NAVFAC
Naval Facilities Engineering Command

Groundwater Sample Results, Level 2 Laboratory Report, Level 4 Laboratory Report, Electronic Data Deliverable, Data Validation Report, and the Sample Location Report, SDG J28427-1

Naval Air Station Meridian
Meridian, Mississippi

July 2019

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 320-28427-1
Client Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

For:
CH2M Hill, Inc.
2411 Dulles Corner Park
Suite 500
Herndon, Virginia 20171

Attn: Mr. Michael Zamboni

Jill Kellmann

Authorized for release by:
6/12/2017 4:44:49 PM

Jill Kellmann, Manager of Project Management
(916)374-4402
jill.kellmann@testamericainc.com

Table of Contents

Definitions/Glossary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Qualifiers

LCMS

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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 ID: 320-28427-1

Laboratory: TestAmerica Sacramento

Narrative

CASE NARRATIVE

Client: CH2M Hill, Inc.

Project: Meridian 10006-7-105420 JM01 Navy Clean

Report Number: 320-28427-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

All parameters for which TestAmerica West Sacramento has certification were evaluated to the QSM specified reporting convention or to the client specified format if different from QSM. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified results where applicable.

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of detection (LOD).

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/20/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.0 C.

PFAS

The first level standard from the initial calibration curve is used to evaluate the tune criteria. The instrument mass windows are set at +/- 0.5amu; therefore, detection of the analyte serves as verification that the assigned mass is within +/- 0.5amu of the true value, which meets the DoD/DOE QSM tune criterion.

The following samples indicated detections and appeared to be blank samples by the sample ID. The samples were re-analyzed and results confirmed. Rig2_Blank (320-28427-2) and Grout Truck_Blank (320-28427-3)

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

Detection Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Client Sample ID: Rig1_Blank — Lab Sample ID: 320-28427-1

No Detections.

Client Sample ID: Rig2_Blank — Lab Sample ID: 320-28427-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	3.4	M	2.4	0.73	ng/L	1		537 (Modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.8	J	3.9	1.2	ng/L	1		537 (Modified)	Total/NA

Client Sample ID: Grout Truck_Blank — Lab Sample ID: 320-28427-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	1.1	J M	3.6	1.1	ng/L	1		537 (Modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Rig1_Blank

Lab Sample ID: 320-28427-1
Matrix: Water
Date Collected: 05/18/17 17:11
Date Received: 05/20/17 09:30

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	2.0	U	2.4	0.73	ng/L		05/25/17 15:37	06/09/17 01:40	1
Perfluorooctanesulfonic acid (PFOS)	2.9	U	3.9	1.2	ng/L		05/25/17 15:37	06/09/17 01:40	1
Perfluorobutanesulfonic acid (PFBS)	2.0	U M	2.4	0.90	ng/L		05/25/17 15:37	06/09/17 01:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*80*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:40*	*1*
13C4 PFOS	*99*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:40*	*1*
18O2 PFHxS	*111*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:40*	*1*

Client Sample ID: Rig2_Blank

Lab Sample ID: 320-28427-2
Matrix: Water
Date Collected: 05/18/17 17:25
Date Received: 05/20/17 09:30

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**3.4**	**M**	2.4	0.73	ng/L		05/25/17 15:37	06/09/17 01:47	1
Perfluorooctanesulfonic acid (PFOS)	**3.8**	**J**	3.9	1.2	ng/L		05/25/17 15:37	06/09/17 01:47	1
Perfluorobutanesulfonic acid (PFBS)	2.0	U M	2.4	0.90	ng/L		05/25/17 15:37	06/09/17 01:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*79*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:47*	*1*
13C4 PFOS	*86*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:47*	*1*
18O2 PFHxS	*101*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:47*	*1*

Client Sample ID: Grout Truck_Blank

Lab Sample ID: 320-28427-3
Matrix: Water
Date Collected: 05/18/17 17:35
Date Received: 05/20/17 09:30

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	1.8	U	2.2	0.66	ng/L		05/25/17 15:37	06/09/17 01:55	1
Perfluorooctanesulfonic acid (PFOS)	**1.1**	**J M**	3.6	1.1	ng/L		05/25/17 15:37	06/09/17 01:55	1
Perfluorobutanesulfonic acid (PFBS)	1.8	U M	2.2	0.82	ng/L		05/25/17 15:37	06/09/17 01:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*77*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:55*	*1*
13C4 PFOS	*102*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:55*	*1*
18O2 PFHxS	*112*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:55*	*1*

Isotope Dilution Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	3C4 PFO/ (25-150)	3C4 PFOS (25-150)	3O2 PFHx (25-150)						
320-28427-1	Rig1_Blank	80	99	111						
320-28427-2	Rig2_Blank	79	86	101						
320-28427-3	Grout Truck_Blank	77	102	112						
LCS 320-166258/2-A	Lab Control Sample	130	89	99						
LCSD 320-166258/3-A	Lab Control Sample Dup	123	87	101						
MB 320-166258/1-A	Method Blank	126	93	102						

Surrogate Legend

13C4 PFOA = 13C4 PFOA
13C4 PFOS = 13C4 PFOS
18O2 PFHxS = 18O2 PFHxS

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Lab Sample ID: MB 320-166258/1-A
Matrix: Water
Analysis Batch: 168409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 166258

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	2.0	U	2.5	0.75	ng/L		05/25/17 15:37	06/09/17 00:53	1
Perfluorooctanesulfonic acid (PFOS)	3.0	U	4.0	1.3	ng/L		05/25/17 15:37	06/09/17 00:53	1
Perfluorobutanesulfonic acid (PFBS)	2.0	U	2.5	0.92	ng/L		05/25/17 15:37	06/09/17 00:53	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*126*		*25 - 150*	*05/25/17 15:37*	*06/09/17 00:53*	*1*
13C4 PFOS	*93*		*25 - 150*	*05/25/17 15:37*	*06/09/17 00:53*	*1*
18O2 PFHxS	*102*		*25 - 150*	*05/25/17 15:37*	*06/09/17 00:53*	*1*

Lab Sample ID: LCS 320-166258/2-A
Matrix: Water
Analysis Batch: 168409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 166258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	40.0	39.1		ng/L		98	60 - 140
Perfluorooctanesulfonic acid (PFOS)	37.1	39.7		ng/L		107	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.4	40.6		ng/L		115	50 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFOA	*130*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
18O2 PFHxS	*99*		*25 - 150*

Lab Sample ID: LCSD 320-166258/3-A
Matrix: Water
Analysis Batch: 168409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 166258

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA)	40.0	41.0		ng/L		102	60 - 140	5	30
Perfluorooctanesulfonic acid (PFOS)	37.1	39.8		ng/L		107	60 - 140	0	30
Perfluorobutanesulfonic acid (PFBS)	35.4	40.2		ng/L		114	50 - 150	1	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFOA	*123*		*25 - 150*
13C4 PFOS	*87*		*25 - 150*
18O2 PFHxS	*101*		*25 - 150*

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

LCMS

Prep Batch: 166258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-28427-1	Rig1_Blank	Total/NA	Water	3535	
320-28427-2	Rig2_Blank	Total/NA	Water	3535	
320-28427-3	Grout Truck_Blank	Total/NA	Water	3535	
MB 320-166258/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-166258/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-166258/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 168409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-28427-1	Rig1_Blank	Total/NA	Water	537 (Modified)	166258
320-28427-2	Rig2_Blank	Total/NA	Water	537 (Modified)	166258
320-28427-3	Grout Truck_Blank	Total/NA	Water	537 (Modified)	166258
MB 320-166258/1-A	Method Blank	Total/NA	Water	537 (Modified)	166258
LCS 320-166258/2-A	Lab Control Sample	Total/NA	Water	537 (Modified)	166258
LCSD 320-166258/3-A	Lab Control Sample Dup	Total/NA	Water	537 (Modified)	166258

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Client Sample ID: Rig1_Blank

Lab Sample ID: 320-28427-1

Date Collected: 05/18/17 17:11

Matrix: Water

Date Received: 05/20/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			255.3 mL	0.5 mL	166258	05/25/17 15:37	VPM	TAL SAC
Total/NA	Analysis	537 (Modified)		1			168409	06/09/17 01:40	SER	TAL SAC

Client Sample ID: Rig2_Blank

Lab Sample ID: 320-28427-2

Date Collected: 05/18/17 17:25

Matrix: Water

Date Received: 05/20/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			255.9 mL	0.5 mL	166258	05/25/17 15:37	VPM	TAL SAC
Total/NA	Analysis	537 (Modified)		1			168409	06/09/17 01:47	SER	TAL SAC

Client Sample ID: Grout Truck_Blank

Lab Sample ID: 320-28427-3

Date Collected: 05/18/17 17:35

Matrix: Water

Date Received: 05/20/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281.4 mL	0.5 mL	166258	05/25/17 15:37	VPM	TAL SAC
Total/NA	Analysis	537 (Modified)		1			168409	06/09/17 01:55	SER	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

Client: CH2M Hill, Inc.
TestAmerica Job ID: 320-28427-1
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

Laboratory: TestAmerica Sacramento

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	UST-055	12-18-17
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-18
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-17
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-17
Hawaii	State Program	9	N/A	01-29-18
Illinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17
L-A-B	DoD ELAP		L2468	01-20-18
Louisiana	NELAP	6	30612	06-30-17
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-17
New Hampshire	NELAP	1	2997	04-18-18
New Jersey	NELAP	2	CA005	06-30-17
New York	NELAP	2	11666	04-01-18
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-18
Texas	NELAP	6	T104704399	05-31-18
US Fish & Wildlife	Federal		LE148388-0	10-31-17
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-18
Virginia	NELAP	3	460278	03-14-18
Washington	State Program	10	C581	05-05-18
West Virginia (DW)	State Program	3	9930C	12-31-17
Wyoming	State Program	8	8TMS-L	01-29-17 *

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

Method Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

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

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-28427-1	Rig1_Blank	Water	05/18/17 17:11	05/20/17 09:30
320-28427-2	Rig2_Blank	Water	05/18/17 17:25	05/20/17 09:30
320-28427-3	Grout Truck_Blank	Water	05/18/17 17:35	05/20/17 09:30

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467.7248

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

Client Contact	Project Manager: Bryan Burkingstock	Site Contact: Ryan Brown	Date: 5/18/17	COC No: 10
CH2M Hill	Tel/Fax:	Lab Contact: Jill Kellmann	Carrier: FedEx	1 of 1 COCs
6600 Peachtree Dunwoody Rd., 400 Embassy Row, Suite 600	Analysis Turnaround Time			Sampler:
Atlanta, GA 30328	☒CALENDAR DAYS ☐WORKING DAYS			For Lab Use Only:
(678) 530-4060 Phone	TAT if different from Below 28days			Walk-in Client:
(770) 604-9183 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Meridian 10006-7-105420 JM01 Navy Clean	☐ 1 week			Job / SDG No.:
Site: NAS Meridian	☐ 2 days			
P O #: 10006-7-105420	☐ 1 day			

320-28427 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PRs (EPA 537M)	Sample Specific Notes:
Rig 1 - Blank	5/18/17	1711	G	W	2	N	N	X	Tank on Curtis Lee's Rig
Rig 2 - Blank	↓	1725	↓	↓	↓	↓	↓	↓	Tank on Kelvin Peak's Rig
Grout Truck - Blank	↓	1735	↓	↓	↓	↓	↓	↓	Tank on grout truck

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☒Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for Months

Special Instructions/QC Requirements & Comments:
Send results to Mike Zamboni - address is on file

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: 6.7 Corr'd: 1.0		Therm ID No.: AR-1
Relinquished by: Ryan Brown	Company: CH2M Hill	Date/Time: 5/19/17 1609	Received by:	Company: TMS	Date/Time: 5/20/17 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.11, dated 1/24/2017

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 320-28427-1

Login Number: 28427
List Number: 1
Creator: Edman, Connor M

List Source: TestAmerica Sacramento

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

ANALYTICAL REPORT

Job Number: 320-28427-1

Job Description: Meridian 10006-7-105420 JM01 Navy Clean

For:
CH2M Hill, Inc.
2411 Dulles Corner Park
Suite 500
Herndon, VA 20171

Attention: Mr. Michael Zamboni

Approved for release.
Jill Kellmann
Manager of Project Management
6/12/2017 4:45 PM

Jill Kellmann, Manager of Project Management
880 Riverside Parkway, West Sacramento, CA, 95605
(916)374-4402
jill.kellmann@testamericainc.com
06/12/2017

Table of Contents

Table of Contents

Qualifiers

LCMS

Qualifier	Qualifier Description
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CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: CH2M Hill, Inc.

Project: Meridian 10006-7-105420 JM01 Navy Clean

Report Number: 320-28427-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

All parameters for which TestAmerica West Sacramento has certification were evaluated to the QSM specified reporting convention or to the client specified format if different from QSM. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified results where applicable.

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of detection (LOD).

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/20/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.0 C.

PFAS

The first level standard from the initial calibration curve is used to evaluate the tune criteria. The instrument mass windows are set at +/- 0.5amu; therefore, detection of the analyte serves as verification that the assigned mass is within +/- 0.5amu of the true value, which meets the DoD/DOE QSM tune criterion.

The following samples indicated detections and appeared to be blank samples by the sample ID. The samples were re-analyzed and results confirmed. Rig2_Blank (320-28427-2) and Grout Truck_Blank (320-28427-3)

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

Detection Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Client Sample ID: Rig1_Blank — Lab Sample ID: 320-28427-1

No Detections.

Client Sample ID: Rig2_Blank — Lab Sample ID: 320-28427-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	3.4	M	2.4	0.73	ng/L	1		537 (Modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.8	J	3.9	1.2	ng/L	1		537 (Modified)	Total/NA

Client Sample ID: Grout Truck_Blank — Lab Sample ID: 320-28427-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	1.1	J M	3.6	1.1	ng/L	1		537 (Modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Rig1_Blank

Lab Sample ID: 320-28427-1

Date Collected: 05/18/17 17:11

Matrix: Water

Date Received: 05/20/17 09:30

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	2.0	U	2.4	0.73	ng/L		05/25/17 15:37	06/09/17 01:40	1
Perfluorooctanesulfonic acid (PFOS)	2.9	U	3.9	1.2	ng/L		05/25/17 15:37	06/09/17 01:40	1
Perfluorobutanesulfonic acid (PFBS)	2.0	U M	2.4	0.90	ng/L		05/25/17 15:37	06/09/17 01:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*80*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:40*	*1*
13C4 PFOS	*99*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:40*	*1*
18O2 PFHxS	*111*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:40*	*1*

Client Sample ID: Rig2_Blank

Lab Sample ID: 320-28427-2

Date Collected: 05/18/17 17:25

Matrix: Water

Date Received: 05/20/17 09:30

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**3.4**	**M**	2.4	0.73	ng/L		05/25/17 15:37	06/09/17 01:47	1
Perfluorooctanesulfonic acid (PFOS)	**3.8**	**J**	3.9	1.2	ng/L		05/25/17 15:37	06/09/17 01:47	1
Perfluorobutanesulfonic acid (PFBS)	2.0	U M	2.4	0.90	ng/L		05/25/17 15:37	06/09/17 01:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*79*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:47*	*1*
13C4 PFOS	*86*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:47*	*1*
18O2 PFHxS	*101*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:47*	*1*

Client Sample ID: Grout Truck_Blank

Lab Sample ID: 320-28427-3

Date Collected: 05/18/17 17:35

Matrix: Water

Date Received: 05/20/17 09:30

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	1.8	U	2.2	0.66	ng/L		05/25/17 15:37	06/09/17 01:55	1
Perfluorooctanesulfonic acid (PFOS)	**1.1**	**J M**	3.6	1.1	ng/L		05/25/17 15:37	06/09/17 01:55	1
Perfluorobutanesulfonic acid (PFBS)	1.8	U M	2.2	0.82	ng/L		05/25/17 15:37	06/09/17 01:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*77*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:55*	*1*
13C4 PFOS	*102*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:55*	*1*
18O2 PFHxS	*112*		*25 - 150*	*05/25/17 15:37*	*06/09/17 01:55*	*1*

Default Detection Limits

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Prep: 3535

Analyte	LOQ	DL	Units	Method
Perfluorobutanesulfonic acid (PFBS)	2.5	0.92	ng/L	537 (Modified)
Perfluorooctanesulfonic acid (PFOS)	4.0	1.3	ng/L	537 (Modified)
Perfluorooctanoic acid (PFOA)	2.5	0.75	ng/L	537 (Modified)

Isotope Dilution Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	3C4 PFOA (25-150)	3C4 PFOS (25-150)	8O2 PFHx (25-150)						
320-28427-1	Rig1_Blank	80	99	111						
320-28427-2	Rig2_Blank	79	86	101						
320-28427-3	Grout Truck_Blank	77	102	112						
LCS 320-166258/2-A	Lab Control Sample	130	89	99						
LCSD 320-166258/3-A	Lab Control Sample Dup	123	87	101						
MB 320-166258/1-A	Method Blank	126	93	102						

Surrogate Legend

13C4 PFOA = 13C4 PFOA
13C4 PFOS = 13C4 PFOS
18O2 PFHxS = 18O2 PFHxS

Method: 537 (Modified) - Perfluorinated Hydrocarbons

Lab Sample ID: MB 320-166258/1-A
Matrix: Water
Analysis Batch: 168409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 166258

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	2.0	U	2.5	0.75	ng/L		05/25/17 15:37	06/09/17 00:53	1
Perfluorooctanesulfonic acid (PFOS)	3.0	U	4.0	1.3	ng/L		05/25/17 15:37	06/09/17 00:53	1
Perfluorobutanesulfonic acid (PFBS)	2.0	U	2.5	0.92	ng/L		05/25/17 15:37	06/09/17 00:53	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*126*		*25 - 150*	*05/25/17 15:37*	*06/09/17 00:53*	*1*
13C4 PFOS	*93*		*25 - 150*	*05/25/17 15:37*	*06/09/17 00:53*	*1*
18O2 PFHxS	*102*		*25 - 150*	*05/25/17 15:37*	*06/09/17 00:53*	*1*

Lab Sample ID: LCS 320-166258/2-A
Matrix: Water
Analysis Batch: 168409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 166258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	40.0	39.1		ng/L		98	60 - 140
Perfluorooctanesulfonic acid (PFOS)	37.1	39.7		ng/L		107	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.4	40.6		ng/L		115	50 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFOA	*130*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
18O2 PFHxS	*99*		*25 - 150*

Lab Sample ID: LCSD 320-166258/3-A
Matrix: Water
Analysis Batch: 168409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 166258

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA)	40.0	41.0		ng/L		102	60 - 140	5	30
Perfluorooctanesulfonic acid (PFOS)	37.1	39.8		ng/L		107	60 - 140	0	30
Perfluorobutanesulfonic acid (PFBS)	35.4	40.2		ng/L		114	50 - 150	1	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFOA	*123*		*25 - 150*
13C4 PFOS	*87*		*25 - 150*
18O2 PFHxS	*101*		*25 - 150*

LCMS

Prep Batch: 166258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-28427-1	Rig1_Blank	Total/NA	Water	3535	
320-28427-2	Rig2_Blank	Total/NA	Water	3535	
320-28427-3	Grout Truck_Blank	Total/NA	Water	3535	
MB 320-166258/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-166258/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-166258/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 168409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-28427-1	Rig1_Blank	Total/NA	Water	537 (Modified)	166258
320-28427-2	Rig2_Blank	Total/NA	Water	537 (Modified)	166258
320-28427-3	Grout Truck_Blank	Total/NA	Water	537 (Modified)	166258
MB 320-166258/1-A	Method Blank	Total/NA	Water	537 (Modified)	166258
LCS 320-166258/2-A	Lab Control Sample	Total/NA	Water	537 (Modified)	166258
LCSD 320-166258/3-A	Lab Control Sample Dup	Total/NA	Water	537 (Modified)	166258

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Client Sample ID: Rig1_Blank
Lab Sample ID: 320-28427-1
Date Collected: 05/18/17 17:11
Matrix: Water
Date Received: 05/20/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			166258	05/25/17 15:37	VPM	TAL SAC
Total/NA	Analysis	537 (Modified)		1	168409	06/09/17 01:40	SER	TAL SAC

Client Sample ID: Rig2_Blank
Lab Sample ID: 320-28427-2
Date Collected: 05/18/17 17:25
Matrix: Water
Date Received: 05/20/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			166258	05/25/17 15:37	VPM	TAL SAC
Total/NA	Analysis	537 (Modified)		1	168409	06/09/17 01:47	SER	TAL SAC

Client Sample ID: Grout Truck_Blank
Lab Sample ID: 320-28427-3
Date Collected: 05/18/17 17:35
Matrix: Water
Date Received: 05/20/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			166258	05/25/17 15:37	VPM	TAL SAC
Total/NA	Analysis	537 (Modified)		1	168409	06/09/17 01:55	SER	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 320-28427-1
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

Laboratory: TestAmerica Sacramento

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	UST-055	12-18-17
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-18
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-17
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-17
Hawaii	State Program	9	N/A	01-29-18
Illinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17
L-A-B	DoD ELAP		L2468	01-20-18
Louisiana	NELAP	6	30612	06-30-17
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-17
New Hampshire	NELAP	1	2997	04-18-18
New Jersey	NELAP	2	CA005	06-30-17
New York	NELAP	2	11666	04-01-18
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-18
Texas	NELAP	6	T104704399	05-31-18
US Fish & Wildlife	Federal		LE148388-0	10-31-17
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-18
Virginia	NELAP	3	460278	03-14-18
Washington	State Program	10	C581	05-05-18
West Virginia (DW)	State Program	3	9930C	12-31-17
Wyoming	State Program	8	8TMS-L	01-29-17 *

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

Method Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

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

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: Meridian 10006-7-105420 JM01 Navy Clean

TestAmerica Job ID: 320-28427-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-28427-1	Rig1_Blank	Water	05/18/17 17:11	05/20/17 09:30
320-28427-2	Rig2_Blank	Water	05/18/17 17:25	05/20/17 09:30
320-28427-3	Grout Truck_Blank	Water	05/18/17 17:35	05/20/17 09:30

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 167755

Lab Sample ID: IC 320-167755/4 Client Sample ID:

Date Analyzed: 06/06/17 13:47 Lab File ID: 2017.06.06CURVE_005.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanesulfonic acid (PFBS)	2.12	Incomplete Integration	chandrasenas	06/06/17 14:52

537 (Modified)

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 168409

Lab Sample ID: 320-28427-1 Client Sample ID: Rig1_Blank

Date Analyzed: 06/09/17 01:40 Lab File ID: 2017.06.08D_008.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanesulfonic acid (PFBS)	2.02	Baseline	raineys	06/09/17 13:54

Lab Sample ID: 320-28427-2 Client Sample ID: Rig2_Blank

Date Analyzed: 06/09/17 01:47 Lab File ID: 2017.06.08D_009.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanesulfonic acid (PFBS)	2.03	Baseline	raineys	06/09/17 13:55
Perfluorooctanoic acid (PFOA)	3.06	Isomers	raineys	06/09/17 13:55

Lab Sample ID: 320-28427-3 Client Sample ID: Grout Truck_Blank

Date Analyzed: 06/09/17 01:55 Lab File ID: 2017.06.08D_010.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanesulfonic acid (PFBS)	2.03	Baseline	raineys	06/09/17 13:56
Perfluorooctanesulfonic acid (PFOS)	3.31	Baseline	raineys	06/09/17 13:57

537 (Modified)

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
LCM2-4:2FTSIC_00002	08/06/17	05/26/17	MeOH/H2O, Lot 09285	5000 uL	LCPFC-IS_00002	1000 uL	13C2-PFOA	50 ng/mL
.LCPFC-IS_00002	11/24/17	05/24/17	Methanol, Lot 090285	30000 uL	LCM2PFOA_00006	150 uL	13C2-PFOA	0.25 ug/mL
..LCM2PFOA_00006	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
LCMPFCSU_00067	11/12/17	05/12/17	Methanol, Lot Baker 141039	200 mL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00009	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00002	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00013	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	0.05 ug/mL
.LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
.LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
.LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
.LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
.LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
.LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
.LCMPFBS_00002	08/02/21	Wellington Laboratories, Lot M3PFBS0815			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
.LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
.LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
.LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
.LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
.LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
.LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
.LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
.LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
LCPFC_FULL-L1_00004	09/02/17	06/01/17	MeOH/H2O, Lot 90285	5000 uL	LCMPFC2SU_00019	250 uL	d-N-EtFOSA-M	50 ng/mL
							d-N-MeFOSA-M	50 ng/mL
							d3-NMeFOSAA	50 ng/mL
							d5-NEtFOSAA	50 ng/mL
							M2-6:2FTS	47.5 ng/mL
							M2-8:2FTS	47.9 ng/mL
					LCMPFCSU_00069	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFC2SP_00031	25 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.467 ng/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.474 ng/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.479 ng/mL
							N-ethylperfluoro-1-octanesulfonamide	0.5 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.5 ng/mL
							MeFOSA	0.5 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.5 ng/mL
					LCPFCIS_00002	50 uL	13C2-PFOA	50 ng/mL
					LCPFCSP_00098	25 uL	Perfluorobutyric acid	0.5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.442 ng/mL
							Perfluorodecanoic acid	0.5 ng/mL
							Perfluorododecanoic acid	0.5 ng/mL
							Perfluorodecane Sulfonic acid	0.482 ng/mL
							Perfluoroheptanoic acid	0.5 ng/mL
							Perfluoroheptanesulfonic Acid	0.476 ng/mL
							Perfluorohexanoic acid	0.5 ng/mL
							Perfluorohexadecanoic acid	0.5 ng/mL
							Perfluorohexanesulfonic acid	0.455 ng/mL
							Perfluorononanoic acid	0.5 ng/mL
							Perfluorooctanoic acid (PFOA)	0.5 ng/mL
							Perfluorooctadecanoic acid	0.5 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.464 ng/mL
							Perfluorooctane Sulfonamide	0.5 ng/mL
							Perfluoropentanoic acid	0.5 ng/mL
							Perfluorotetradecanoic acid	0.5 ng/mL
							Perfluorotridecanoic acid	0.5 ng/mL
							Perfluoroundecanoic acid	0.5 ng/mL
.LCMPFC2SU_00019	11/30/17	05/30/17	Methanol, Lot 104453	5000 uL	LCd-NEtFOSA-M_00005	100 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00004	100 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00004	100 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00004	100 uL	d5-NEtFOSAA	1 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCM2-6:FTS_00004	100 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00004	100 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00005	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00004	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00004	11/22/21	WELLINGTON, Lot d3NMeFOSAA1116			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00004	11/22/21	WELLINGTON, Lot d5NEtFOSAA1116			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00004	02/17/22	WELLINGTON, Lot M262FTS0217			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00004	08/22/21	WELLINGTON, Lot M282FTS0816			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00069	11/24/17	05/24/17	Methanol, Lot Baker 141039	10000 uL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00009	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00013	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFC2SP_00031	10/14/17	04/14/17	Methanol, Lot 104453	5000 uL	LCPFC2SP_00030	500 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.0934 ug/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.0948 ug/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.0958 ug/mL
							N-ethylperfluoro-1-octanesulfonamide	0.1 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.1 ug/mL
							MeFOSA	0.1 ug/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.1 ug/mL
..LCPFC2SP_00030	10/14/17	04/14/17	Methanol, Lot 104453	10000 uL	LC4:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.934 ug/mL
					LC6:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.948 ug/mL
					LC8:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.958 ug/mL
					LCN-EtFOSA-M_00003	200 uL	N-ethylperfluoro-1-octanesulfonamide	1 ug/mL
					LCN-EtFOSAA_00002	200 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
					LCN-MeFOSA-M_00002	200 uL	MeFOSA	1 ug/mL
					LCN-MeFOSAA_00003	200 uL	N-methyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
...LC4:2FTS_00002	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	46.7 ug/mL
...LC6:2FTS_00002	06/25/21	WELLINGTON, Lot 62FTS0616			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	47.4 ug/mL
...LC8:2FTS_00002	10/23/20	WELLINGTON, Lot 82FTS1015			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	47.9 ug/mL
...LCN-EtFOSA-M_00003	05/24/21	WELLINGTON, Lot NEtFOSA0516M			(Purchased Reagent)		N-ethylperfluoro-1-octanesulfonamide	50 ug/mL
...LCN-EtFOSAA_00002	01/20/21	WELLINGTON, Lot NEtFOSAA0116			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
...LCN-MeFOSA-M_00002	05/24/21	WELLINGTON, Lot NMeFOSA0714M			(Purchased Reagent)		MeFOSA	50 ug/mL
...LCN-MeFOSAA_00003	01/20/21	WELLINGTON, Lot NMeFOSAA0116			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCPFCIS_00002	10/17/17	04/17/17	Methanol, Lot 14139	2000 uL	LCM2PFOA_00005	200 uL	13C2-PFOA	5 ug/mL
..LCM2PFOA_00005	06/19/18	Wellington Laboratories, Lot M2PFOA0613			(Purchased Reagent)		13C2-PFOA	50 ug/mL
.LCPFCSP_00098	09/02/17	06/01/17	Methanol, Lot 157237	10000 uL	LCPFCSP_00096	1000 uL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid	0.0964 ug/mL
							Perfluoroheptanoic acid	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL
							Perfluorohexadecanoic acid	0.1 ug/mL
							Perfluorohexanesulfonic acid	0.091 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorononanoic acid	0.1 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctadecanoic acid	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0928 ug/mL
							Perfluorooctane Sulfonamide	0.1 ug/mL
							Perfluoropentanoic acid	0.1 ug/mL
							Perfluorotetradecanoic acid	0.1 ug/mL
							Perfluorotridecanoic acid	0.1 ug/mL
							Perfluoroundecanoic acid	0.1 ug/mL
..LCPFCSP_00096	09/02/17	05/24/17	Methanol, Lot 090285	10000 uL	LCPFBA_00006	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBS_00006	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00006	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00006	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDS_00005	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00006	200 uL	Perfluoroheptanoic acid	1 ug/mL
					LCPFHpS_00010	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00005	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00007	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxS-br_00003	200 uL	Perfluorohexanesulfonic acid	0.91 ug/mL
					LCPFNA_00007	200 uL	Perfluorononanoic acid	1 ug/mL
					LCPFOA_00007	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00007	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS-br_00003	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.928 ug/mL
					LCPFOSA_00009	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00006	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00005	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00005	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00006	200 uL	Perfluoroundecanoic acid	1 ug/mL
...LCPFBA_00006	05/27/21	Wellington Laboratories, Lot PFBA0516			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBS_00006	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFDA_00006	05/31/21	Wellington Laboratories, Lot PFDA0516			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDoA_00006	05/31/21	Wellington Laboratories, Lot PFDoA0516			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDS_00005	07/02/20	Wellington Laboratories, Lot LPFDS0615			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00006	01/22/21	Wellington Laboratories, Lot PFHpA0116			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
...LCPFHpS_00010	11/06/20	Wellington Laboratories, Lot LPFHpS1115			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
...LCPFHxA_00005	12/22/20	Wellington Laboratories, Lot PFHxA1215			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxDA_00007	05/25/21	Wellington Laboratories, Lot PFHxDA0516			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
...LCPFHxS-br_00003	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexanesulfonic acid	45.5 ug/mL
...LCPFNA_00007	10/23/20	Wellington Laboratories, Lot PFNA1015			(Purchased Reagent)		Perfluorononanoic acid	50 ug/mL
...LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFODA_00007	04/29/21	Wellington Laboratories, Lot PFODA0416			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
...LCPFOS-br_00003	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
...LCPFOSA_00009	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCPFPeA_00006	05/31/21	Wellington Laboratories, Lot PFPeA0516			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA_00005	12/09/20	Wellington Laboratories, Lot PFTeDA1215			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA_00005	02/12/21	Wellington Laboratories, Lot PFTrDA0216			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA_00006	08/19/20	Wellington Laboratories, Lot PFUdA0815			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_FULL-L2_00003	08/13/17	04/16/17	MeOH/H2O, Lot 090285	5050 uL	LCMPFC2SU_00014	250 uL	d-N-EtFOSA-M	49.505 ng/mL
							d-N-MeFOSA-M	49.505 ng/mL
							d3-NMeFOSAA	49.505 ng/mL
							d5-NEtFOSAA	49.505 ng/mL
							M2-6:2FTS	47.0297 ng/mL
							M2-8:2FTS	47.4257 ng/mL
					LCMPFCSU_00057	250 uL	13C2-PFHxDA	49.505 ng/mL
							13C2-PFTeDA	49.505 ng/mL
							13C4-PFHpA	49.505 ng/mL
							13C5-PFPeA	49.505 ng/mL
							13C8 FOSA	49.505 ng/mL
							13C4 PFBA	49.505 ng/mL
							13C2 PFDA	49.505 ng/mL
							13C2 PFDoA	49.505 ng/mL
							13C2 PFHxA	49.505 ng/mL
							18O2 PFHxS	46.8317 ng/mL
							13C5 PFNA	49.505 ng/mL
							13C4 PFOA	49.505 ng/mL
							13C4 PFOS	47.3267 ng/mL
							13C2 PFUnA	49.505 ng/mL
					LCPFCSP_00084	50 uL	Perfluorobutanesulfonic acid (PFBS)	0.875248 ng/mL
							Perfluorooctanoic acid (PFOA)	0.990099 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.918812 ng/mL
.LCMPFC2SU_00014	08/13/17	02/13/17	Methanol, Lot 104453	50000 uL	LCd-NEtFOSA-M_00004	1000 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00003	1000 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00003	1000 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00003	1000 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00003	1000 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00003	1000 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00004	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00003	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00003	05/31/21	WELLINGTON, Lot d3NMeFOSAA0516			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00003	08/02/21	WELLINGTON, Lot d5NEtFOSAA0716			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00003	01/08/21	WELLINGTON, Lot M262FTS0116			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00003	01/08/21	WELLINGTON, Lot M282FTS0116			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00057	10/04/17	04/04/17	Methanol, Lot Baker 141039	50000 uL	LCM2PFHxDA_00008	1000 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00007	1000 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00007	1000 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00008	1000 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00011	1000 uL	13C8 FOSA	1 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFBA_00008	1000 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00011	1000 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00008	1000 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00012	1000 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00008	1000 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00008	1000 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00012	1000 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00018	1000 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00009	1000 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00008	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00007	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00007	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00008	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00011	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00008	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00011	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00008	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00012	04/08/21	Wellington Laboratories, Lot MPFHxA0416			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00008	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00008	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00012	01/22/21	Wellington Laboratories, Lot MPFOA0116			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00018	08/03/21	Wellington Laboratories, Lot MPFOS0816			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00009	02/12/21	Wellington Laboratories, Lot MPFUdA0216			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00084	09/02/17	03/23/17	Methanol, Lot 141039	10000 uL	LCPFCSP_00083	2000 uL	Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0928 ug/mL
..LCPFCSP_00083	09/02/17	03/23/17	Methanol, Lot 141039	10000 uL	LCPFBS_00005	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFOA_00006	100 uL	Perfluorooctanoic acid (PFOA)	0.5 ug/mL
					LCPFOS-br_00002	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
...LCPFBS_00005	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFOA_00006	11/06/20	Wellington Laboratories, Lot PFOA1115			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFOS-br_00002	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
LCPFC_FULL-L2_00005	09/02/17	06/01/17	MeOH/H2O, Lot 090285	5 mL	LCMPFC2SU_00019	250 uL	d-N-EtFOSA-M	50 ng/mL
							d-N-MeFOSA-M	50 ng/mL
							d3-NMeFOSAA	50 ng/mL
							d5-NEtFOSAA	50 ng/mL
							M2-6:2FTS	47.5 ng/mL
							M2-8:2FTS	47.9 ng/mL
					LCMPFCSU_00069	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFC2SP_00031	50 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.934 ng/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.948 ng/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.958 ng/mL
							N-ethylperfluoro-1-octanesulfonamide	1 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	1 ng/mL
							MeFOSA	1 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	1 ng/mL
					LCPFCIS_00002	50 uL	13C2-PFOA	50 ng/mL
					LCPFCSP_00098	50 uL	Perfluorobutyric acid	1 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.884 ng/mL
							Perfluorodecanoic acid	1 ng/mL
							Perfluorododecanoic acid	1 ng/mL
							Perfluorodecane Sulfonic acid	0.964 ng/mL
							Perfluoroheptanoic acid	1 ng/mL
							Perfluoroheptanesulfonic Acid	0.952 ng/mL
							Perfluorohexanoic acid	1 ng/mL
							Perfluorohexadecanoic acid	1 ng/mL
							Perfluorohexanesulfonic acid	0.91 ng/mL
							Perfluorononanoic acid	1 ng/mL
							Perfluorooctanoic acid (PFOA)	1 ng/mL
							Perfluorooctadecanoic acid	1 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.928 ng/mL
							Perfluorooctane Sulfonamide	1 ng/mL
							Perfluoropentanoic acid	1 ng/mL
							Perfluorotetradecanoic acid	1 ng/mL
							Perfluorotridecanoic acid	1 ng/mL
							Perfluoroundecanoic acid	1 ng/mL
.LCMPFC2SU_00019	11/30/17	05/30/17	Methanol, Lot 104453	5000 uL	LCd-NEtFOSA-M_00005	100 uL	d-N-EtFOSA-M	1 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCd-NMeFOSA-M_00004	100 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00004	100 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00004	100 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00004	100 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00004	100 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00005	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00004	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00004	11/22/21	WELLINGTON, Lot d3NMeFOSAA1116			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00004	11/22/21	WELLINGTON, Lot d5NEtFOSAA1116			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00004	02/17/22	WELLINGTON, Lot M262FTS0217			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00004	08/22/21	WELLINGTON, Lot M282FTS0816			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00069	11/24/17	05/24/17	Methanol, Lot Baker 141039	10000 uL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00009	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00013	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFC2SP_00031	10/14/17	04/14/17	Methanol, Lot 104453	5000 uL	LCPFC2SP_00030	500 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.0934 ug/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.0948 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.0958 ug/mL
							N-ethylperfluoro-1-octanesulfonamide	0.1 ug/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.1 ug/mL
							MeFOSA	0.1 ug/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.1 ug/mL
..LCPFC2SP_00030	10/14/17	04/14/17	Methanol, Lot 104453	10000 uL	LC4:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.934 ug/mL
					LC6:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.948 ug/mL
					LC8:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.958 ug/mL
					LCN-EtFOSA-M_00003	200 uL	N-ethylperfluoro-1-octanesulfonamide	1 ug/mL
					LCN-EtFOSAA_00002	200 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
					LCN-MeFOSA-M_00002	200 uL	MeFOSA	1 ug/mL
					LCN-MeFOSAA_00003	200 uL	N-methyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
...LC4:2FTS_00002	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	46.7 ug/mL
...LC6:2FTS_00002	06/25/21	WELLINGTON, Lot 62FTS0616			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	47.4 ug/mL
...LC8:2FTS_00002	10/23/20	WELLINGTON, Lot 82FTS1015			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	47.9 ug/mL
...LCN-EtFOSA-M_00003	05/24/21	WELLINGTON, Lot NEtFOSA0516M			(Purchased Reagent)		N-ethylperfluoro-1-octanesulfonamide	50 ug/mL
...LCN-EtFOSAA_00002	01/20/21	WELLINGTON, Lot NEtFOSAA0116			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
...LCN-MeFOSA-M_00002	05/24/21	WELLINGTON, Lot NMeFOSA0714M			(Purchased Reagent)		MeFOSA	50 ug/mL
...LCN-MeFOSAA_00003	01/20/21	WELLINGTON, Lot NMeFOSAA0116			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCPFCIS_00002	10/17/17	04/17/17	Methanol, Lot 14139	2000 uL	LCM2PFOA_00005	200 uL	13C2-PFOA	5 ug/mL
..LCM2PFOA_00005	06/19/18	Wellington Laboratories, Lot M2PFOA0613			(Purchased Reagent)		13C2-PFOA	50 ug/mL
.LCPFCSP_00098	09/02/17	06/01/17	Methanol, Lot 157237	10000 uL	LCPFCSP_00096	1000 uL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid	0.0964 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluoroheptanoic acid	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL
							Perfluorohexadecanoic acid	0.1 ug/mL
							Perfluorohexanesulfonic acid	0.091 ug/mL
							Perfluorononanoic acid	0.1 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctadecanoic acid	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0928 ug/mL
							Perfluorooctane Sulfonamide	0.1 ug/mL
							Perfluoropentanoic acid	0.1 ug/mL
							Perfluorotetradecanoic acid	0.1 ug/mL
							Perfluorotridecanoic acid	0.1 ug/mL
							Perfluoroundecanoic acid	0.1 ug/mL
..LCPFCSP_00096	09/02/17	05/24/17	Methanol, Lot 090285	10000 uL	LCPFBA_00006	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBS_00006	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00006	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00006	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDS_00005	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00006	200 uL	Perfluoroheptanoic acid	1 ug/mL
					LCPFHpS_00010	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00005	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00007	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxS-br_00003	200 uL	Perfluorohexanesulfonic acid	0.91 ug/mL
					LCPFNA_00007	200 uL	Perfluorononanoic acid	1 ug/mL
					LCPFOA_00007	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00007	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS-br_00003	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.928 ug/mL
					LCPFOSA_00009	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00006	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00005	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00005	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00006	200 uL	Perfluoroundecanoic acid	1 ug/mL
...LCPFBA_00006	05/27/21	Wellington Laboratories, Lot PFBA0516			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBS_00006	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFDA_00006	05/31/21	Wellington Laboratories, Lot PFDA0516			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDoA_00006	05/31/21	Wellington Laboratories, Lot PFDoA0516			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDS_00005	07/02/20	Wellington Laboratories, Lot LPFDS0615			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00006	01/22/21	Wellington Laboratories, Lot PFHpA0116			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
...LCPFHpS_00010	11/06/20	Wellington Laboratories, Lot LPFHpS1115			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
...LCPFHxA_00005	12/22/20	Wellington Laboratories, Lot PFHxA1215			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxDA_00007	05/25/21	Wellington Laboratories, Lot PFHxDA0516			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
...LCPFHxS-br_00003	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexanesulfonic acid	45.5 ug/mL
...LCPFNA_00007	10/23/20	Wellington Laboratories, Lot PFNA1015			(Purchased Reagent)		Perfluorononanoic acid	50 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFODA_00007	04/29/21	Wellington Laboratories, Lot PFODA0416			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
...LCPFOS-br_00003	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
...LCPFOSA_00009	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA_00006	05/31/21	Wellington Laboratories, Lot PFPeA0516			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA_00005	12/09/20	Wellington Laboratories, Lot PFTeDA1215			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA_00005	02/12/21	Wellington Laboratories, Lot PFTrDA0216			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA_00006	08/19/20	Wellington Laboratories, Lot PFUdA0815			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_FULL-L3_00004	09/02/17	06/01/17	MeOH/H2O, Lot 090285	5000 uL	LCMPFC2SU_00019	250 uL	d-N-EtFOSA-M	50 ng/mL
							d-N-MeFOSA-M	50 ng/mL
							d3-NMeFOSAA	50 ng/mL
							d5-NEtFOSAA	50 ng/mL
							M2-6:2FTS	47.5 ng/mL
							M2-8:2FTS	47.9 ng/mL
					LCMPFCSU_00069	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFC2SP_00031	250 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	4.67 ng/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	4.74 ng/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	4.79 ng/mL
							N-ethylperfluoro-1-octanesulfonamide	5 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	5 ng/mL
							MeFOSA	5 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	5 ng/mL
					LCPFCIS_00002	50 uL	13C2-PFOA	50 ng/mL
					LCPFCSP_00098	250 uL	Perfluorobutyric acid	5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	4.42 ng/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorodecanoic acid	5 ng/mL
							Perfluorododecanoic acid	5 ng/mL
							Perfluorodecane Sulfonic acid	4.82 ng/mL
							Perfluoroheptanoic acid	5 ng/mL
							Perfluoroheptanesulfonic Acid	4.76 ng/mL
							Perfluorohexanoic acid	5 ng/mL
							Perfluorohexadecanoic acid	5 ng/mL
							Perfluorohexanesulfonic acid	4.55 ng/mL
							Perfluorononanoic acid	5 ng/mL
							Perfluorooctanoic acid (PFOA)	5 ng/mL
							Perfluorooctadecanoic acid	5 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	4.64 ng/mL
							Perfluorooctane Sulfonamide	5 ng/mL
							Perfluoropentanoic acid	5 ng/mL
							Perfluorotetradecanoic acid	5 ng/mL
							Perfluorotridecanoic acid	5 ng/mL
							Perfluoroundecanoic acid	5 ng/mL
.LCMPFC2SU_00019	11/30/17	05/30/17	Methanol, Lot 104453	5000 uL	LCd-NEtFOSA-M_00005	100 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00004	100 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00004	100 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00004	100 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00004	100 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00004	100 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00005	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00004	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00004	11/22/21	WELLINGTON, Lot d3NMeFOSAA1116			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00004	11/22/21	WELLINGTON, Lot d5NEtFOSAA1116			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00004	02/17/22	WELLINGTON, Lot M262FTS0217			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00004	08/22/21	WELLINGTON, Lot M282FTS0816			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00069	11/24/17	05/24/17	Methanol, Lot Baker 141039	10000 uL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00009	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00013	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFC2SP_00031	10/14/17	04/14/17	Methanol, Lot 104453	5000 uL	LCPFC2SP_00030	500 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.0934 ug/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.0948 ug/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.0958 ug/mL
							N-ethylperfluoro-1-octanesulfonamide	0.1 ug/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.1 ug/mL
							MeFOSA	0.1 ug/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.1 ug/mL
..LCPFC2SP_00030	10/14/17	04/14/17	Methanol, Lot 104453	10000 uL	LC4:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.934 ug/mL
					LC6:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.948 ug/mL
					LC8:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.958 ug/mL
					LCN-EtFOSA-M_00003	200 uL	N-ethylperfluoro-1-octanesulfonamide	1 ug/mL
					LCN-EtFOSAA_00002	200 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
					LCN-MeFOSA-M_00002	200 uL	MeFOSA	1 ug/mL
					LCN-MeFOSAA_00003	200 uL	N-methyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
...LC4:2FTS_00002	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	46.7 ug/mL
...LC6:2FTS_00002	06/25/21	WELLINGTON, Lot 62FTS0616			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	47.4 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LC8:2FTS_00002	10/23/20	WELLINGTON, Lot 82FTS1015			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	47.9 ug/mL
...LCN-EtFOSA-M_00003	05/24/21	WELLINGTON, Lot NEtFOSA0516M			(Purchased Reagent)		N-ethylperfluoro-1-octanesulfonamide	50 ug/mL
...LCN-EtFOSAA_00002	01/20/21	WELLINGTON, Lot NEtFOSAA0116			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
...LCN-MeFOSA-M_00002	05/24/21	WELLINGTON, Lot NMeFOSA0714M			(Purchased Reagent)		MeFOSA	50 ug/mL
...LCN-MeFOSAA_00003	01/20/21	WELLINGTON, Lot NMeFOSAA0116			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCPFCIS_00002	10/17/17	04/17/17	Methanol, Lot 14139	2000 uL	LCM2PFOA_00005	200 uL	13C2-PFOA	5 ug/mL
..LCM2PFOA_00005	06/19/18	Wellington Laboratories, Lot M2PFOA0613			(Purchased Reagent)		13C2-PFOA	50 ug/mL
.LCPFCSP_00098	09/02/17	06/01/17	Methanol, Lot 157237	10000 uL	LCPFCSP_00096	1000 uL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid	0.0964 ug/mL
							Perfluoroheptanoic acid	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL
							Perfluorohexadecanoic acid	0.1 ug/mL
							Perfluorohexanesulfonic acid	0.091 ug/mL
							Perfluorononanoic acid	0.1 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctadecanoic acid	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0928 ug/mL
							Perfluorooctane Sulfonamide	0.1 ug/mL
							Perfluoropentanoic acid	0.1 ug/mL
							Perfluorotetradecanoic acid	0.1 ug/mL
							Perfluorotridecanoic acid	0.1 ug/mL
							Perfluoroundecanoic acid	0.1 ug/mL
..LCPFCSP_00096	09/02/17	05/24/17	Methanol, Lot 090285	10000 uL	LCPFBA_00006	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBS_00006	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00006	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00006	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDS_00005	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00006	200 uL	Perfluoroheptanoic acid	1 ug/mL
					LCPFHpS_00010	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00005	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00007	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxS-br_00003	200 uL	Perfluorohexanesulfonic acid	0.91 ug/mL
					LCPFNA_00007	200 uL	Perfluorononanoic acid	1 ug/mL
					LCPFOA_00007	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00007	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS-br_00003	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.928 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFOSA_00009	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00006	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00005	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00005	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00006	200 uL	Perfluoroundecanoic acid	1 ug/mL
...LCPFBA_00006	05/27/21	Wellington Laboratories, Lot PFBA0516			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBS_00006	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFDA_00006	05/31/21	Wellington Laboratories, Lot PFDA0516			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDoA_00006	05/31/21	Wellington Laboratories, Lot PFDoA0516			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDS_00005	07/02/20	Wellington Laboratories, Lot LPFDS0615			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00006	01/22/21	Wellington Laboratories, Lot PFHpA0116			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
...LCPFHpS_00010	11/06/20	Wellington Laboratories, Lot LPFHpS1115			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
...LCPFHxA_00005	12/22/20	Wellington Laboratories, Lot PFHxA1215			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxDA_00007	05/25/21	Wellington Laboratories, Lot PFHxDA0516			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
...LCPFHxS-br_00003	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexanesulfonic acid	45.5 ug/mL
...LCPFNA_00007	10/23/20	Wellington Laboratories, Lot PFNA1015			(Purchased Reagent)		Perfluorononanoic acid	50 ug/mL
...LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFODA_00007	04/29/21	Wellington Laboratories, Lot PFODA0416			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
...LCPFOS-br_00003	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
...LCPFOSA_00009	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA_00006	05/31/21	Wellington Laboratories, Lot PFPeA0516			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA_00005	12/09/20	Wellington Laboratories, Lot PFTeDA1215			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA_00005	02/12/21	Wellington Laboratories, Lot PFTrDA0216			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA_00006	08/19/20	Wellington Laboratories, Lot PFUdA0815			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_FULL-L4_00003	08/13/17	04/16/17	MeOH/H2O, Lot 090285	5050 uL	LCMPFC2SU_00014	250 uL	d-N-EtFOSA-M	49.505 ng/mL
							d-N-MeFOSA-M	49.505 ng/mL
							d3-NMeFOSAA	49.505 ng/mL
							d5-NEtFOSAA	49.505 ng/mL
							M2-6:2FTS	47.0297 ng/mL
							M2-8:2FTS	47.4257 ng/mL
					LCMPFCSU_00057	250 uL	13C2-PFHxDA	49.505 ng/mL
							13C2-PFTeDA	49.505 ng/mL
							13C4-PFHpA	49.505 ng/mL
							13C5-PFPeA	49.505 ng/mL
							13C8 FOSA	49.505 ng/mL
							13C4 PFBA	49.505 ng/mL
							13C2 PFDA	49.505 ng/mL
							13C2 PFDoA	49.505 ng/mL
							13C2 PFHxA	49.505 ng/mL
							18O2 PFHxS	46.8317 ng/mL
							13C5 PFNA	49.505 ng/mL
							13C4 PFOA	49.505 ng/mL
							13C4 PFOS	47.3267 ng/mL
							13C2 PFUnA	49.505 ng/mL
					LCPFCSP_00086	200 uL	Perfluorobutanesulfonic acid (PFBS)	17.505 ng/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorooctanoic acid (PFOA)	19.802 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	18.3762 ng/mL
.LCMPFC2SU_00014	08/13/17	02/13/17	Methanol, Lot 104453	50000 uL	LCd-NEtFOSA-M_00004	1000 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00003	1000 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00003	1000 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00003	1000 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00003	1000 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00003	1000 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00004	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00003	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00003	05/31/21	WELLINGTON, Lot d3NMeFOSAA0516			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00003	08/02/21	WELLINGTON, Lot d5NEtFOSAA0716			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00003	01/08/21	WELLINGTON, Lot M262FTS0116			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00003	01/08/21	WELLINGTON, Lot M282FTS0116			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00057	10/04/17	04/04/17	Methanol, Lot Baker 141039	50000 uL	LCM2PFHxDA_00008	1000 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00007	1000 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00007	1000 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00008	1000 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00011	1000 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00008	1000 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00011	1000 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00008	1000 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00012	1000 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00008	1000 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00008	1000 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00012	1000 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00018	1000 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00009	1000 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00008	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00007	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00007	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00008	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00011	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00008	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00011	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00008	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00012	04/08/21	Wellington Laboratories, Lot MPFHxA0416			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00008	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00008	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00012	01/22/21	Wellington Laboratories, Lot MPFOA0116			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00018	08/03/21	Wellington Laboratories, Lot MPFOS0816			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00009	02/12/21	Wellington Laboratories, Lot MPFUdA0216			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00086	09/02/17	04/05/17	Methanol, Lot 141039	10000 uL	LCPFBS_00005	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFOA_00007	100 uL	Perfluorooctanoic acid (PFOA)	0.5 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFOS-br_00002	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
..LCPFBS_00005	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00002	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
LCPFC_FULL-L4_00005	09/02/17	05/30/17	MeOH/H2O, Lot 090285	5000 uL	LCMPFC2SU_00019	250 uL	d-N-EtFOSA-M	50 ng/mL
							d-N-MeFOSA-M	50 ng/mL
							d3-NMeFOSAA	50 ng/mL
							d5-NEtFOSAA	50 ng/mL
							M2-6:2FTS	47.5 ng/mL
							M2-8:2FTS	47.9 ng/mL
					LCMPFCSU_00069	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFC2SP_00030	100 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	18.68 ng/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	18.96 ng/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	19.16 ng/mL
							N-ethylperfluoro-1-octanesulfonamide	20 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	20 ng/mL
							MeFOSA	20 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	20 ng/mL
					LCPFCIS_00002	50 uL	13C2-PFOA	50 ng/mL
					LCPFCSP_00096	100 uL	Perfluorobutyric acid	20 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	17.68 ng/mL
							Perfluorodecanoic acid	20 ng/mL
							Perfluorododecanoic acid	20 ng/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorodecane Sulfonic acid	19.28 ng/mL
							Perfluoroheptanoic acid	20 ng/mL
							Perfluoroheptanesulfonic Acid	19.04 ng/mL
							Perfluorohexanoic acid	20 ng/mL
							Perfluorohexadecanoic acid	20 ng/mL
							Perfluorohexanesulfonic acid	18.2 ng/mL
							Perfluorononanoic acid	20 ng/mL
							Perfluorooctanoic acid (PFOA)	20 ng/mL
							Perfluorooctadecanoic acid	20 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	18.56 ng/mL
							Perfluorooctane Sulfonamide	20 ng/mL
							Perfluoropentanoic acid	20 ng/mL
							Perfluorotetradecanoic acid	20 ng/mL
							Perfluorotridecanoic acid	20 ng/mL
							Perfluoroundecanoic acid	20 ng/mL
.LCMPFC2SU_00019	11/30/17	05/30/17	Methanol, Lot 104453	5000 uL	LCd-NEtFOSA-M_00005	100 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00004	100 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00004	100 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00004	100 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00004	100 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00004	100 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00005	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00004	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00004	11/22/21	WELLINGTON, Lot d3NMeFOSAA1116			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00004	11/22/21	WELLINGTON, Lot d5NEtFOSAA1116			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00004	02/17/22	WELLINGTON, Lot M262FTS0217			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00004	08/22/21	WELLINGTON, Lot M282FTS0816			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00069	11/24/17	05/24/17	Methanol, Lot Baker 141039	10000 uL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00009	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00013	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFC2SP_00030	10/14/17	04/14/17	Methanol, Lot 104453	10000 uL	LC4:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.934 ug/mL
					LC6:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.948 ug/mL
					LC8:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.958 ug/mL
					LCN-EtFOSA-M_00003	200 uL	N-ethylperfluoro-1-octanesulfonamide	1 ug/mL
					LCN-EtFOSAA_00002	200 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
					LCN-MeFOSA-M_00002	200 uL	MeFOSA	1 ug/mL
					LCN-MeFOSAA_00003	200 uL	N-methyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
..LC4:2FTS_00002	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	46.7 ug/mL
..LC6:2FTS_00002	06/25/21	WELLINGTON, Lot 62FTS0616			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	47.4 ug/mL
..LC8:2FTS_00002	10/23/20	WELLINGTON, Lot 82FTS1015			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	47.9 ug/mL
..LCN-EtFOSA-M_00003	05/24/21	WELLINGTON, Lot NEtFOSA0516M			(Purchased Reagent)		N-ethylperfluoro-1-octanesulfonamide	50 ug/mL
..LCN-EtFOSAA_00002	01/20/21	WELLINGTON, Lot NEtFOSAA0116			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCN-MeFOSA-M_00002	05/24/21	WELLINGTON, Lot NMeFOSA0714M			(Purchased Reagent)		MeFOSA	50 ug/mL
..LCN-MeFOSAA_00003	01/20/21	WELLINGTON, Lot NMeFOSAA0116			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCPFCIS_00002	10/17/17	04/17/17	Methanol, Lot 14139	2000 uL	LCM2PFOA_00005	200 uL	13C2-PFOA	5 ug/mL
..LCM2PFOA_00005	06/19/18	Wellington Laboratories, Lot M2PFOA0613			(Purchased Reagent)		13C2-PFOA	50 ug/mL
.LCPFCSP_00096	09/02/17	05/24/17	Methanol, Lot 090285	10000 uL	LCPFBA_00006	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBS_00006	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00006	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00006	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDS_00005	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00006	200 uL	Perfluoroheptanoic acid	1 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHpS_00010	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00005	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00007	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxS-br_00003	200 uL	Perfluorohexanesulfonic acid	0.91 ug/mL
					LCPFNA_00007	200 uL	Perfluorononanoic acid	1 ug/mL
					LCPFOA_00007	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00007	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS-br_00003	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.928 ug/mL
					LCPFOSA_00009	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00006	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00005	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00005	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00006	200 uL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00006	05/27/21	Wellington Laboratories, Lot PFBA0516			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00006	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00006	05/31/21	Wellington Laboratories, Lot PFDA0516			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00006	05/31/21	Wellington Laboratories, Lot PFDoA0516			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00005	07/02/20	Wellington Laboratories, Lot LPFDS0615			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00006	01/22/21	Wellington Laboratories, Lot PFHpA0116			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
..LCPFHpS_00010	11/06/20	Wellington Laboratories, Lot LPFHpS1115			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00005	12/22/20	Wellington Laboratories, Lot PFHxA1215			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00007	05/25/21	Wellington Laboratories, Lot PFHxDA0516			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxS-br_00003	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexanesulfonic acid	45.5 ug/mL
..LCPFNA_00007	10/23/20	Wellington Laboratories, Lot PFNA1015			(Purchased Reagent)		Perfluorononanoic acid	50 ug/mL
..LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00007	04/29/21	Wellington Laboratories, Lot PFODA0416			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
..LCPFOS-br_00003	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00009	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00006	05/31/21	Wellington Laboratories, Lot PFPeA0516			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00005	12/09/20	Wellington Laboratories, Lot PFTeDA1215			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00005	02/12/21	Wellington Laboratories, Lot PFTrDA0216			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00006	08/19/20	Wellington Laboratories, Lot PFUdA0815			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_FULL-L5_00004	08/13/17	05/06/17	MeOH/H2O, Lot 090285	5050 uL	LCMPFC2SU_00014	250 uL	d-N-EtFOSA-M	49.505 ng/mL
							d-N-MeFOSA-M	49.505 ng/mL
							d3-NMeFOSAA	49.505 ng/mL
							d5-NEtFOSAA	49.505 ng/mL
							M2-6:2FTS	47.0297 ng/mL
							M2-8:2FTS	47.4257 ng/mL
					LCMPFCSU_00057	250 uL	13C2-PFHxDA	49.505 ng/mL
							13C2-PFTeDA	49.505 ng/mL
							13C4-PFHpA	49.505 ng/mL
							13C5-PFPeA	49.505 ng/mL
							13C8 FOSA	49.505 ng/mL
							13C4 PFBA	49.505 ng/mL
							13C2 PFDA	49.505 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C2 PFDoA	49.505 ng/mL
							13C2 PFHxA	49.505 ng/mL
							18O2 PFHxS	46.8317 ng/mL
							13C5 PFNA	49.505 ng/mL
							13C4 PFOA	49.505 ng/mL
							13C4 PFOS	47.3267 ng/mL
							13C2 PFUnA	49.505 ng/mL
					LCPFCSP_00086	500 uL	Perfluorobutanesulfonic acid (PFBS)	43.7624 ng/mL
							Perfluorooctanoic acid (PFOA)	49.505 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	45.9406 ng/mL
.LCMPFC2SU_00014	08/13/17	02/13/17	Methanol, Lot 104453	50000 uL	LCd-NEtFOSA-M_00004	1000 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00003	1000 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00003	1000 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00003	1000 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00003	1000 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00003	1000 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00004	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00003	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00003	05/31/21	WELLINGTON, Lot d3NMeFOSAA0516			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00003	08/02/21	WELLINGTON, Lot d5NEtFOSAA0716			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00003	01/08/21	WELLINGTON, Lot M262FTS0116			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00003	01/08/21	WELLINGTON, Lot M282FTS0116			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00057	10/04/17	04/04/17	Methanol, Lot Baker 141039	50000 uL	LCM2PFHxDA_00008	1000 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00007	1000 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00007	1000 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00008	1000 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00011	1000 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00008	1000 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00011	1000 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00008	1000 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00012	1000 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00008	1000 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00008	1000 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00012	1000 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00018	1000 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00009	1000 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00008	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00007	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00007	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00008	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00011	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00008	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00011	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00008	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00012	04/08/21	Wellington Laboratories, Lot MPFHxA0416			(Purchased Reagent)		13C2 PFHxA	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFHxS_00008	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00008	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00012	01/22/21	Wellington Laboratories, Lot MPFOA0116			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00018	08/03/21	Wellington Laboratories, Lot MPFOS0816			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00009	02/12/21	Wellington Laboratories, Lot MPFUdA0216			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00086	09/02/17	04/05/17	Methanol, Lot 141039	10000 uL	LCPFBS_00005	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFOA_00007	100 uL	Perfluorooctanoic acid (PFOA)	0.5 ug/mL
					LCPFOS-br_00002	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
..LCPFBS_00005	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00002	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
LCPFC_FULL-L5_00005	09/02/17	05/30/17	MeOH/H2O, Lot 090285	5000 uL	LCMPFC2SU_00019	250 uL	d-N-EtFOSA-M	50 ng/mL
							d-N-MeFOSA-M	50 ng/mL
							d3-NMeFOSAA	50 ng/mL
							d5-NEtFOSAA	50 ng/mL
							M2-6:2FTS	47.5 ng/mL
							M2-8:2FTS	47.9 ng/mL
					LCMPFCSU_00069	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFC2SP_00030	250 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	46.7 ng/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	47.4 ng/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	47.9 ng/mL
							N-ethylperfluoro-1-octanesulfonamide	50 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	50 ng/mL
							MeFOSA	50 ng/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-methyl perfluorooctane sulfonamidoacetic acid	50 ng/mL
					LCPFCIS_00002	50 uL	13C2-PFOA	50 ng/mL
					LCPFCSP_00096	250 uL	Perfluorobutyric acid	50 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	44.2 ng/mL
							Perfluorodecanoic acid	50 ng/mL
							Perfluorododecanoic acid	50 ng/mL
							Perfluorodecane Sulfonic acid	48.2 ng/mL
							Perfluoroheptanoic acid	50 ng/mL
							Perfluoroheptanesulfonic Acid	47.6 ng/mL
							Perfluorohexanoic acid	50 ng/mL
							Perfluorohexadecanoic acid	50 ng/mL
							Perfluorohexanesulfonic acid	45.5 ng/mL
							Perfluorononanoic acid	50 ng/mL
							Perfluorooctanoic acid (PFOA)	50 ng/mL
							Perfluorooctadecanoic acid	50 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	46.4 ng/mL
							Perfluorooctane Sulfonamide	50 ng/mL
							Perfluoropentanoic acid	50 ng/mL
							Perfluorotetradecanoic acid	50 ng/mL
							Perfluorotridecanoic acid	50 ng/mL
							Perfluoroundecanoic acid	50 ng/mL
.LCMPFC2SU_00019	11/30/17	05/30/17	Methanol, Lot 104453	5000 uL	LCd-NEtFOSA-M_00005	100 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00004	100 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00004	100 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00004	100 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00004	100 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00004	100 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00005	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00004	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00004	11/22/21	WELLINGTON, Lot d3NMeFOSAA1116			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00004	11/22/21	WELLINGTON, Lot d5NEtFOSAA1116			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00004	02/17/22	WELLINGTON, Lot M262FTS0217			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00004	08/22/21	WELLINGTON, Lot M282FTS0816			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00069	11/24/17	05/24/17	Methanol, Lot Baker 141039	10000 uL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00009	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	1 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFOA_00013	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFC2SP_00030	10/14/17	04/14/17	Methanol, Lot 104453	10000 uL	LC4:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.934 ug/mL
					LC6:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.948 ug/mL
					LC8:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.958 ug/mL
					LCN-EtFOSA-M_00003	200 uL	N-ethylperfluoro-1-octanesulfonamide	1 ug/mL
					LCN-EtFOSAA_00002	200 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
					LCN-MeFOSA-M_00002	200 uL	MeFOSA	1 ug/mL
					LCN-MeFOSAA_00003	200 uL	N-methyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
..LC4:2FTS_00002	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	46.7 ug/mL
..LC6:2FTS_00002	06/25/21	WELLINGTON, Lot 62FTS0616			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	47.4 ug/mL
..LC8:2FTS_00002	10/23/20	WELLINGTON, Lot 82FTS1015			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	47.9 ug/mL
..LCN-EtFOSA-M_00003	05/24/21	WELLINGTON, Lot NEtFOSA0516M			(Purchased Reagent)		N-ethylperfluoro-1-octanesulfonamide	50 ug/mL
..LCN-EtFOSAA_00002	01/20/21	WELLINGTON, Lot NEtFOSAA0116			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCN-MeFOSA-M_00002	05/24/21	WELLINGTON, Lot NMeFOSA0714M			(Purchased Reagent)		MeFOSA	50 ug/mL
..LCN-MeFOSAA_00003	01/20/21	WELLINGTON, Lot NMeFOSAA0116			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCPFCIS_00002	10/17/17	04/17/17	Methanol, Lot 14139	2000 uL	LCM2PFOA_00005	200 uL	13C2-PFOA	5 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCM2PFOA_00005	06/19/18	Wellington Laboratories, Lot M2PFOA0613			(Purchased Reagent)		13C2-PFOA	50 ug/mL
.LCPFCSP_00096	09/02/17	05/24/17	Methanol, Lot 090285	10000 uL	LCPFBA_00006	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBS_00006	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00006	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00006	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDS_00005	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00006	200 uL	Perfluoroheptanoic acid	1 ug/mL
					LCPFHpS_00010	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00005	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00007	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxS-br_00003	200 uL	Perfluorohexanesulfonic acid	0.91 ug/mL
					LCPFNA_00007	200 uL	Perfluorononanoic acid	1 ug/mL
					LCPFOA_00007	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00007	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS-br_00003	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.928 ug/mL
					LCPFOSA_00009	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00006	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00005	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00005	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00006	200 uL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00006	05/27/21	Wellington Laboratories, Lot PFBA0516			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00006	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00006	05/31/21	Wellington Laboratories, Lot PFDA0516			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00006	05/31/21	Wellington Laboratories, Lot PFDoA0516			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00005	07/02/20	Wellington Laboratories, Lot LPFDS0615			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00006	01/22/21	Wellington Laboratories, Lot PFHpA0116			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
..LCPFHpS_00010	11/06/20	Wellington Laboratories, Lot LPFHpS1115			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00005	12/22/20	Wellington Laboratories, Lot PFHxA1215			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00007	05/25/21	Wellington Laboratories, Lot PFHxDA0516			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxS-br_00003	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexanesulfonic acid	45.5 ug/mL
..LCPFNA_00007	10/23/20	Wellington Laboratories, Lot PFNA1015			(Purchased Reagent)		Perfluorononanoic acid	50 ug/mL
..LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00007	04/29/21	Wellington Laboratories, Lot PFODA0416			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
..LCPFOS-br_00003	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00009	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00006	05/31/21	Wellington Laboratories, Lot PFPeA0516			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00005	12/09/20	Wellington Laboratories, Lot PFTeDA1215			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00005	02/12/21	Wellington Laboratories, Lot PFTrDA0216			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00006	08/19/20	Wellington Laboratories, Lot PFUdA0815			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_FULL-L6_00005	09/02/17	05/30/17	MeOH/H2O, Lot 090285	5000 uL	LCMPFC2SU_00019	250 uL	d-N-EtFOSA-M	50 ng/mL
							d-N-MeFOSA-M	50 ng/mL
							d3-NMeFOSAA	50 ng/mL
							d5-NEtFOSAA	50 ng/mL
							M2-6:2FTS	47.5 ng/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							M2-8:2FTS	47.9 ng/mL
					LCMPFCSU_00069	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFC2SP_00030	500 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	93.4 ng/mL
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	94.8 ng/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	95.8 ng/mL
							N-ethylperfluoro-1-octanesulfonamide	100 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	100 ng/mL
							MeFOSA	100 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	100 ng/mL
					LCPFCIS_00002	50 uL	13C2-PFOA	50 ng/mL
					LCPFCSP_00096	500 uL	Perfluorobutyric acid	100 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	88.4 ng/mL
							Perfluorodecanoic acid	100 ng/mL
							Perfluorododecanoic acid	100 ng/mL
							Perfluorodecane Sulfonic acid	96.4 ng/mL
							Perfluoroheptanoic acid	100 ng/mL
							Perfluoroheptanesulfonic Acid	95.2 ng/mL
							Perfluorohexanoic acid	100 ng/mL
							Perfluorohexadecanoic acid	100 ng/mL
							Perfluorohexanesulfonic acid	91 ng/mL
							Perfluorononanoic acid	100 ng/mL
							Perfluorooctanoic acid (PFOA)	100 ng/mL
							Perfluorooctadecanoic acid	100 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	92.8 ng/mL
							Perfluorooctane Sulfonamide	100 ng/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluoropentanoic acid	100 ng/mL
							Perfluorotetradecanoic acid	100 ng/mL
							Perfluorotridecanoic acid	100 ng/mL
							Perfluoroundecanoic acid	100 ng/mL
.LCMPFC2SU_00019	11/30/17	05/30/17	Methanol, Lot 104453	5000 uL	LCd-NEtFOSA-M_00005	100 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00004	100 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00004	100 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00004	100 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00004	100 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00004	100 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00005	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00004	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00004	11/22/21	WELLINGTON, Lot d3NMeFOSAA1116			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00004	11/22/21	WELLINGTON, Lot d5NEtFOSAA1116			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00004	02/17/22	WELLINGTON, Lot M262FTS0217			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00004	08/22/21	WELLINGTON, Lot M282FTS0816			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00069	11/24/17	05/24/17	Methanol, Lot Baker 141039	10000 uL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00009	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00013	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFC2SP_00030	10/14/17	04/14/17	Methanol, Lot 104453	10000 uL	LC4:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.934 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LC6:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.948 ug/mL
					LC8:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.958 ug/mL
					LCN-EtFOSA-M_00003	200 uL	N-ethylperfluoro-1-octanesulfonamide	1 ug/mL
					LCN-EtFOSAA_00002	200 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
					LCN-MeFOSA-M_00002	200 uL	MeFOSA	1 ug/mL
					LCN-MeFOSAA_00003	200 uL	N-methyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
..LC4:2FTS_00002	12/12/21		WELLINGTON, Lot 42FTS1216		(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	46.7 ug/mL
..LC6:2FTS_00002	06/25/21		WELLINGTON, Lot 62FTS0616		(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	47.4 ug/mL
..LC8:2FTS_00002	10/23/20		WELLINGTON, Lot 82FTS1015		(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	47.9 ug/mL
..LCN-EtFOSA-M_00003	05/24/21		WELLINGTON, Lot NEtFOSA0516M		(Purchased Reagent)		N-ethylperfluoro-1-octanesulfonamide	50 ug/mL
..LCN-EtFOSAA_00002	01/20/21		WELLINGTON, Lot NEtFOSAA0116		(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCN-MeFOSA-M_00002	05/24/21		WELLINGTON, Lot NMeFOSA0714M		(Purchased Reagent)		MeFOSA	50 ug/mL
..LCN-MeFOSAA_00003	01/20/21		WELLINGTON, Lot NMeFOSAA0116		(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCPFCIS_00002	10/17/17	04/17/17	Methanol, Lot 14139	2000 uL	LCM2PFOA_00005	200 uL	13C2-PFOA	5 ug/mL
..LCM2PFOA_00005	06/19/18		Wellington Laboratories, Lot M2PFOA0613		(Purchased Reagent)		13C2-PFOA	50 ug/mL
.LCPFCSP_00096	09/02/17	05/24/17	Methanol, Lot 090285	10000 uL	LCPFBA_00006	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBS_00006	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00006	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00006	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDS_00005	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00006	200 uL	Perfluoroheptanoic acid	1 ug/mL
					LCPFHpS_00010	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00005	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00007	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxS-br_00003	200 uL	Perfluorohexanesulfonic acid	0.91 ug/mL
					LCPFNA_00007	200 uL	Perfluorononanoic acid	1 ug/mL
					LCPFOA_00007	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00007	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS-br_00003	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.928 ug/mL
					LCPFOSA_00009	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00006	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00005	200 uL	Perfluorotetradecanoic acid	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFTrDA_00005	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00006	200 uL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00006	05/27/21	Wellington Laboratories, Lot PFBA0516			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00006	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00006	05/31/21	Wellington Laboratories, Lot PFDA0516			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00006	05/31/21	Wellington Laboratories, Lot PFDoA0516			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00005	07/02/20	Wellington Laboratories, Lot LPFDS0615			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00006	01/22/21	Wellington Laboratories, Lot PFHpA0116			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
..LCPFHpS_00010	11/06/20	Wellington Laboratories, Lot LPFHpS1115			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00005	12/22/20	Wellington Laboratories, Lot PFHxA1215			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00007	05/25/21	Wellington Laboratories, Lot PFHxDA0516			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxS-br_00003	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexanesulfonic acid	45.5 ug/mL
..LCPFNA_00007	10/23/20	Wellington Laboratories, Lot PFNA1015			(Purchased Reagent)		Perfluorononanoic acid	50 ug/mL
..LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00007	04/29/21	Wellington Laboratories, Lot PFODA0416			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
..LCPFOS-br_00003	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00009	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00006	05/31/21	Wellington Laboratories, Lot PFPeA0516			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00005	12/09/20	Wellington Laboratories, Lot PFTeDA1215			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00005	02/12/21	Wellington Laboratories, Lot PFTrDA0216			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00006	08/19/20	Wellington Laboratories, Lot PFUdA0815			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_FULL-L7_00003	09/02/17	05/30/17	MeOH/H2O, Lot 090285	5000 uL	LCMPFC2SU_00019	250 uL	d-N-EtFOSA-M	50 ng/mL
							d-N-MeFOSA-M	50 ng/mL
							d3-NMeFOSAA	50 ng/mL
							d5-NEtFOSAA	50 ng/mL
							M2-6:2FTS	47.5 ng/mL
							M2-8:2FTS	47.9 ng/mL
					LCMPFCSU_00069	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFC2SP_00030	1000 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	186.8 ng/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	189.6 ng/mL
							Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	191.6 ng/mL
							N-ethylperfluoro-1-octanesulfonamide	200 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	200 ng/mL
							MeFOSA	200 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	200 ng/mL
					LCPFCIS_00002	50 uL	13C2-PFOA	50 ng/mL
					LCPFCSP_00096	1000 uL	Perfluorobutyric acid	200 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	176.8 ng/mL
							Perfluorodecanoic acid	200 ng/mL
							Perfluorododecanoic acid	200 ng/mL
							Perfluorodecane Sulfonic acid	192.8 ng/mL
							Perfluoroheptanoic acid	200 ng/mL
							Perfluoroheptanesulfonic Acid	190.4 ng/mL
							Perfluorohexanoic acid	200 ng/mL
							Perfluorohexadecanoic acid	200 ng/mL
							Perfluorohexanesulfonic acid	182 ng/mL
							Perfluorononanoic acid	200 ng/mL
							Perfluorooctanoic acid (PFOA)	200 ng/mL
							Perfluorooctadecanoic acid	200 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	185.6 ng/mL
							Perfluorooctane Sulfonamide	200 ng/mL
							Perfluoropentanoic acid	200 ng/mL
							Perfluorotetradecanoic acid	200 ng/mL
							Perfluorotridecanoic acid	200 ng/mL
							Perfluoroundecanoic acid	200 ng/mL
.LCMPFC2SU_00019	11/30/17	05/30/17	Methanol, Lot 104453	5000 uL	LCd-NEtFOSA-M_00005	100 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00004	100 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00004	100 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00004	100 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00004	100 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00004	100 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00005	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00004	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00004	11/22/21	WELLINGTON, Lot d3NMeFOSAA1116			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00004	11/22/21	WELLINGTON, Lot d5NEtFOSAA1116			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00004	02/17/22	WELLINGTON, Lot M262FTS0217			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00004	08/22/21	WELLINGTON, Lot M282FTS0816			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00069	11/24/17	05/24/17	Methanol, Lot Baker 141039	10000 uL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	1 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00009	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00013	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFC2SP_00030	10/14/17	04/14/17	Methanol, Lot 104453	10000 uL	LC4:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	0.934 ug/mL
					LC6:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	0.948 ug/mL
					LC8:2FTS_00002	200 uL	Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	0.958 ug/mL
					LCN-EtFOSA-M_00003	200 uL	N-ethylperfluoro-1-octanesulfonamide	1 ug/mL
					LCN-EtFOSAA_00002	200 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
					LCN-MeFOSA-M_00002	200 uL	MeFOSA	1 ug/mL
					LCN-MeFOSAA_00003	200 uL	N-methyl perfluorooctane sulfonamidoacetic acid	1 ug/mL
..LC4:2FTS_00002	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	46.7 ug/mL
..LC6:2FTS_00002	06/25/21	WELLINGTON, Lot 62FTS0616			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	47.4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LC8:2FTS_00002	10/23/20	WELLINGTON, Lot 82FTS1015			(Purchased Reagent)		Sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	47.9 ug/mL
..LCN-EtFOSA-M_00003	05/24/21	WELLINGTON, Lot NEtFOSA0516M			(Purchased Reagent)		N-ethylperfluoro-1-octanesulfonamide	50 ug/mL
..LCN-EtFOSAA_00002	01/20/21	WELLINGTON, Lot NEtFOSAA0116			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCN-MeFOSA-M_00002	05/24/21	WELLINGTON, Lot NMeFOSA0714M			(Purchased Reagent)		MeFOSA	50 ug/mL
..LCN-MeFOSAA_00003	01/20/21	WELLINGTON, Lot NMeFOSAA0116			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCPFCIS_00002	10/17/17	04/17/17	Methanol, Lot 14139	2000 uL	LCM2PFOA_00005	200 uL	13C2-PFOA	5 ug/mL
..LCM2PFOA_00005	06/19/18	Wellington Laboratories, Lot M2PFOA0613			(Purchased Reagent)		13C2-PFOA	50 ug/mL
.LCPFCSP_00096	09/02/17	05/24/17	Methanol, Lot 090285	10000 uL	LCPFBA_00006	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBS_00006	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00006	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00006	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDS_00005	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00006	200 uL	Perfluoroheptanoic acid	1 ug/mL
					LCPFHpS_00010	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00005	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00007	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxS-br_00003	200 uL	Perfluorohexanesulfonic acid	0.91 ug/mL
					LCPFNA_00007	200 uL	Perfluorononanoic acid	1 ug/mL
					LCPFOA_00007	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00007	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS-br_00003	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.928 ug/mL
					LCPFOSA_00009	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00006	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00005	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00005	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00006	200 uL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00006	05/27/21	Wellington Laboratories, Lot PFBA0516			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00006	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00006	05/31/21	Wellington Laboratories, Lot PFDA0516			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00006	05/31/21	Wellington Laboratories, Lot PFDoA0516			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00005	07/02/20	Wellington Laboratories, Lot LPFDS0615			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00006	01/22/21	Wellington Laboratories, Lot PFHpA0116			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
..LCPFHpS_00010	11/06/20	Wellington Laboratories, Lot LPFHpS1115			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00005	12/22/20	Wellington Laboratories, Lot PFHxA1215			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00007	05/25/21	Wellington Laboratories, Lot PFHxDA0516			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxS-br_00003	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexanesulfonic acid	45.5 ug/mL
..LCPFNA_00007	10/23/20	Wellington Laboratories, Lot PFNA1015			(Purchased Reagent)		Perfluorononanoic acid	50 ug/mL
..LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00007	04/29/21	Wellington Laboratories, Lot PFODA0416			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
..LCPFOS-br_00003	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFOSA_00009	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00006	05/31/21	Wellington Laboratories, Lot PFPeA0516			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00005	12/09/20	Wellington Laboratories, Lot PFTeDA1215			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00005	02/12/21	Wellington Laboratories, Lot PFTrDA0216			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00006	08/19/20	Wellington Laboratories, Lot PFUdA0815			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFCIC_FULL_00003	09/02/17	05/30/17	MeOH/H2O, Lot 09285	5050 uL	LCMPFC2SU_00019	250 uL	d-N-EtFOSA-M	49.505 ng/mL
							d-N-MeFOSA-M	49.505 ng/mL
							d3-NMeFOSAA	49.505 ng/mL
							d5-NEtFOSAA	49.505 ng/mL
							M2-6:2FTS	47.0297 ng/mL
							M2-8:2FTS	47.4257 ng/mL
					LCMPFCSU_00069	250 uL	13C2-PFHxDA	49.505 ng/mL
							13C2-PFTeDA	49.505 ng/mL
							13C4-PFHpA	49.505 ng/mL
							13C5-PFPeA	49.505 ng/mL
							13C8 FOSA	49.505 ng/mL
							13C4 PFBA	49.505 ng/mL
							13C2 PFDA	49.505 ng/mL
							13C2 PFDoA	49.505 ng/mL
							13C2 PFHxA	49.505 ng/mL
							18O2 PFHxS	46.8317 ng/mL
							13C5 PFNA	49.505 ng/mL
							13C4 PFOA	49.505 ng/mL
							13C4 PFOS	47.3267 ng/mL
							13C2 PFUnA	49.505 ng/mL
					LCPFACMXB_00007	125 uL	Perfluorobutanesulfonic acid (PFBS)	43.8119 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	47.2772 ng/mL
							Perfluorooctanoic acid (PFOA)	49.505 ng/mL
.LCMPFC2SU_00019	11/30/17	05/30/17	Methanol, Lot 104453	5000 uL	LCd-NEtFOSA-M_00005	100 uL	d-N-EtFOSA-M	1 ug/mL
					LCd-NMeFOSA-M_00004	100 uL	d-N-MeFOSA-M	1 ug/mL
					LCd3-NMeFOSAA_00004	100 uL	d3-NMeFOSAA	1 ug/mL
					LCd5-NEtFOSAA_00004	100 uL	d5-NEtFOSAA	1 ug/mL
					LCM2-6:FTS_00004	100 uL	M2-6:2FTS	0.95 ug/mL
					LCM2-8:2FTS_00004	100 uL	M2-8:2FTS	0.958 ug/mL
..LCd-NEtFOSA-M_00005	06/10/21	WELLINGTON, Lot dNEtFOSA0616M			(Purchased Reagent)		d-N-EtFOSA-M	50 ug/mL
..LCd-NMeFOSA-M_00004	06/10/21	WELLINGTON, Lot dNMeFOSA0616M			(Purchased Reagent)		d-N-MeFOSA-M	50 ug/mL
..LCd3-NMeFOSAA_00004	11/22/21	WELLINGTON, Lot d3NMeFOSAA1116			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00004	11/22/21	WELLINGTON, Lot d5NEtFOSAA1116			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00004	02/17/22	WELLINGTON, Lot M262FTS0217			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00004	08/22/21	WELLINGTON, Lot M282FTS0816			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCMPFCSU_00069	11/24/17	05/24/17	Methanol, Lot Baker 141039	10000 uL	LCM2PFHxDA_00009	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00008	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00008	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00009	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00012	200 uL	13C8 FOSA	1 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFBA_00009	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00013	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00009	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00014	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00009	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00009	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00013	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00020	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00010	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00009	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00008	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00008	05/27/21	Wellington Laboratories, Lot M4PFHpA0516			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00009	11/22/21	Wellington Laboratories, Lot M5PFPeA1116			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00012	12/22/20	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00009	05/24/21	Wellington Laboratories, Lot MPFBA0516			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00013	09/30/21	Wellington Laboratories, Lot MPFDA0916			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00009	04/08/21	Wellington Laboratories, Lot MPFDoA0416			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00014	11/22/21	Wellington Laboratories, Lot MPFHxA1116			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00009	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00009	09/30/21	Wellington Laboratories, Lot MPFNA0916			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00013	10/18/21	Wellington Laboratories, Lot MPFOA1016			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00020	12/12/21	Wellington Laboratories, Lot MPFOS1216			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00010	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFACMXB_00007	11/06/20	Wellington Laboratories, Lot PFACMXB1115			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	1.77 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	1.91 ug/mL
							Perfluorooctanoic acid (PFOA)	2 ug/mL
LCPFCSP_00095	09/02/17	05/19/17	Methanol, Lot 090285	250 mL	LCPFBA_00005	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00005	100 uL	Perfluorobutane Sulfonate	0.01768 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00006	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00006	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00006	100 uL	Perfluorodecane Sulfonate	0.01928 ug/mL
							Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00006	100 uL	Perfluoroheptanoic acid	0.02 ug/mL
					LCPFHpS_00009	100 uL	Perfluoroheptane Sulfonate	0.01904 ug/mL
							Perfluoroheptanesulfonic Acid	0.01904 ug/mL
					LCPFHxA_00005	100 uL	Perfluorohexanoic acid	0.02 ug/mL
					LCPFHxDA_00006	100 uL	Perfluorohexadecanoic acid	0.02 ug/mL
					LCPFHxS-br_00002	100 uL	Perfluorohexane Sulfonate	0.0182 ug/mL
							Perfluorohexanesulfonic acid	0.0182 ug/mL
					LCPFNA_00006	100 uL	Perfluorononanoic acid	0.02 ug/mL
					LCPFOA_00007	100 uL	Perfluorooctanoic acid (PFOA)	0.02 ug/mL
					LCPFODA_00006	100 uL	Perfluorooctadecanoic acid	0.02 ug/mL
					LCPFOS-br_00002	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFOSA_00009	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00006	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFTeDA_00005	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00005	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00005	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
.LCPFBA_00005	05/27/21	Wellington Laboratories, Lot PFBA0516			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
.LCPFBS_00005	03/15/21	Wellington Laboratories, Lot LPFBS0316			(Purchased Reagent)		Perfluorobutane Sulfonate	44.2 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
.LCPFDA_00006	05/31/21	Wellington Laboratories, Lot PFDA0516			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
.LCPFDoA_00006	05/31/21	Wellington Laboratories, Lot PFDoA0516			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
.LCPFDS_00006	05/24/21	Wellington Laboratories, Lot LPFDS0516			(Purchased Reagent)		Perfluorodecane Sulfonate	48.2 ug/mL
							Perfluorodecane Sulfonic acid	48.2 ug/mL
.LCPFHpA_00006	01/22/21	Wellington Laboratories, Lot PFHpA0116			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
.LCPFHpS_00009	11/06/20	Wellington Laboratories, Lot LPFHpS1115			(Purchased Reagent)		Perfluoroheptane Sulfonate	47.6 ug/mL
							Perfluoroheptanesulfonic Acid	47.6 ug/mL
.LCPFHxA_00005	12/22/20	Wellington Laboratories, Lot PFHxA1215			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
.LCPFHxDA_00006	05/25/21	Wellington Laboratories, Lot PFHxDA0516			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
.LCPFHxS-br_00002	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexane Sulfonate	45.5 ug/mL
							Perfluorohexanesulfonic acid	45.5 ug/mL
.LCPFNA_00006	10/23/20	Wellington Laboratories, Lot PFNA1015			(Purchased Reagent)		Perfluorononanoic acid	50 ug/mL
.LCPFOA_00007	08/02/21	Wellington Laboratories, Lot PFOA0716			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
.LCPFODA_00006	04/29/21	Wellington Laboratories, Lot PFODA0416			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
.LCPFOS-br_00002	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
.LCPFOSA_00009	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
.LCPFPeA_00006	05/31/21	Wellington Laboratories, Lot PFPeA0516			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
.LCPFTeDA_00005	12/09/20	Wellington Laboratories, Lot PFTeDA1215			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
.LCPFTrDA_00005	02/12/21	Wellington Laboratories, Lot PFTrDA0216			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
.LCPFUdA_00005	08/19/20	Wellington Laboratories, Lot PFUdA0815			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL

Reagent

LC4:2FTS_00002

R: SBC 3/31/17

896827
ID: LC4:2FTS_00002
Exp: 12/12/21 Prpd:
4:2FTS

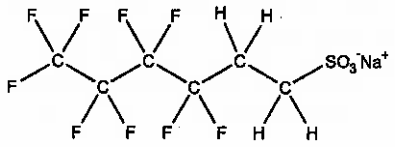
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: 4:2FTS **LOT NUMBER:** 42FTS1216

COMPOUND: Sodium 1H,1H,2H,2H-perfluorohexane sulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$C_6H_4F_9SO_3Na$		**MOLECULAR WEIGHT:**	350.13
CONCENTRATION:	50.0 ± 2.5 µg/ml	(Na salt)	**SOLVENT(S):**	Methanol
	46.7 ± 2.3 µg/ml	(4:2FTS anion)		
CHEMICAL PURITY:	>98%			
LAST TESTED: (mm/dd/yyyy)	12/12/2016			
EXPIRY DATE: (mm/dd/yyyy)	12/12/2021			
RECOMMENDED STORAGE:	Refrigerate ampoule			

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/21/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

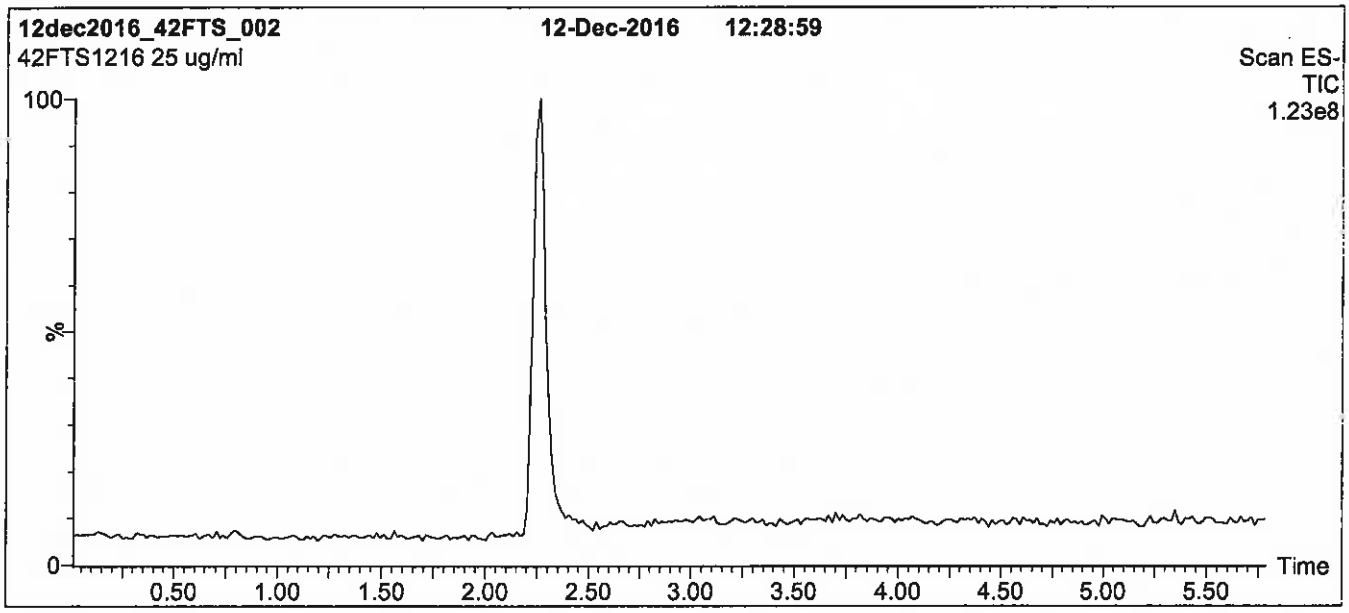
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

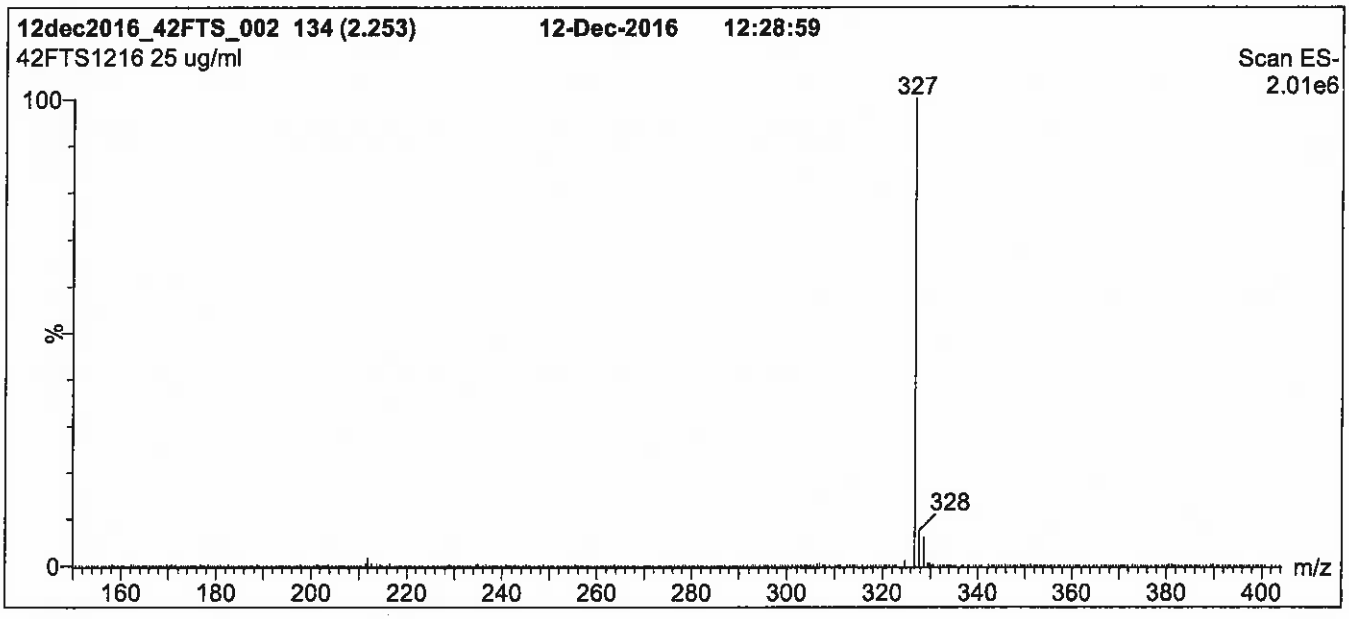
CALA Testing

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **4:2FTS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

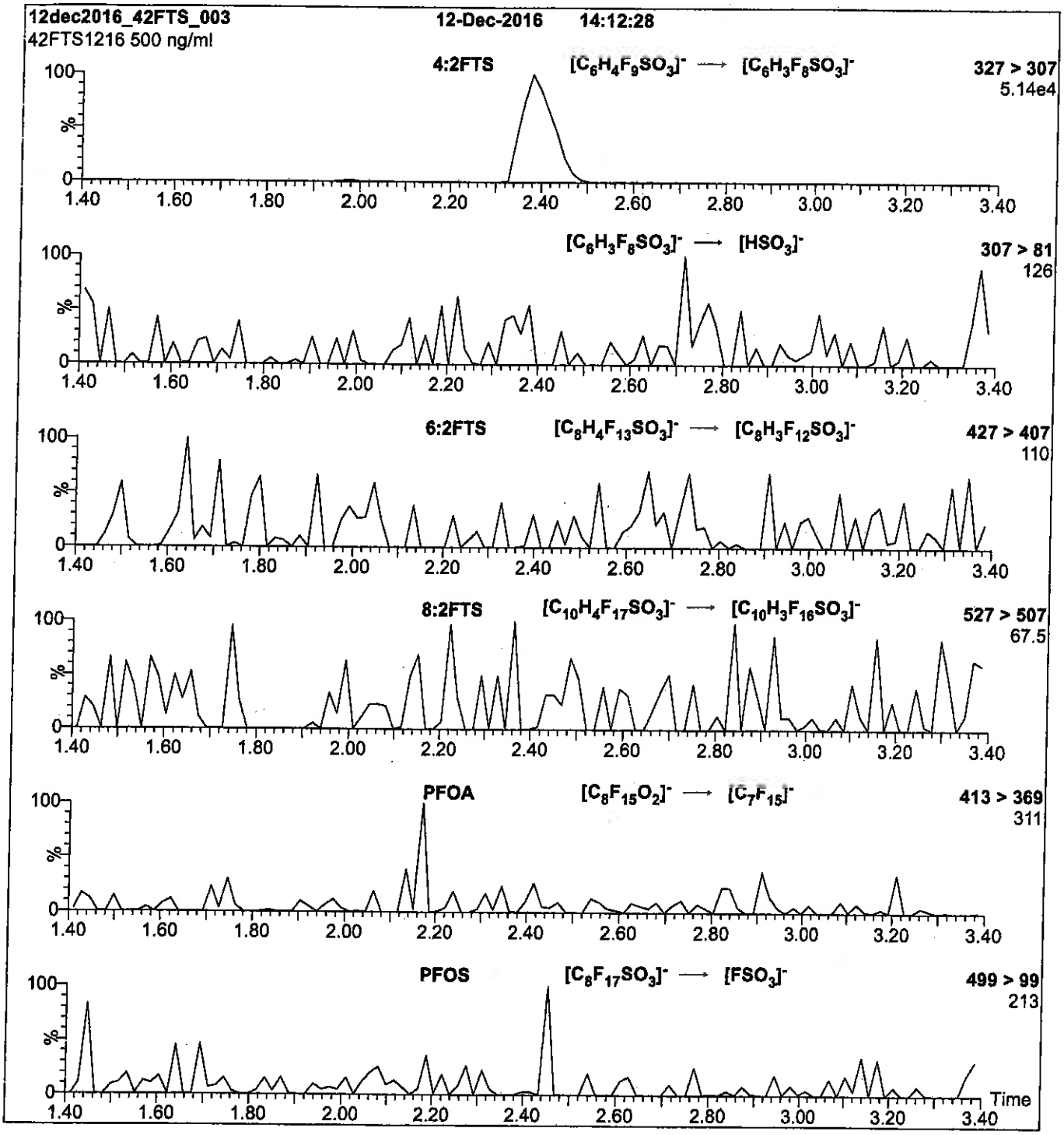
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **4:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml 4:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 25

Reagent

LC6:2FTS_00002

R: 8/23/16 SBC

715544
ID: LC6:2FTS_00002
Exp: 06/25/21 Prpd: SBC
6:2FTS

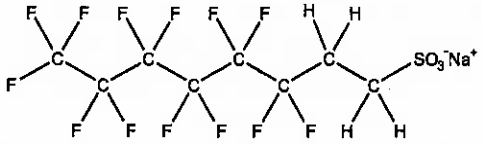
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: 6:2FTS **LOT NUMBER:** 62FTS0616

COMPOUND: Sodium 1H,1H,2H,2H-perfluorooctane sulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$C_8H_4F_{13}SO_3Na$		**MOLECULAR WEIGHT:**	450.15
CONCENTRATION:	50.0 ± 2.5 µg/ml	(Na salt)	**SOLVENT(S):**	Methanol
	47.4 ± 2.4 µg/ml	(6:2FTS anion)		
CHEMICAL PURITY:	>98%			
LAST TESTED: (mm/dd/yyyy)	06/25/2016			
EXPIRY DATE: (mm/dd/yyyy)	06/25/2021			
RECOMMENDED STORAGE:	Refrigerate ampoule			

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 06/29/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • Info@well-labs.com

INTENDED USE:

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HAZARDS:

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The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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CALA Testing

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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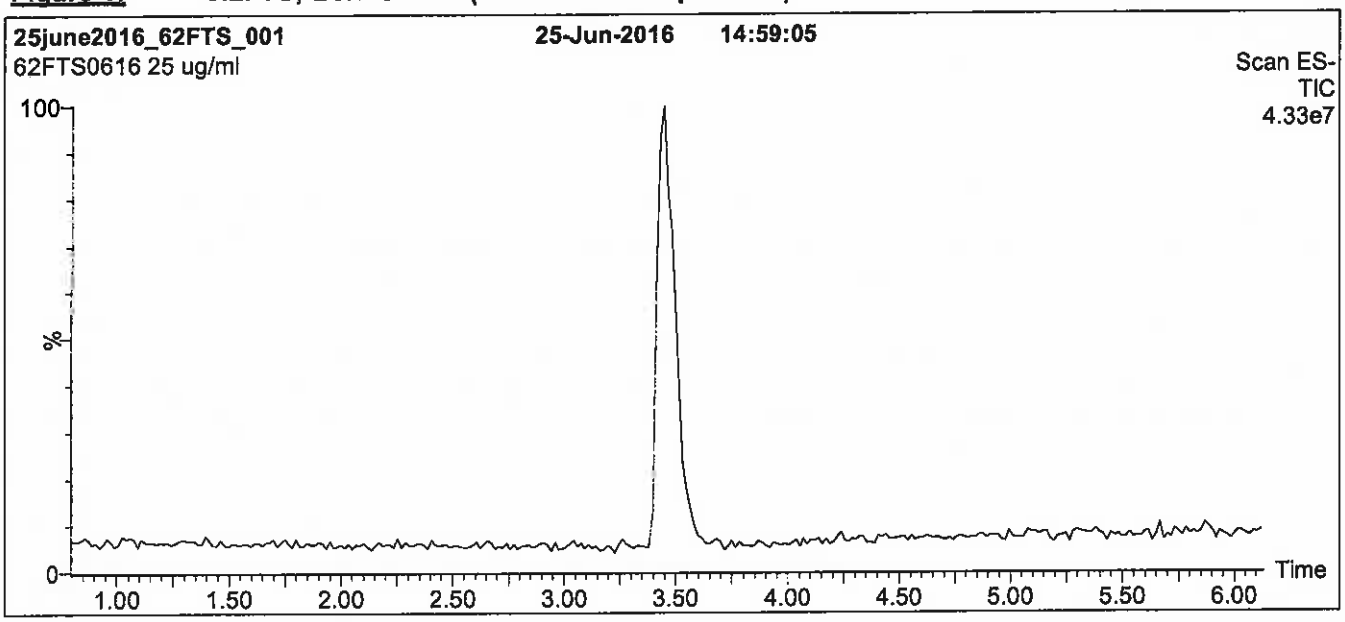
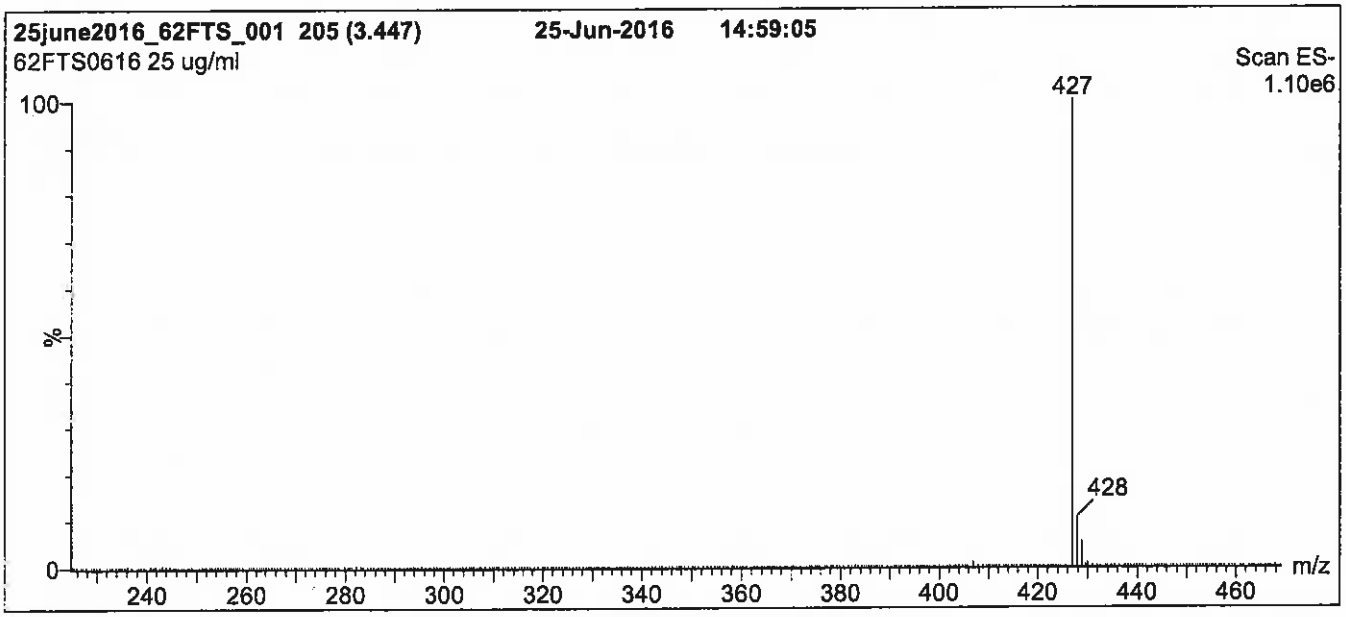
Figure 1: **6:2FTS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

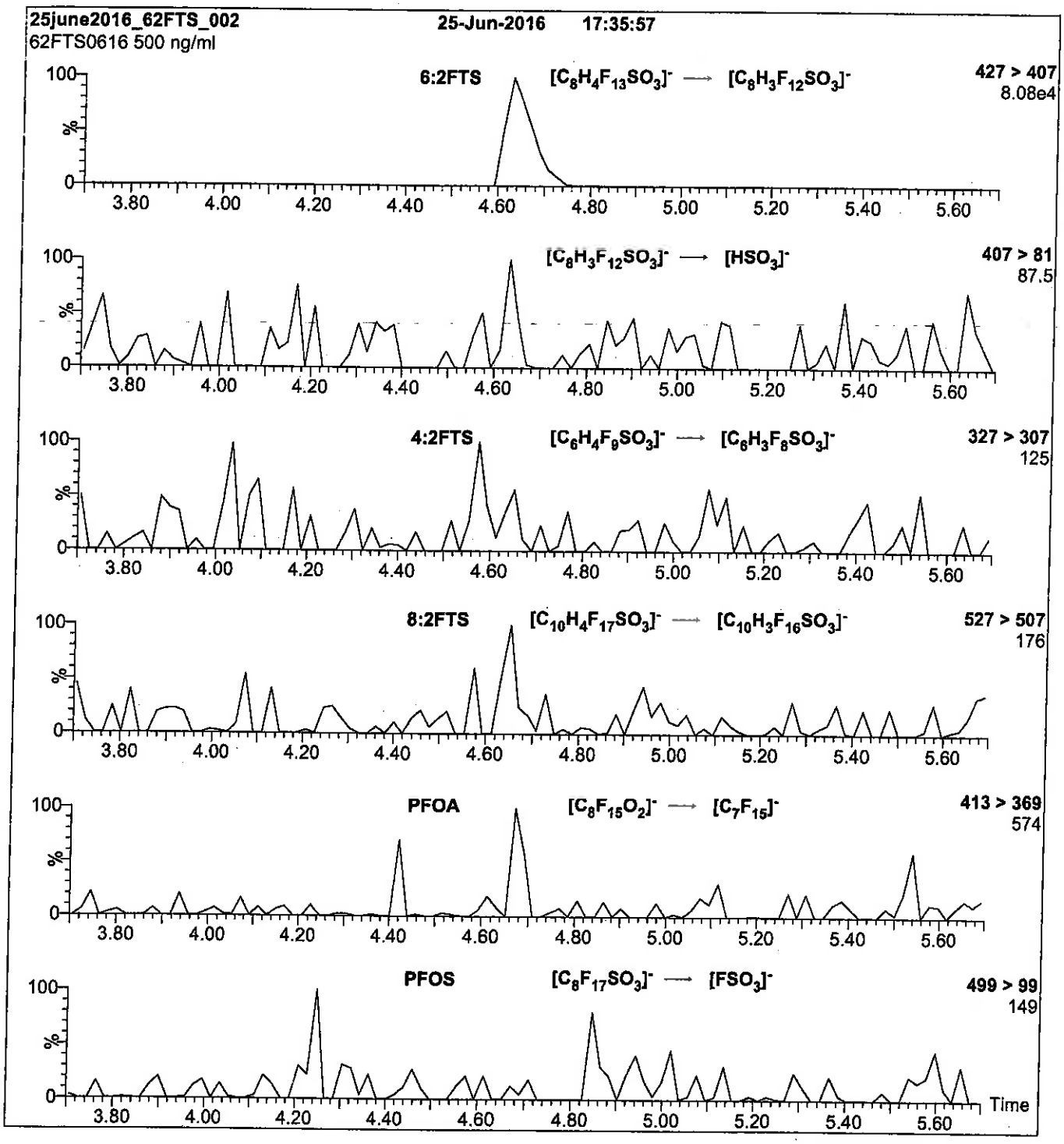
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **6:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml 6:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 25

Reagent

LC8:2FTS_00002

R: 8/23/16 SBC

715545
ID: LC8:2FTS_00002
Exp: 10/23/20 Prpd: SBC
8:2FTS

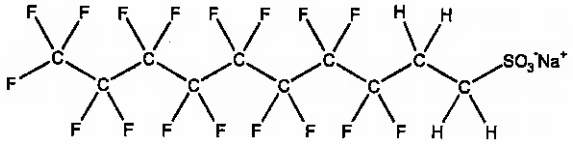
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: 8:2FTS **LOT NUMBER:** 82FTS1015

COMPOUND: Sodium 1H,1H,2H,2H-perfluorodecane sulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$C_{10}H_4F_{17}SO_3Na$		**MOLECULAR WEIGHT:**	550.16
CONCENTRATION:	50.0 ± 2.5 µg/ml	(Na salt)	**SOLVENT(S):**	Methanol
	47.9 ± 2.4 µg/ml	(8:2FTS anion)		
CHEMICAL PURITY:	>98%			
LAST TESTED: (mm/dd/yyyy)	10/23/2015			
EXPIRY DATE: (mm/dd/yyyy)	10/23/2020			
RECOMMENDED STORAGE:	Refrigerate ampoule			

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 10/27/2015 (mm/dd/yyyy)

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CALA

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

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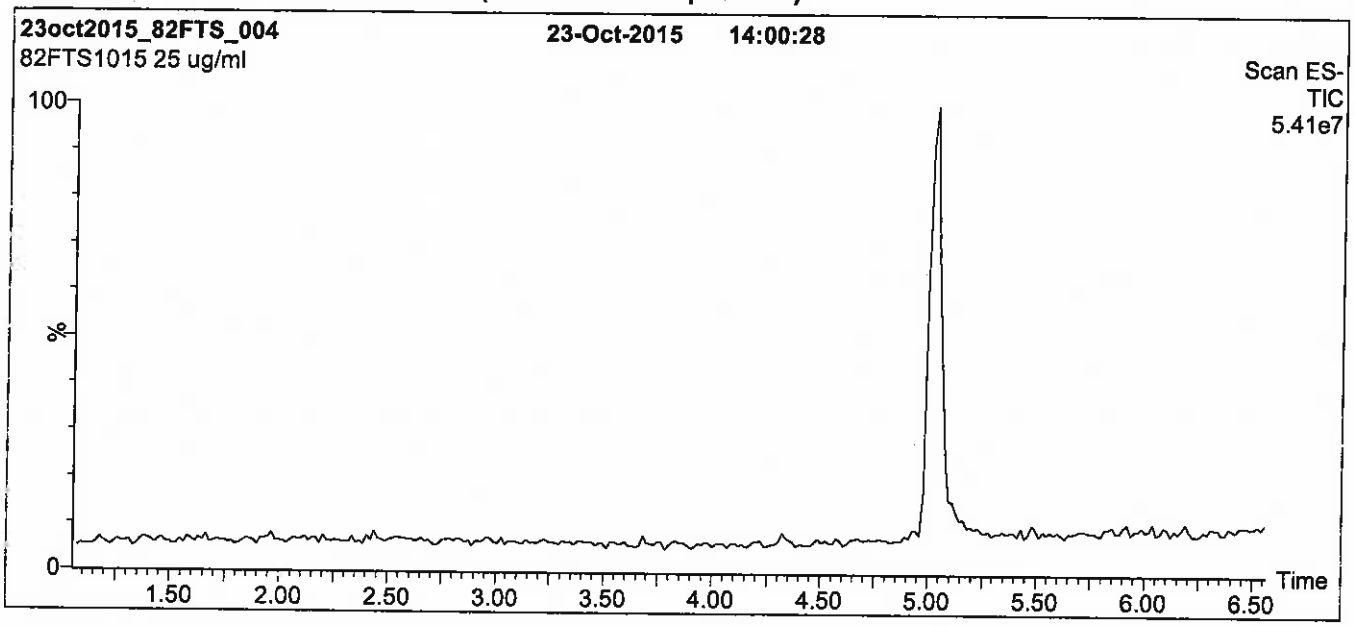
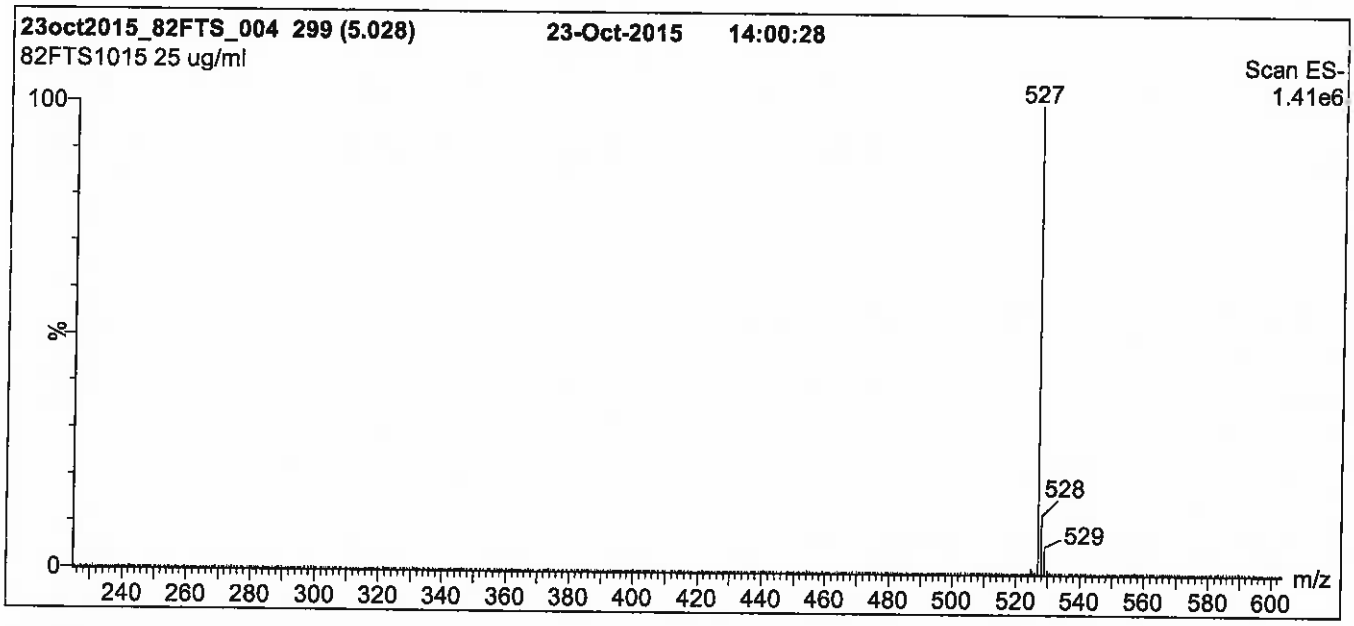
Figure 1: **8:2FTS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min.
Return to Initial conditions in 0.5 min.
Time: 10 min

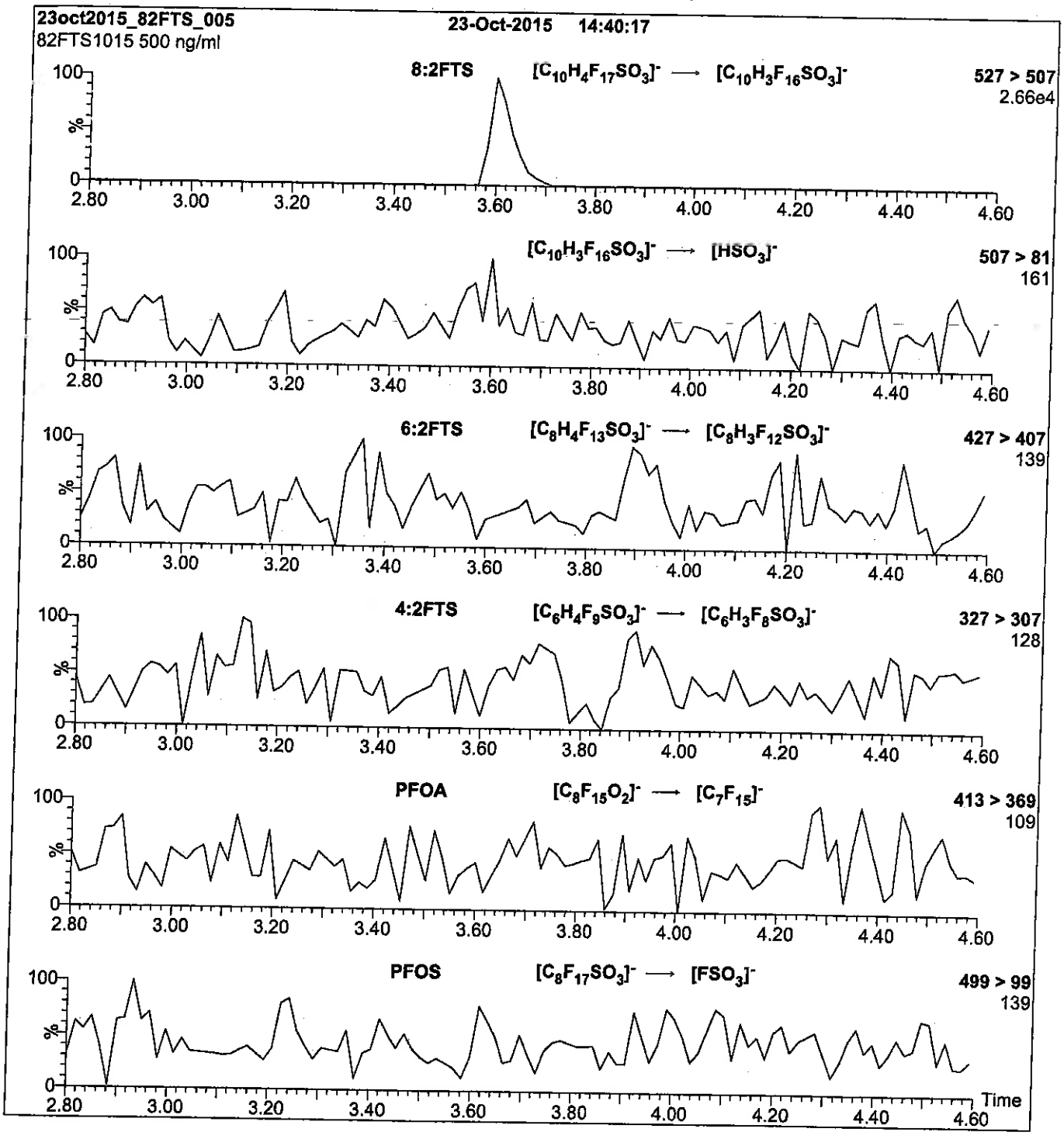
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **8:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml 8:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 30

Reagent

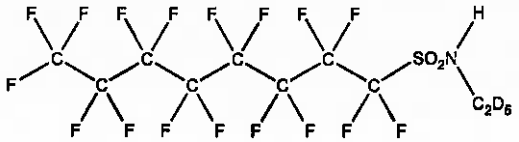
LCd-NEtFOSA-M_00005

D: 3/20/17

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	d-N-EtFOSA-M	**LOT NUMBER:**	dNEtFOSA0616M
COMPOUND:	N-ethyl-d_5-perfluoro-1-octanesulfonamide		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$C_{10}D_5HF_{17}NO_2S$	**MOLECULAR WEIGHT:**	532.23
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥98% $^2H_5$
LAST TESTED: (mm/dd/yyyy)	06/10/2016		
EXPIRY DATE: (mm/dd/yyyy)	06/10/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.5% of N-methyl-d_3-perfluoro-1-octanesulfonamide (d-N-MeFOSA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____ B.G. Chittim **Date:** 07/14/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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CALA

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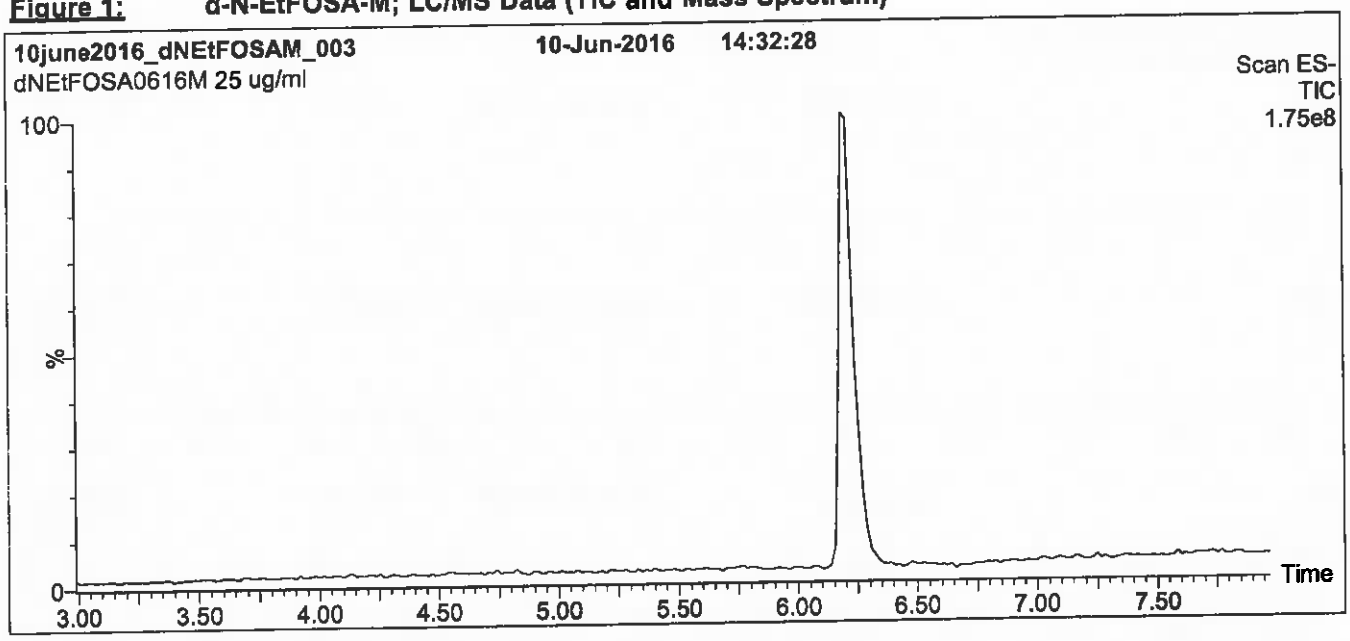
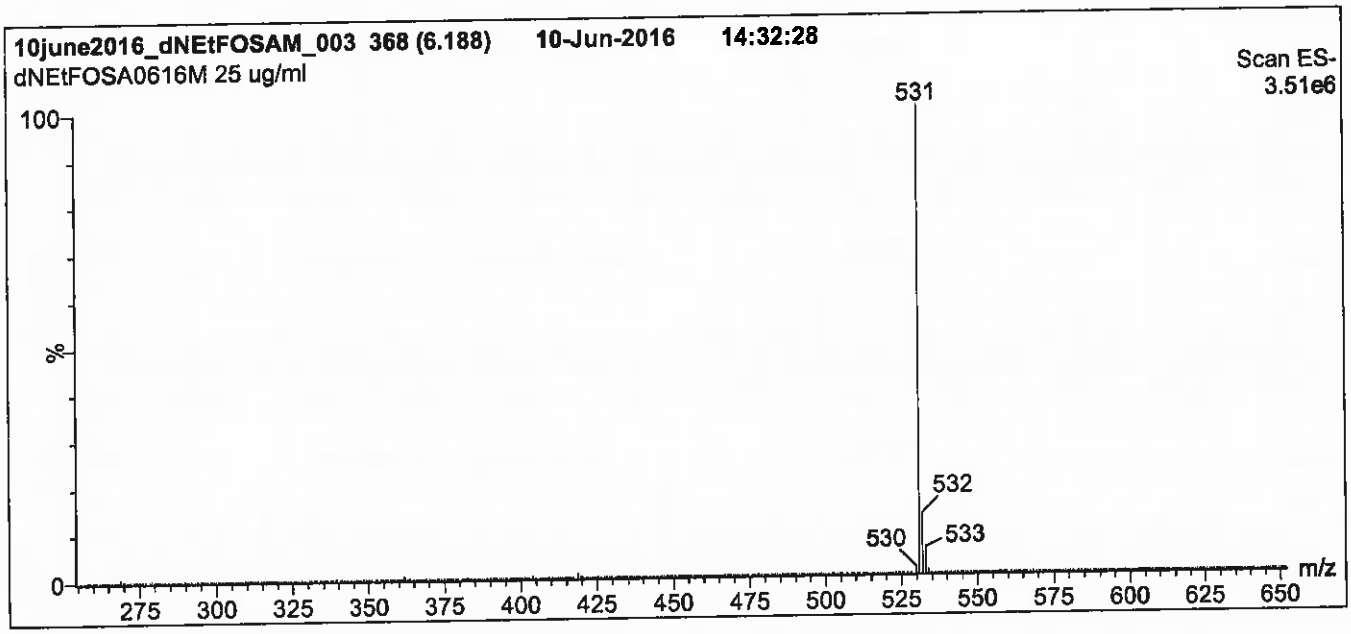
Figure 1: **d-N-EtFOSA-M; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% H_2O / 60% (80:20 MeOH:ACN)
(both with 10mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

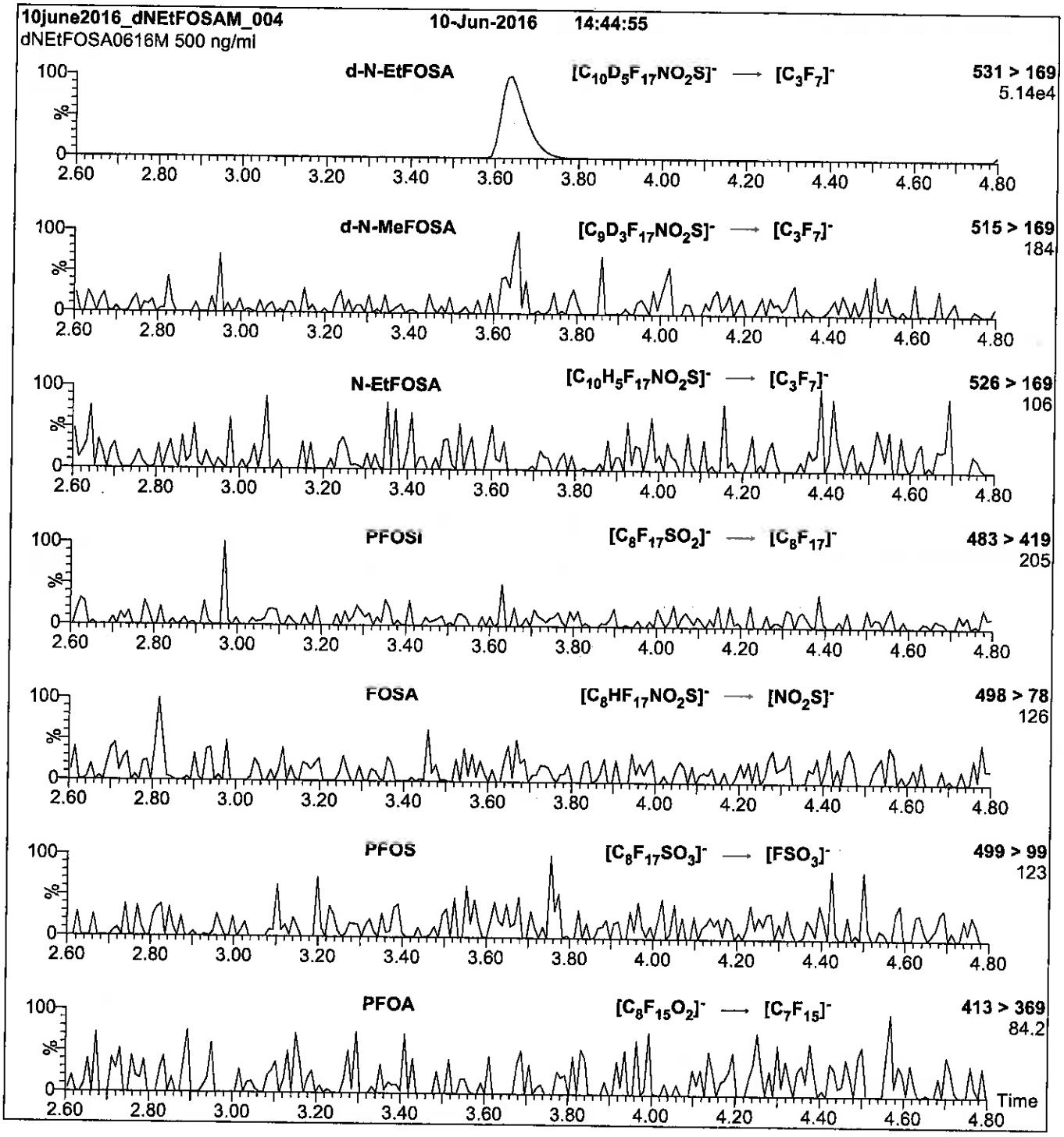
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **d-N-EtFOSA-M; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml d-N-EtFOSA-M)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 25

Reagent

LCd-NMeFOSA-M_00003

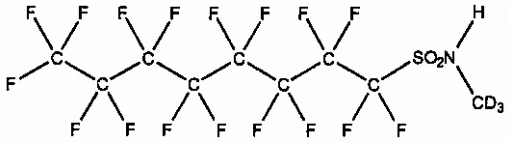
R: 9/9/16 SBC

728303
ID: LCd-NMeFOSA-M_00003
Exp: 06/10/21 Prpd: SBC
d-N-MeFOSA-M

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	d-N-MeFOSA-M	**LOT NUMBER:**	dNMeFOSA0616M
COMPOUND:	N-methyl-d_3-perfluoro-1-octanesulfonamide		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$C_9D_3HF_{17}NO_2S$	**MOLECULAR WEIGHT:**	516.19
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥98% $^2H_3$
LAST TESTED: (mm/dd/yyyy)	06/10/2016		
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$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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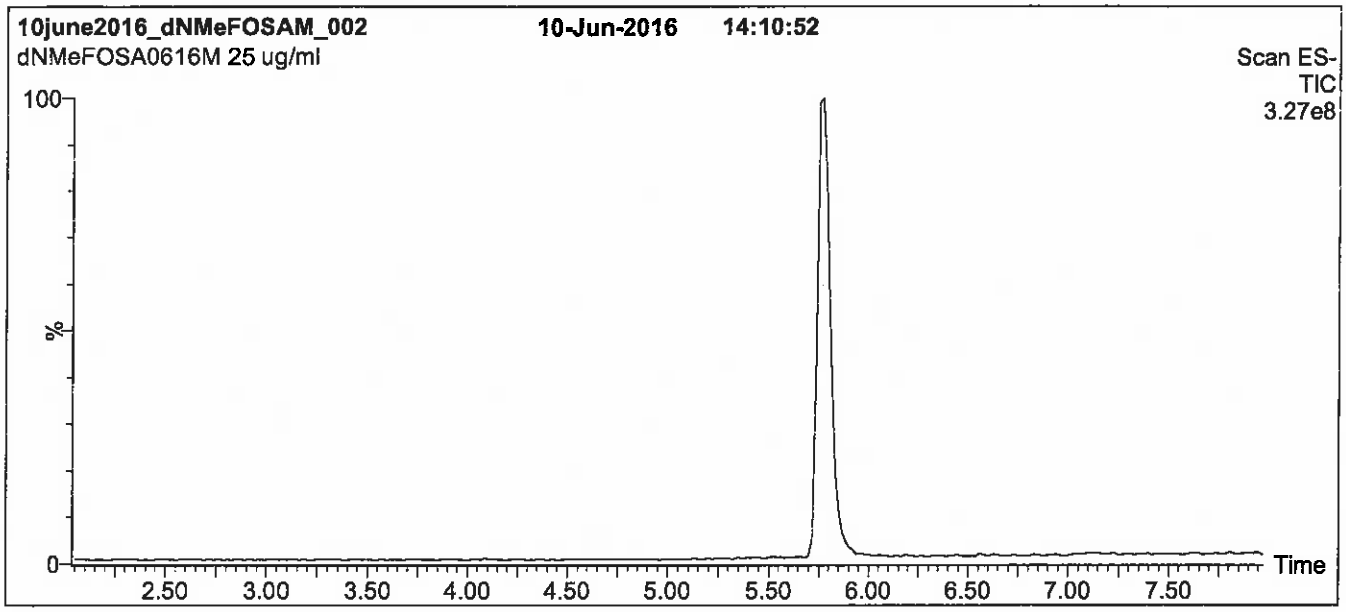
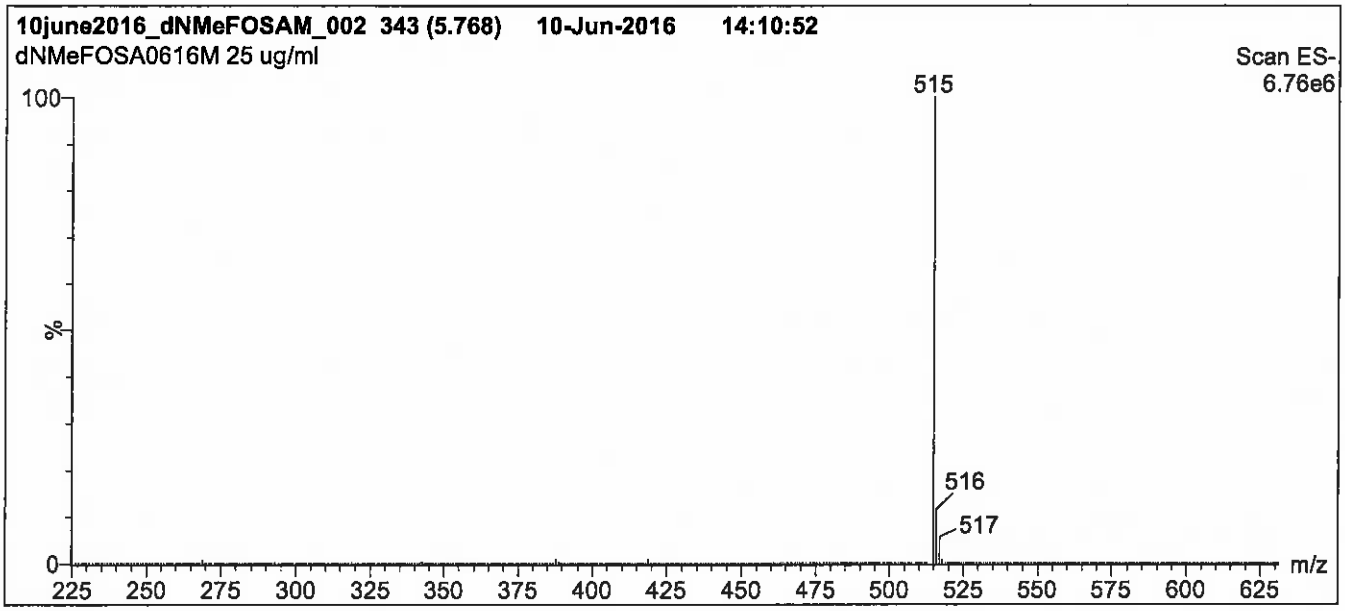
Figure 1: **d-N-MeFOSA-M; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% H_2O / 60% (80:20 MeOH:ACN)
(both with 10mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

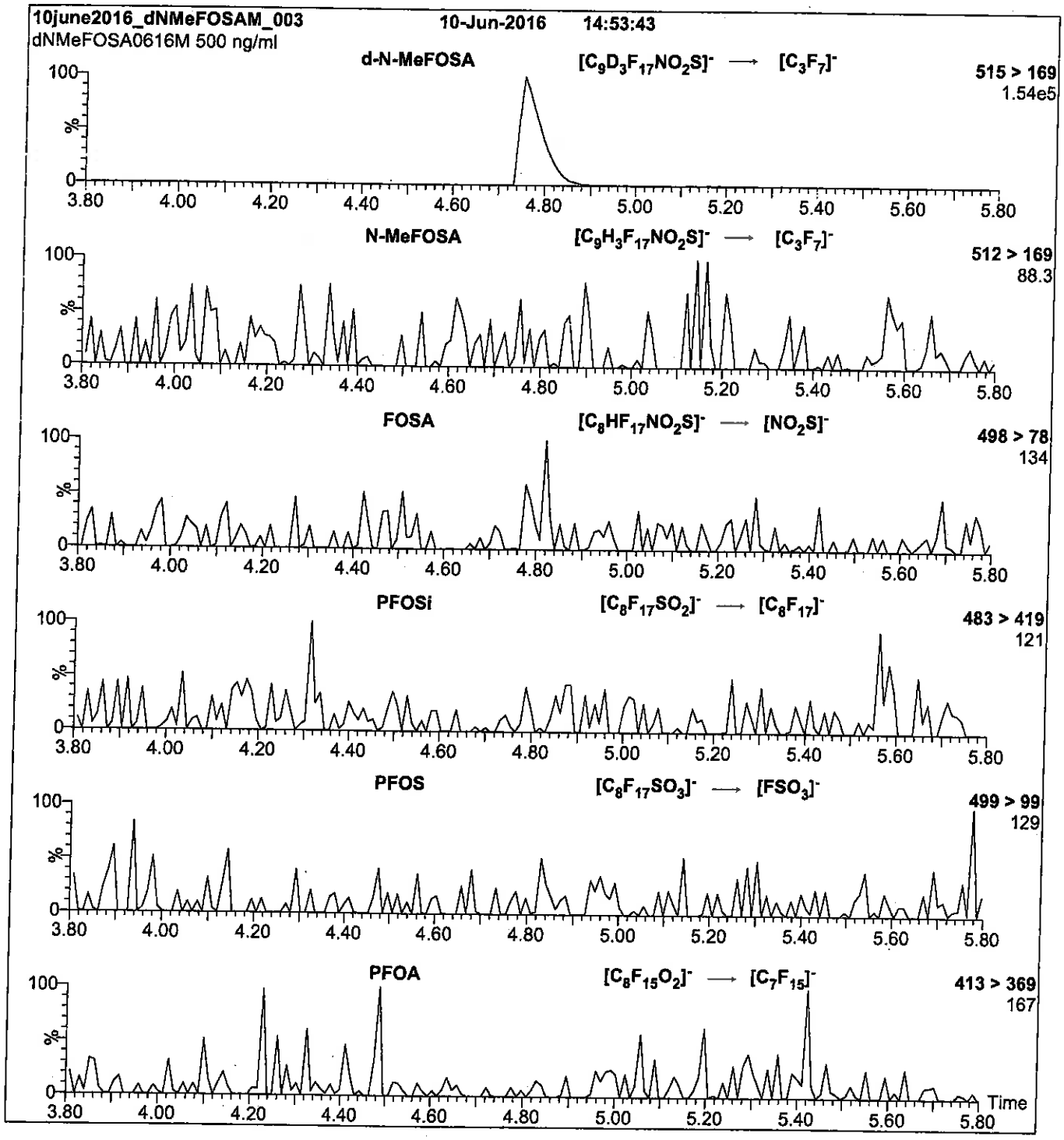
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **d-N-MeFOSA-M; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml d-N-MeFOSA-M)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 25

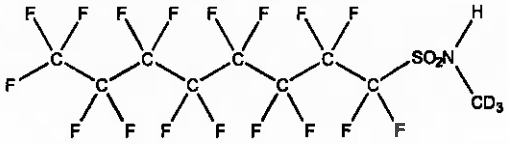
Reagent

LCd-NMeFOSA-M_00004

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:	d-N-MeFOSA-M	**LOT NUMBER:**	dNMeFOSA0616M
COMPOUND:	N-methyl-d_3-perfluoro-1-octanesulfonamide		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$C_8D_3HF_{17}NO_2S$	**MOLECULAR WEIGHT:**	516.19
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥98% $^2H_3$
LAST TESTED: (mm/dd/yyyy)	06/10/2016		
EXPIRY DATE: (mm/dd/yyyy)	06/10/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 06/16/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • Info@well-labs.com

INTENDED USE:

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HAZARDS:

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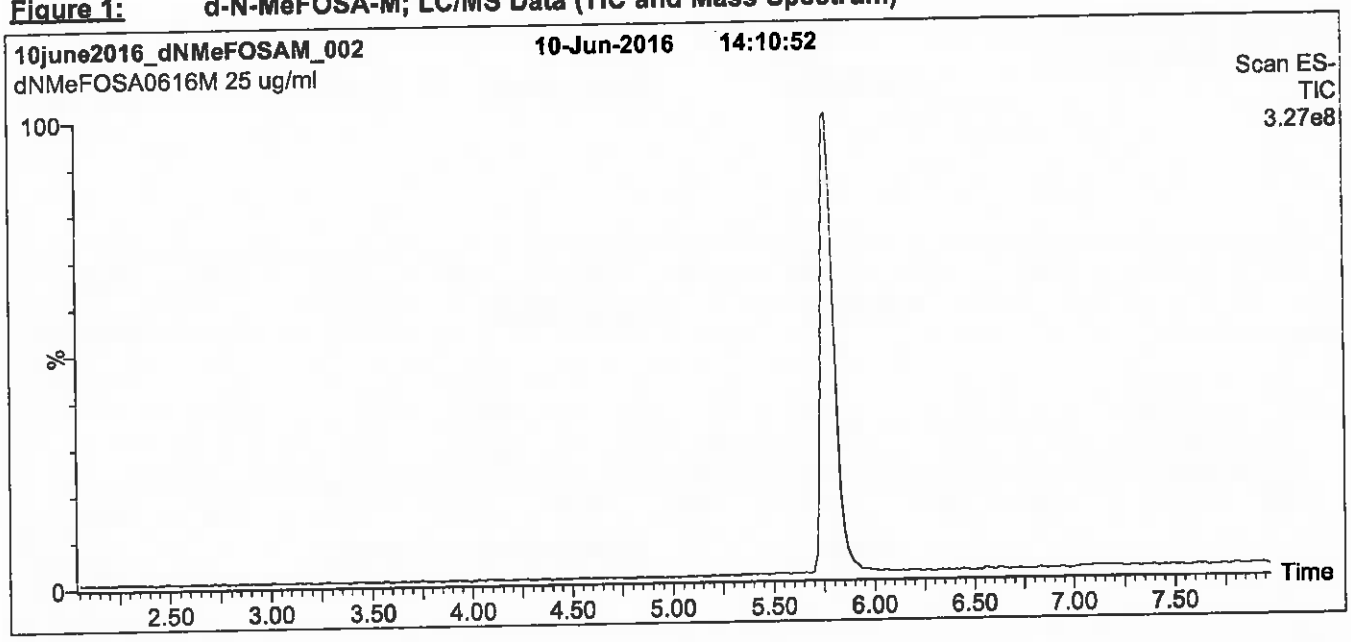
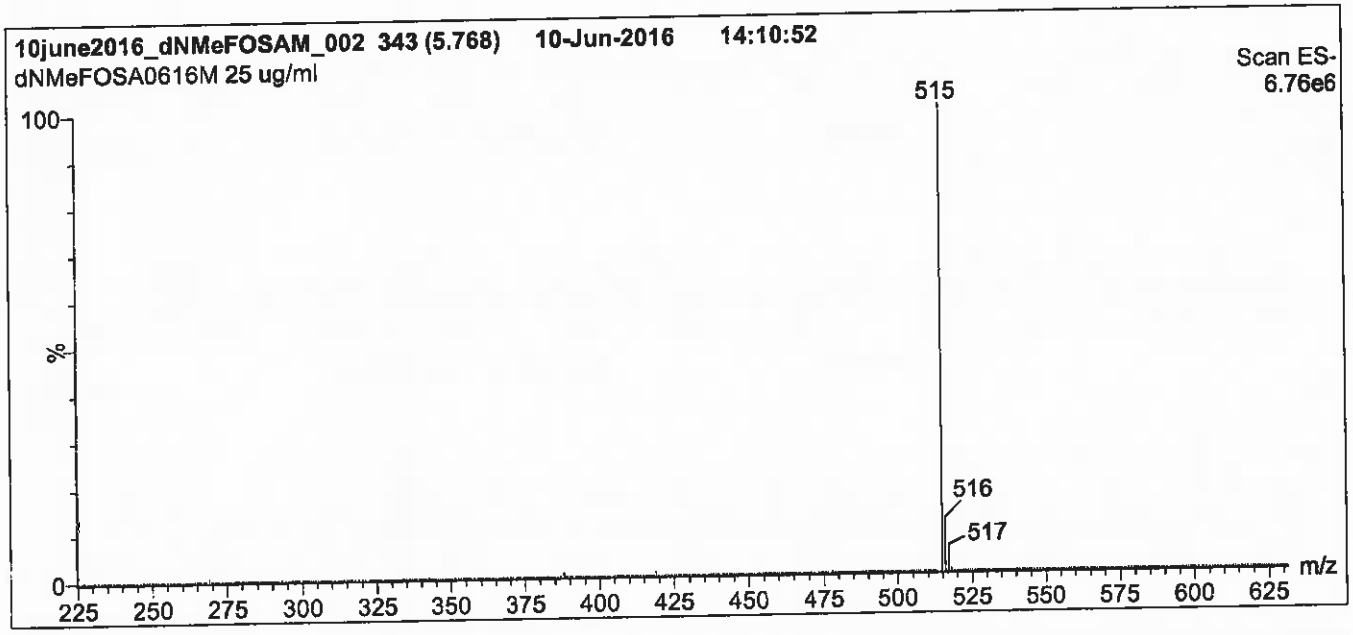




Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% H_2O / 60% (80:20 MeOH:ACN)
(both with 10mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

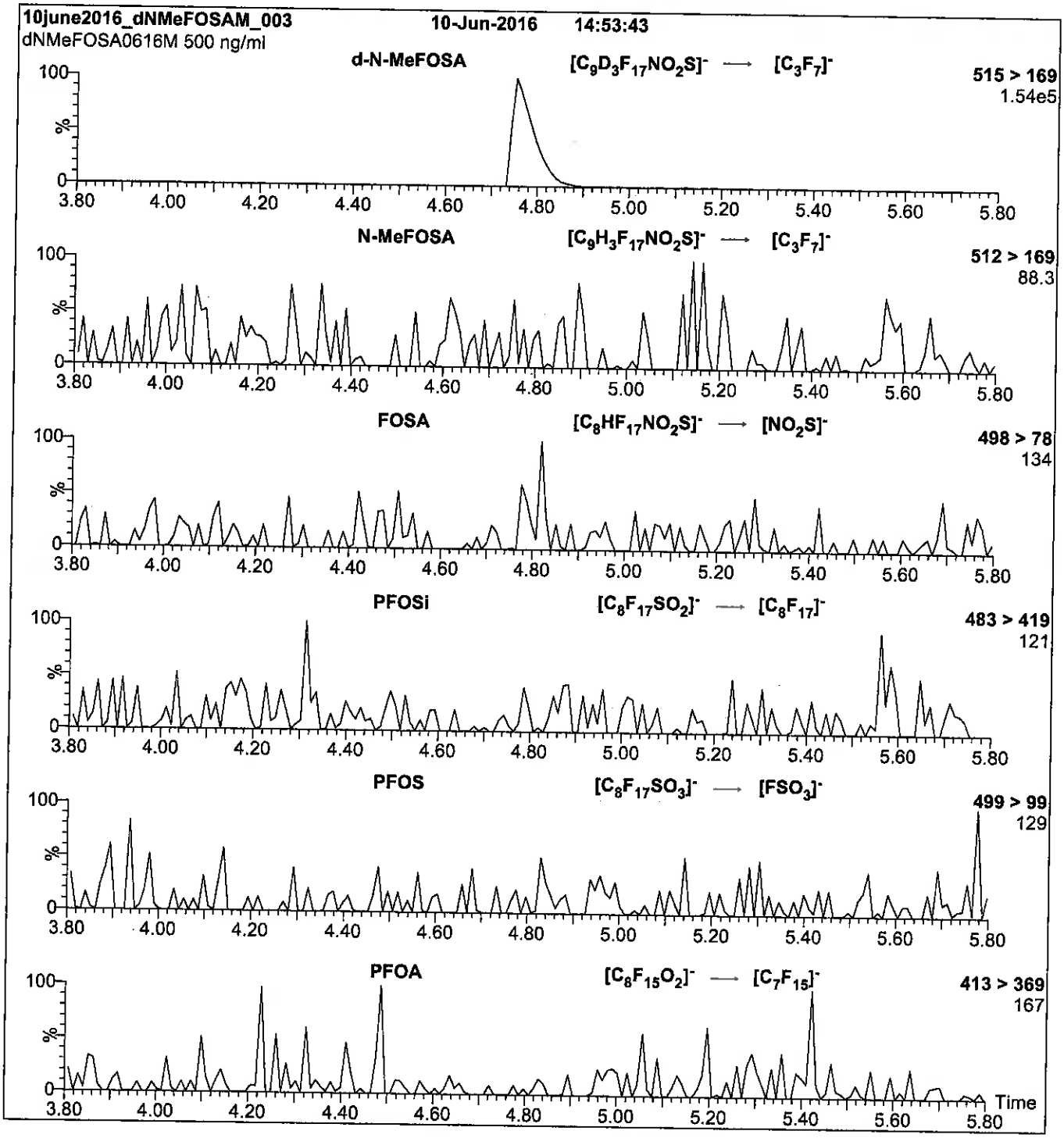
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **d-N-MeFOSA-M; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml d-N-MeFOSA-M)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 25

Reagent

LCd3-NMeFOSAA_00003

R: 9/9/16 SBC

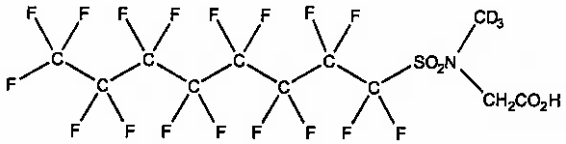
7283C0
ID: LCd3-NMeFOSAA_00003
Exp: 05/31/21 Prpd: SBC
d3-N-MeFOSAA

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: d3-N-MeFOSAA **LOT NUMBER:** d3NMeFOSAA0516
COMPOUND: N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$C_{11}D_3H_3F_{17}NO_4S$	**MOLECULAR WEIGHT:**	574.23
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥98% $^2H_3$
LAST TESTED: (mm/dd/yyyy)	05/31/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/31/2021		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.
- Contains ~ 1% of branched isomer.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 06/01/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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CALA

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER

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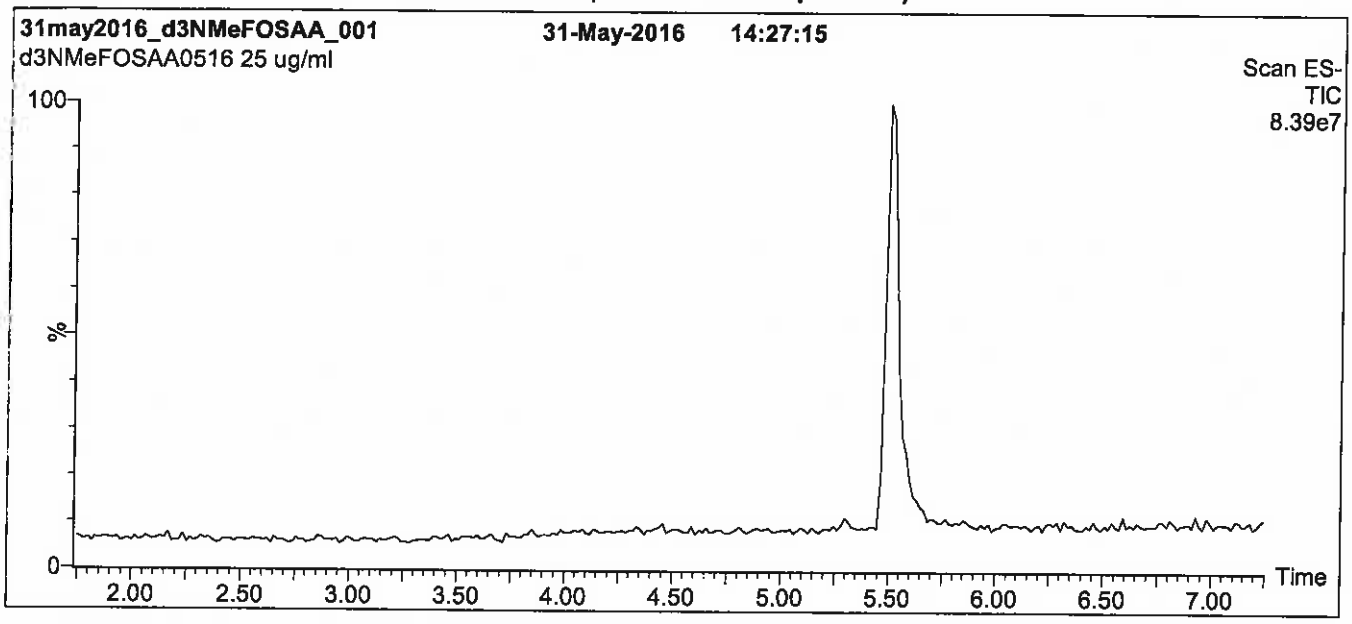
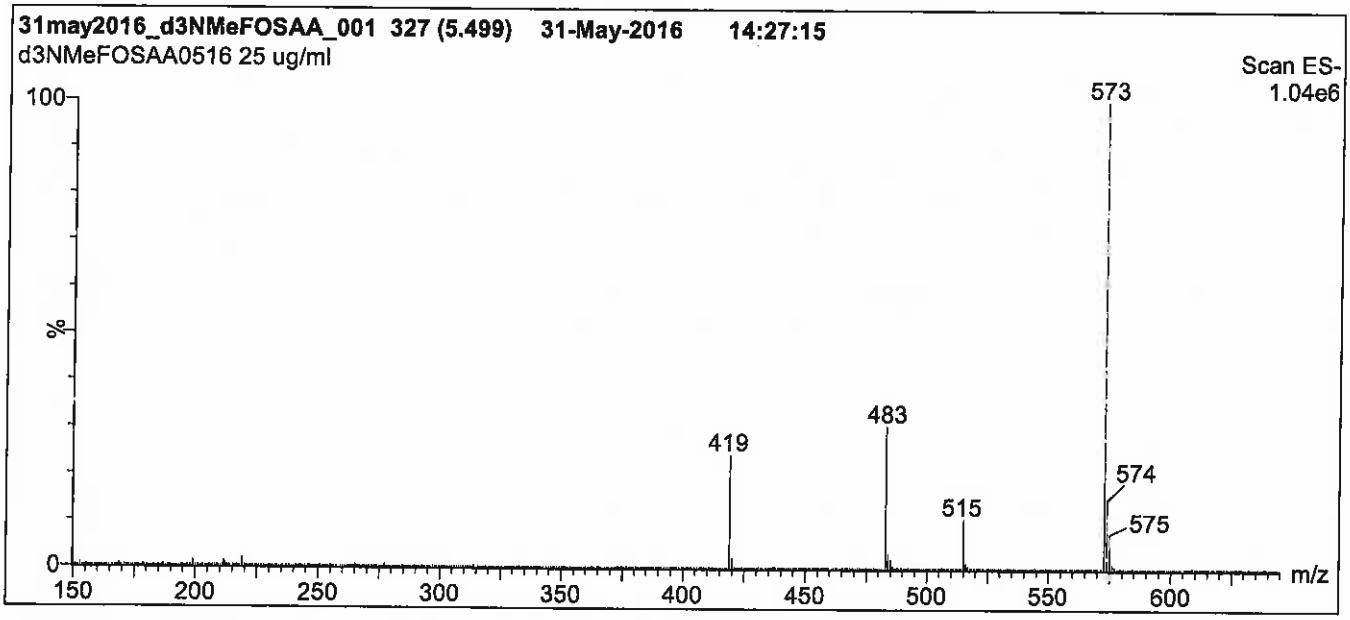
Figure 1: **d3-N-MeFOSAA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

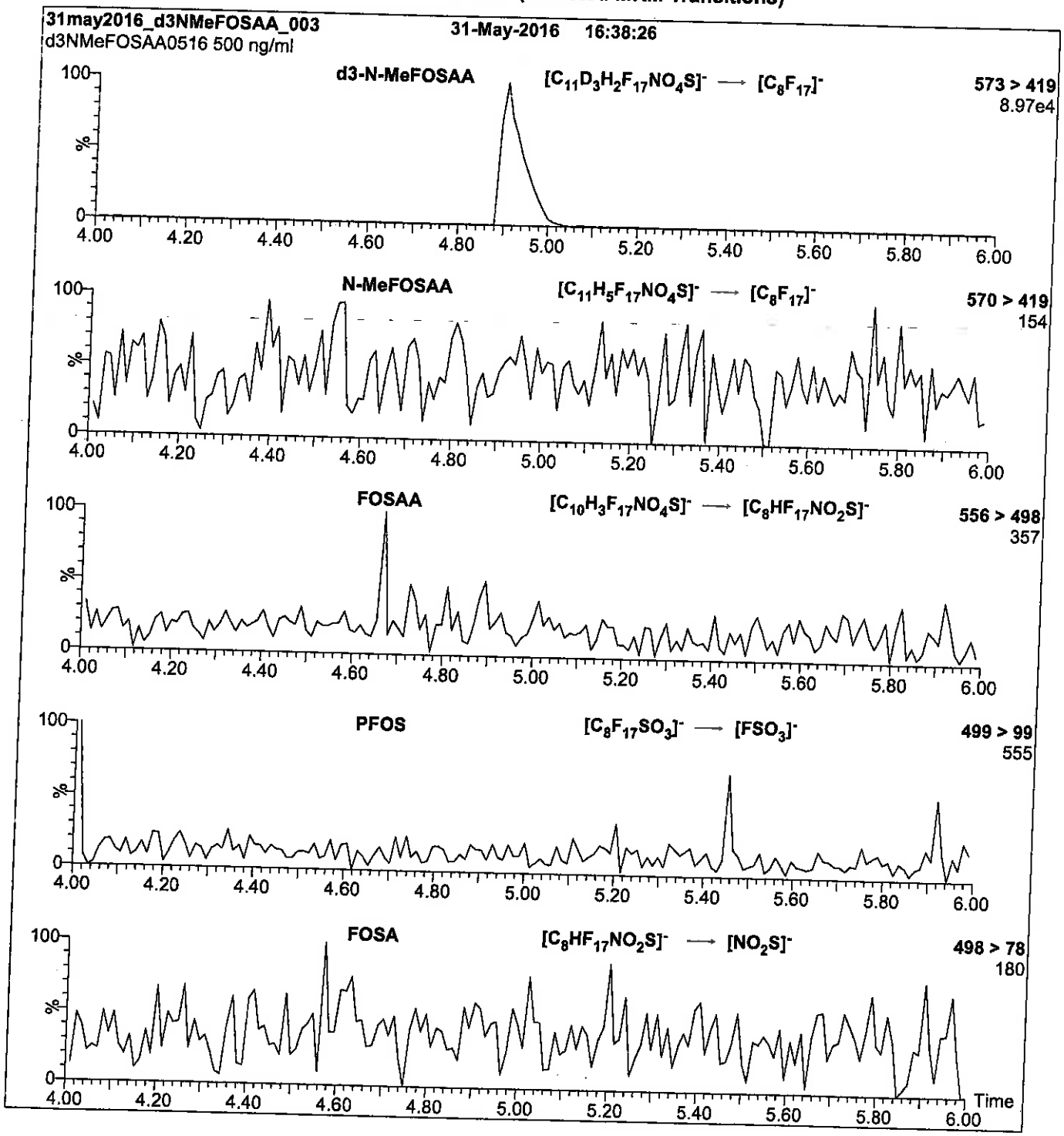
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **d3-N-MeFOSAA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml d3-N-MeFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 25

Reagent

LCd3-NMeFOSAA_00004

S: 3/20/17 SRV

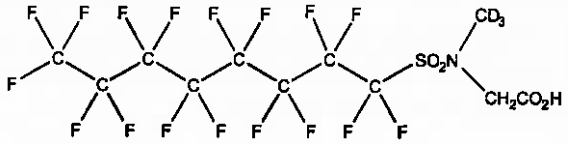
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: d3-N-MeFOSAA **LOT NUMBER:** d3NMeFOSAA1116

COMPOUND: N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: $C_{11}D_3H_3F_{17}NO_4S$ **MOLECULAR WEIGHT:** 574.23

CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol, Water (<1%)

CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥98% $^2H_3$

LAST TESTED: (mm/dd/yyyy) 11/22/2016

EXPIRY DATE: (mm/dd/yyyy) 11/22/2021

RECOMMENDED STORAGE: Refrigerate ampoule

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ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

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Certified By: B.G. Chittim **Date:** 12/07/2016 (mm/dd/yyyy)

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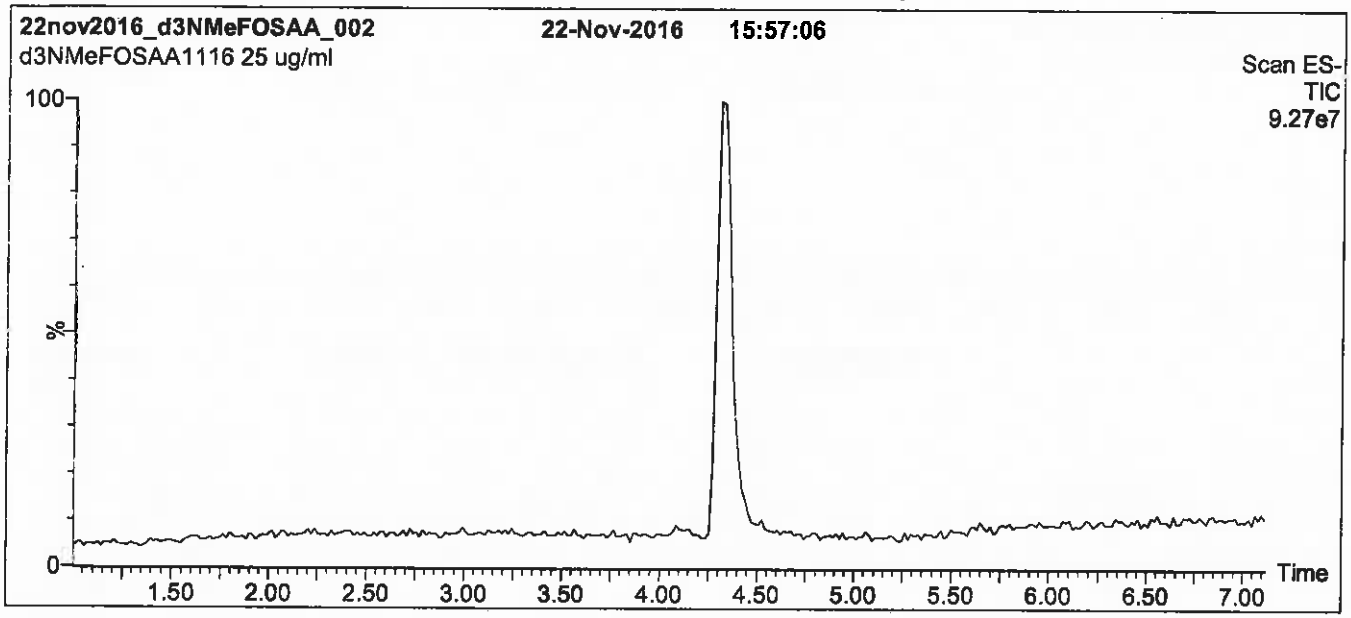
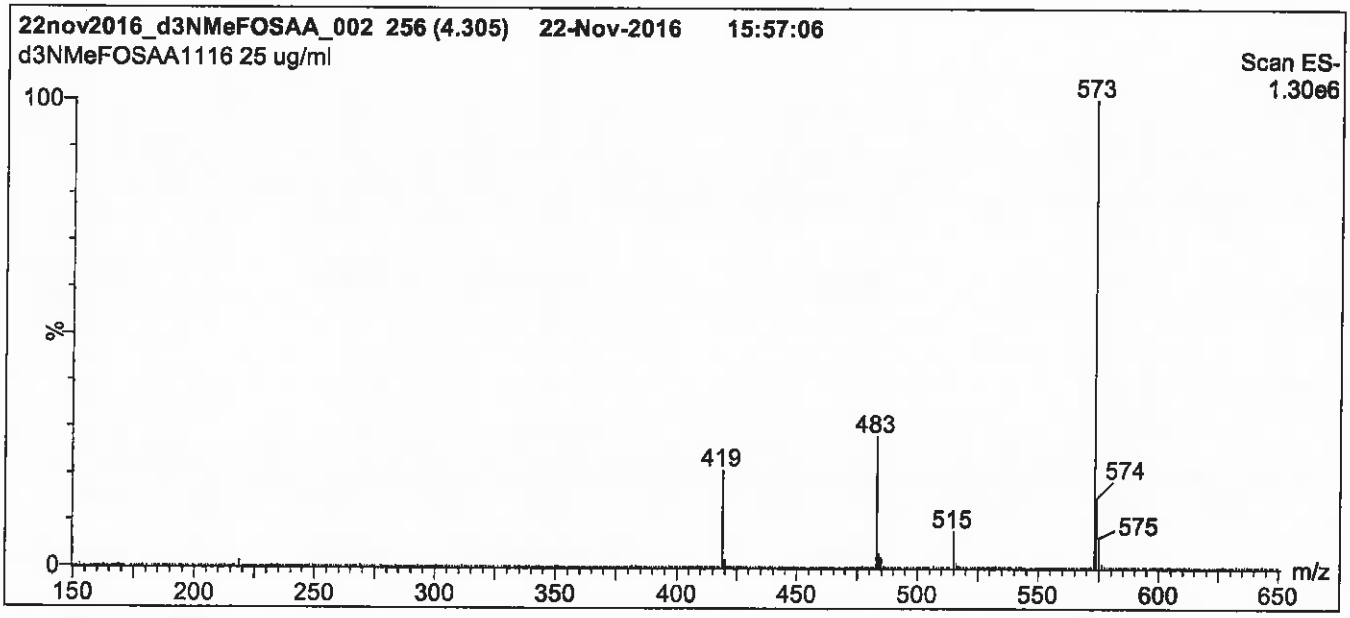
Figure 1: **d3-N-MeFOSAA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

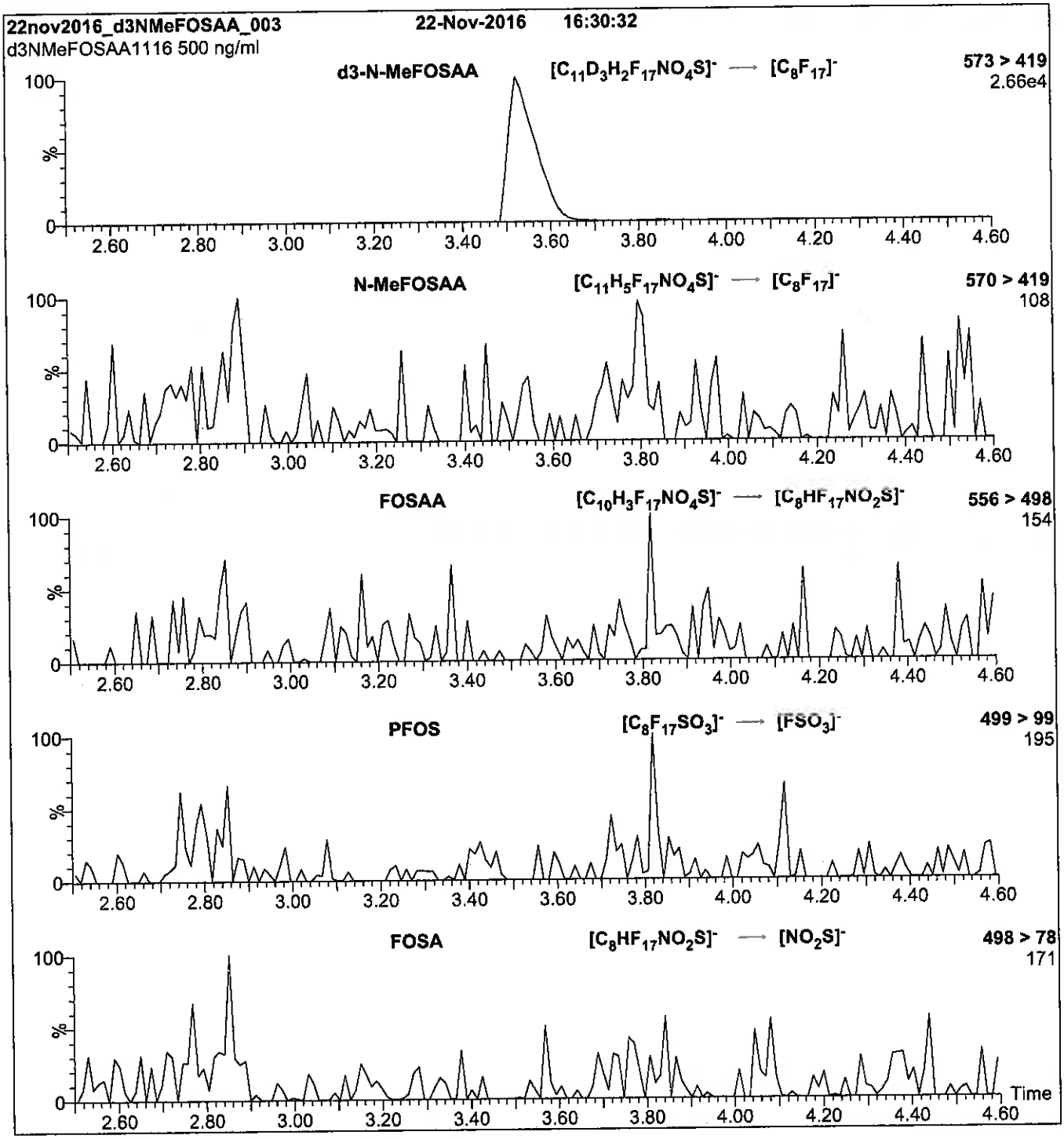
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **d3-N-MeFOSAA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml d3-N-MeFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 20

Reagent

LCd5-NEtFOSAA_00003

R: 9/9/16 SBC

728301
ID: LCd5-NEtFOSAA_00003
Exp: 08/02/21 Prpd: SBC
d5-N-EtFOSAA

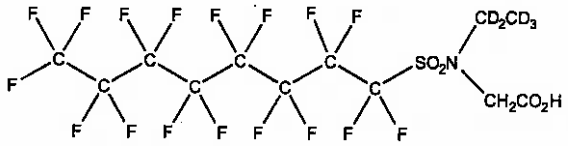
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: d5-N-EtFOSAA **LOT NUMBER:** d5NEtFOSAA0716

COMPOUND: N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$C_{12}D_5H_3F_{17}NO_4S$	**MOLECULAR WEIGHT:**	590.26
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥98% $^2H_5$
LAST TESTED: (mm/dd/yyyy)	08/02/2016		
EXPIRY DATE: (mm/dd/yyyy)	08/02/2021		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 08/09/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

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where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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CALA

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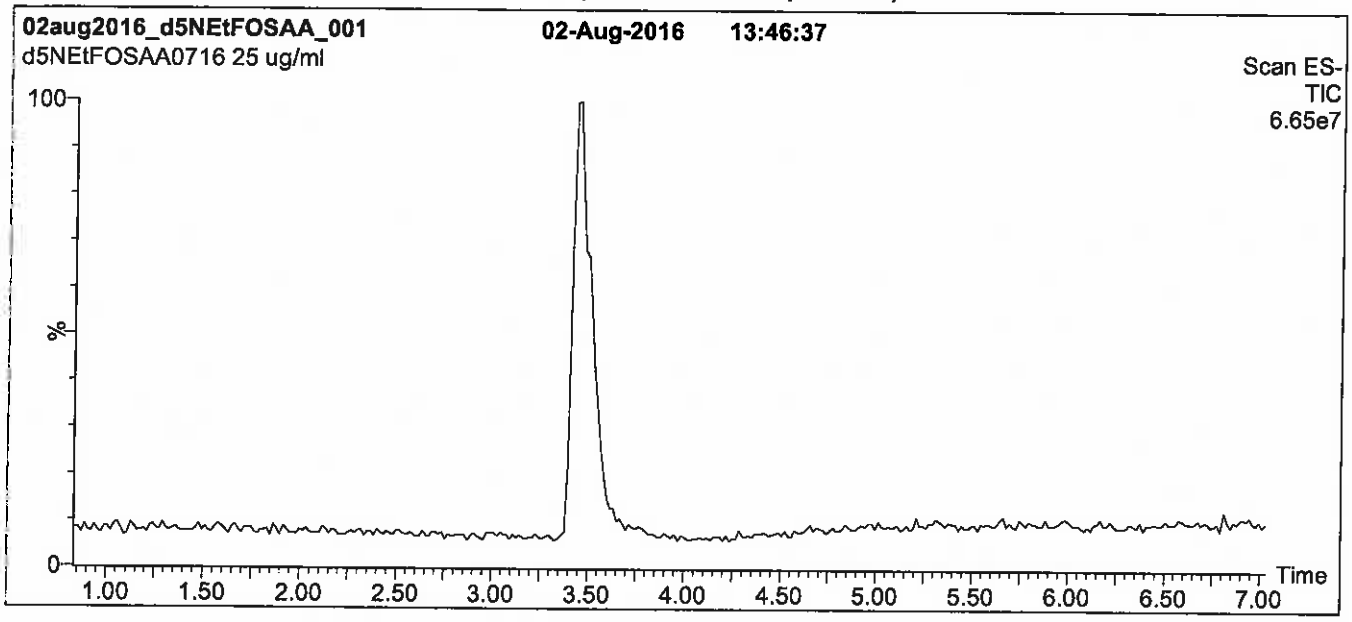

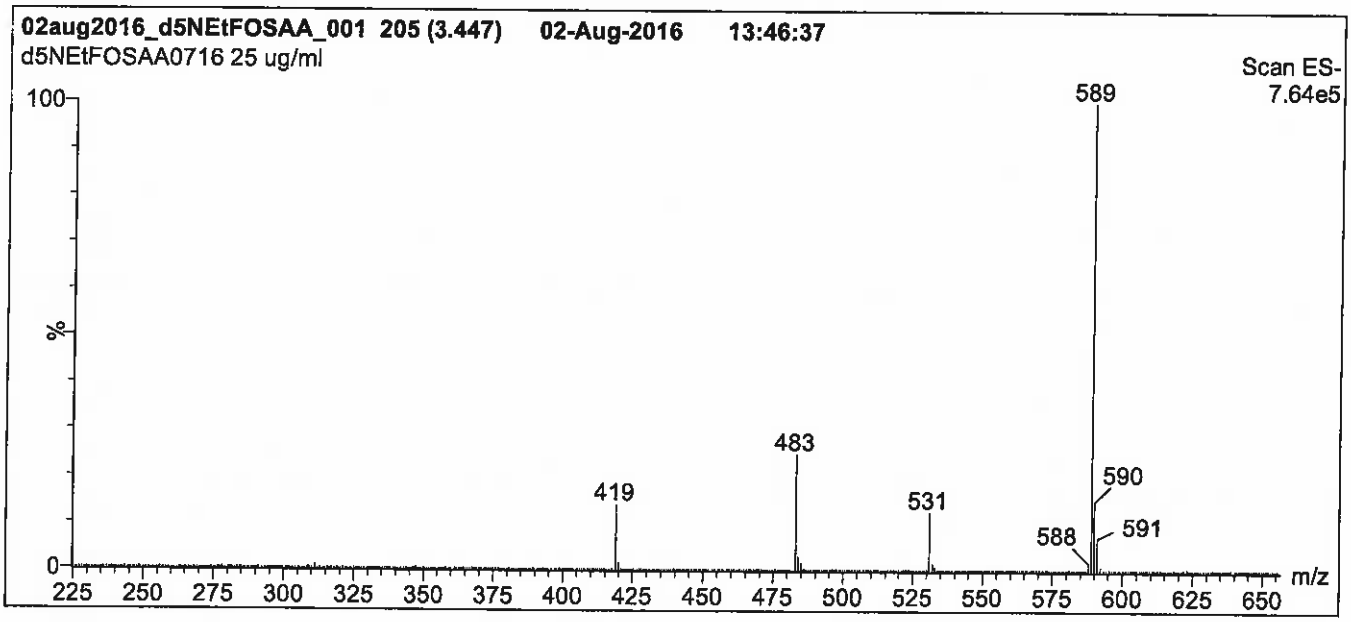

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(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

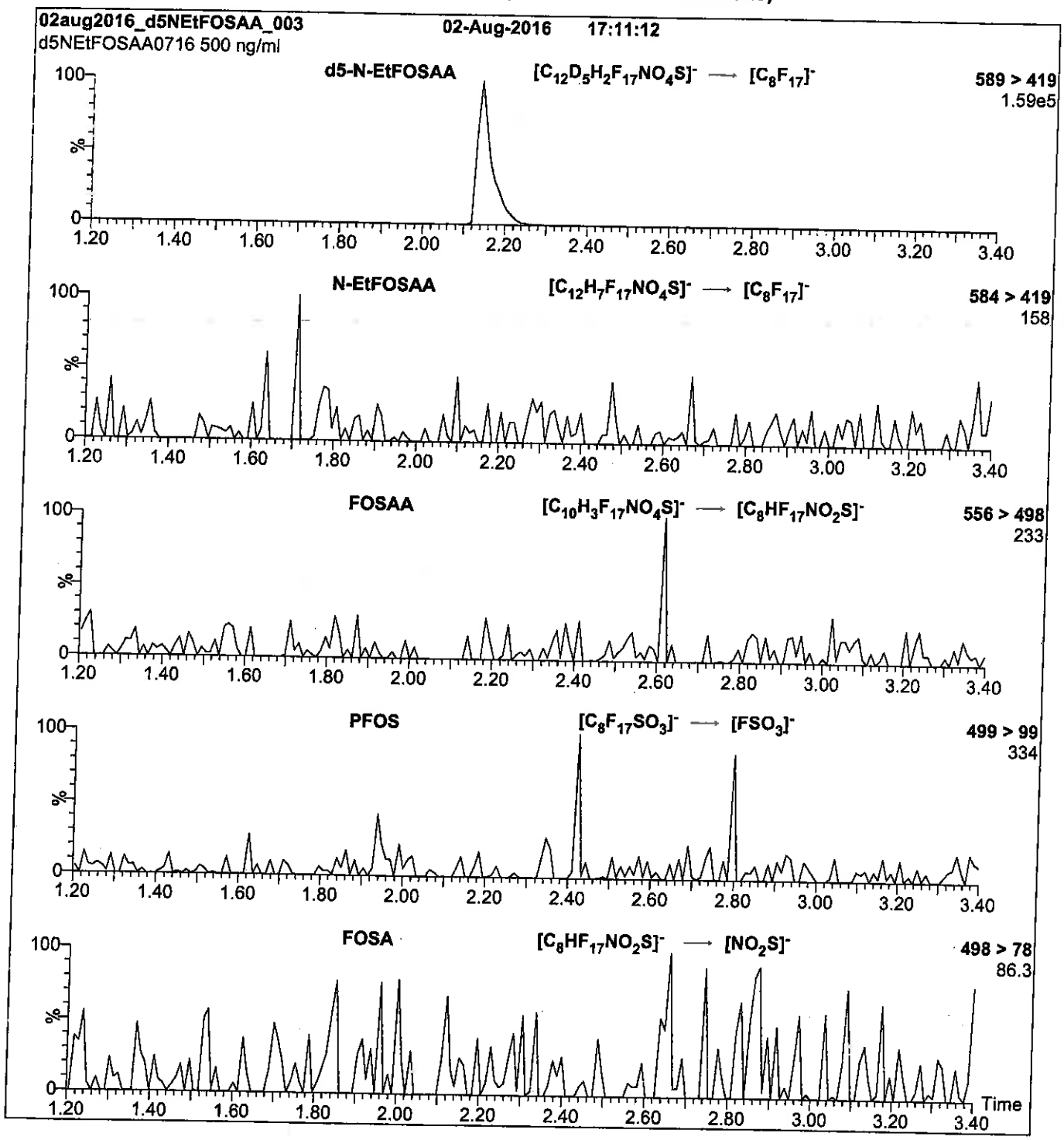
Flow: 350 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **d5-N-EtFOSAA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml d5-N-EtFOSAA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 25

Reagent

LCd5-NEtFOSAA_00004

P: 3/20/17 SRV

WELLINGTON LABORATORIES

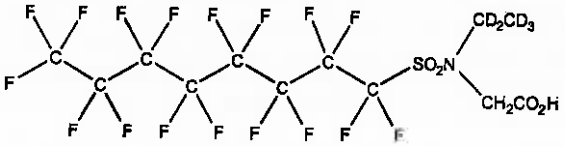
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: d5-N-EtFOSAA **LOT NUMBER:** d5NEtFOSAA1116

COMPOUND: N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA:	$C_{12}D_5H_3F_{17}NO_4S$	**MOLECULAR WEIGHT:**	590.26
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥98% $^2H_5$
LAST TESTED: (mm/dd/yyyy)	11/22/2016		
EXPIRY DATE: (mm/dd/yyyy)	11/22/2021		
RECOMMENDED STORAGE:	Refrigerate ampoule		

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ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/01/2016 (mm/dd/yyyy)

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519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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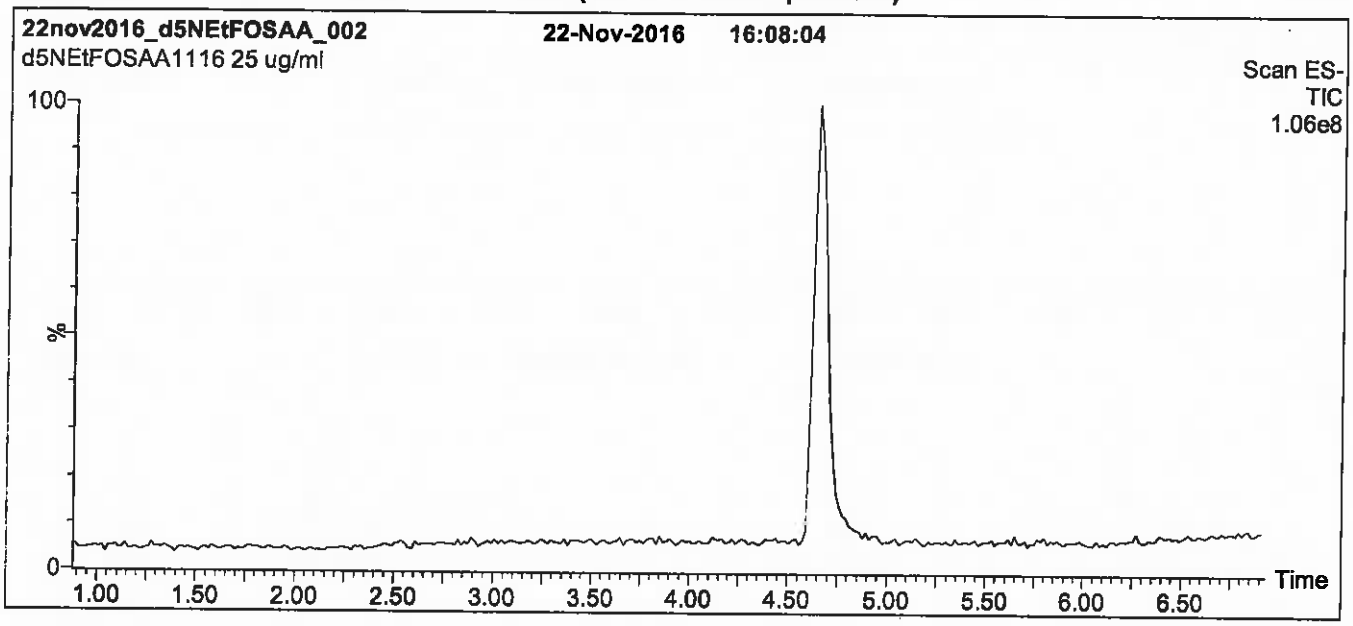
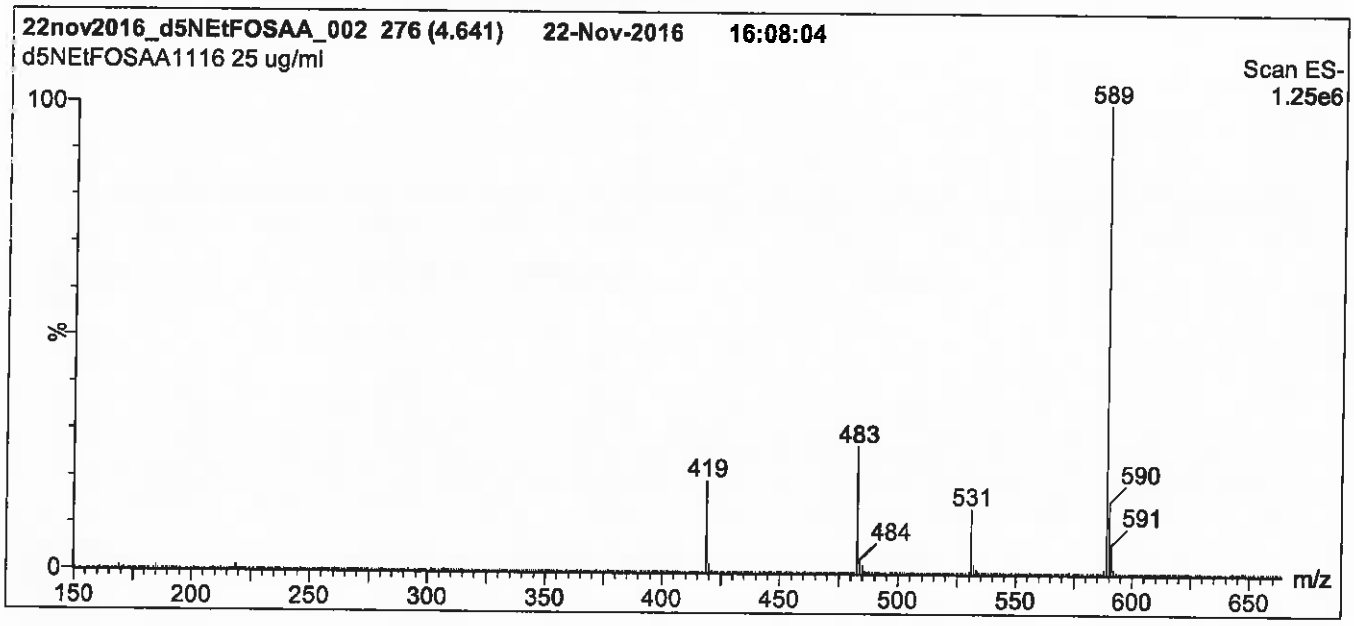




Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

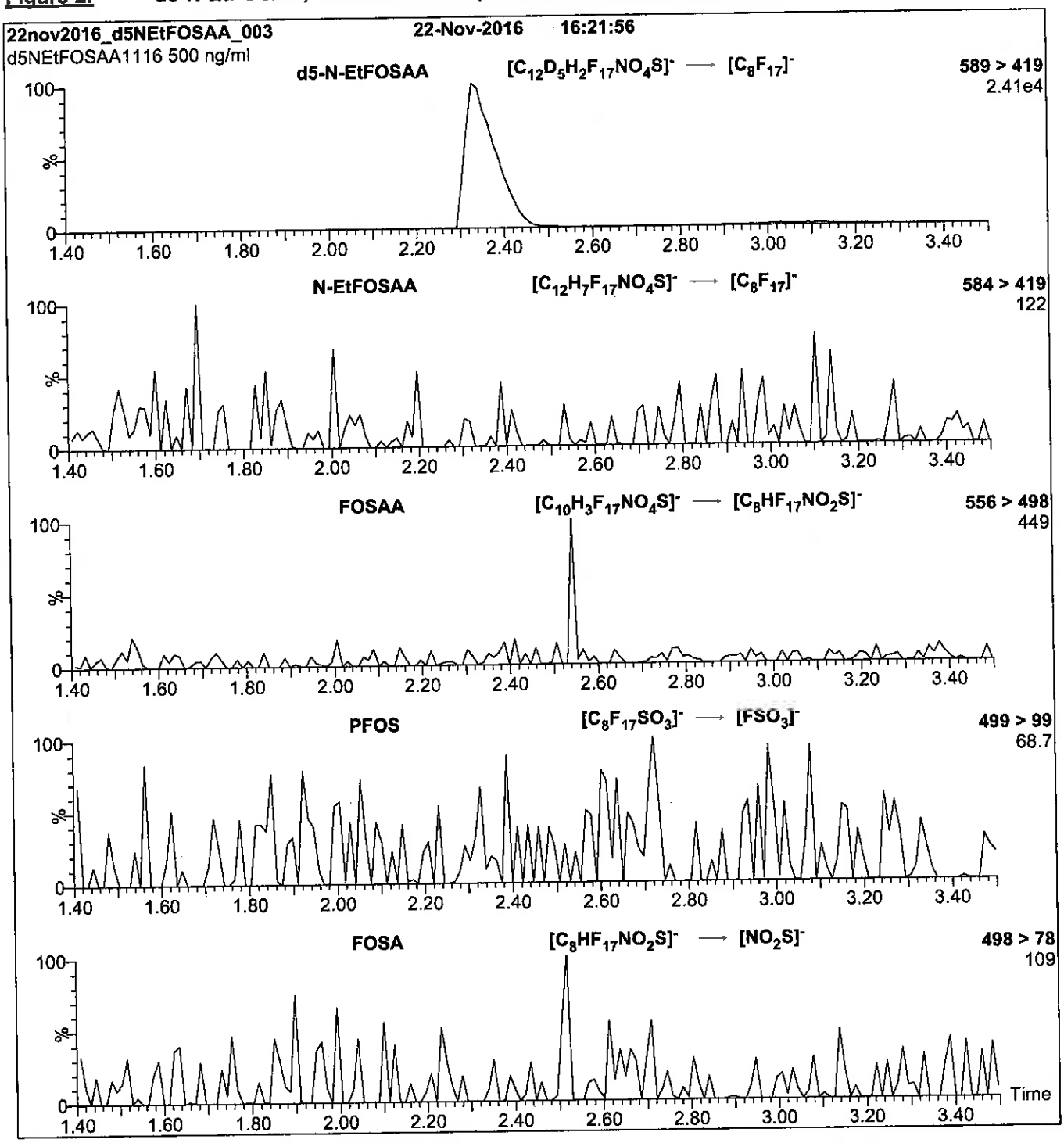
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **d5-N-EtFOSAA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml d5-N-EtFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 20

Reagent

LCM2-6:FTS_00003

R: 9/9/16 SBC

728304
ID: LCM2-6:FTS_00003
Exp: 01/08/21 Prpd: SBC
M2-6:2FTS

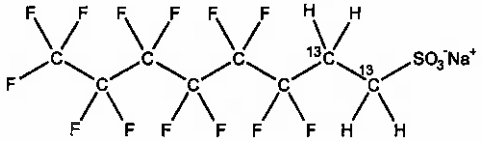
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2-6:2FTS **LOT NUMBER:** M262FTS0116

COMPOUND: Sodium 1H,1H,2H,2H-perfluoro-[1,2-$^{13}C_2$]octane sulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_6H_4F_{13}SO_3Na$	**MOLECULAR WEIGHT:**	452.13
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt)	**SOLVENT(S):**	Methanol
	47.5 ± 2.4 µg/ml (M2-6:2FTS anion)		
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	01/08/2016		
EXPIRY DATE: (mm/dd/yyyy)	01/08/2021		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
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ADDITIONAL INFORMATION:

- See page 2 for further details.
- The native 6:2FTS contains 4.22% of ^{34}S (due to natural isotopic abundance) therefore both native 6:2FTS and M2-6:2FTS will produce signals in the m/z 429 to m/z 409 channel during SRM analysis. We recommend using the m/z 429 to m/z 81 transition to monitor for M2-6:2FTS during quantitative analysis as it will be free of any native contribution (see Figure 2).

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Certified By: B.G. Chittim **Date:** 01/11/2016 (mm/dd/yyyy)

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CALA

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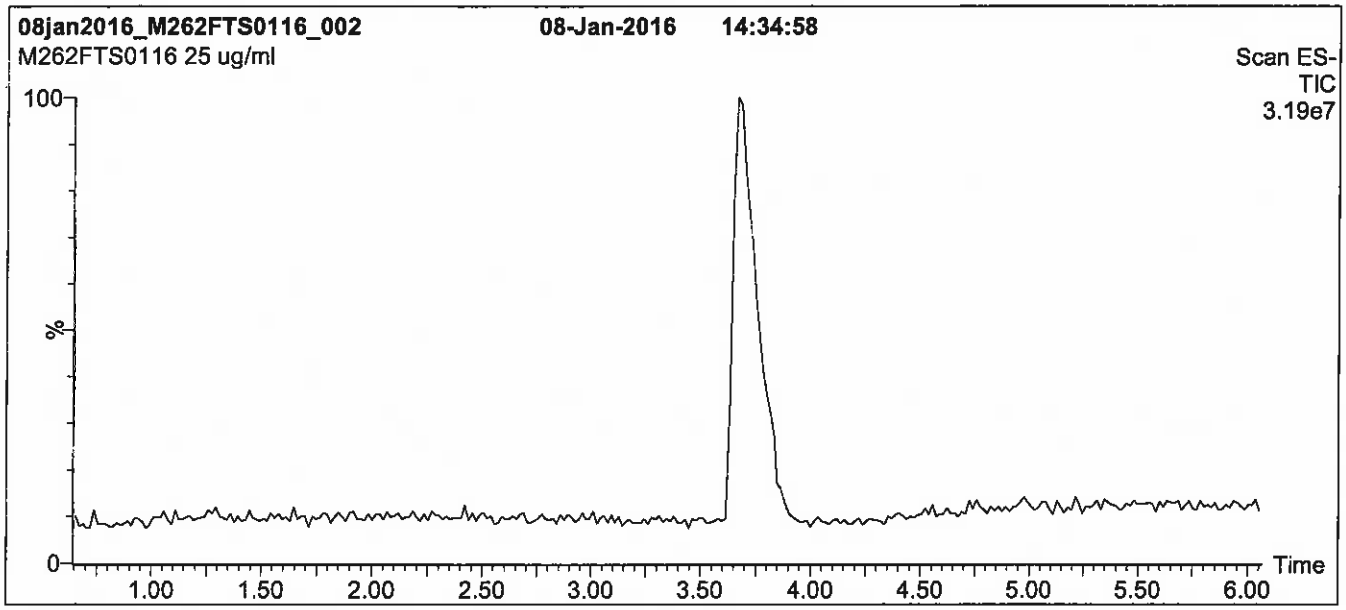
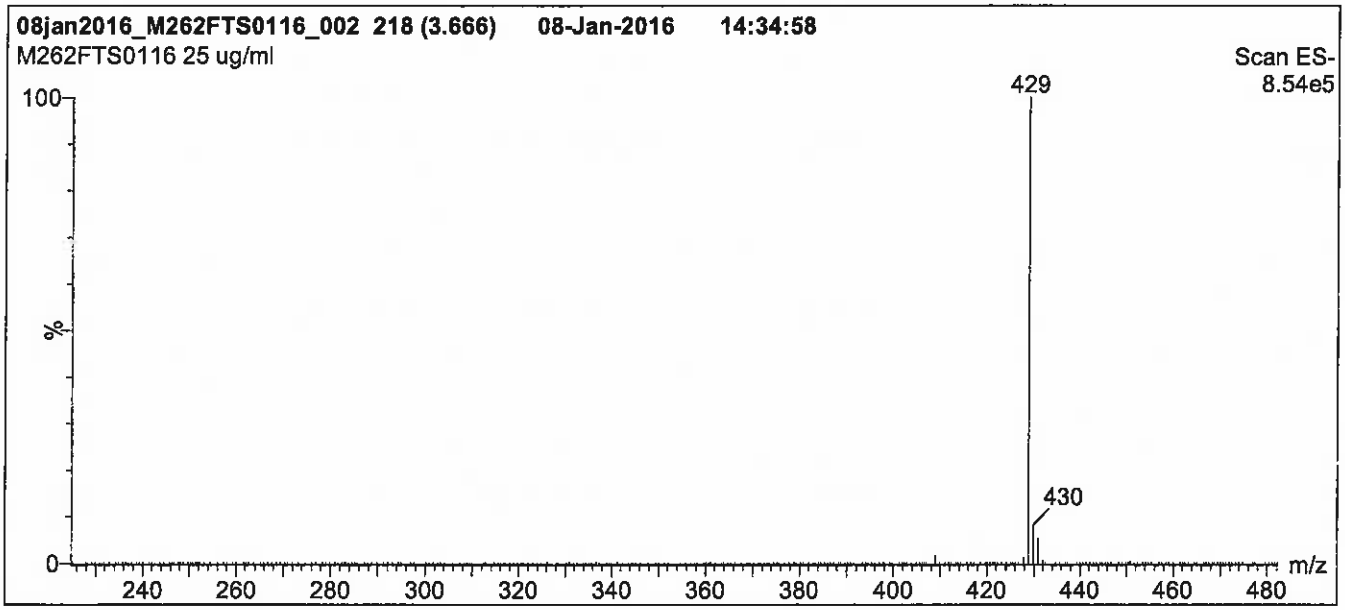
Figure 1: **M2-6:2FTS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min
and hold for 2 min before returning
to initial conditions in 0.5 min.
Time: 10 min

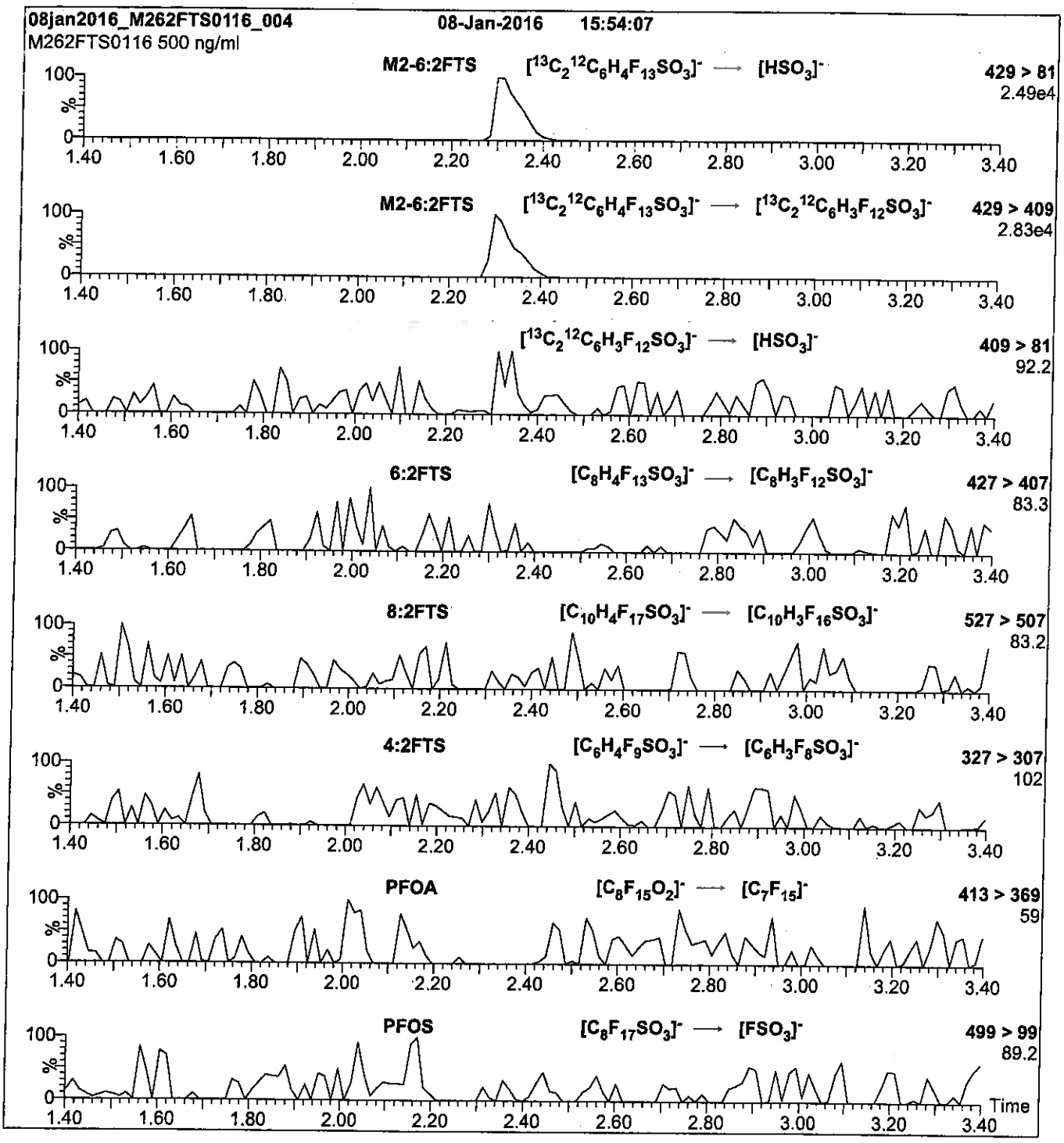
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2-6:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M2-6:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 25

Reagent

LCM2-6:FTS_00004

P: 3/20/17 SRV

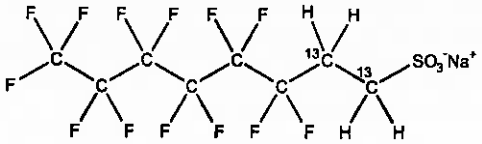
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2-6:2FTS **LOT NUMBER:** M262FTS0217

COMPOUND: Sodium 1H,1H,2H,2H-perfluoro-[1,2-$^{13}C_2$]octane sulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_6H_4F_{13}SO_3Na$	**MOLECULAR WEIGHT:**	452.13
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt) 47.5 ± 2.4 µg/ml (M2-6:2FTS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	02/17/2017		
EXPIRY DATE: (mm/dd/yyyy)	02/17/2022		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The native 6:2FTS contains 4.22% of ^{34}S (due to natural isotopic abundance) therefore both native 6:2FTS and M2-6:2FTS will produce signals in the m/z 429 to m/z 409 channel during SRM analysis. We recommend using the m/z 429 to m/z 81 transition to monitor for M2-6:2FTS during quantitative analysis as it will be free of any native contribution (see Figure 2).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 02/24/2017 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

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$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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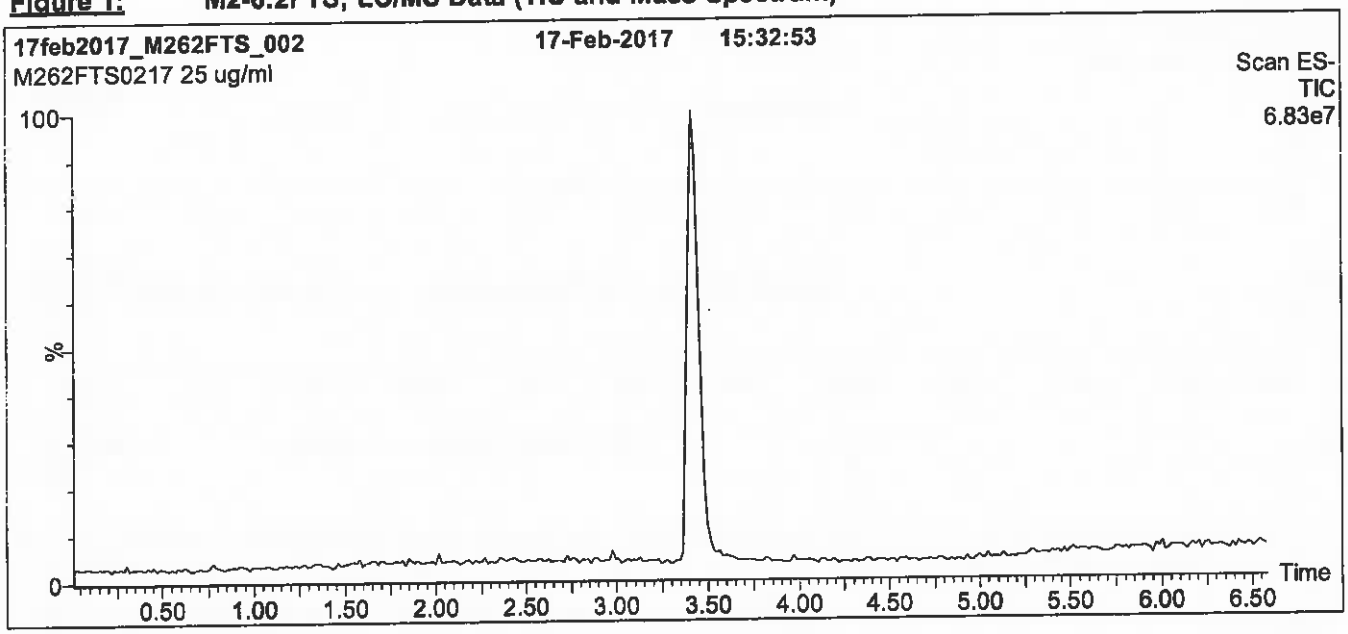
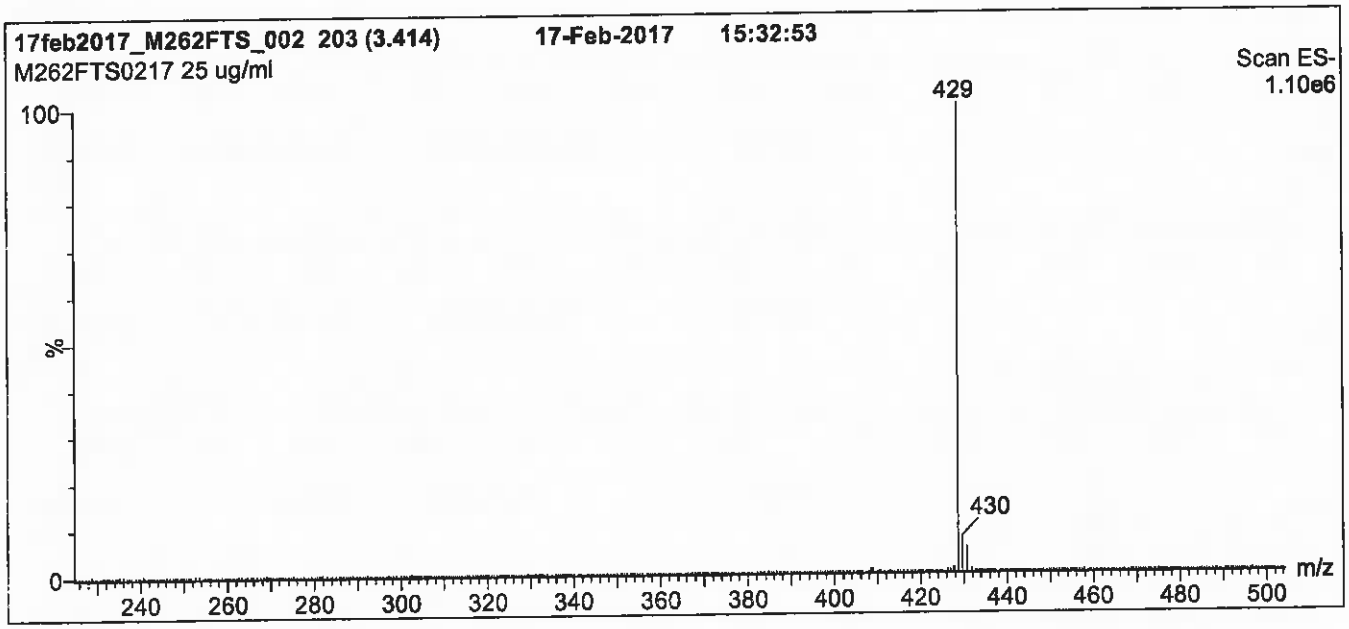




Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 8 min and hold for 1 min
before returning to initial conditions in 0.5 min.
Time: 10 min

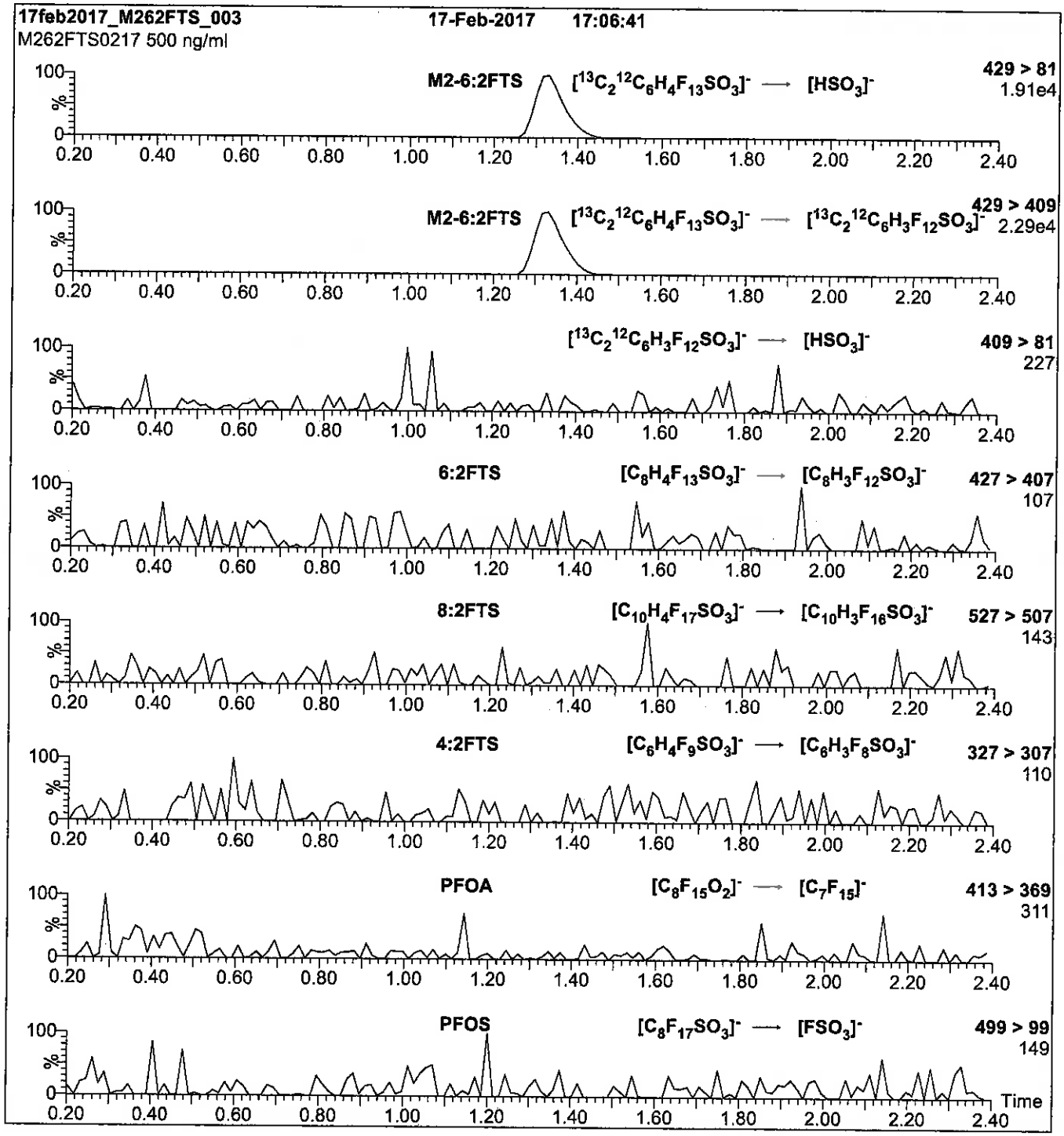
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source:Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2-6:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M2-6:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 25

Reagent

LCM2-8:2FTS_00004

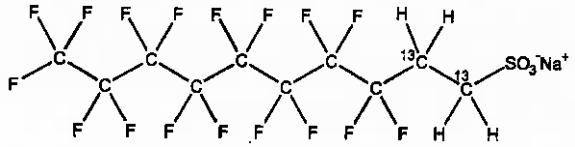
Γ: 3/2017 SEV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: M2-8:2FTS
LOT NUMBER: M282FTS0816
COMPOUND: Sodium 1H,1H,2H,2H-perfluoro-[1,2-$^{13}C_2$]decane sulfonate

STRUCTURE:
CAS #: Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_8H_4F_{17}SO_3Na$	**MOLECULAR WEIGHT:**	552.15
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt)	**SOLVENT(S):**	Methanol
	47.9 ± 2.4 µg/ml (M2-8:2FTS anion)		
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	08/22/2016		
EXPIRY DATE: (mm/dd/yyyy)	08/22/2021		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The native 8:2FTS contains 4.22% of ^{34}S (due to natural isotopic abundance) therefore both native 8:2FTS and M2-8:2FTS will produce signals in the m/z 529 to m/z 509 channel during SRM analysis. We recommend using the m/z 529 to m/z 81 transition to monitor for M2-8:2FTS during quantitative analysis as it will be free of any native contribution (see Figure 2).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 09/02/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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CALA

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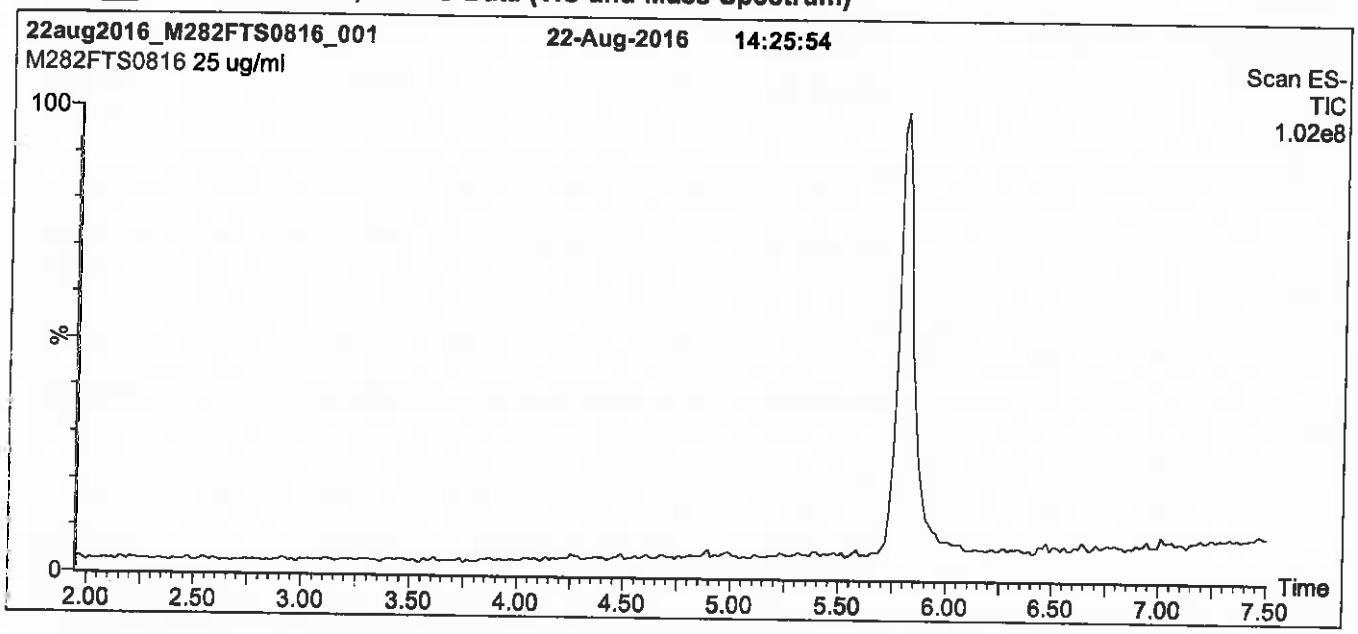
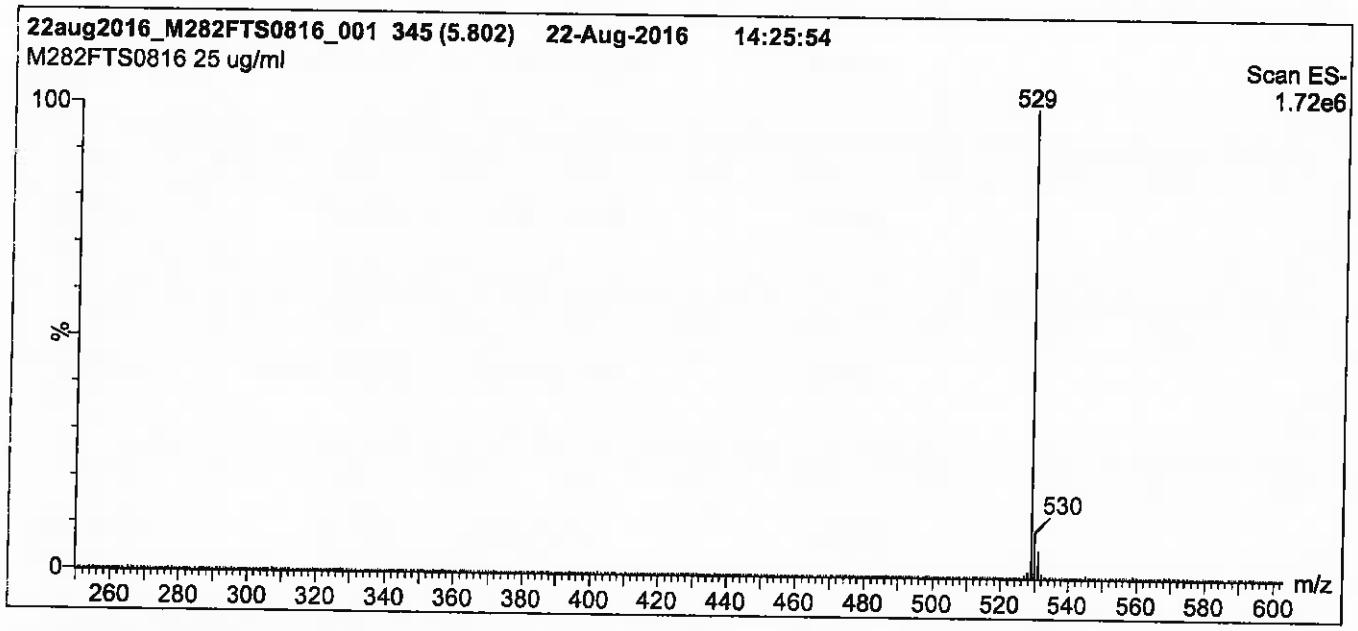
Figure 1: **M2-8:2FTS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Agilent Zorbax Bonus-RP
1.8 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

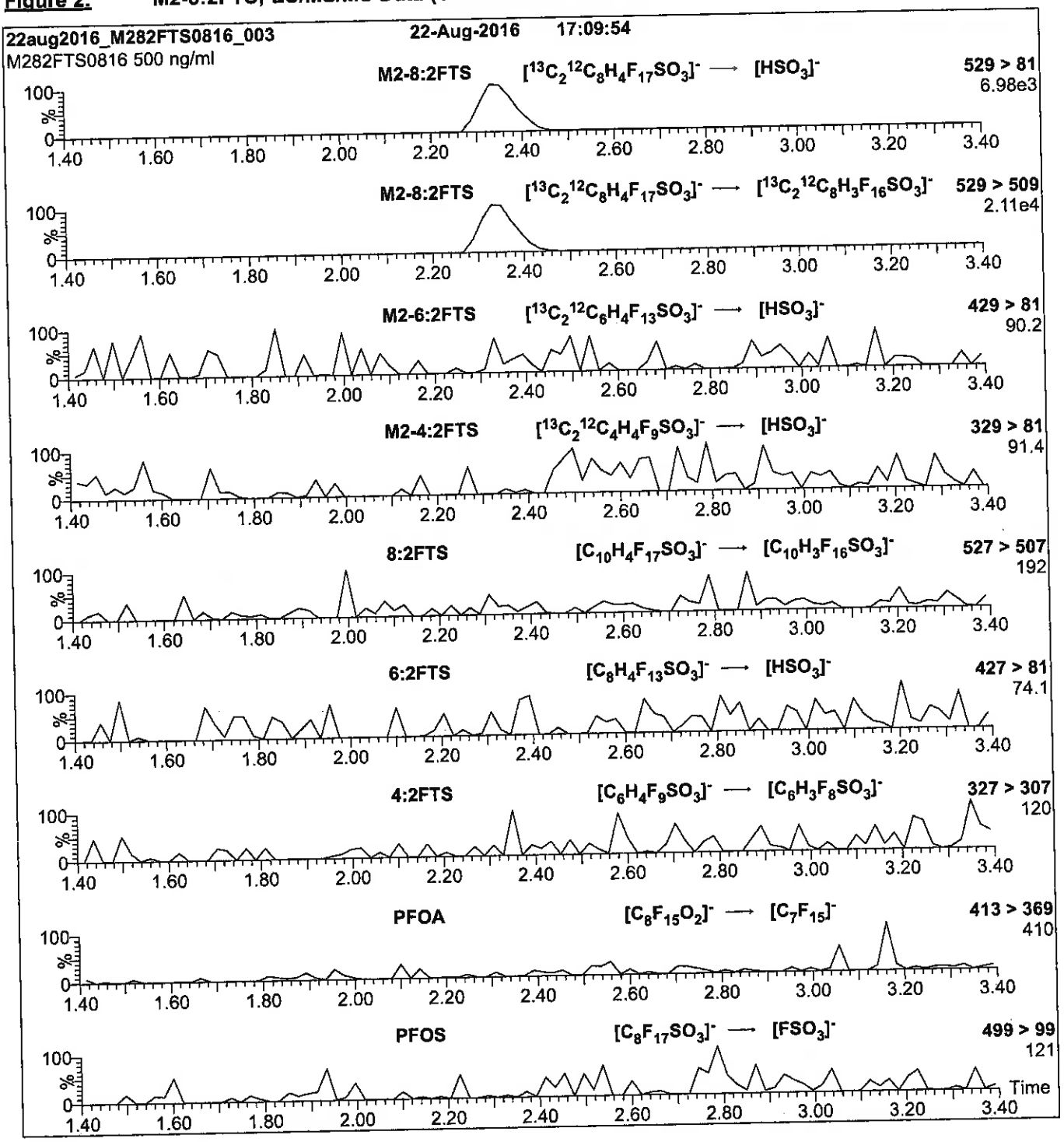
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source:Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2-8:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M2-8:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 30

Reagent

LCM2PFHxDA_00008

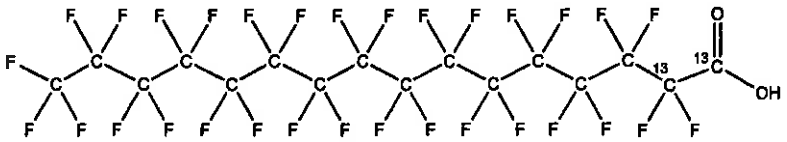
R: SBC 9/22/16

739512
ID: LCM2PFHxDA_00008
Exp: 01/07/21 Prpd: SBC
13C2-PFHxDA at 50ug/mL

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	M2PFHxDA	**LOT NUMBER:**	M2PFHxDA1112
COMPOUND:	Perfluoro-n-[1,2-$^{13}C_2$]hexadecanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_{14}HF_{31}O_2$	**MOLECULAR WEIGHT:**	816.11
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2-$^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	01/07/2016		
EXPIRY DATE: (mm/dd/yyyy)	01/07/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of native perfluoro-n-hexadecanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 01/11/2016 (mm/dd/yyyy)

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CALA

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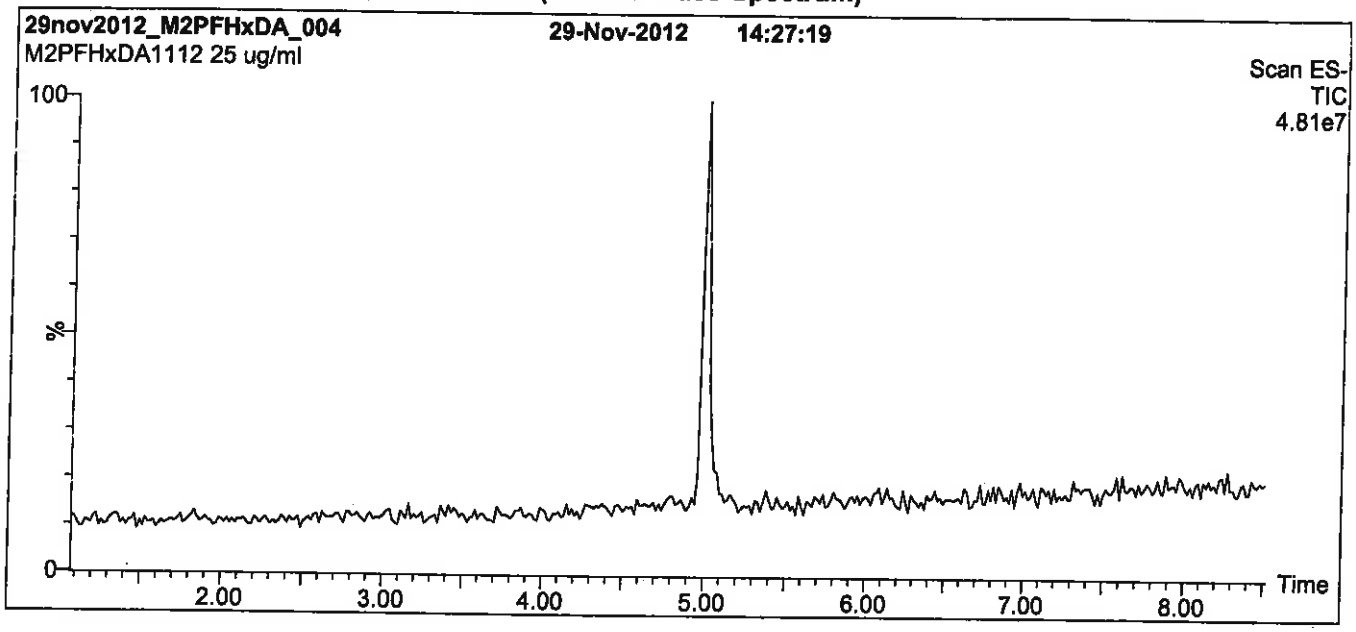
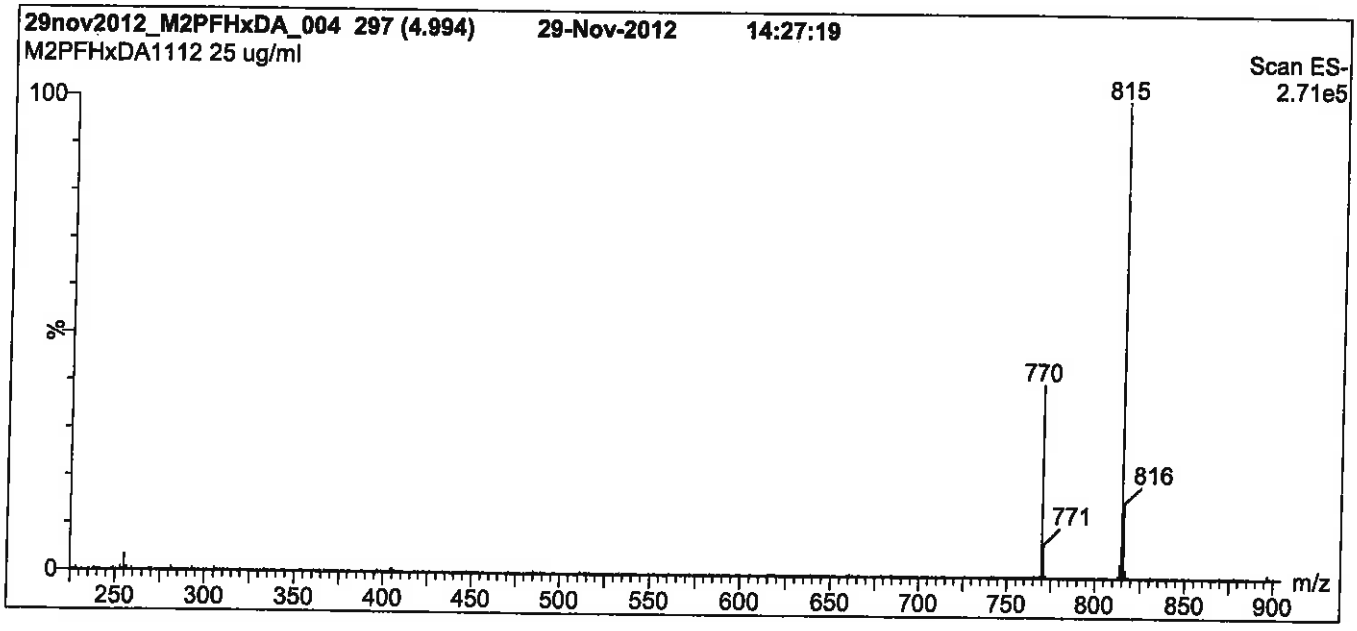
Figure 1: **M2PFHxDA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 100% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

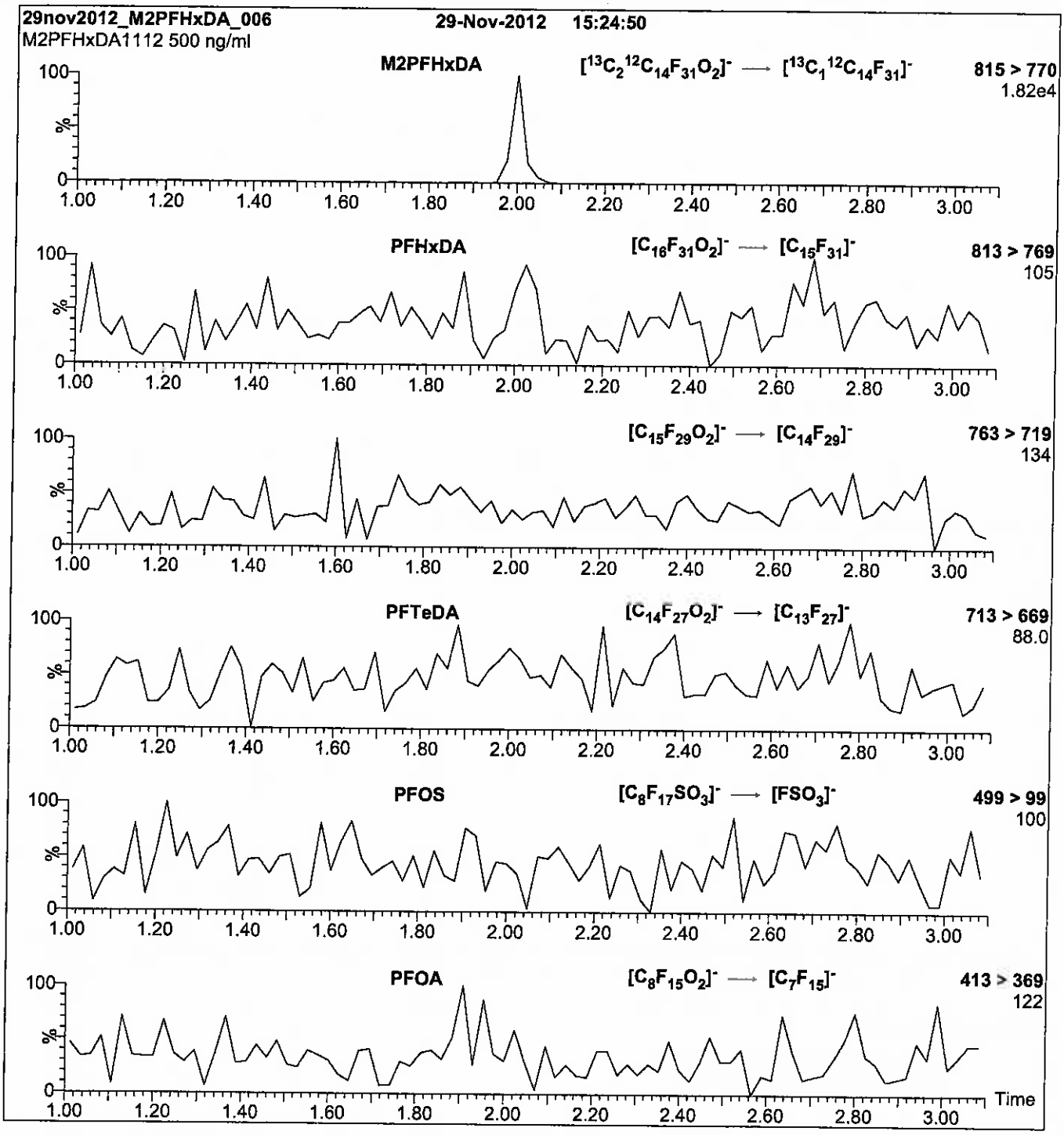
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 1200 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2PFHxDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml M2PFHxDA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

Reagent

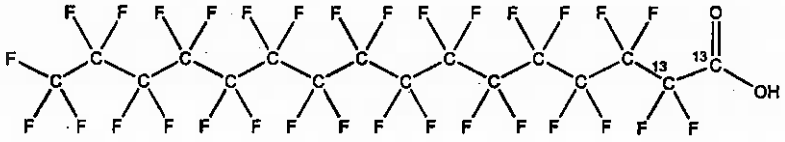
LCM2PFHxDA_00009

rr: 3/9/17 SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	M2PFHxDA	**LOT NUMBER:**	M2PFHxDA1112
COMPOUND:	Perfluoro-n-[1,2-$^{13}C_2$]hexadecanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_{14}HF_{31}O_2$	**MOLECULAR WEIGHT:**	816.11
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	01/07/2016		
EXPIRY DATE: (mm/dd/yyyy)	01/07/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of native perfluoro-n-hexadecanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 01/11/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

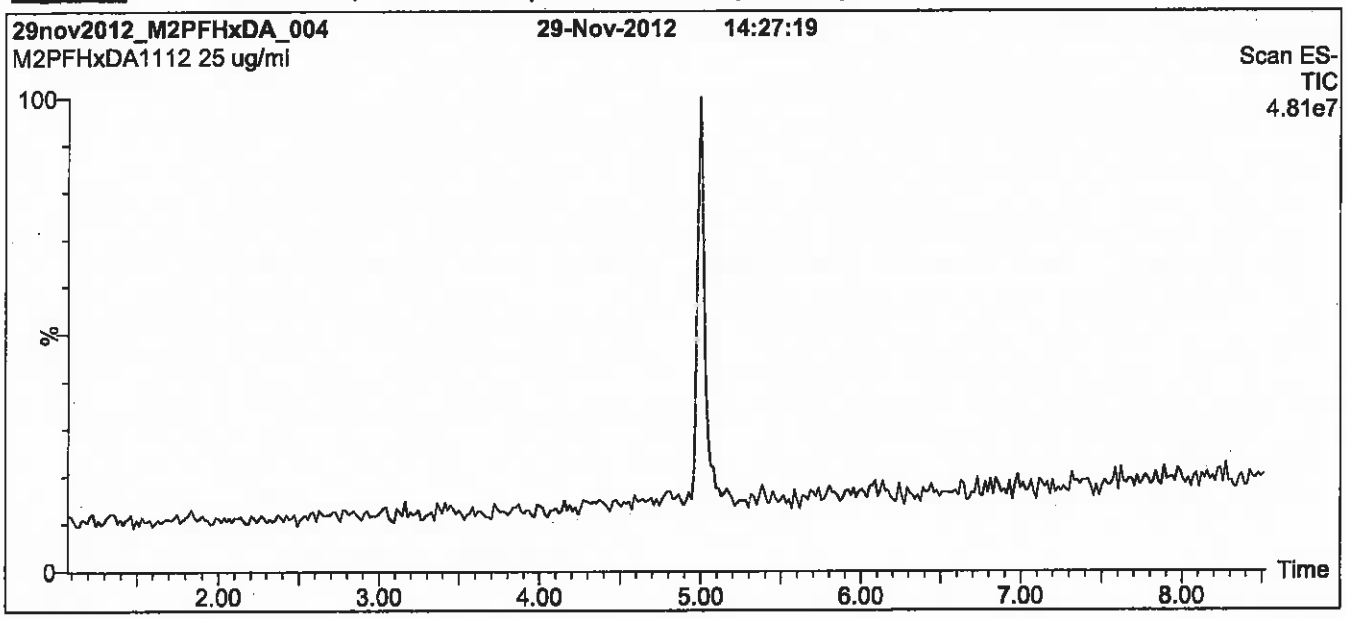
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

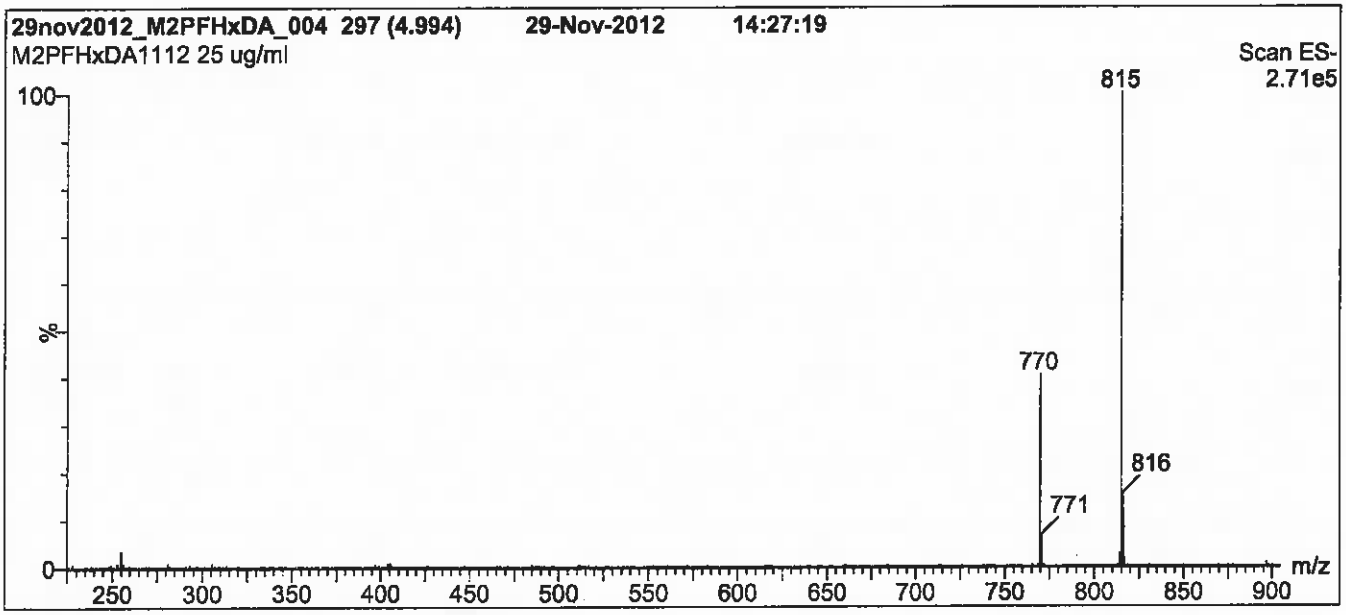
CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **M2PFHxDA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 100% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

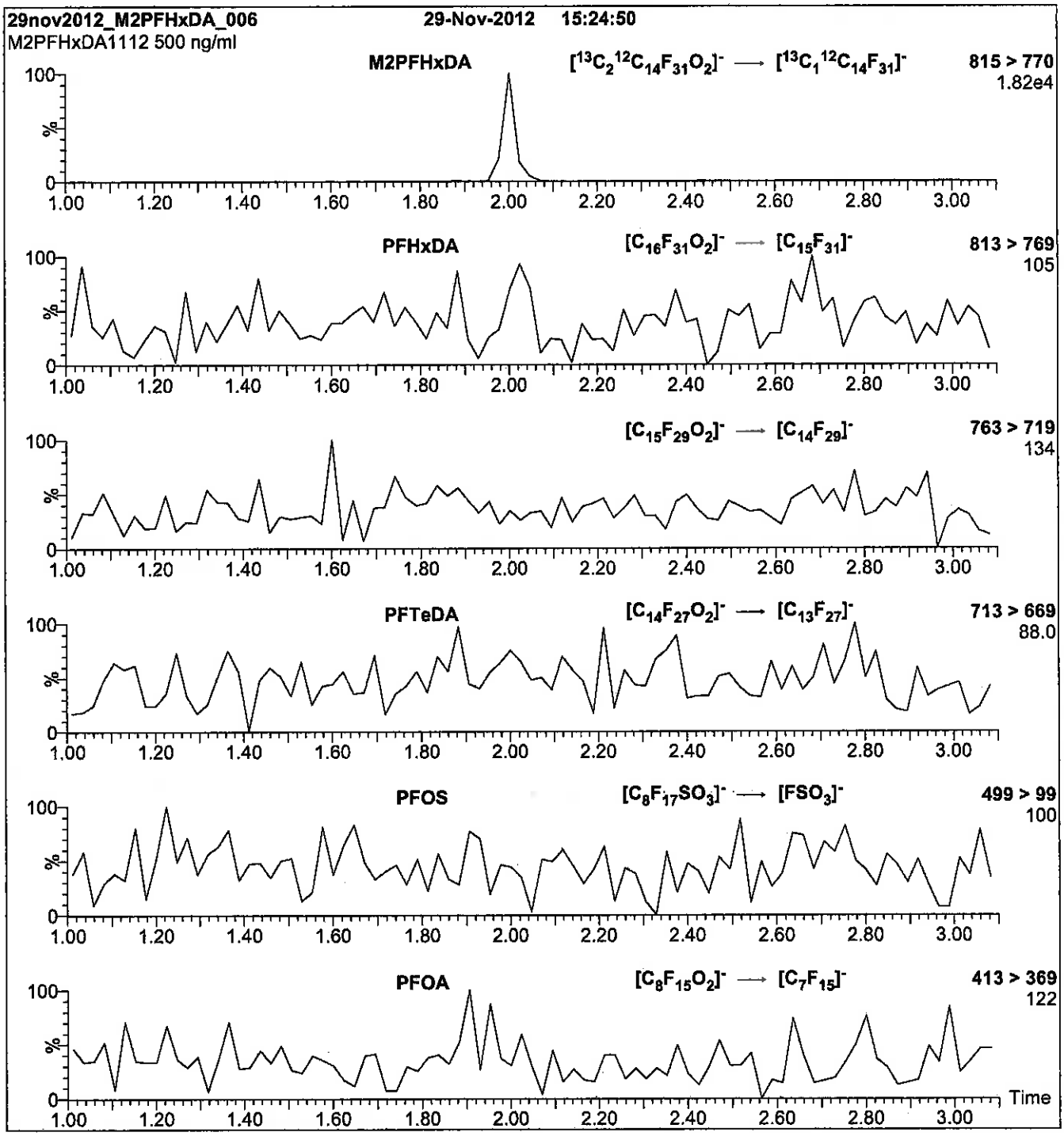
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 1200 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2PFHxDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M2PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

Reagent

LCM2PFOA_00005

Rec'd. 2/10/15 SV

WELLINGTON LABORATORIES

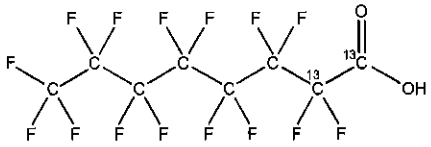
CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: M2PFOA
COMPOUND: Perfluoro-n-[1,2-$^{13}C_2$]octanoic acid

LOT NUMBER: M2PFOA0613

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_6HF_{15}O_2$	**MOLECULAR WEIGHT:**	416.05
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99%^{13}C (1,2-$^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	06/19/2013		
EXPIRY DATE: (mm/dd/yyyy)	06/19/2018		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 07/16/2013 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2,...x_n$ on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

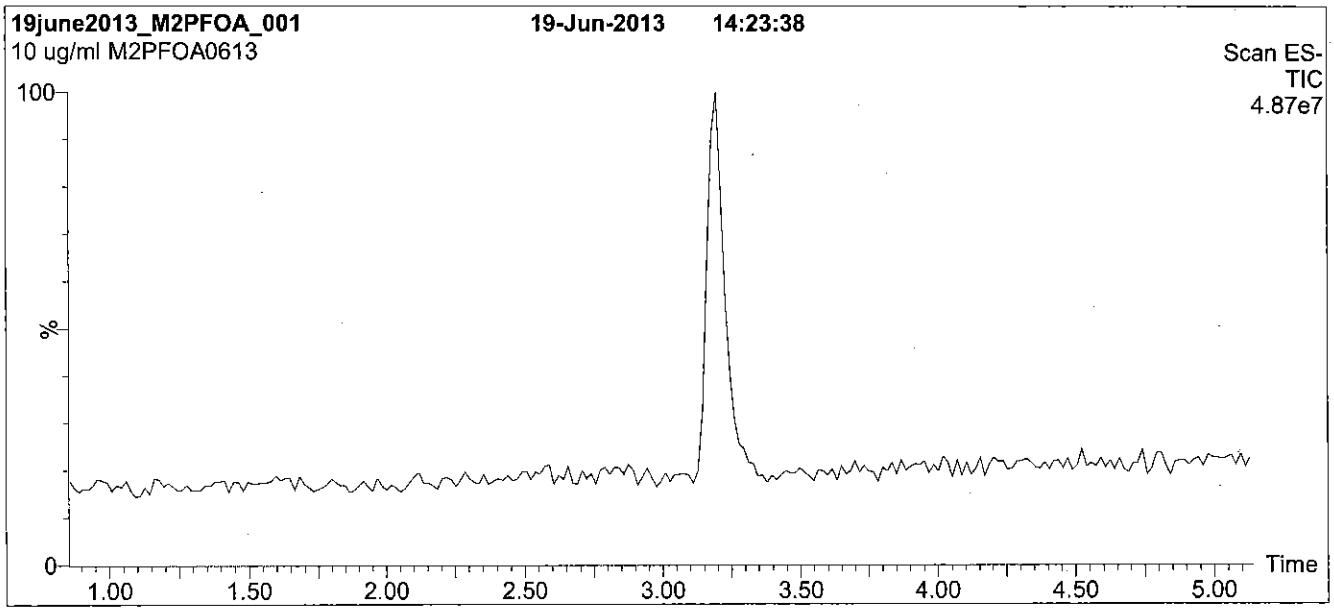
This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).

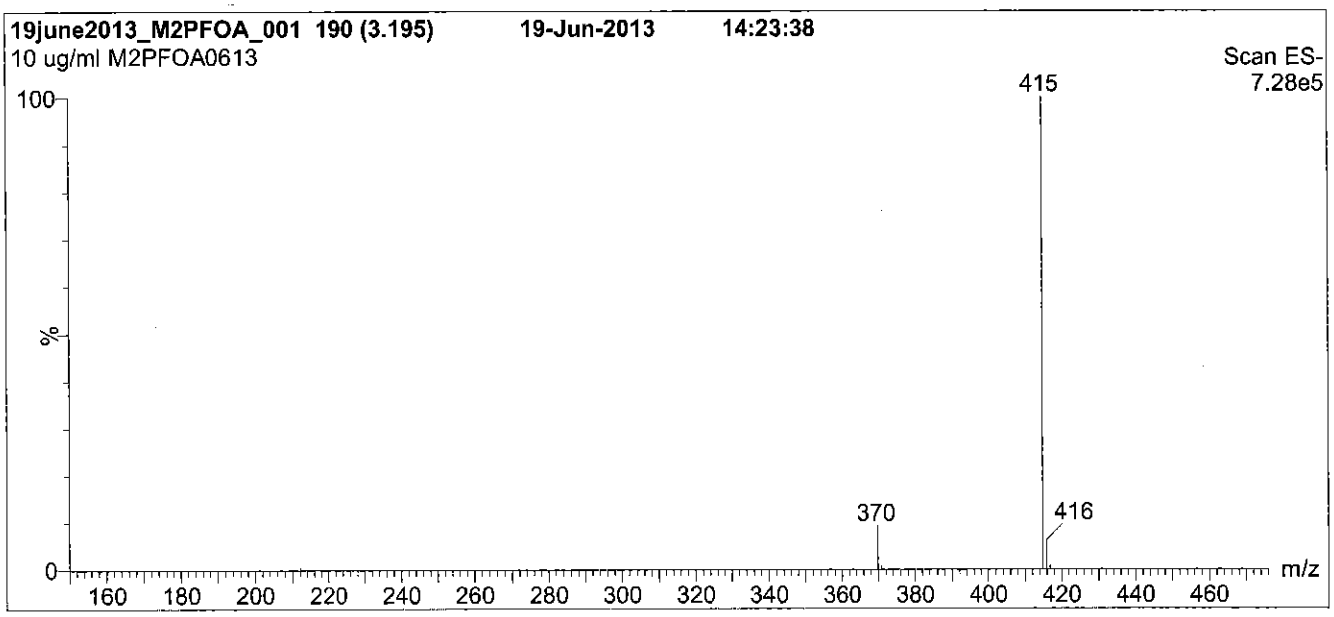
CALA Testing Accreditation No. A1226

ACLASS ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **M2PFOA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

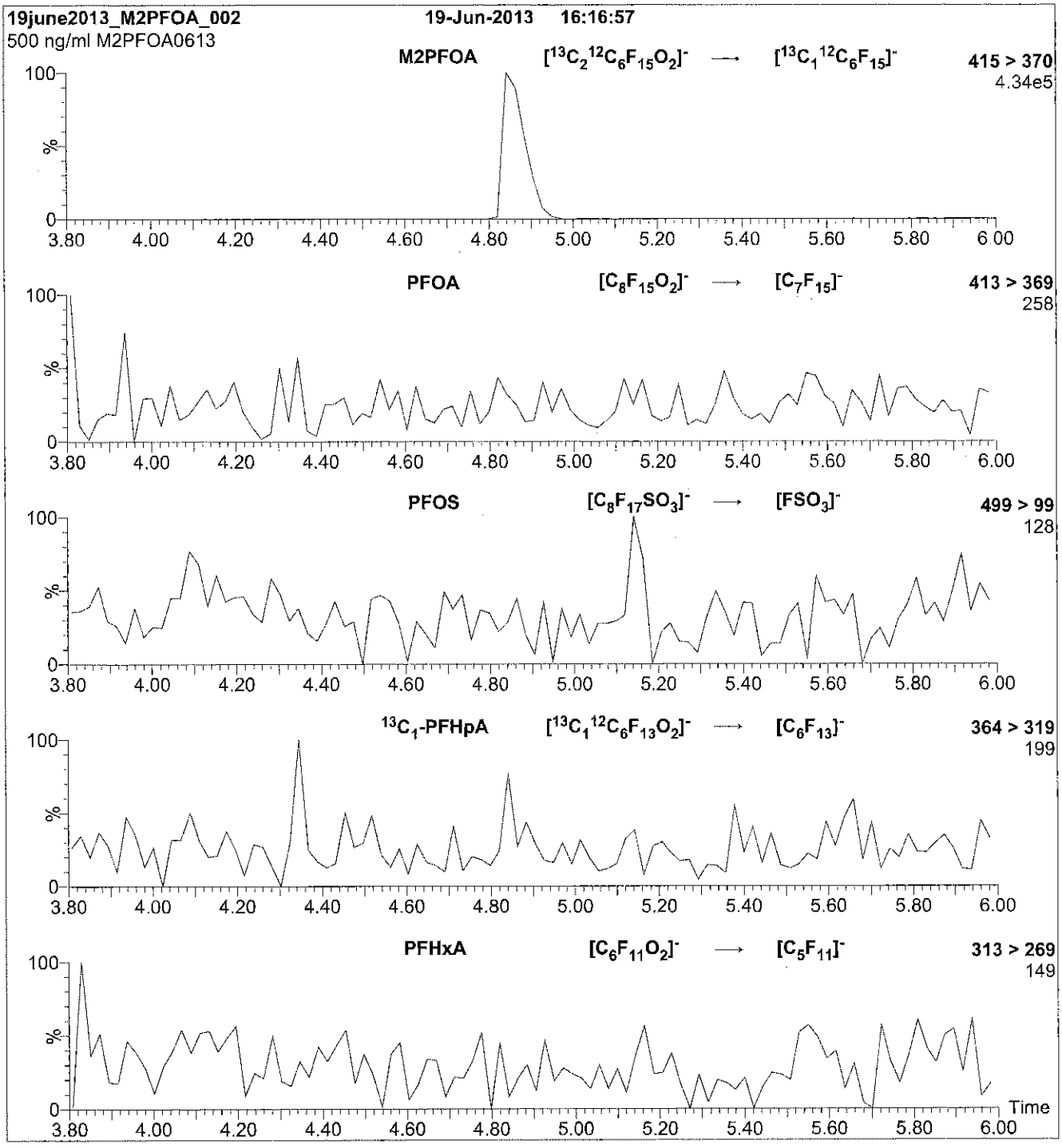
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2PFOA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml M2PFOA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.66e-3
Collision Energy (eV) = 11

Reagent

LCM2PFOA_00006

R: SBC 12/21/16

814260
ID: LCM2PFOA_00006
Exp: 02/12/21 Prpd: SBC
13C2-PFOA Stock 50ug/mL

WELLINGTON LABORATORIES

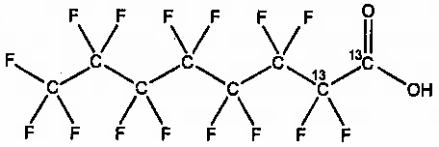
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2PFOA
COMPOUND: Perfluoro-n-[1,2-$^{13}C_2$]octanoic acid

LOT NUMBER: M2PFOA0216

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $^{13}C_2{}^{12}C_6HF_{15}O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 02/12/2016
EXPIRY DATE: (mm/dd/yyyy) 02/12/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 416.05
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ^{13}C ($1,2\text{-}^{13}C_2$)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 02/24/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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CALA Testing

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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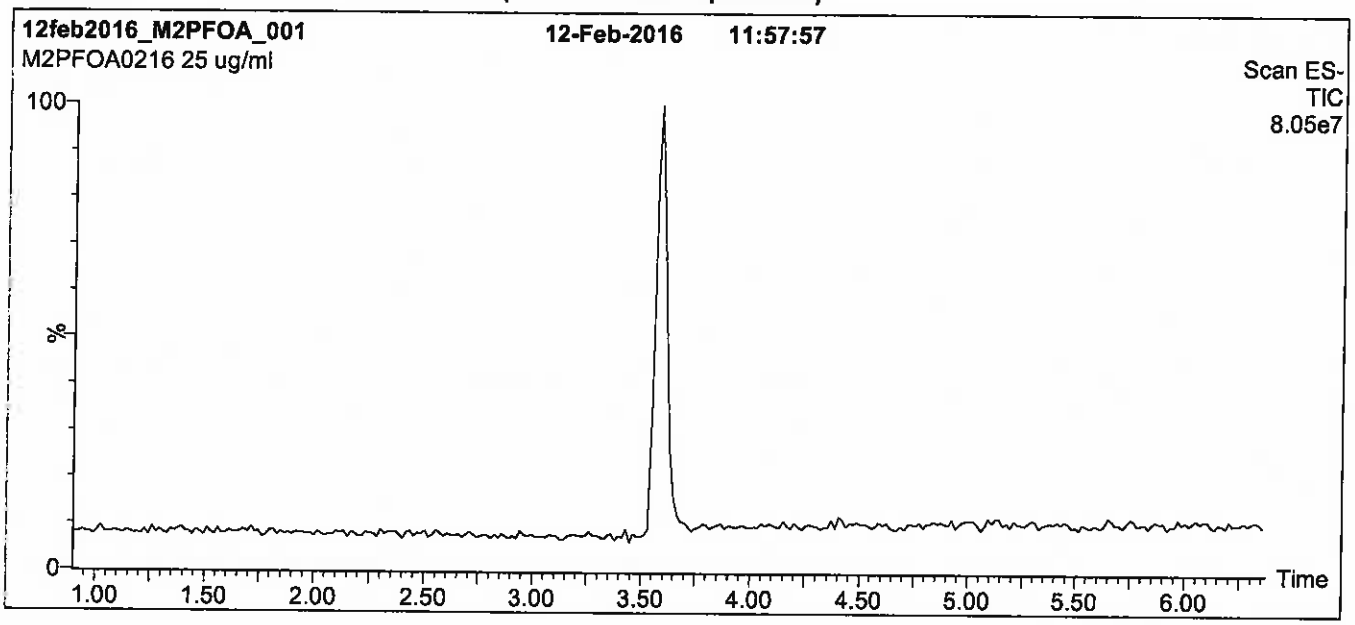
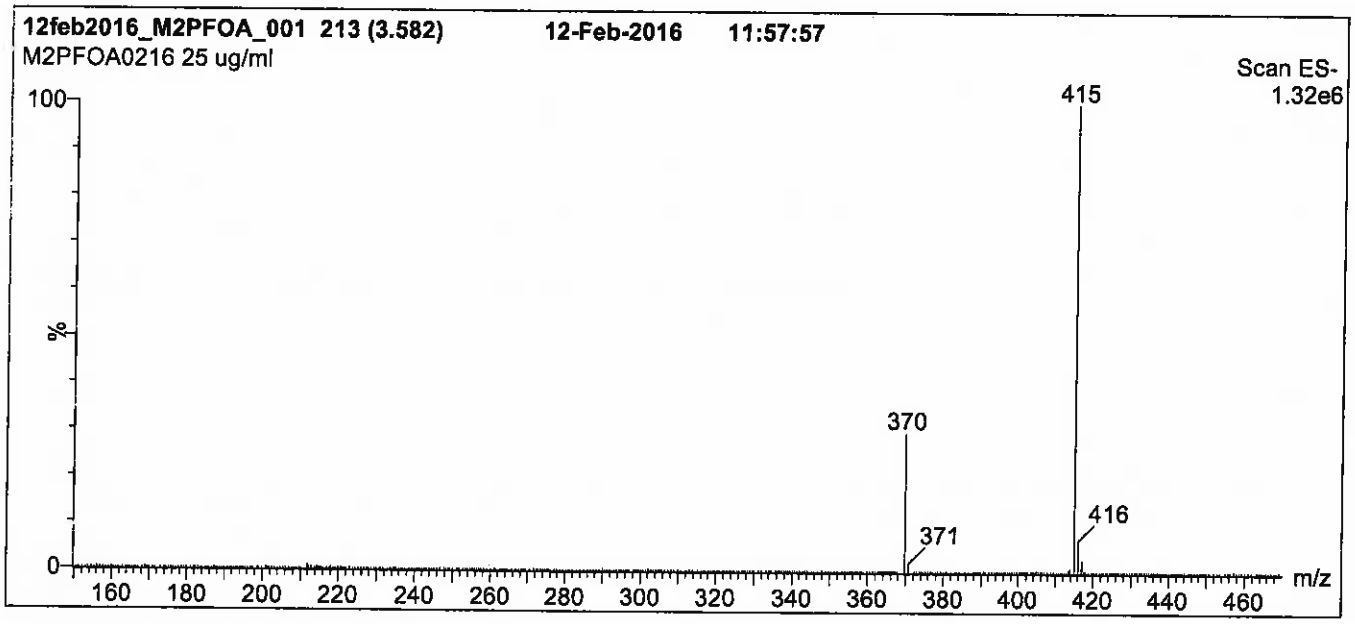




Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

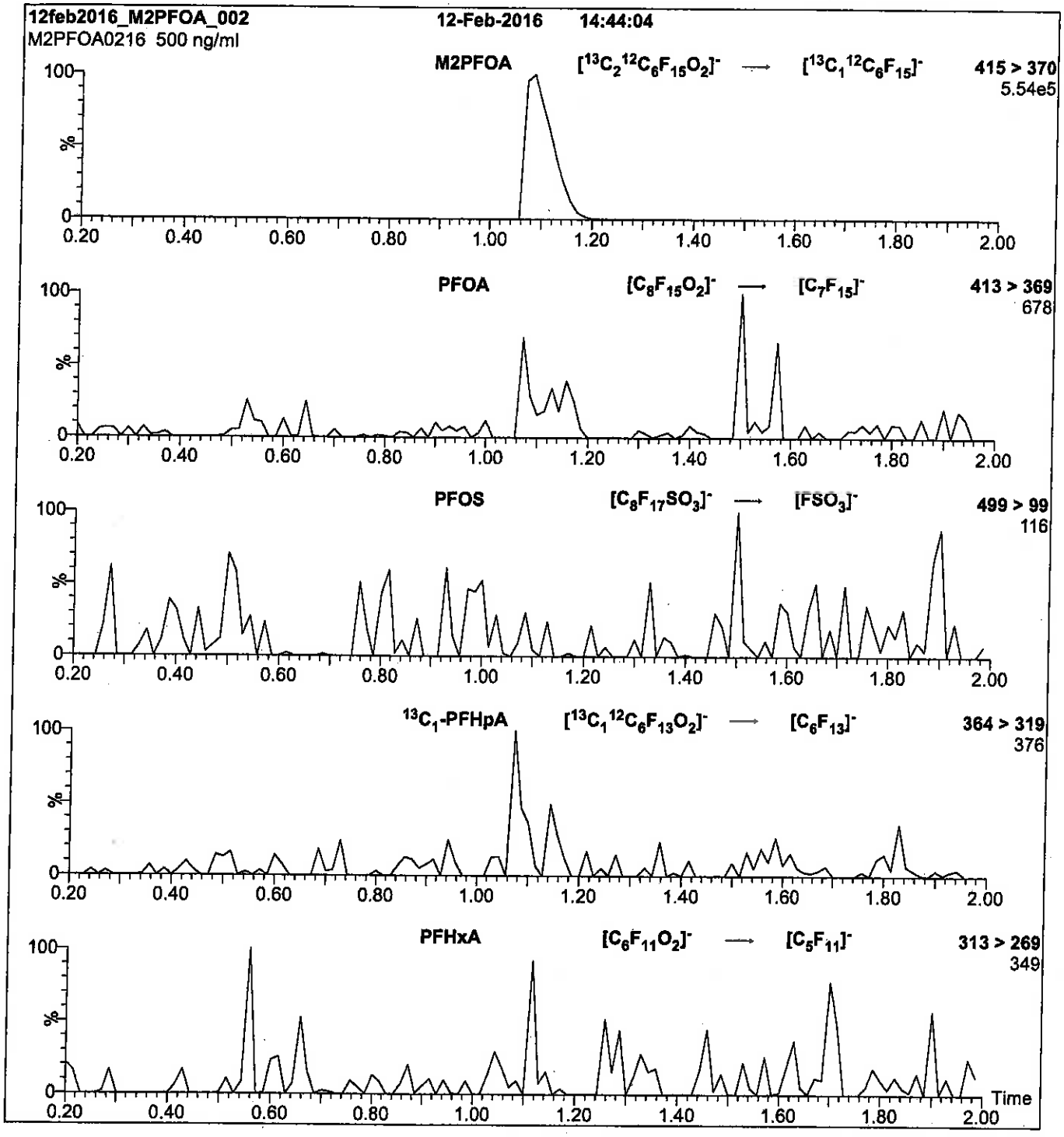
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2PFOA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml M2PFOA)
Mobile phase:	Isocratic 80% MeOH / 20% H_2O
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 10

Reagent

LCM2PFTeDA_00007

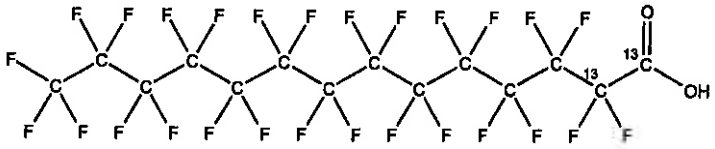
Scanned 10/14/16 R: SBC 9/22/16

738563
ID: LCM2PFTeDA_00007
Exp: 12/07/20 Prpd: SBC
13C2-PFTeDA at 50ug/mL

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	M2PFTeDA	**LOT NUMBER:**	M2PFTeDA1115
COMPOUND:	Perfluoro-n-[1,2-$^{13}C_2$]tetradecanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_{12}HF_{27}O_2$	**MOLECULAR WEIGHT:**	716.10
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	12/07/2015		
EXPIRY DATE: (mm/dd/yyyy)	12/07/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/08/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

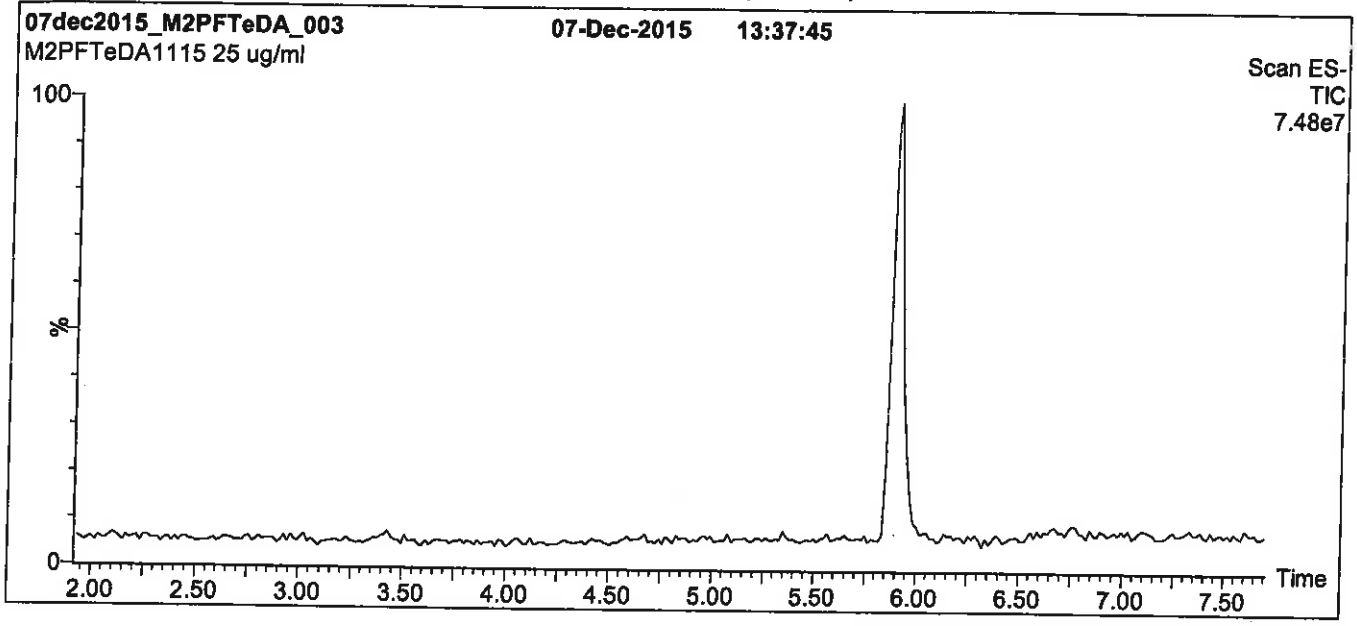
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

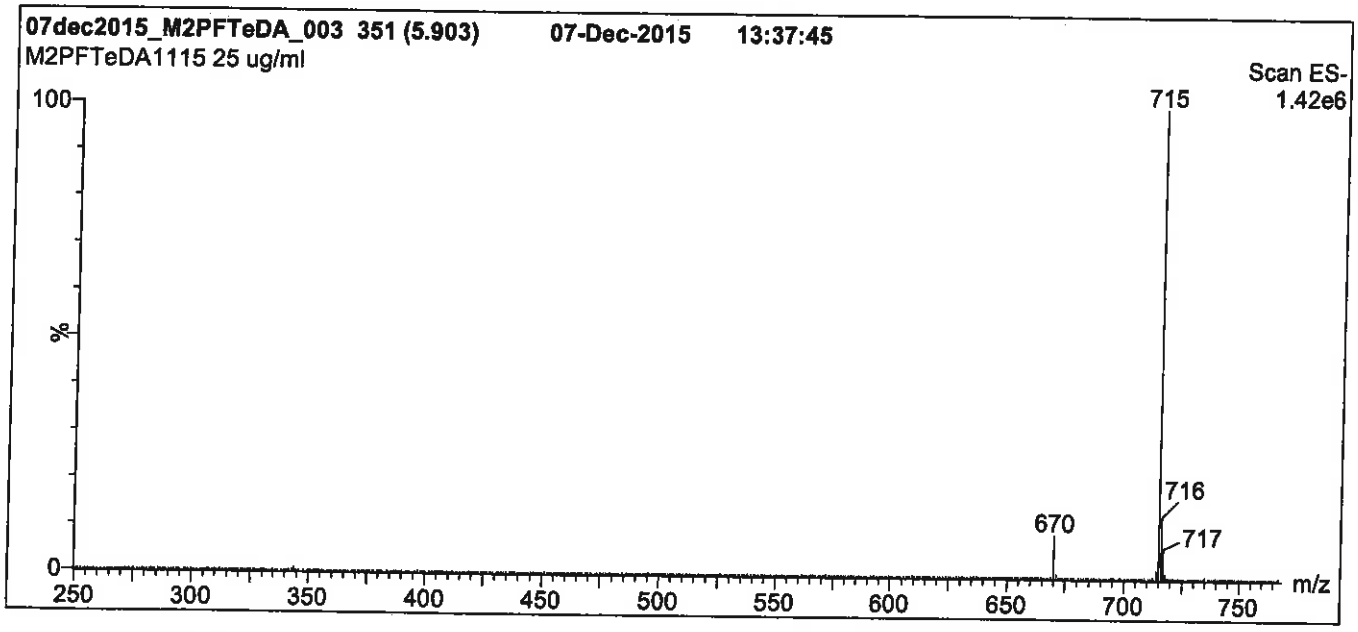
CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **M2PFTeDA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 65% (80:20 MeOH:ACN) / 35% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

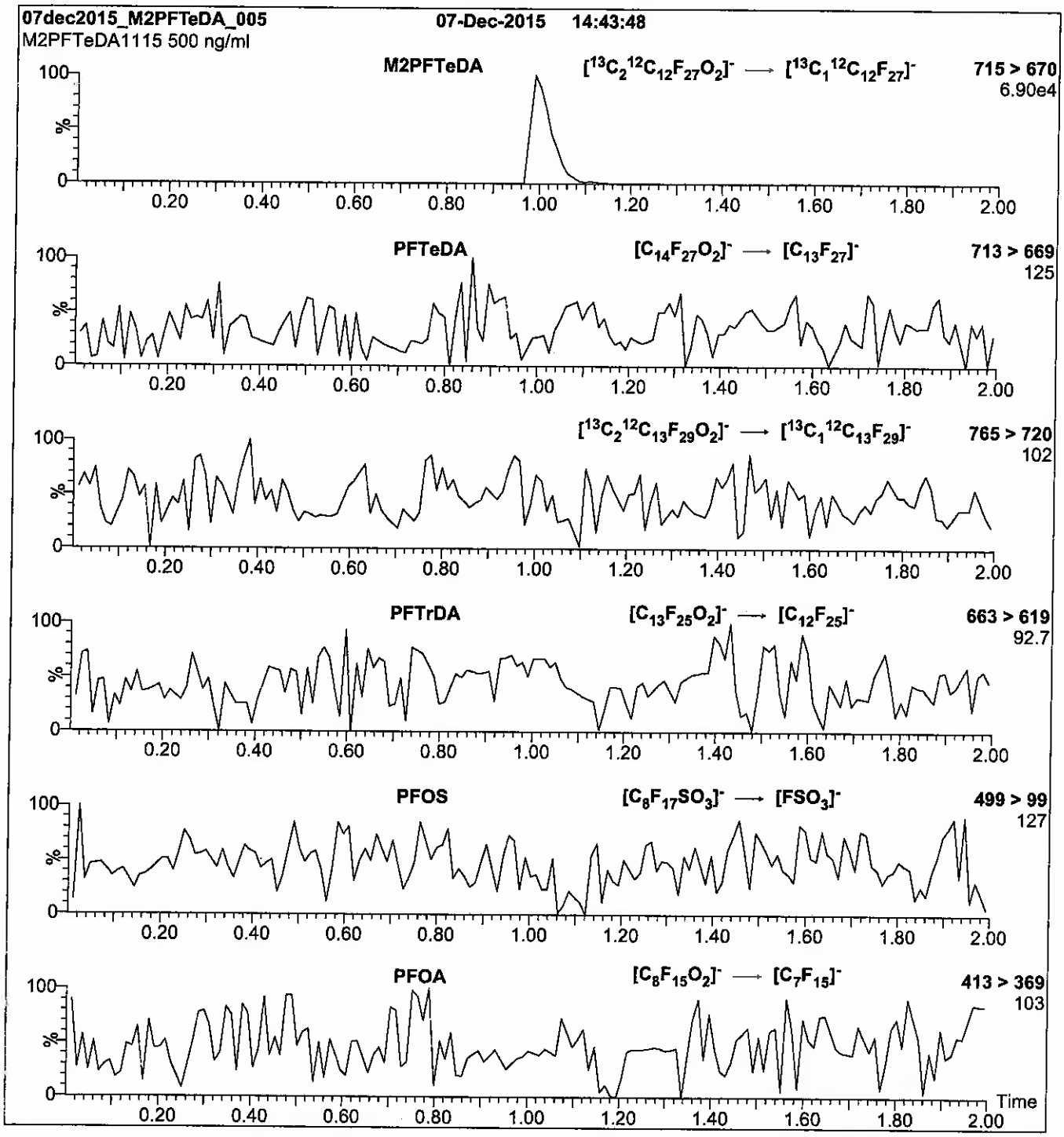
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 1250 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2PFTeDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M2PFTeDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 14

Reagent

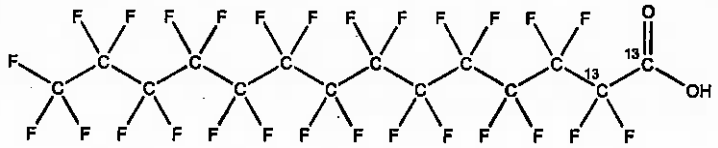
LCM2PFTeDA_00008

r: 3/5/17 SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	M2PFTeDA	**LOT NUMBER:**	M2PFTeDA1115
COMPOUND:	Perfluoro-n-[1,2-$^{13}C_2$]tetradecanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_{12}HF_{27}O_2$	**MOLECULAR WEIGHT:**	716.10
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	12/07/2015		
EXPIRY DATE: (mm/dd/yyyy)	12/07/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/08/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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EXPIRY DATE / PERIOD OF VALIDITY:

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QUALITY MANAGEMENT:

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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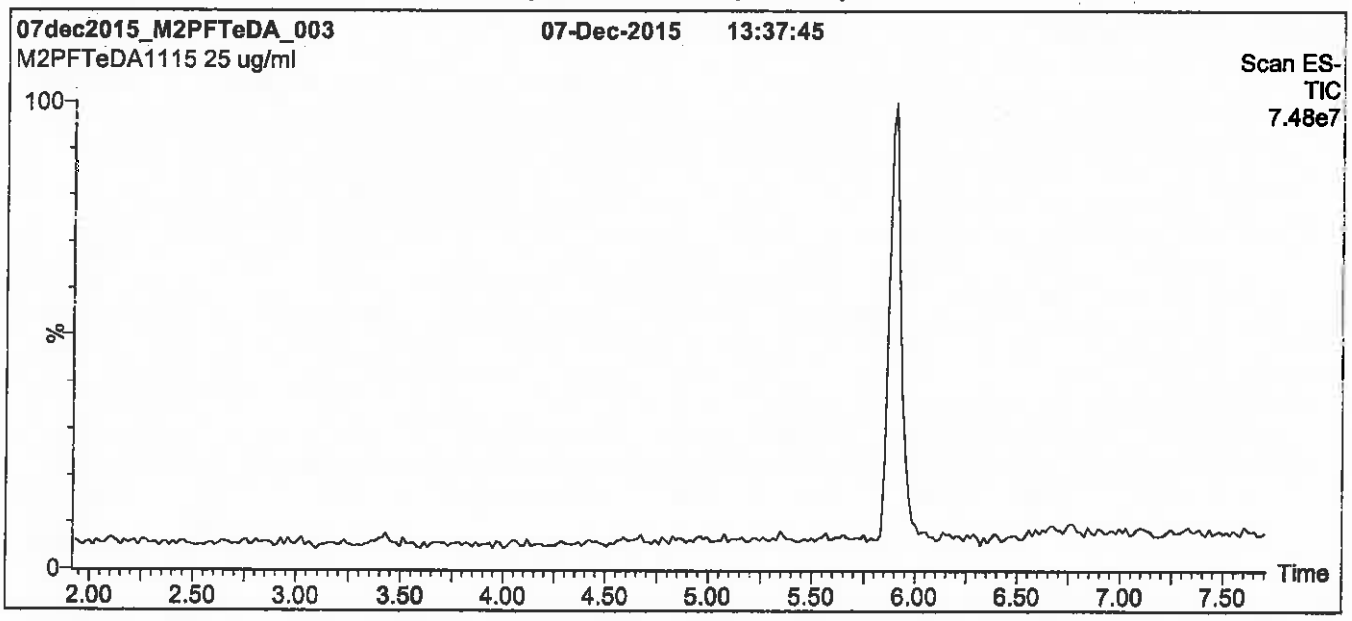
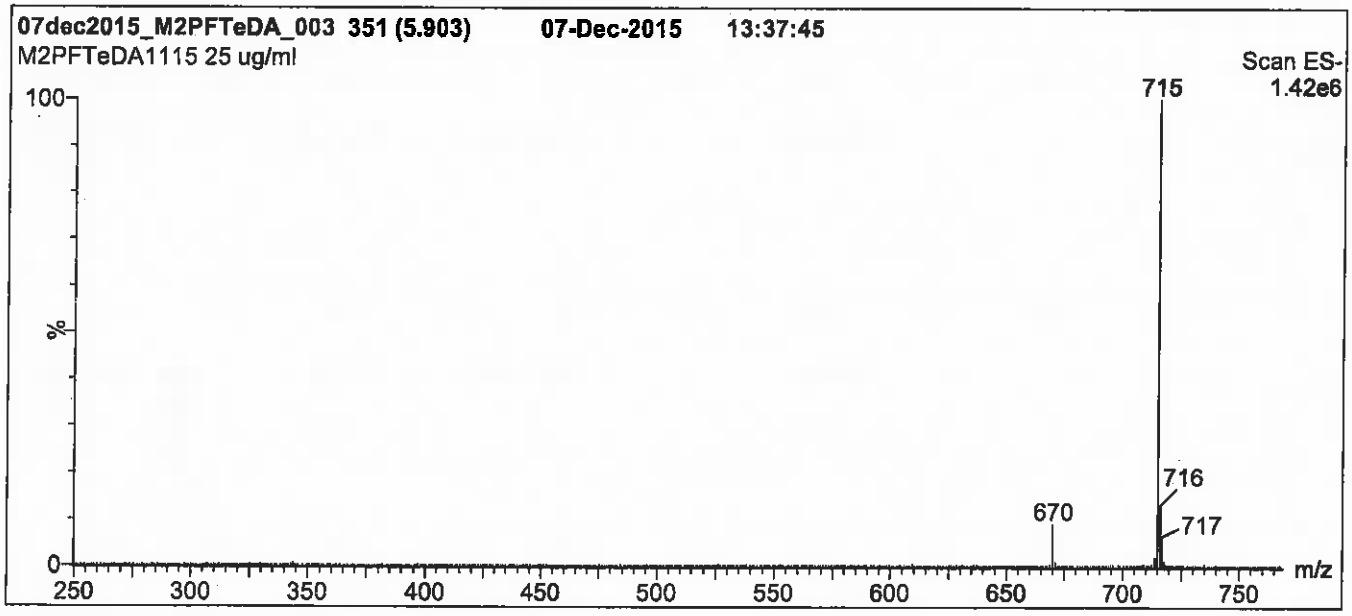
Figure 1: **M2PFTeDA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 65% (80:20 MeOH:ACN) / 35% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

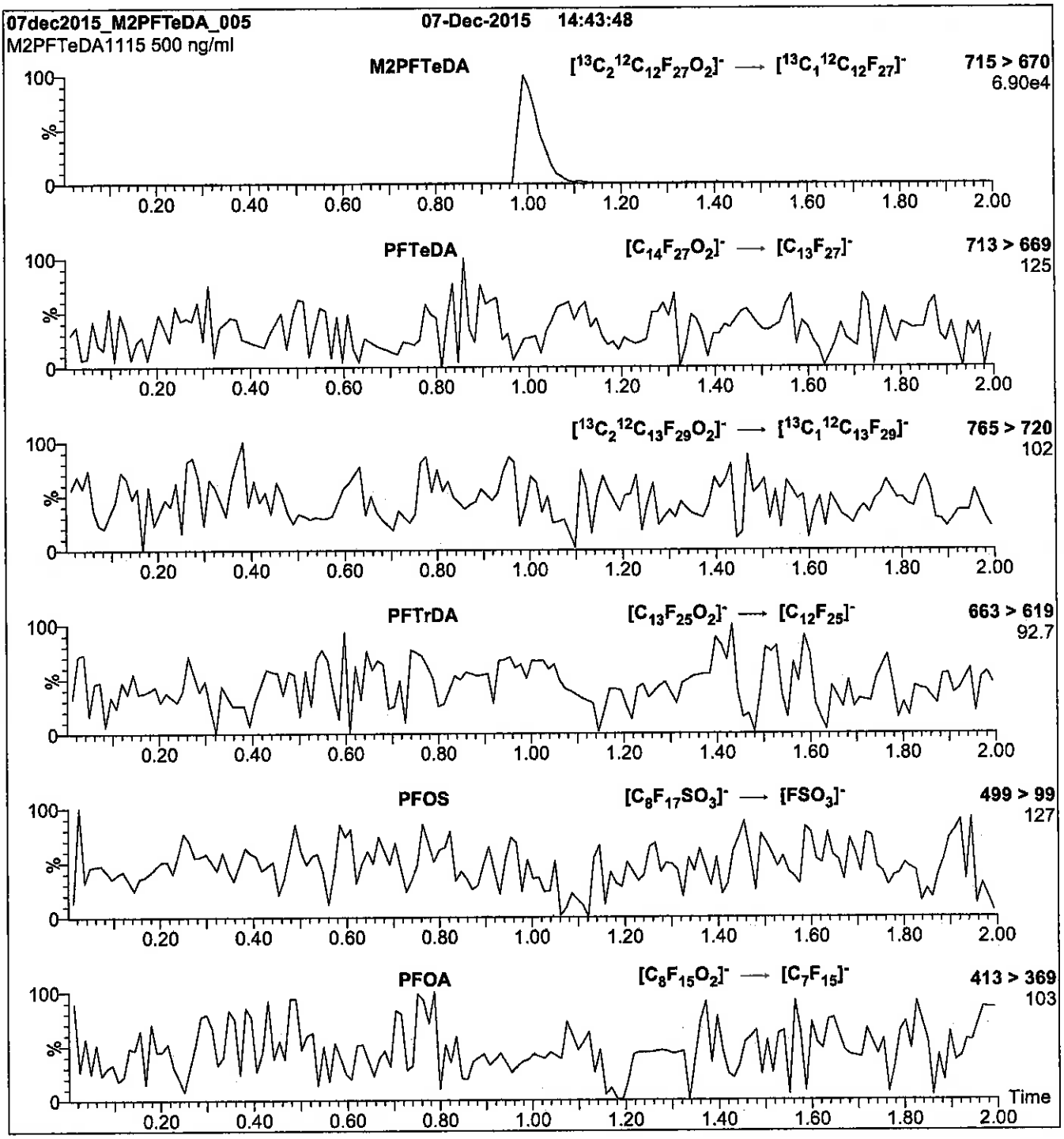
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 1250 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2PFTeDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml M2PFTeDA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 14

Reagent

LCM4PFHPA_00007

R: SBC 9/22/16

739567
ID: LCM4PFHPA_00007
Exp: 05/27/21 Prpd: SBC
13C4-Perfluoroheptanoic a

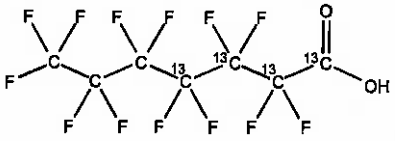
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS

DOCUMENTATION

Scanned 10/14/16 SBC

PRODUCT CODE:	M4PFHpA	**LOT NUMBER:**	M4PFHpA0516
COMPOUND:	Perfluoro-n-[1,2,3,4-$^{13}C_4$]heptanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_4{}^{12}C_3HF_{13}O_2$	**MOLECULAR WEIGHT:**	368.03
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2,3,4-$^{13}C_4$)
LAST TESTED: (mm/dd/yyyy)	05/27/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/27/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 07/05/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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CALA Testing

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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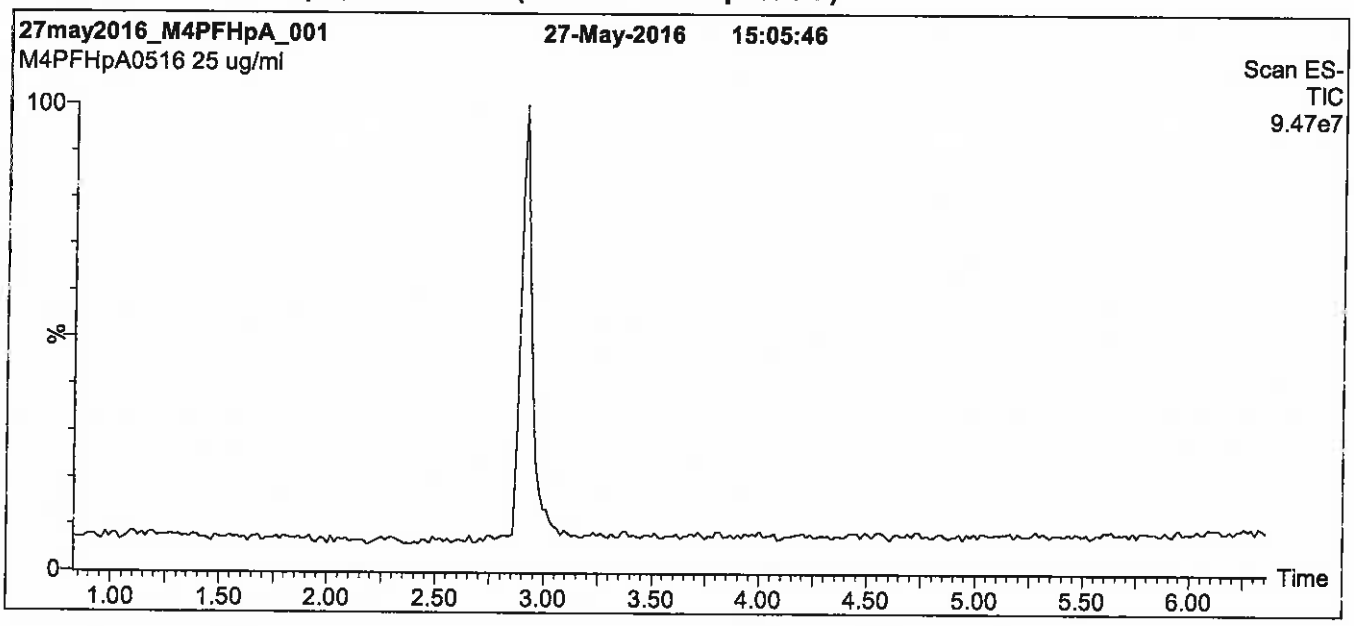
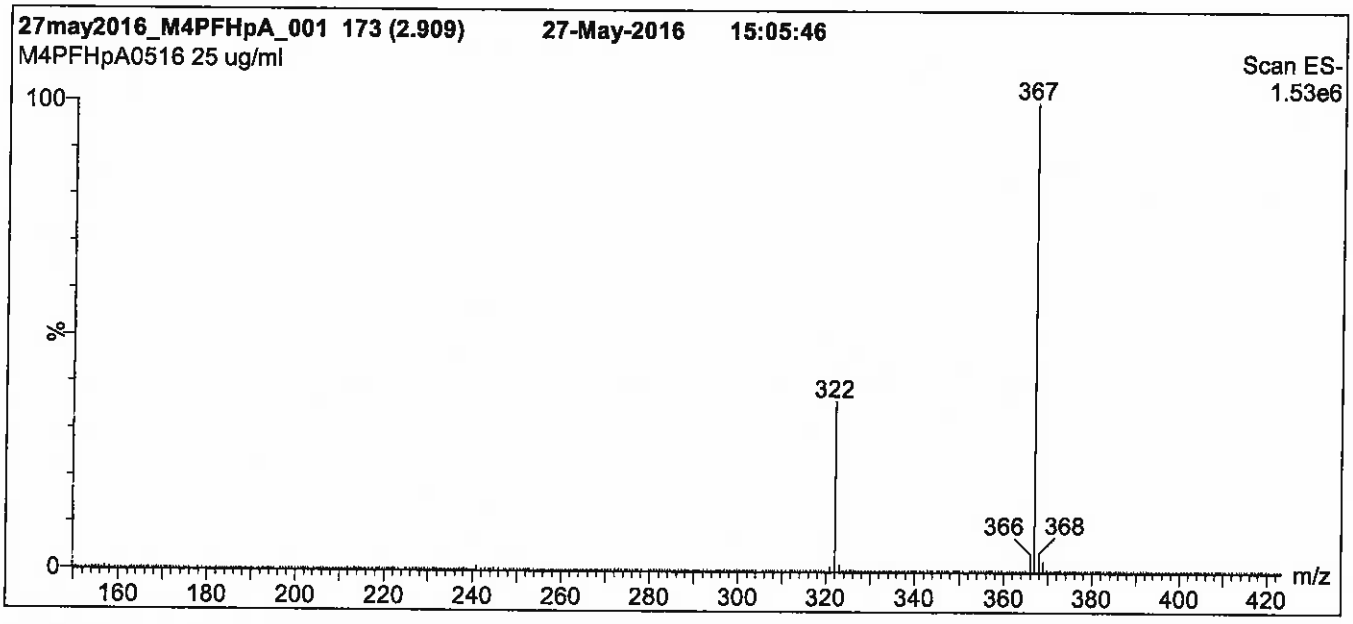
Figure 1: **M4PFHpA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

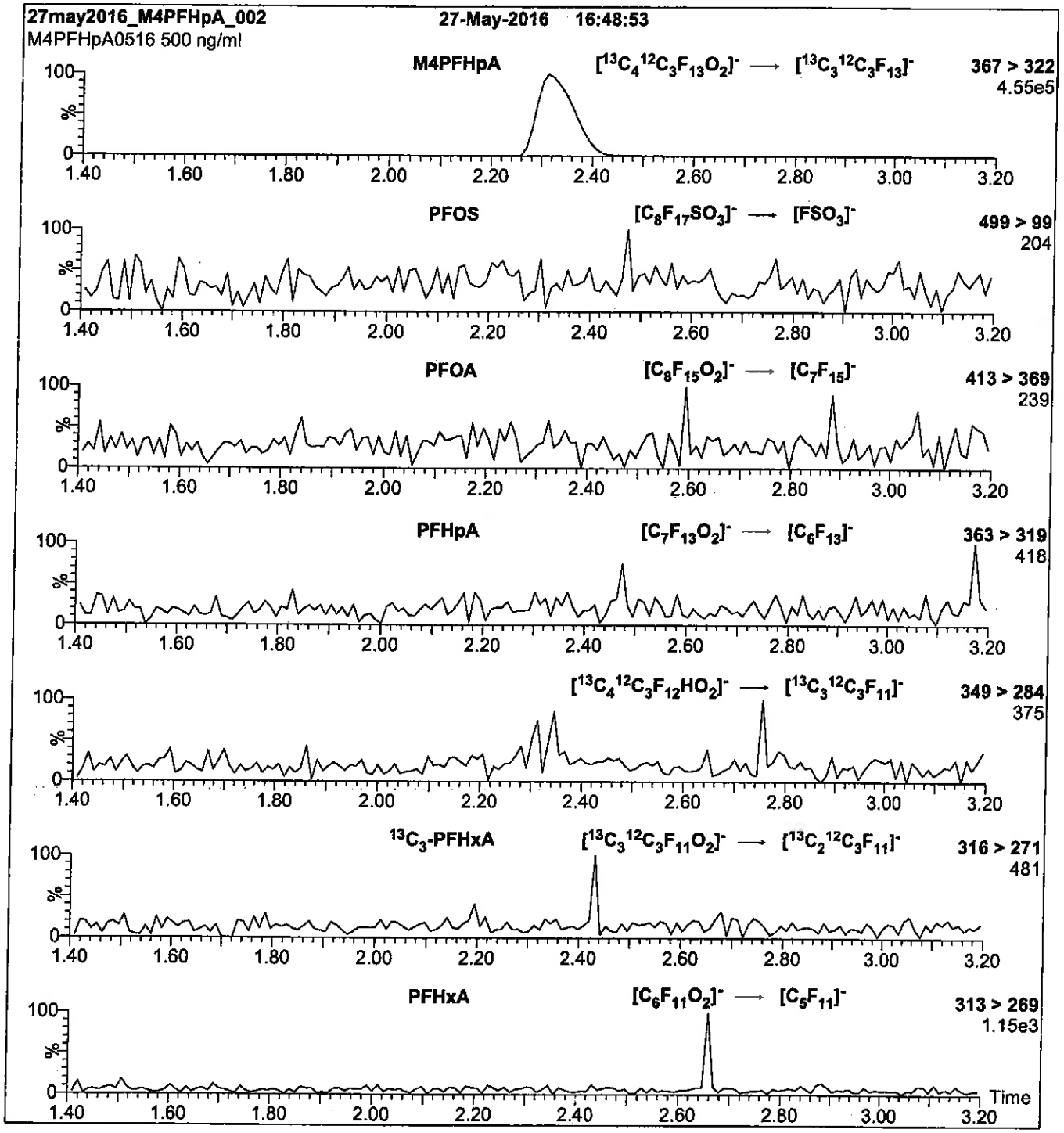
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M4PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 11

Reagent

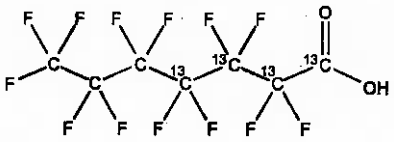
LCM4PFHPA_00008

P: 3/9/17 SN

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	M4PFHpA	**LOT NUMBER:**	M4PFHpA0516
COMPOUND:	Perfluoro-n-[1,2,3,4-$^{13}C_4$]heptanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_4{}^{12}C_3HF_{13}O_2$	**MOLECULAR WEIGHT:**	368.03
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2,3,4-$^{13}C_4$)
LAST TESTED: (mm/dd/yyyy)	05/27/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/27/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 07/05/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

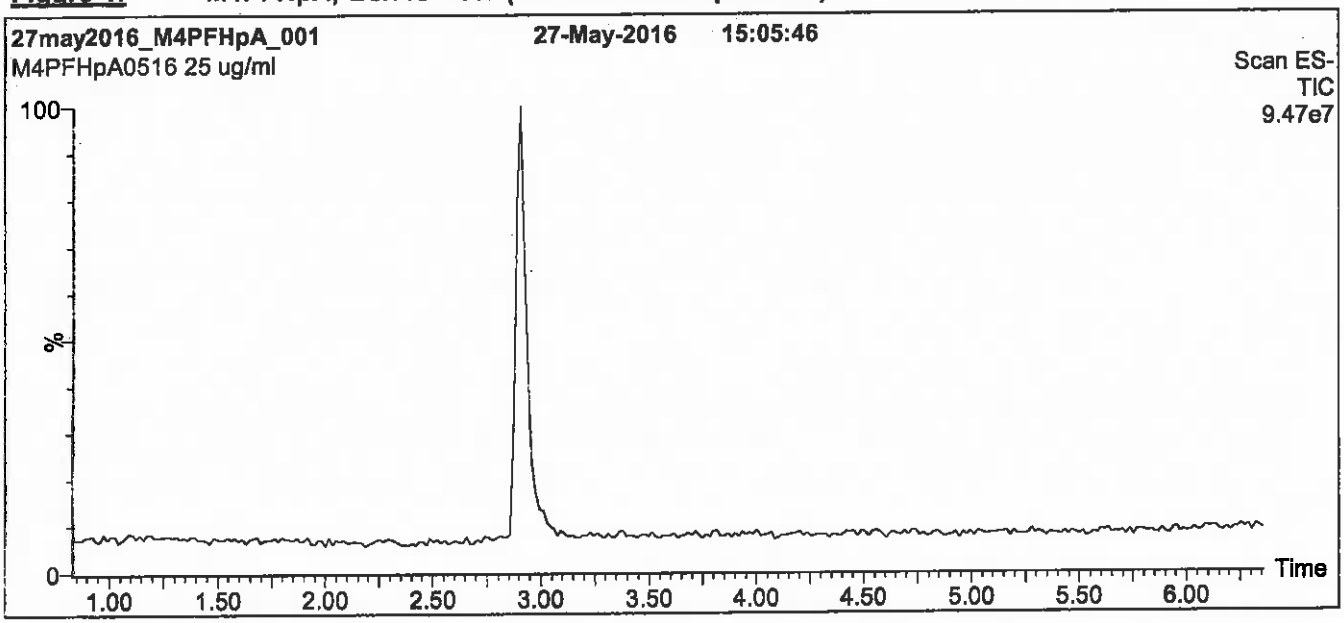
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

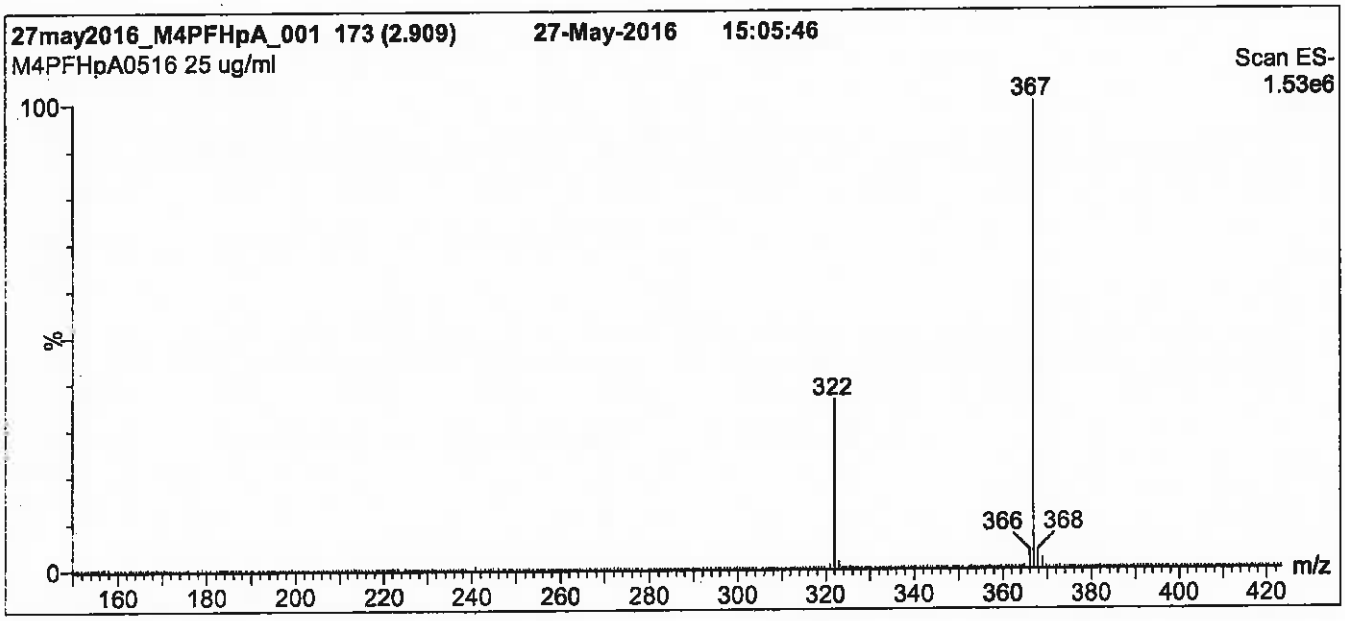
CALA

ANAB ACCREDITED

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **M4PFHpA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

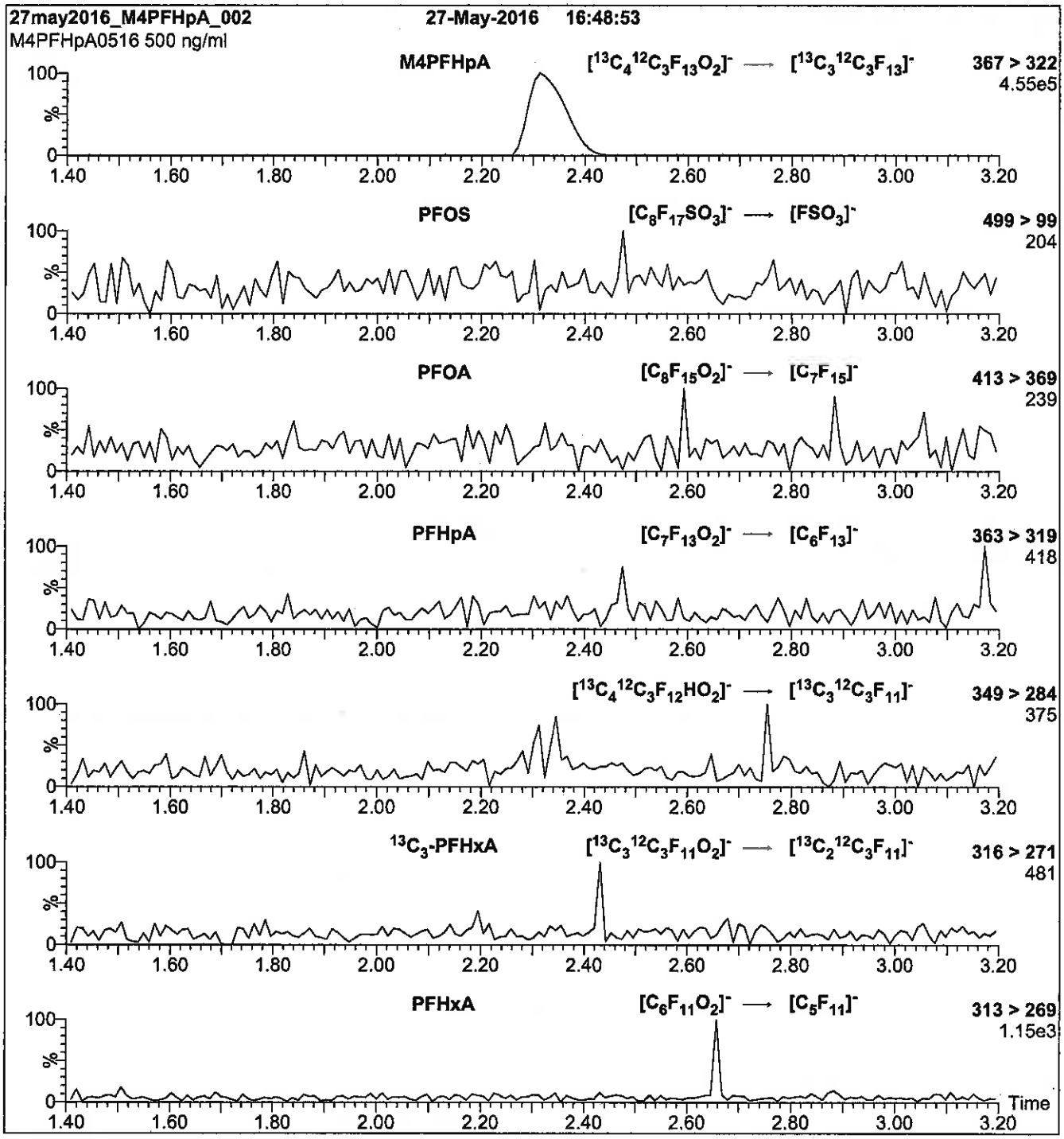
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M4PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 11

Reagent

LCM5PFPEA_00008

R: SBC 9/22/16

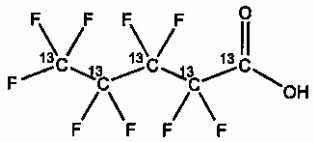
739590
ID: LCM5PFPEA_00008
Exp: 05/22/20 Prpd: SBC
13C5-Perfluoropentanoic a

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

Scanned 10/14/16 SR

PRODUCT CODE:	M5PFPeA	**LOT NUMBER:**	M5PFPeA0515
COMPOUND:	Perfluoro-n-[$^{13}C_5$]pentanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_5HF_9O_2$	**MOLECULAR WEIGHT:**	269.01
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($^{13}C_5$)
LAST TESTED: (mm/dd/yyyy)	05/22/2015		
EXPIRY DATE: (mm/dd/yyyy)	05/22/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-pentanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 05/25/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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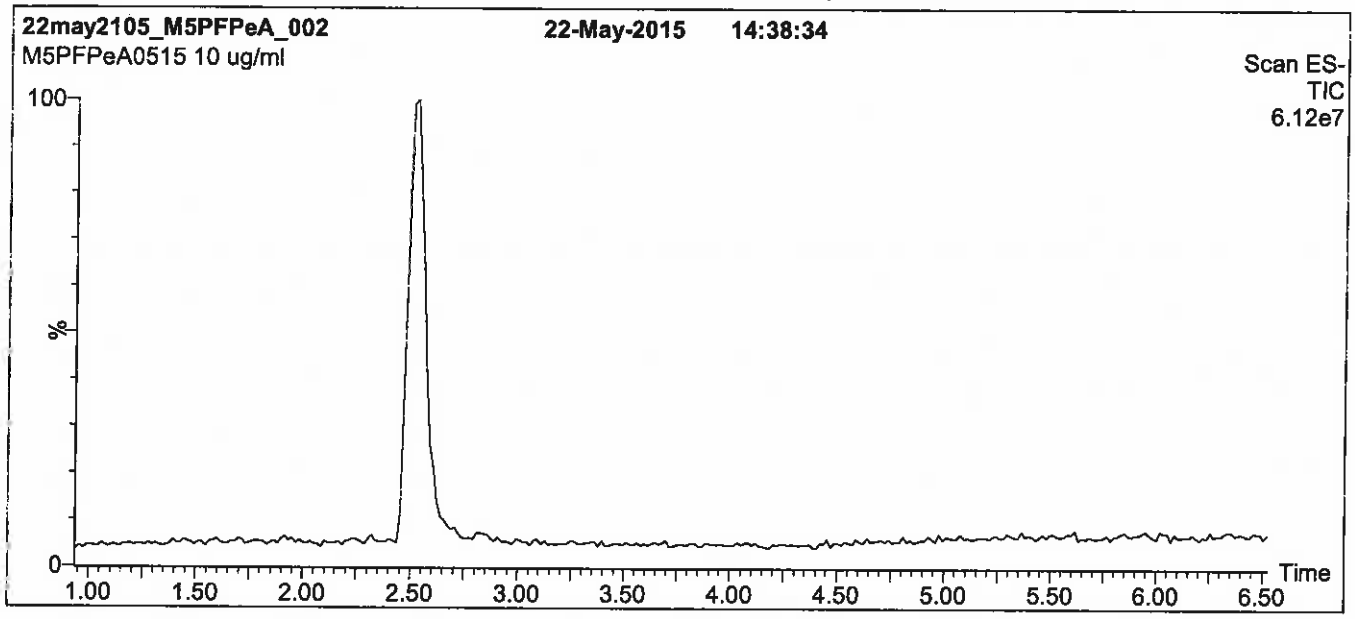
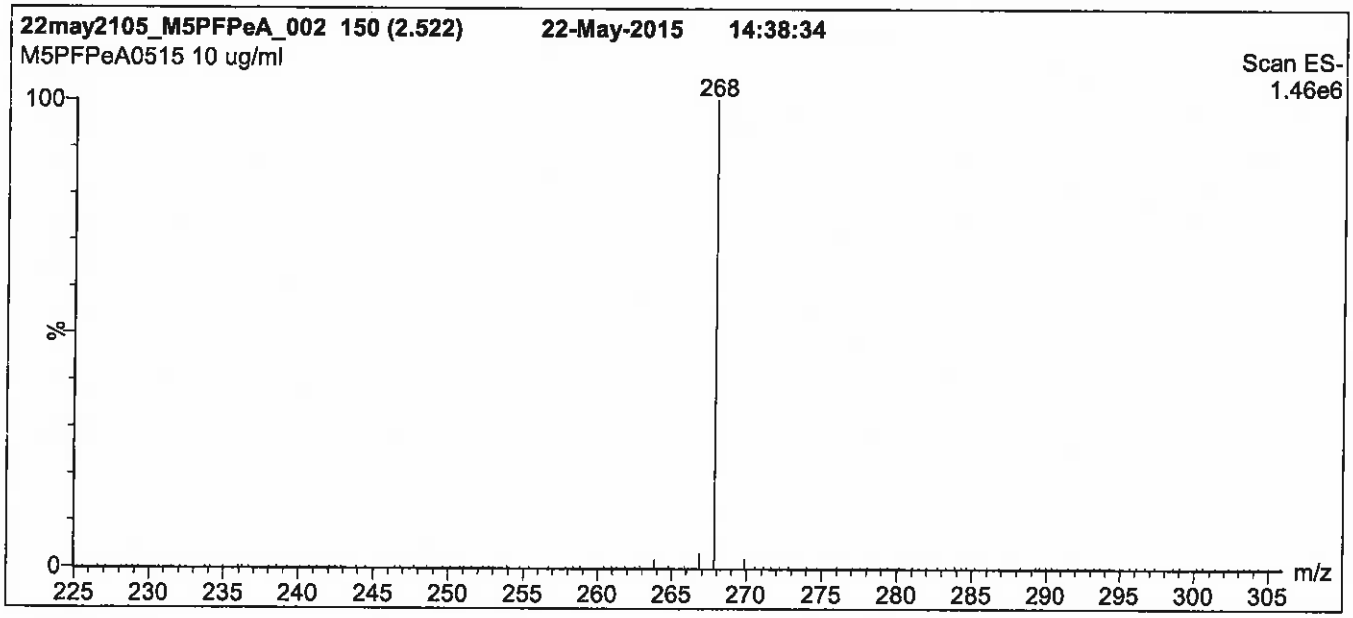
Figure 1: **M5PFPeA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

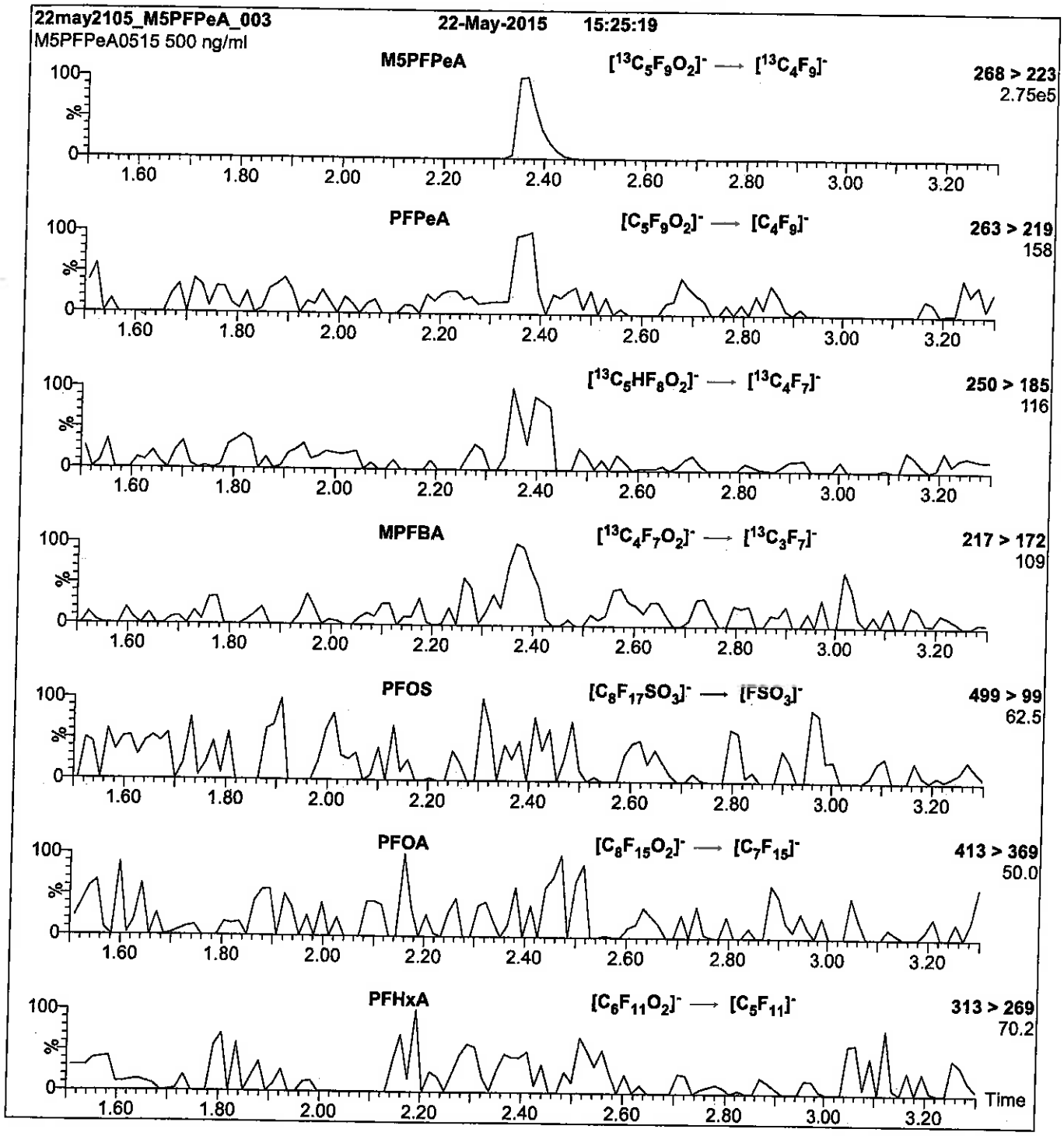
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M5PFPeA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml M5PFPeA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 9

Reagent

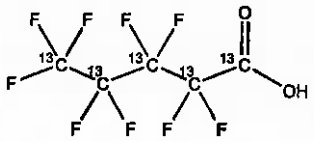
LCM5PFPEA_00009

Pr: 3/9/17 SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	M5PFPeA	**LOT NUMBER:**	M5PFPeA1116
COMPOUND:	Perfluoro-n-[$^{13}C_5$]pentanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_6HF_9O_2$	**MOLECULAR WEIGHT:**	269.01
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($^{13}C_5$)
LAST TESTED: (mm/dd/yyyy)	11/22/2016		
EXPIRY DATE: (mm/dd/yyyy)	11/22/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-pentanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/09/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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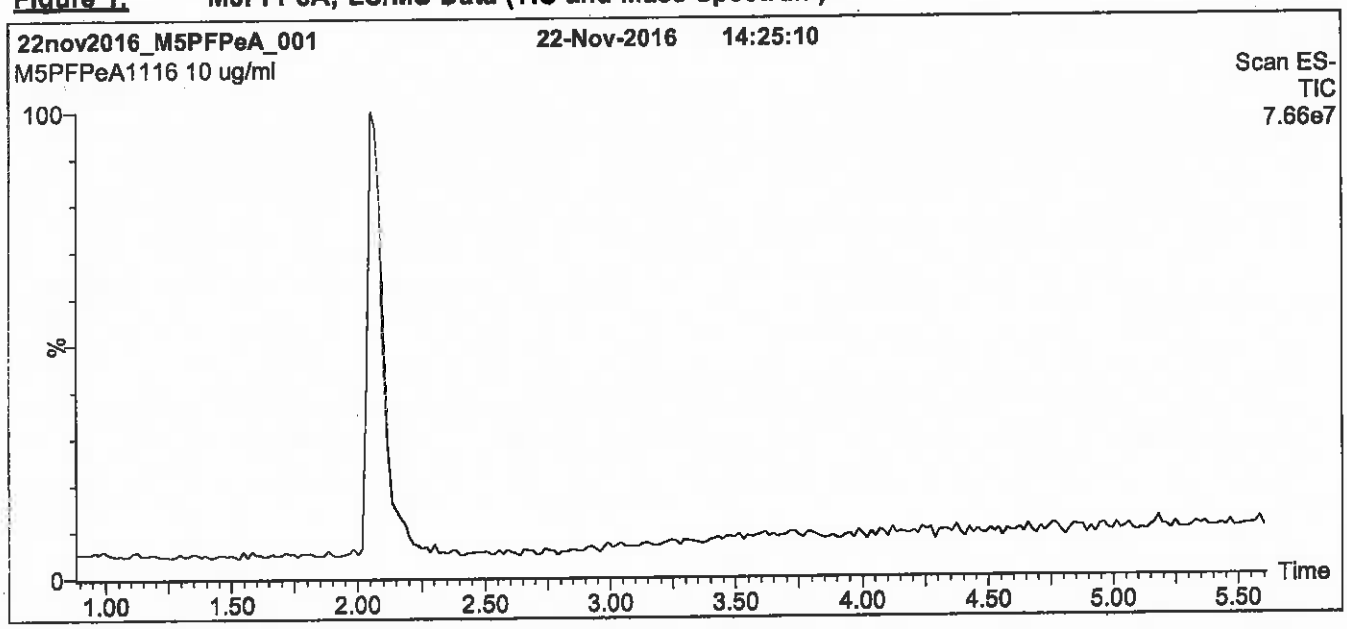
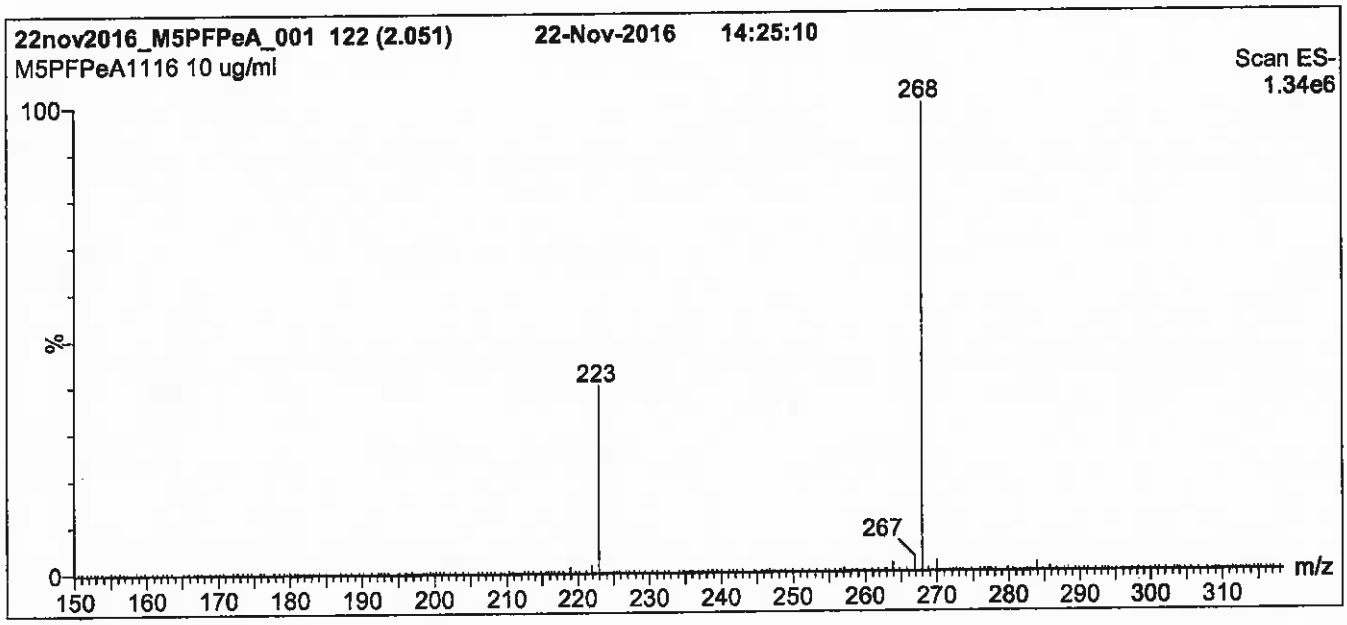
Figure 1: **M5PFPeA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

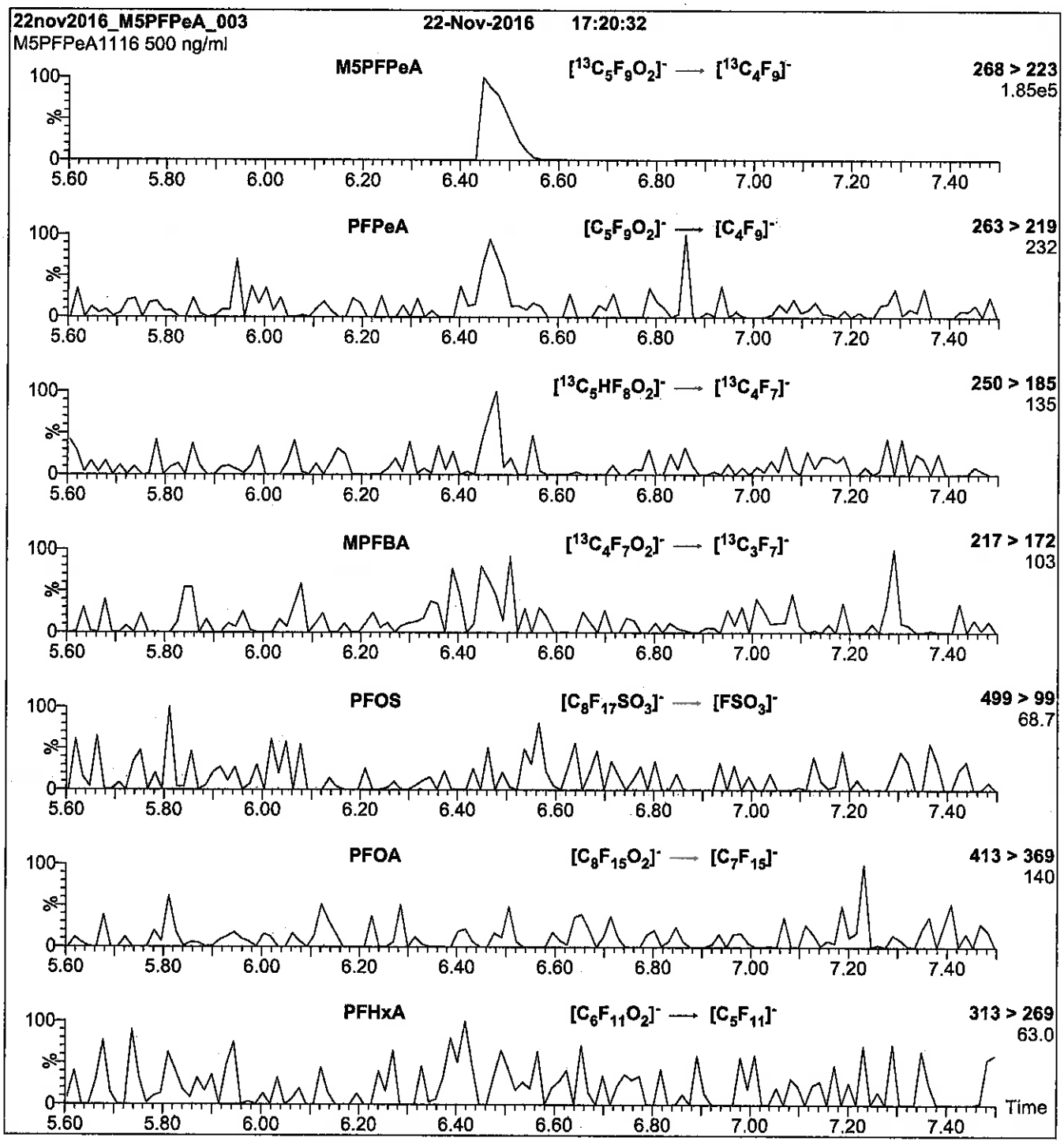
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M5PFPeA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M5PFPeA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 9

Reagent

LCM8FOSA_00011

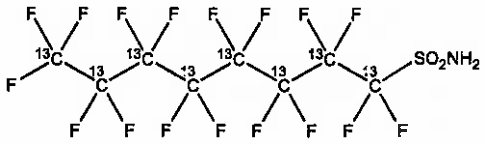
R: SBC 9/22/16
Scanned 10/14/16 SBC

739615
ID: LCM8FOSA_00011
Exp: 12/22/17 Prpd: SBC
13C8-Perfluorooctanesulfo

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	M8FOSA-I	**LOT NUMBER:**	M8FOSA1215I
COMPOUND:	Perfluoro-1-[$^{13}C_8$]octanesulfonamide		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_8H_2F_{17}NO_2S$	**MOLECULAR WEIGHT:**	507.09
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Isopropanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($^{13}C_8$)
LAST TESTED: (mm/dd/yyyy)	12/22/2015		
EXPIRY DATE: (mm/dd/yyyy)	12/22/2017		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 01/14/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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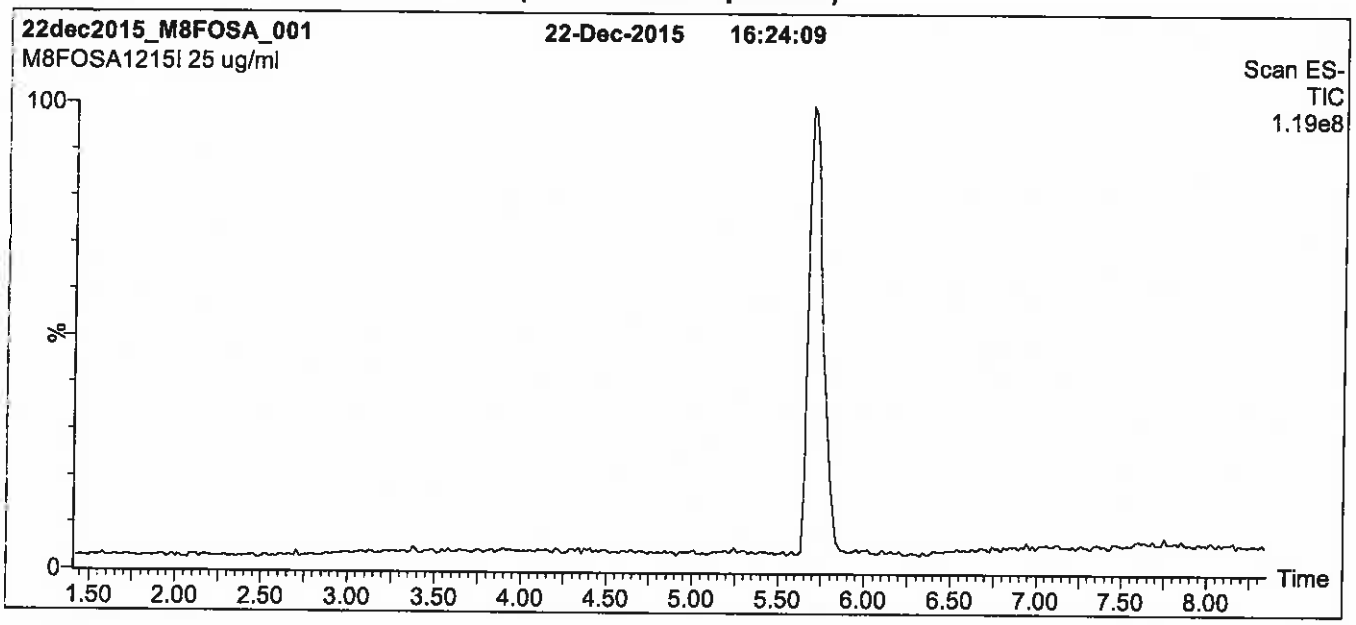
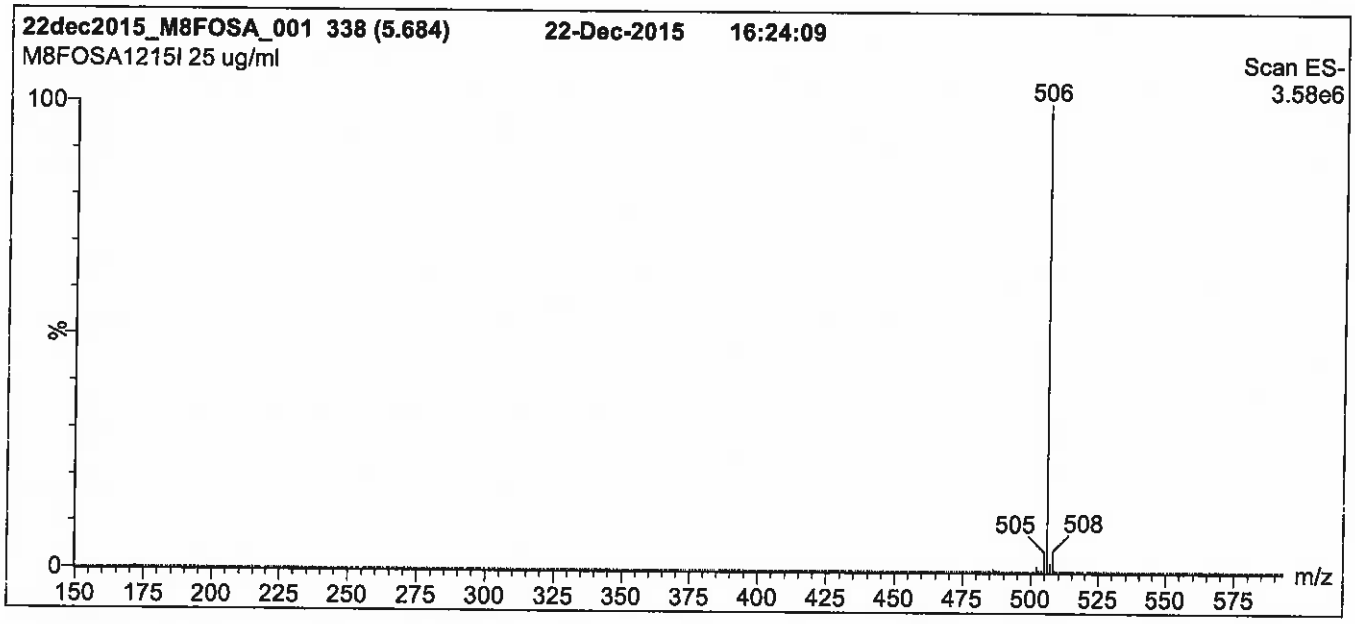
Figure 1: **M8FOSA-I; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

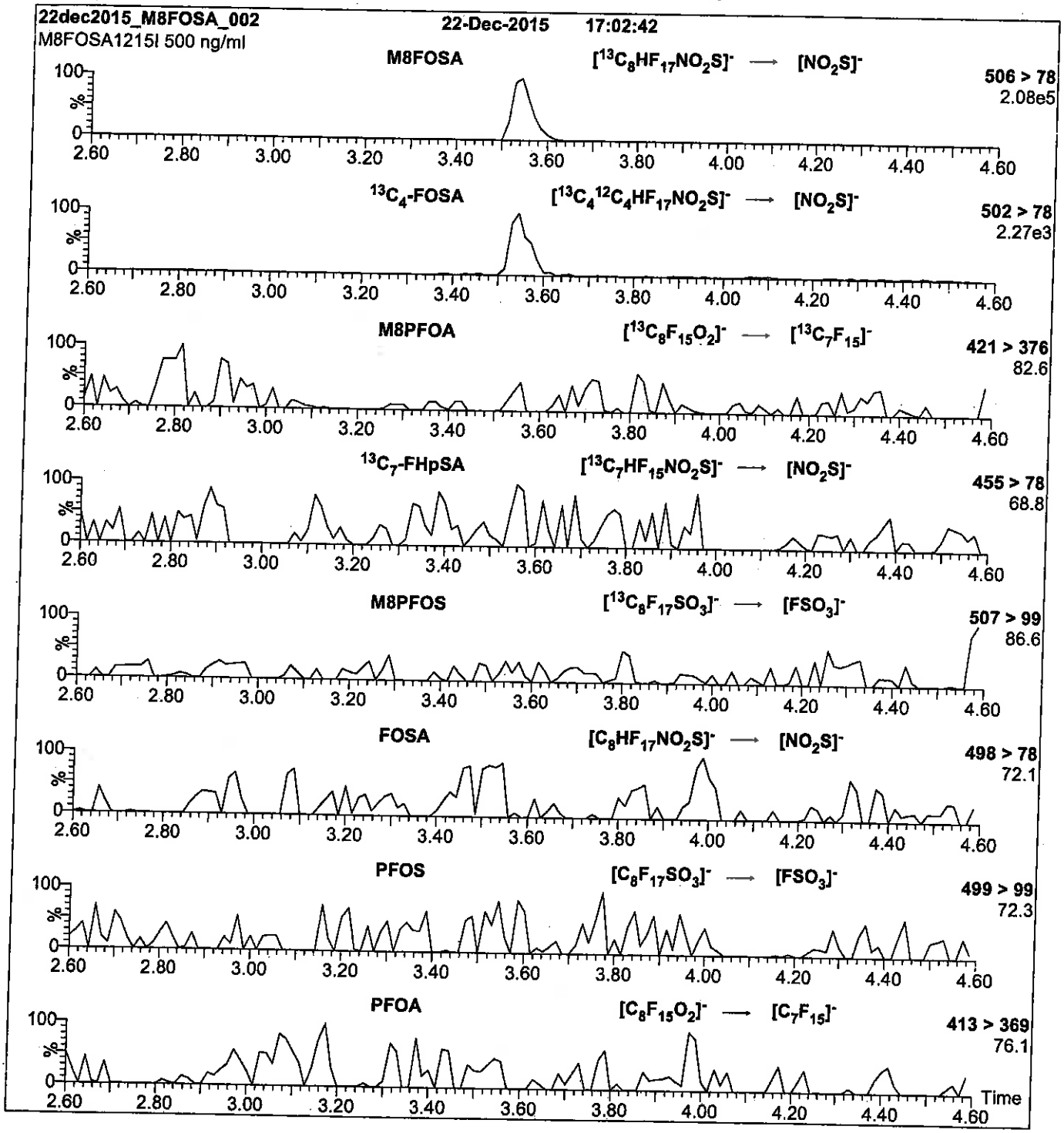
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M8FOSA-I; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M8FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 30

Reagent

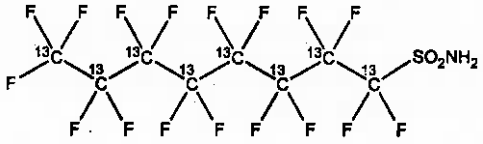
LCM8FOSA_00012

R: 3/9/17 SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	M8FOSA-I	**LOT NUMBER:**	M8FOSA1215I
COMPOUND:	Perfluoro-1-[$^{13}C_8$]octanesulfonamide		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_8H_2F_{17}NO_2S$	**MOLECULAR WEIGHT:**	507.09
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Isopropanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($^{13}C_8$)
LAST TESTED: (mm/dd/yyyy)	12/22/2015		
EXPIRY DATE: (mm/dd/yyyy)	12/22/2020		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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Certified By: B.G. Chittim **Date:** 12/13/2016 (mm/dd/yyyy)

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CALA

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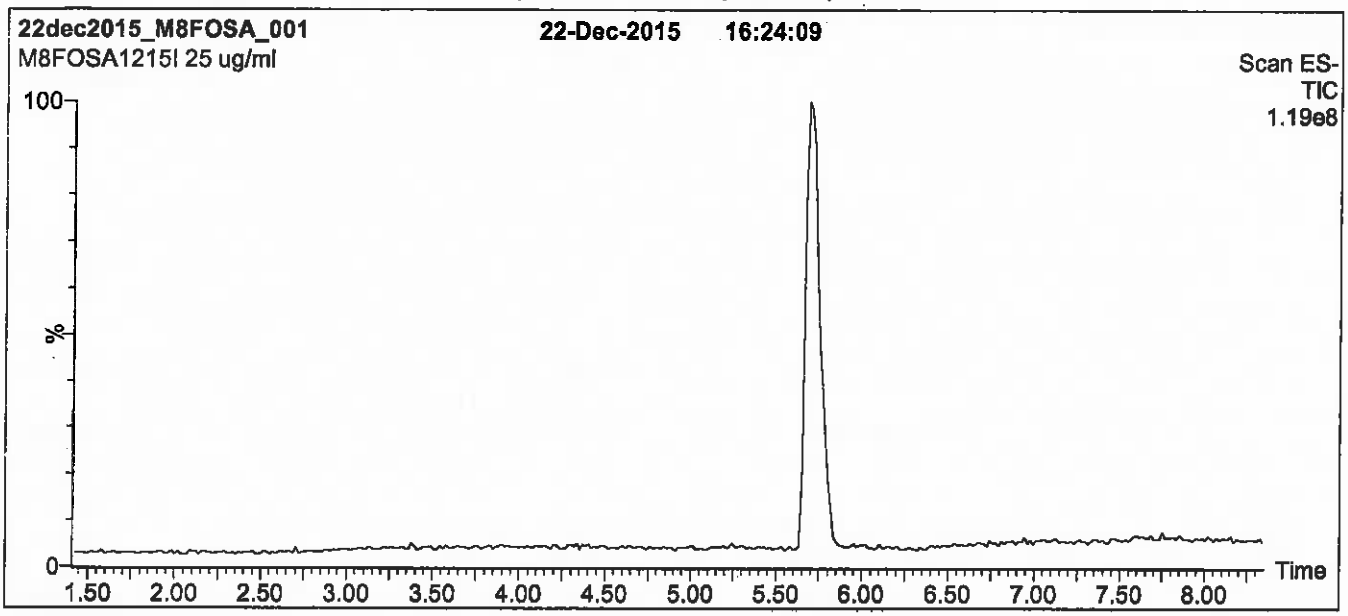
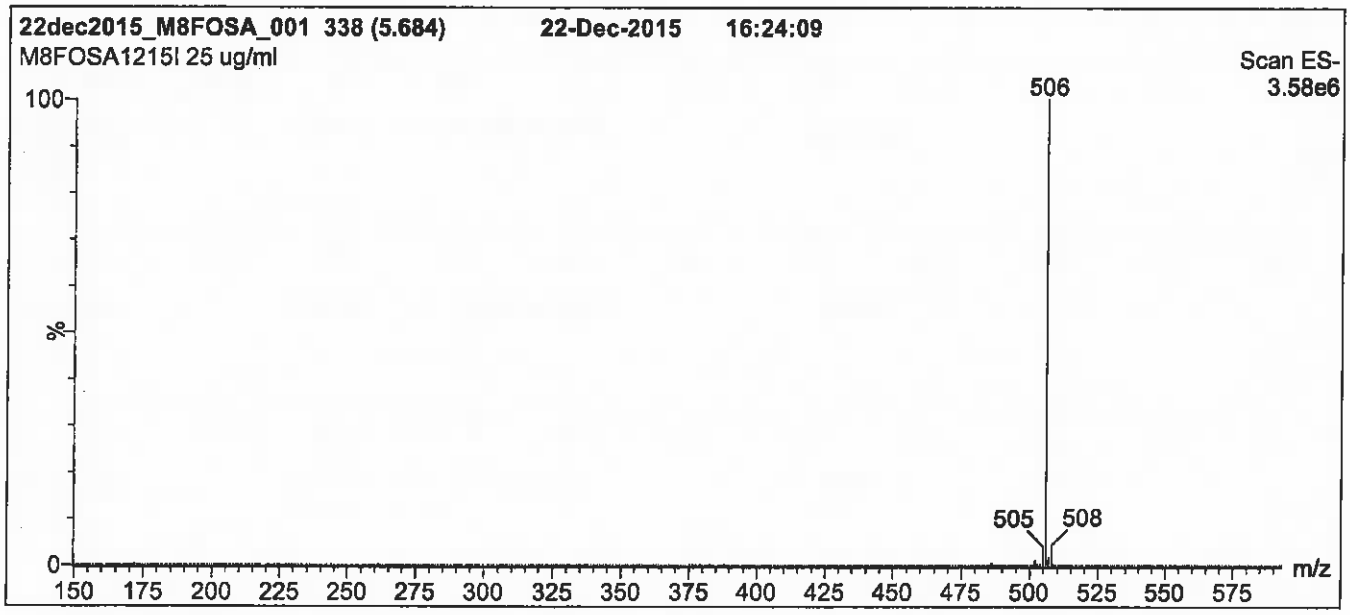




Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

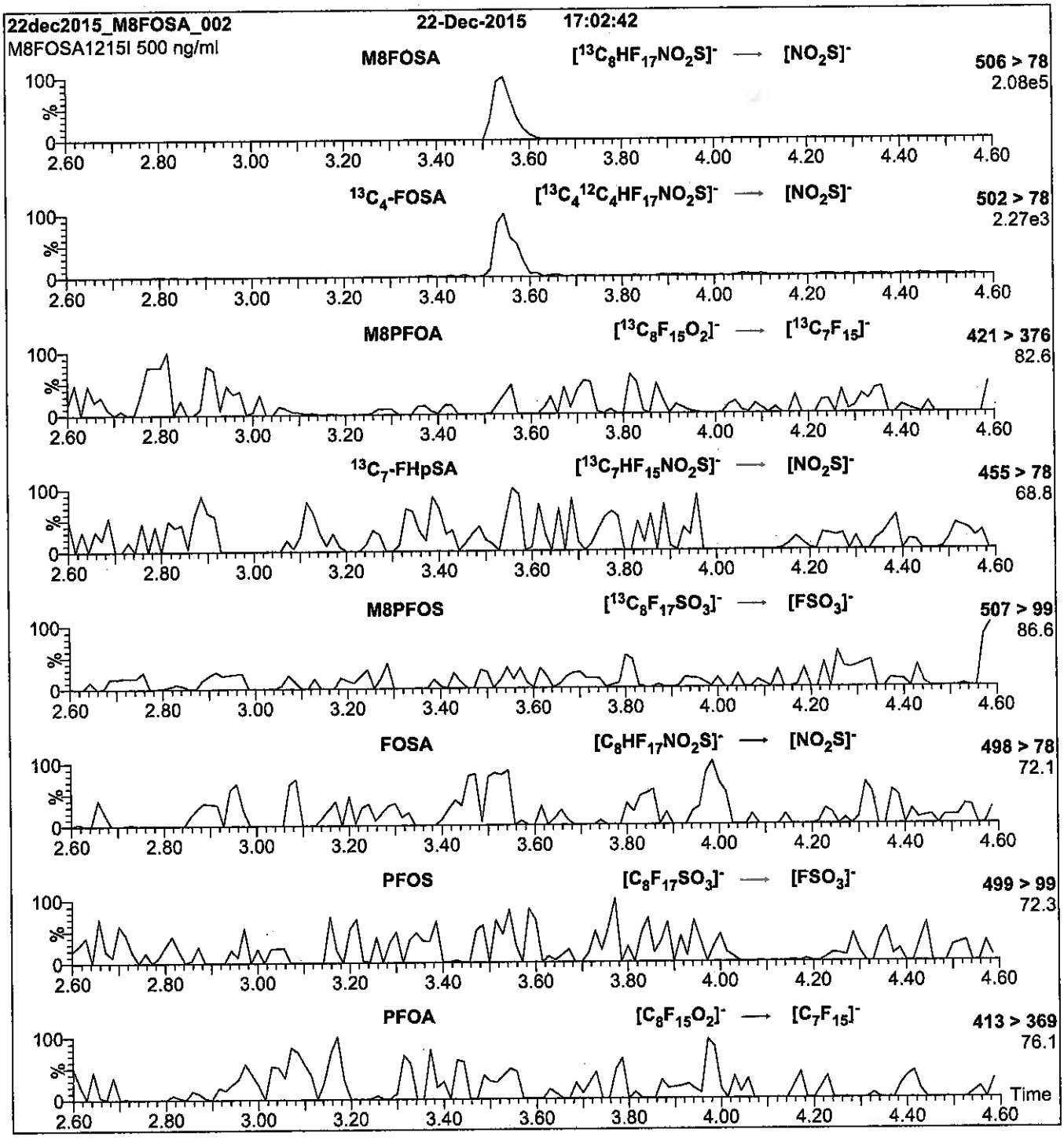
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M8FOSA-I; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M8FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 30

Reagent

LCMPFBA_00008

R: SBC 9/22/16

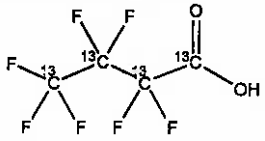
739593
ID: LCMPFBA_00008
Exp: 05/24/21 Prpd: SBC
13C4-Perfluorobutanoic ac

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

Scanned 10/14/16 SR

PRODUCT CODE:	MPFBA	**LOT NUMBER:**	MPFBA0516
COMPOUND:	Perfluoro-n-[1,2,3,4-$^{13}C_4$]butanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_4HF_7O_2$	**MOLECULAR WEIGHT:**	218.01
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2,3,4-$^{13}C_4$)
LAST TESTED: (mm/dd/yyyy)	05/24/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/24/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

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Certified By: B.G. Chittim **Date:** 05/30/2016 (mm/dd/yyyy)

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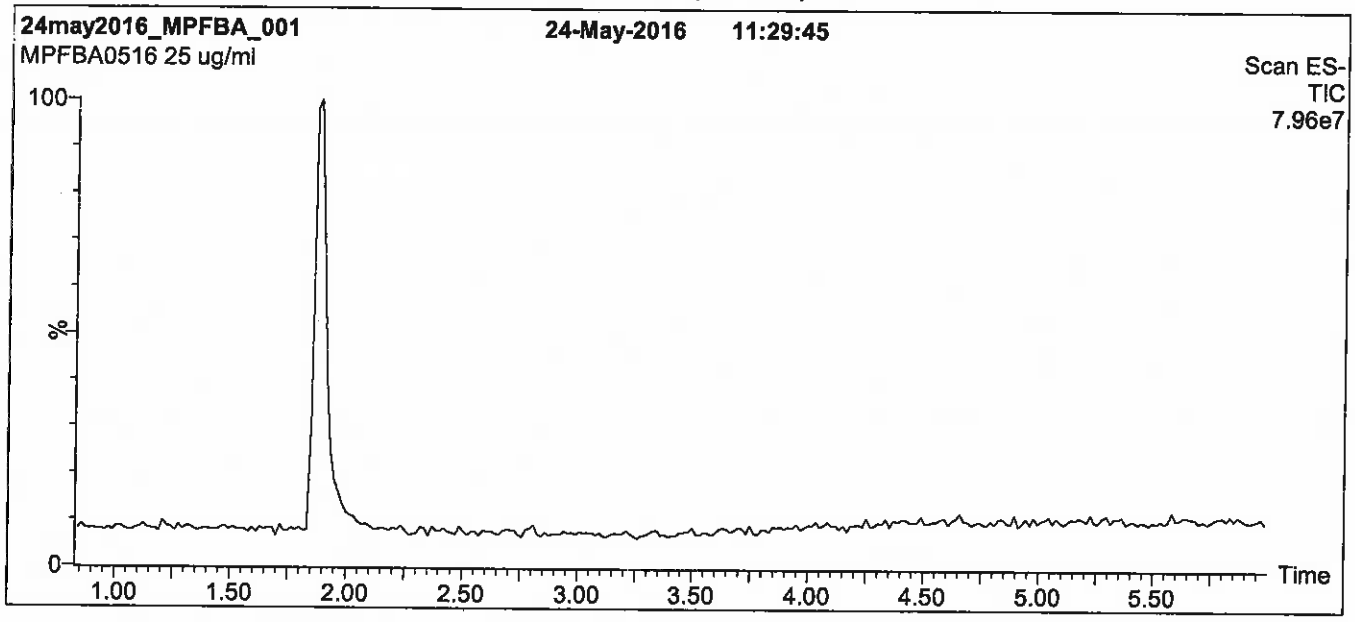
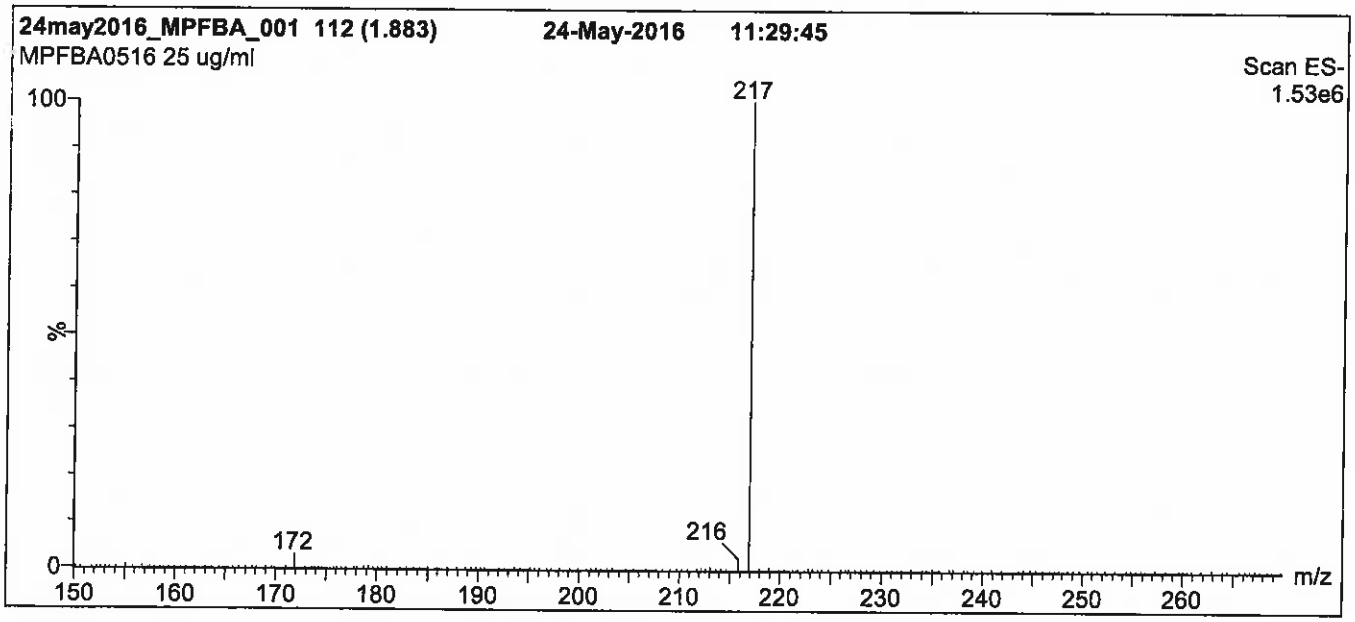
Figure 1: **MPFBA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

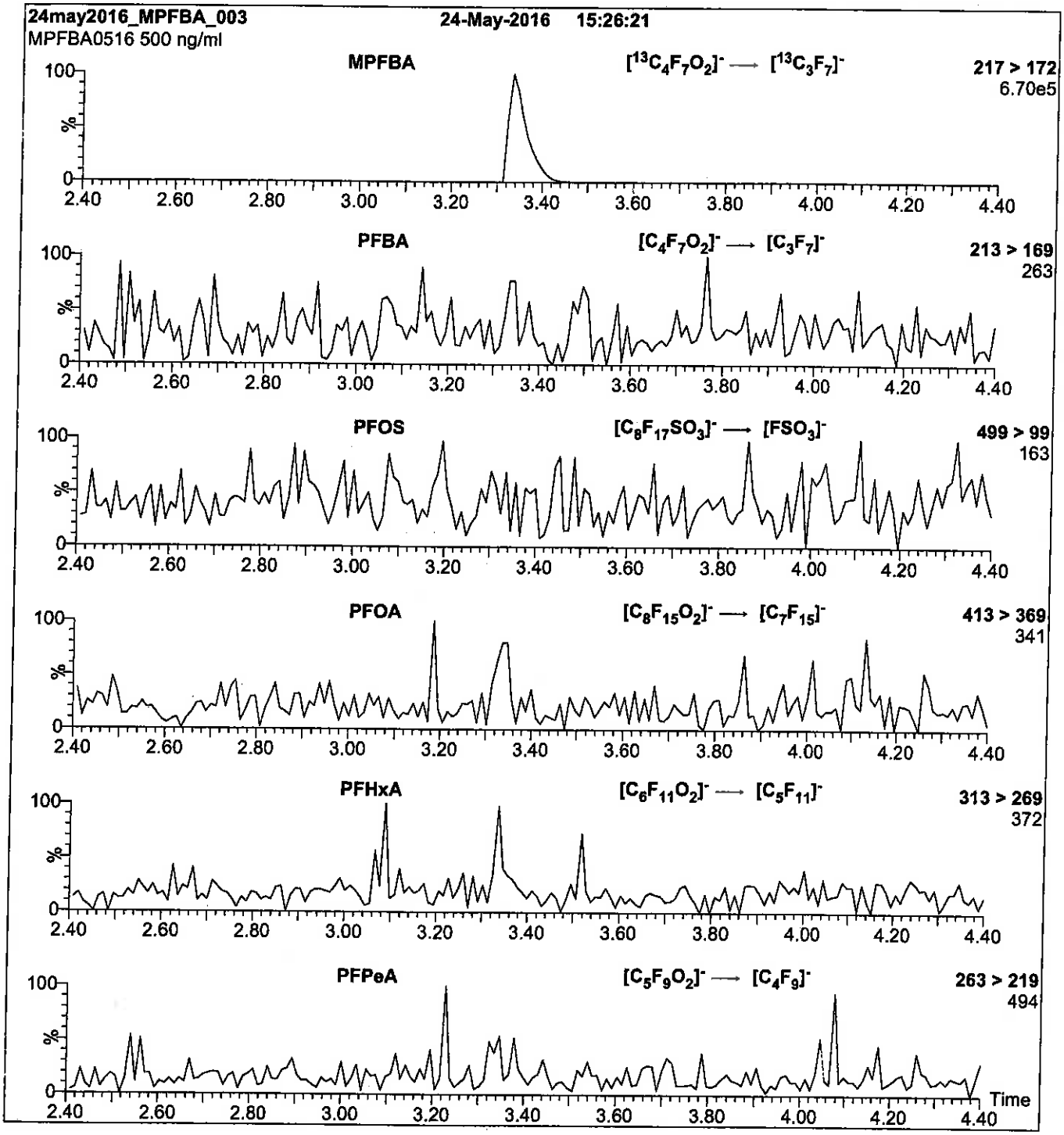
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 10.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFBA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop Injection
10 µl (500 ng/ml MPFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.50e-3
Collision Energy (eV) = 10

Reagent

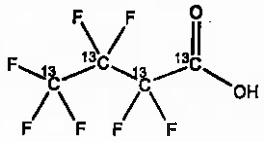
LCMPFBA_00009

P:3/9/17SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:	MPFBA	**LOT NUMBER:**	MPFBA0516
COMPOUND:	Perfluoro-n-[1,2,3,4-$^{13}C_4$]butanoic acid		
STRUCTURE:		**CAS #:**	Not available



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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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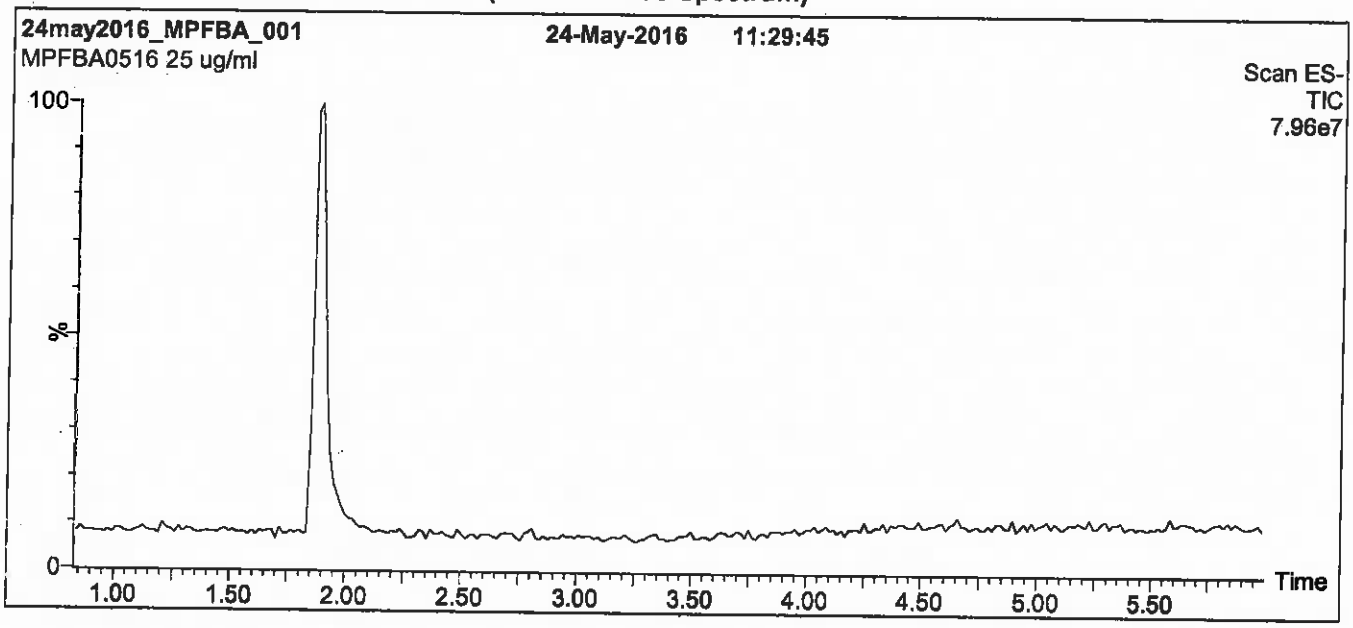
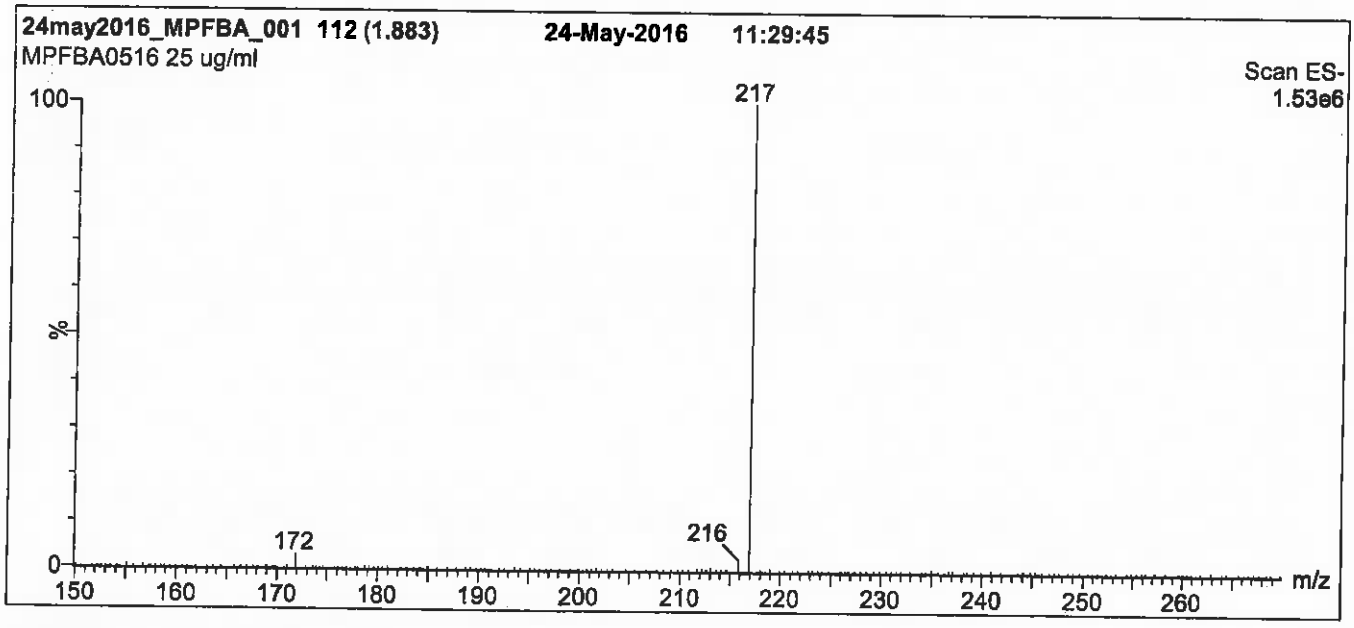
Figure 1: **MPFBA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

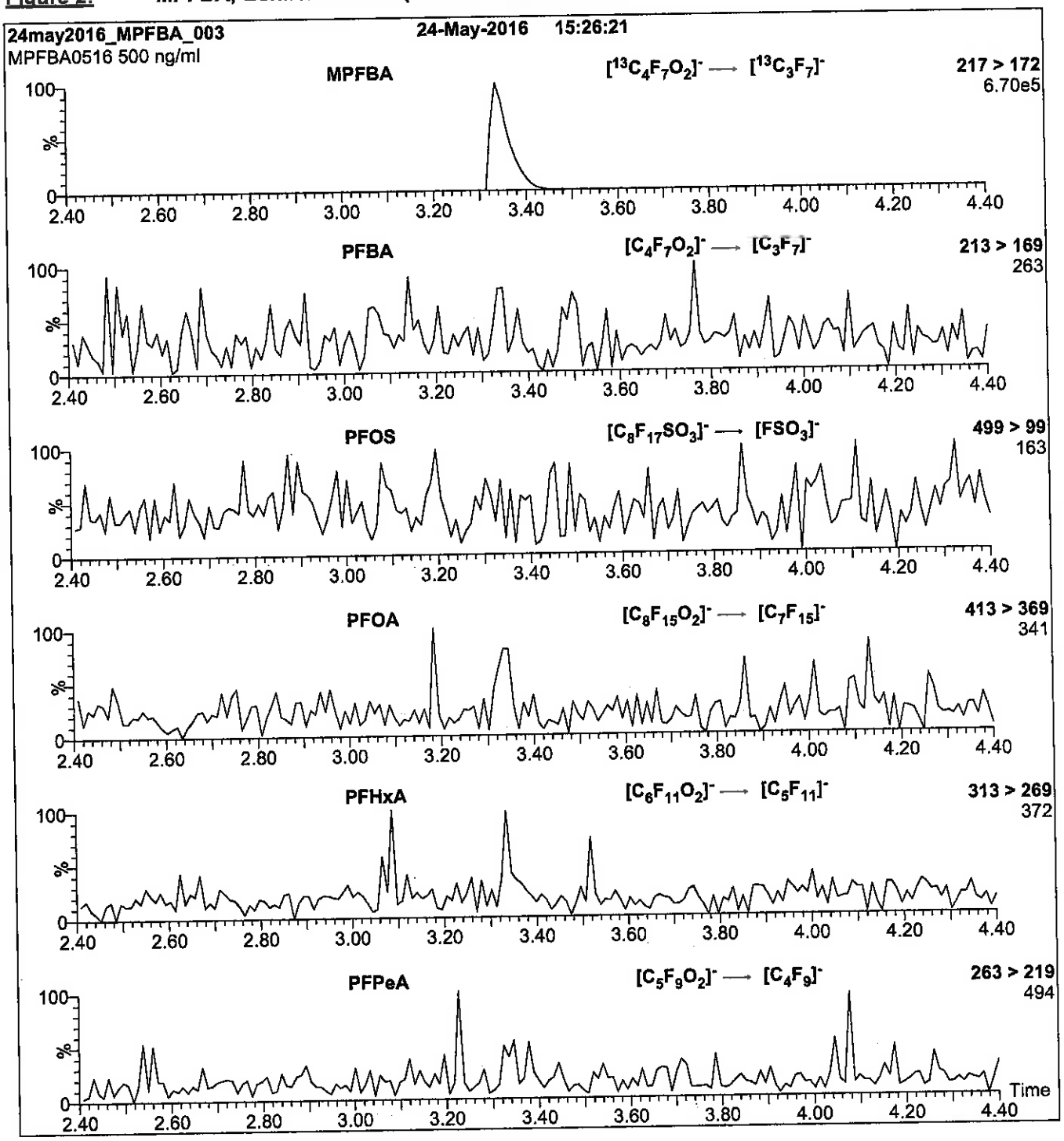
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 10.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFBA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.50e-3
Collision Energy (eV) = 10

Reagent

LCMPFBS_00002

Scanned 10/14/16 SBC R: SBC 9/22/16

739640
ID: LCMPFBS_00002
Exp: 08/02/21 Prpd: SBC
13C3-Perfluorobutanesulfo

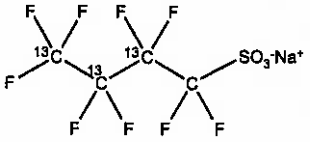
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: M3PFBS **LOT NUMBER:** M3PFBS0815

COMPOUND: Sodium perfluoro-1-[2,3,4-$^{13}C_3$]butanesulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$^{13}C_3{}^{12}CF_9SO_3Na$	**MOLECULAR WEIGHT:**	325.06
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt) 46.5 ± 2.3 µg/ml (M3PFBS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($2,3,4\text{-}^{13}C_3$)
LAST TESTED: (mm/dd/yyyy)	08/02/2016		
EXPIRY DATE: (mm/dd/yyyy)	08/02/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 08/05/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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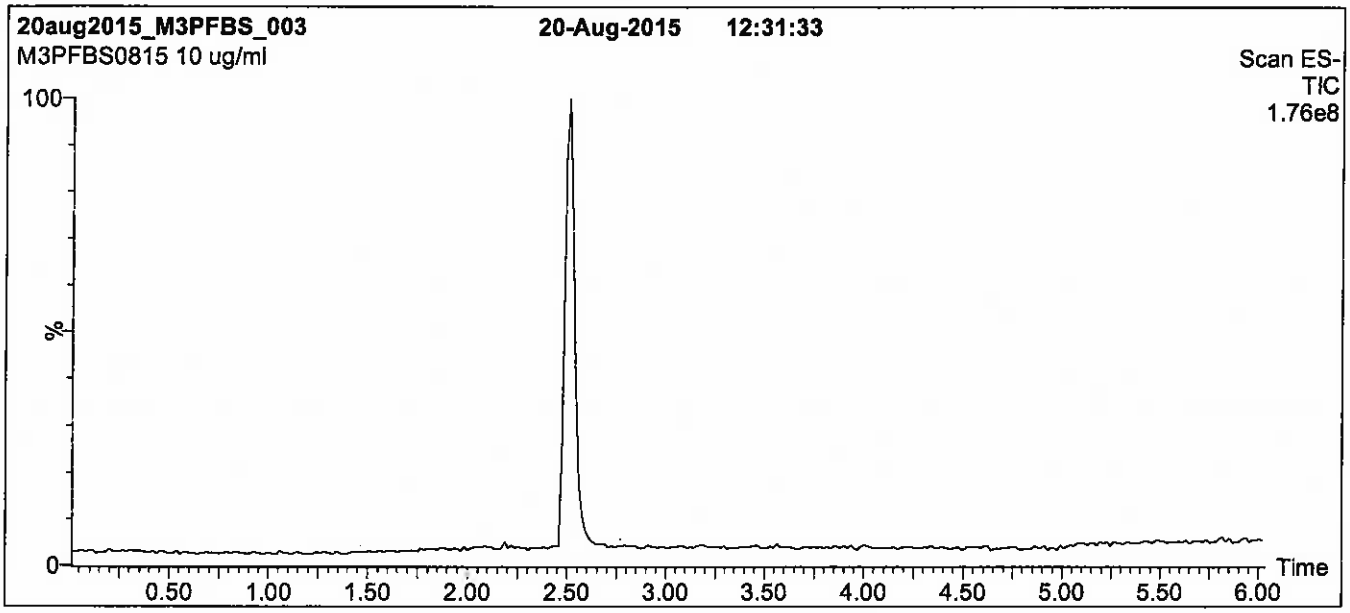
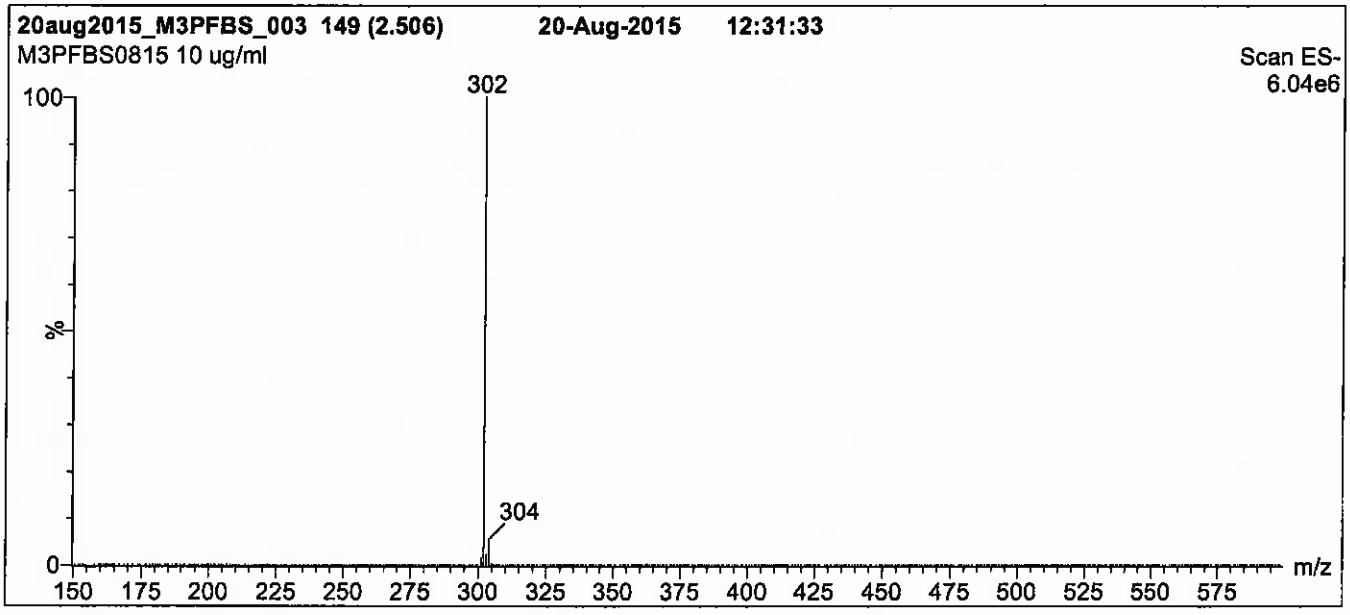
Figure 1: **M3PFBS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

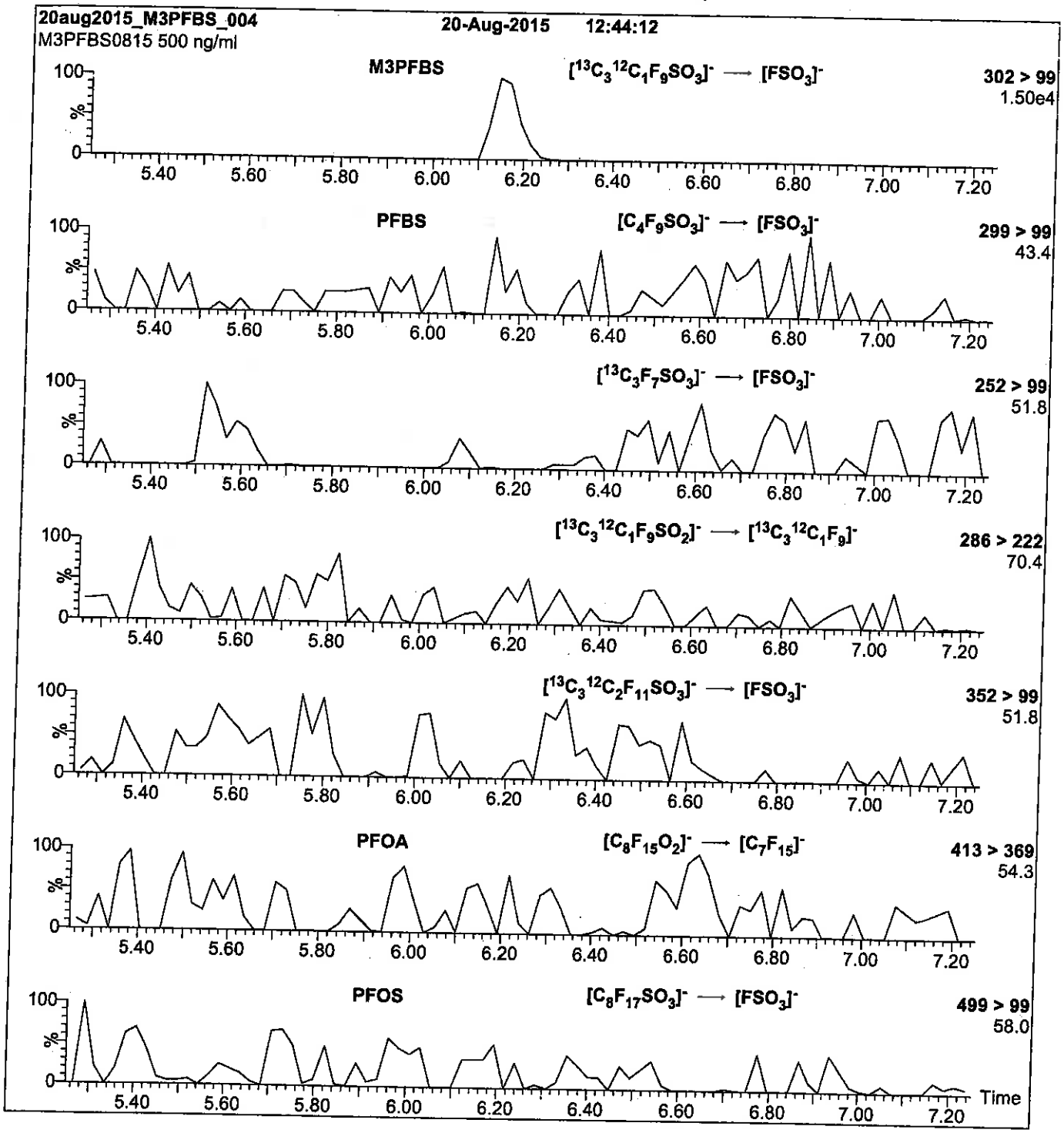
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M3PFBS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M3PFBS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 25

Reagent

LCMPFDA_00011

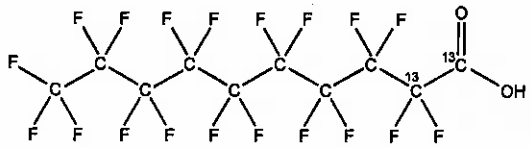
Scanned 10/14/16 R: SBC 9/22/16

739609
ID: LCMPFDA_00011
Exp: 08/19/20 Prpd: SBC
13C2-Perfluorodecanoic a

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:	MPFDA	**LOT NUMBER:**	MPFDA0815
COMPOUND:	Perfluoro-n-[1,2-$^{13}C_2$]decanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_8HF_{19}O_2$	**MOLECULAR WEIGHT:**	516.07
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	08/19/2015		
EXPIRY DATE: (mm/dd/yyyy)	08/19/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of $^{13}C_1$-PFNA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 08/21/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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CALA Testing Accreditation No. A1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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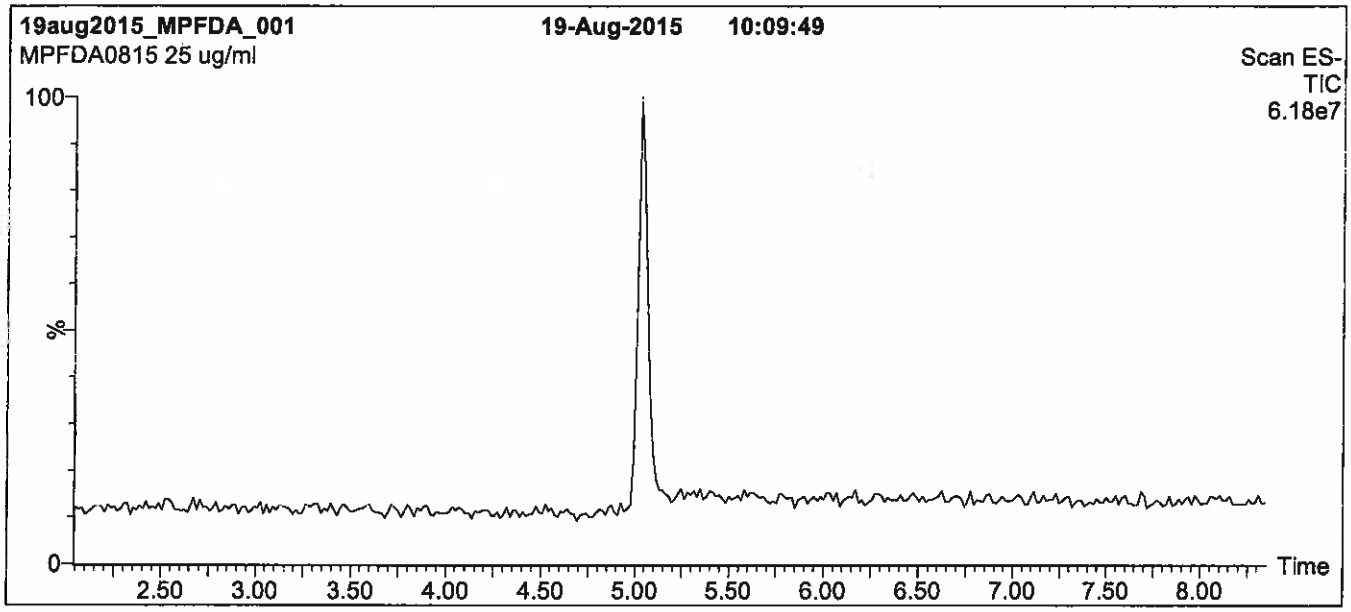
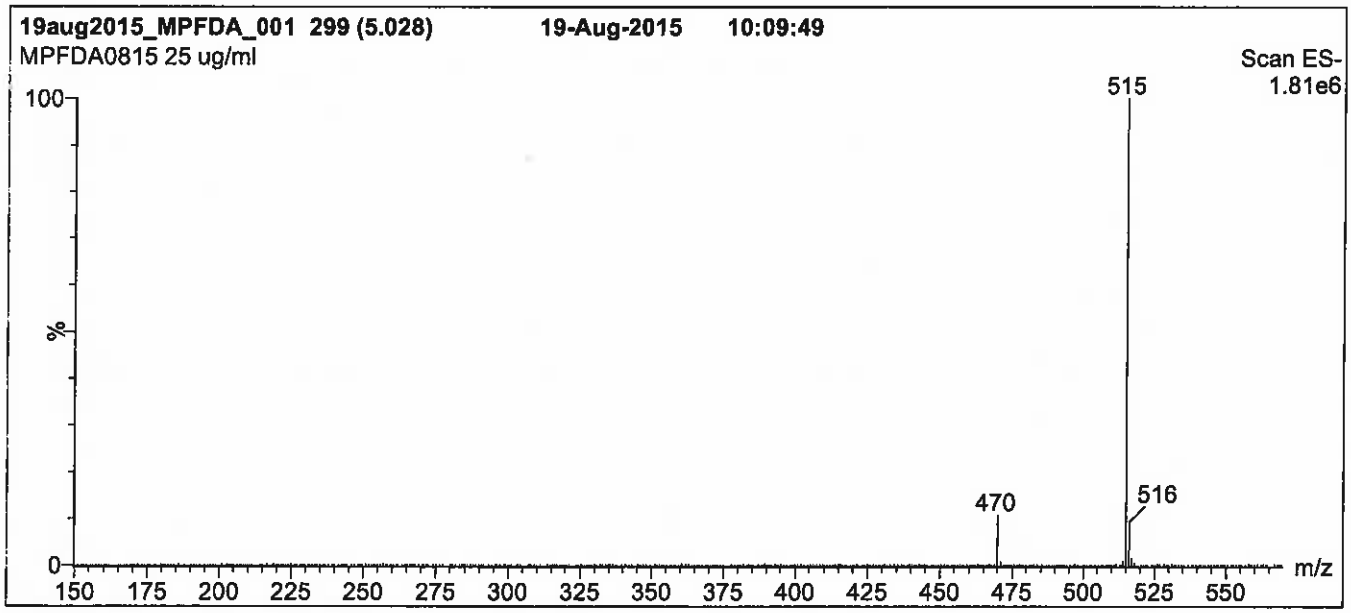




Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

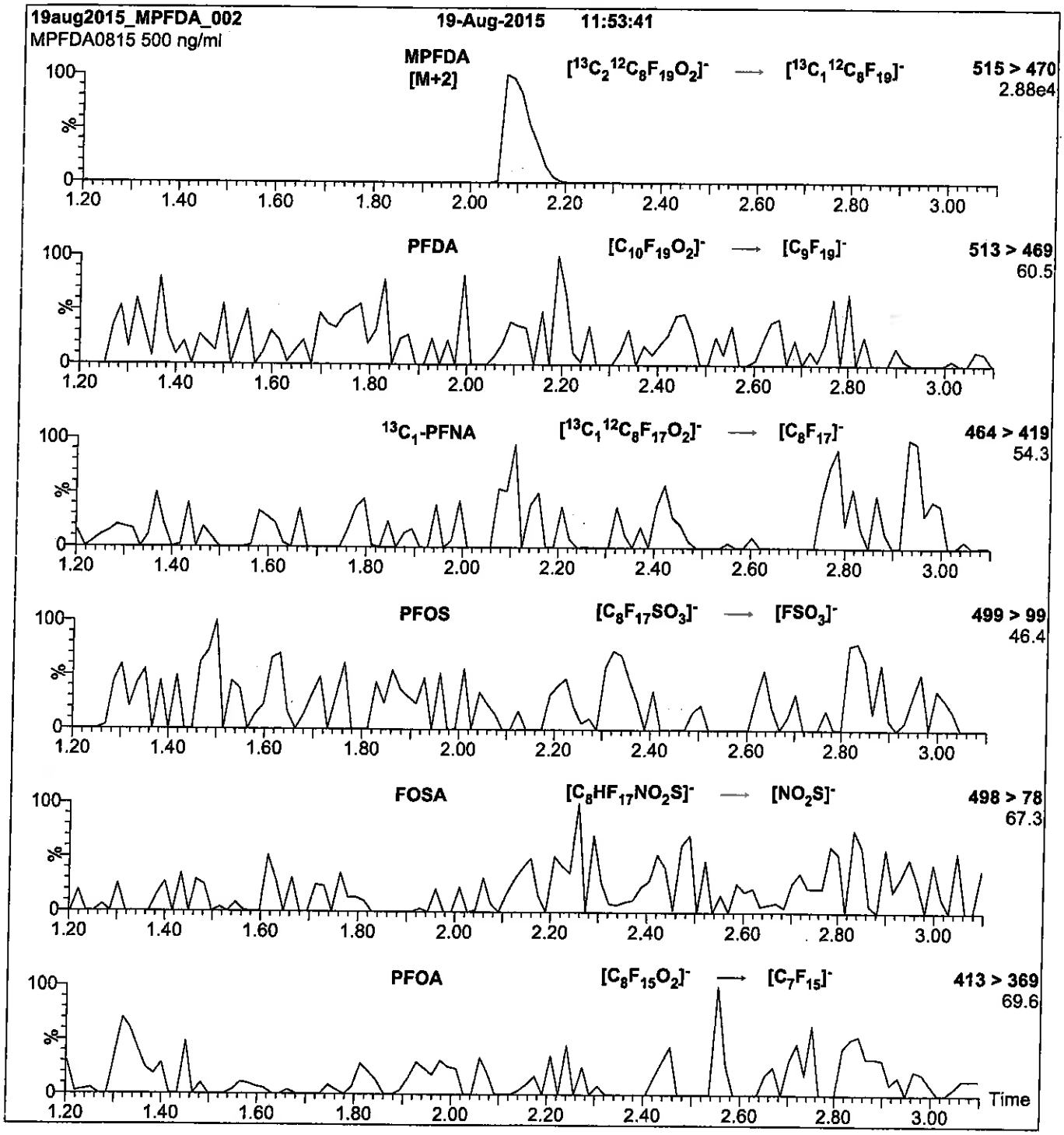
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml MPFDA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 13

Reagent

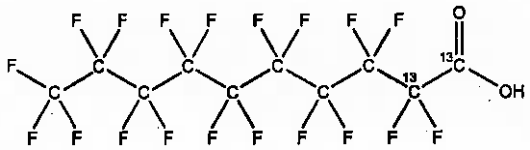
LCMPFDA_00013

P:3/9/17 SKJ

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	MPFDA	**LOT NUMBER:**	MPFDA0916
COMPOUND:	Perfluoro-n-[1,2-$^{13}C_2$]decanoic acid		
STRUCTURE:		**CAS #:**	Not available



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CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2-$^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	09/30/2016		
EXPIRY DATE: (mm/dd/yyyy)	09/30/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
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ADDITIONAL INFORMATION:

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- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
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Certified By: B.G. Chittim **Date:** 10/07/2016 (mm/dd/yyyy)

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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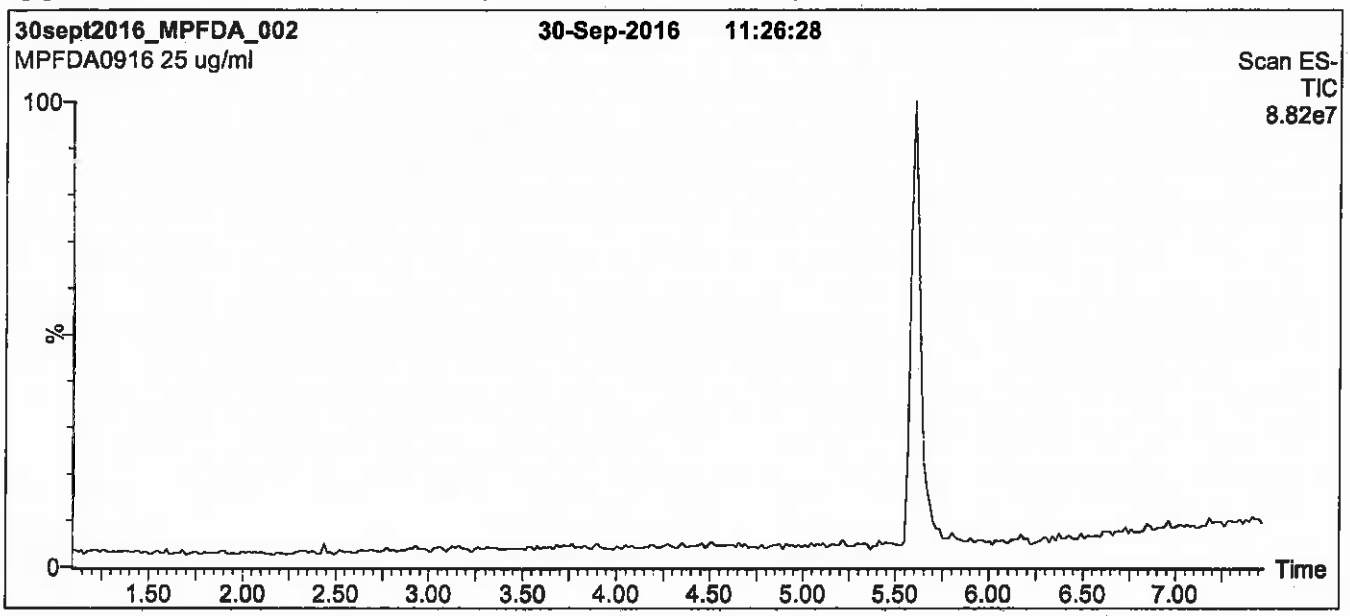
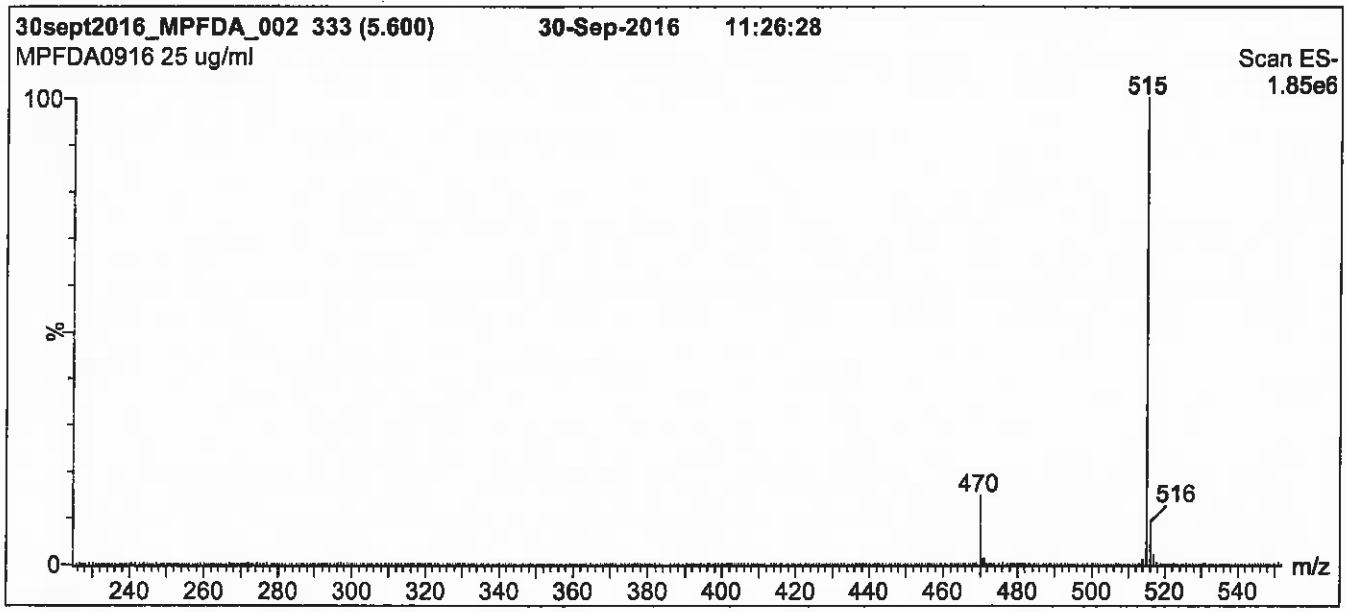
Figure 1: **MPFDA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

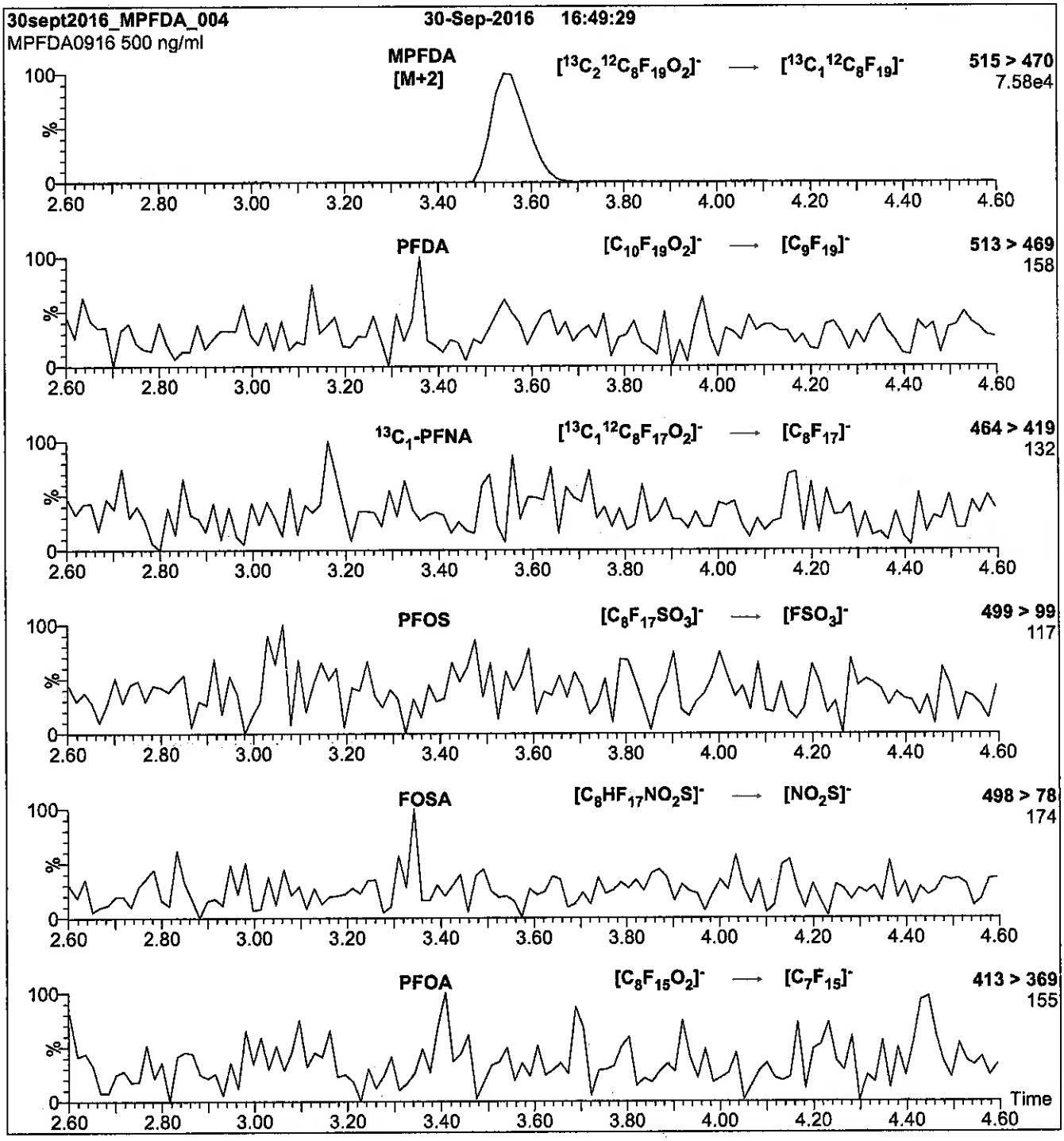
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 13

Reagent

LCMPFDoA_00008

R: SBC 9/22/16

739598
ID: LCMPFDoA_00008
Exp: 04/08/21 Prpd: SBC
13C2-Perfluorododecanoic

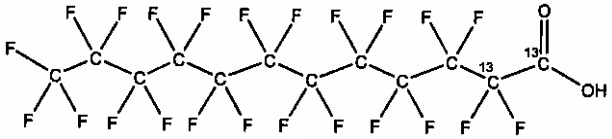
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

Scanned 10/14/16 SR

PRODUCT CODE: MPFDoA
LOT NUMBER: MPFDoA0416
COMPOUND: Perfluoro-n-[1,2-$^{13}C_2$]dodecanoic acid

STRUCTURE:
CAS #: Not available



MOLECULAR FORMULA: $^{13}C_2{}^{12}C_{10}HF_{23}O_2$
MOLECULAR WEIGHT: 616.08
CONCENTRATION: 50 ± 2.5 µg/ml
SOLVENT(S): Methanol
Water (<1%)
CHEMICAL PURITY: >98%
ISOTOPIC PURITY: ≥99% ^{13}C (1,2-$^{13}C_2$)
LAST TESTED: (mm/dd/yyyy) 04/08/2016
EXPIRY DATE: (mm/dd/yyyy) 04/08/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 04/15/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

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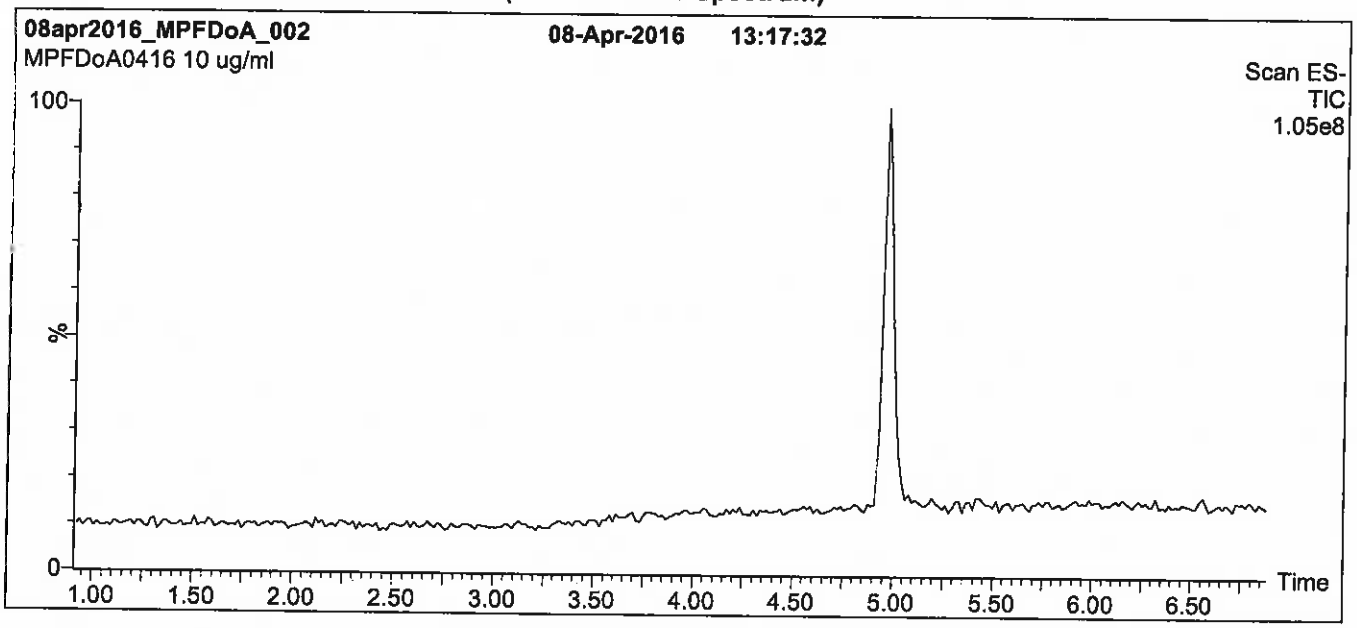

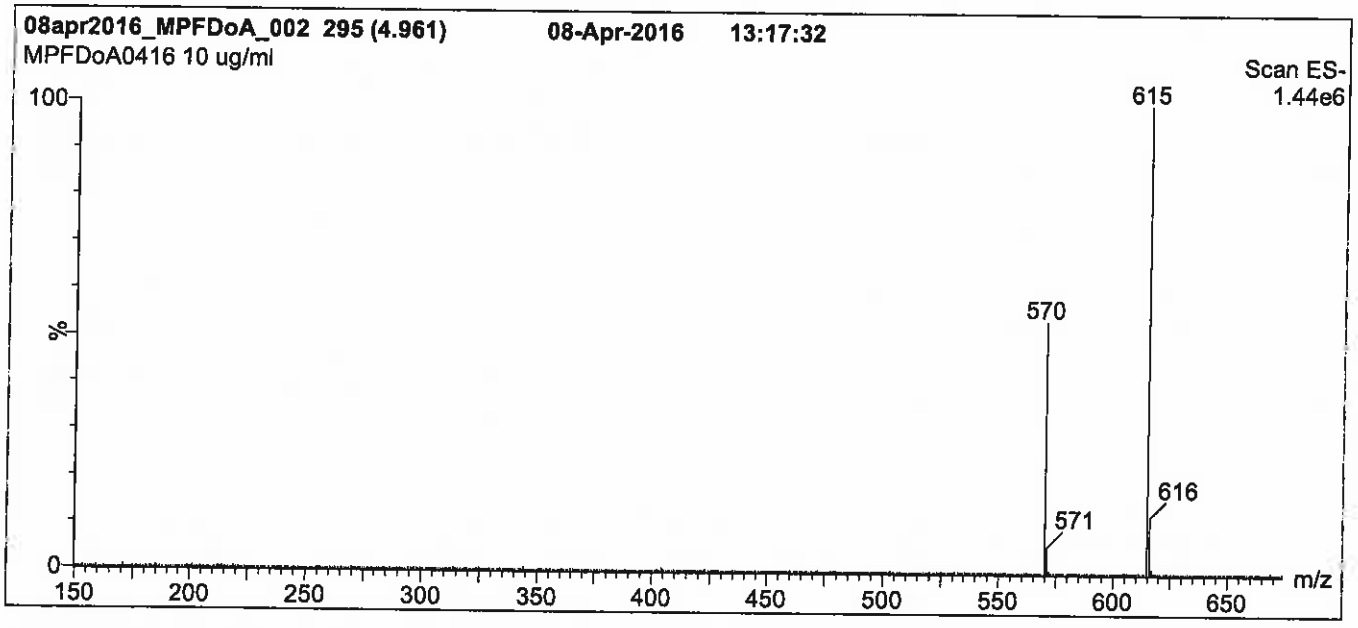

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LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

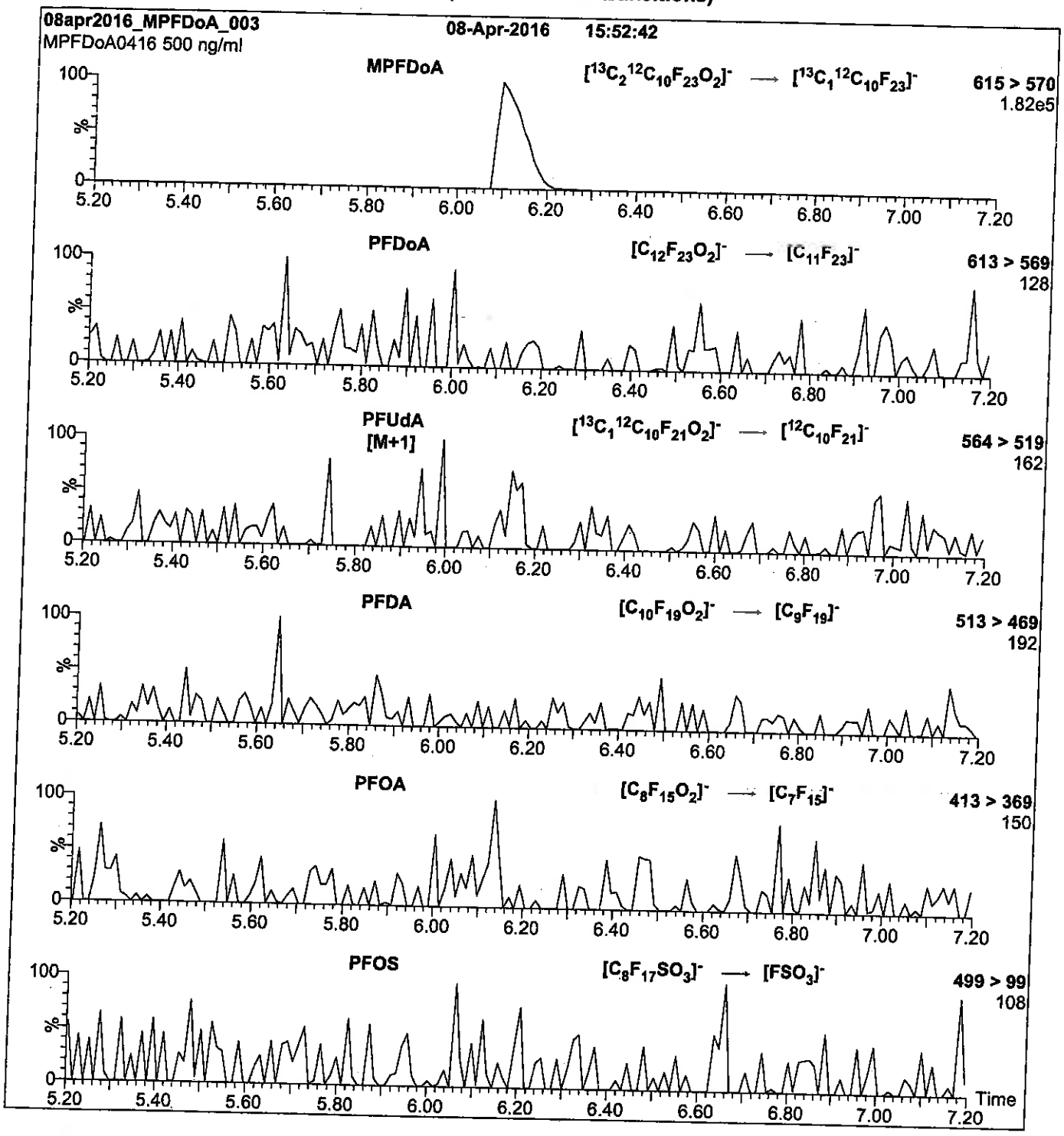
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFDoA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml MPFDoA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 13

Reagent

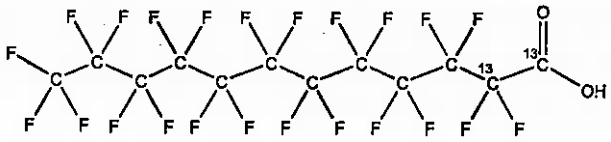
LCMPFDoA_00009

r: 3/9/17 SRV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	MPFDoA	**LOT NUMBER:**	MPFDoA0416
COMPOUND:	Perfluoro-n-[1,2-$^{13}C_2$]dodecanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_{10}HF_{23}O_2$	**MOLECULAR WEIGHT:**	616.08
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2-$^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	04/08/2016		
EXPIRY DATE: (mm/dd/yyyy)	04/08/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

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Certified By: B.G. Chittim **Date:** 04/15/2016 (mm/dd/yyyy)

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519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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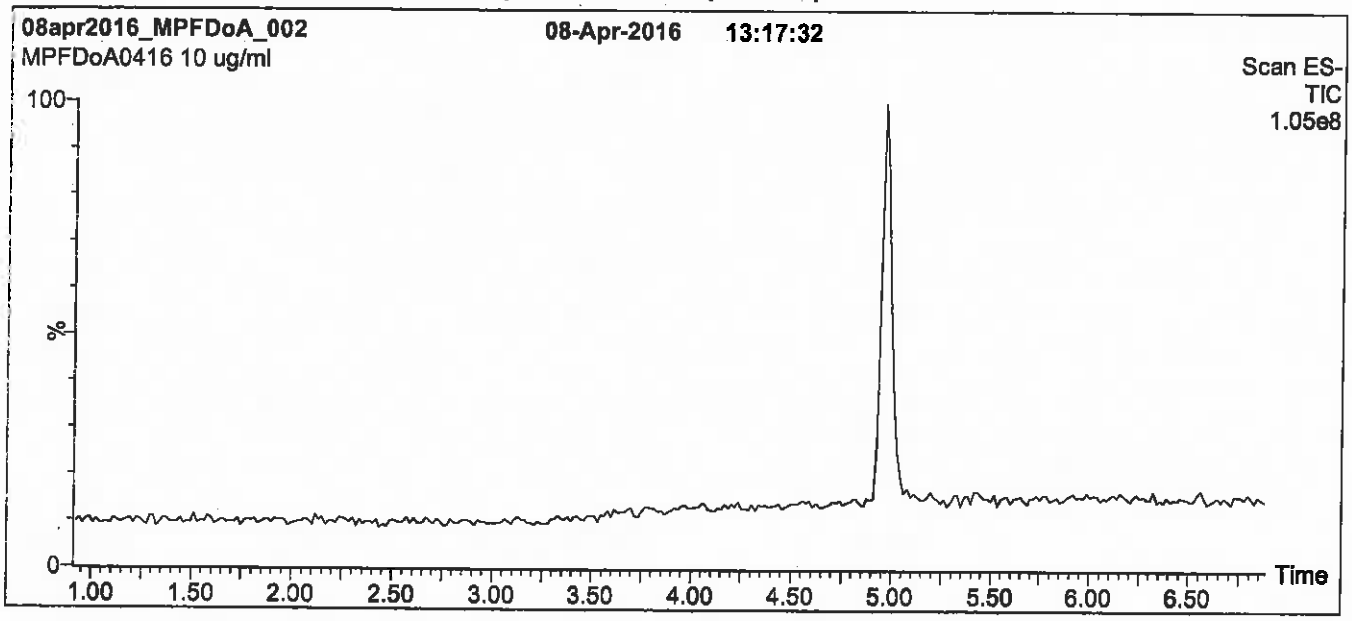
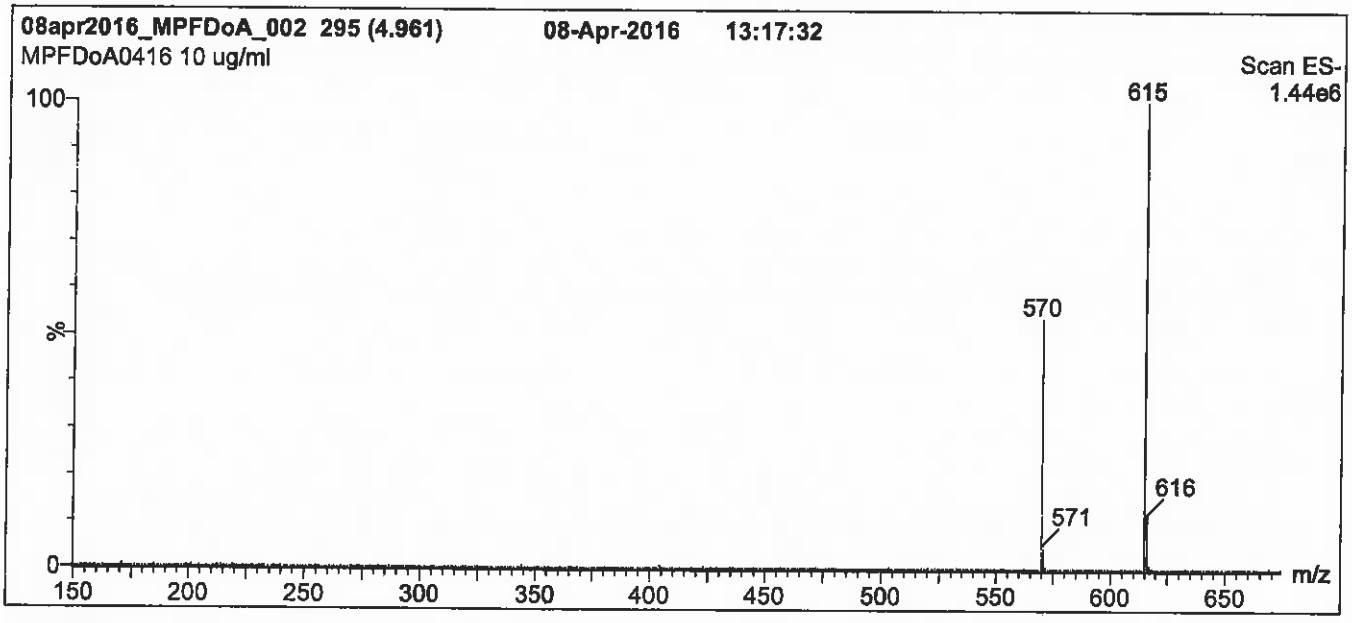




Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

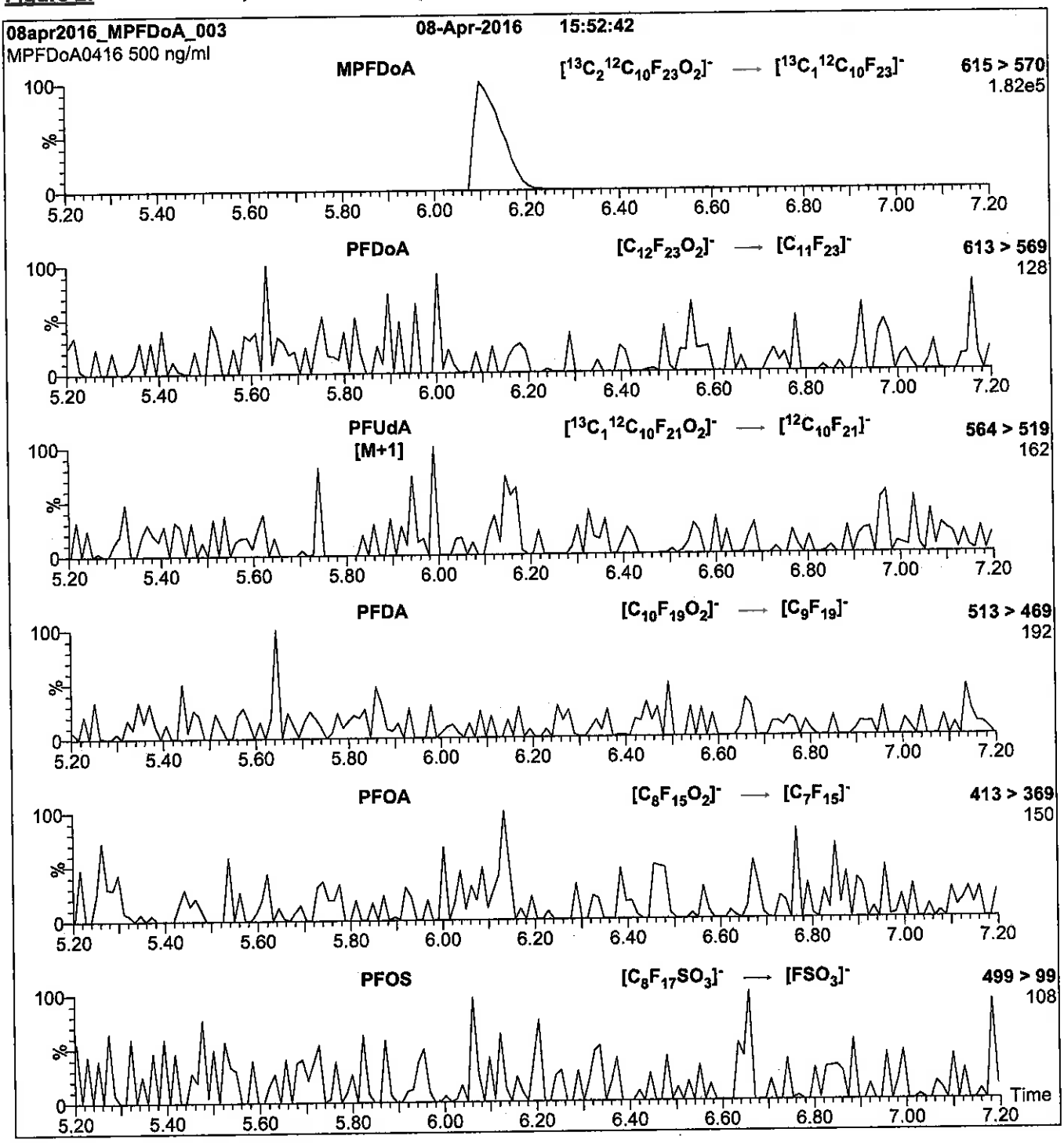
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFDoA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFDoA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 13

Reagent

LCMPFHxA_00012

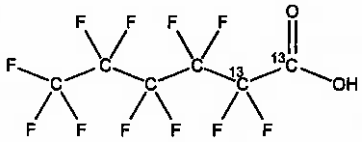
Scanned 10/14/16 JR R: SBC 9/22/16

739612
ID: LCMPFHxA_00012
Exp: 04/08/21 Prpd: SBC
13C2-Perfluorohexanoic ac

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: MPFHxA
LOT NUMBER: MPFHxA0416
COMPOUND: Perfluoro-n-[1,2-$^{13}C_2$]hexanoic acid
STRUCTURE:
CAS #: Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_4HF_{11}O_2$	**MOLECULAR WEIGHT:**	316.04
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	04/08/2016		
EXPIRY DATE: (mm/dd/yyyy)	04/08/2021		
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Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-hexanoic acid and ~ 0.3% of perfluoro-n-octanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 04/29/2016 (mm/dd/yyyy)

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CALA

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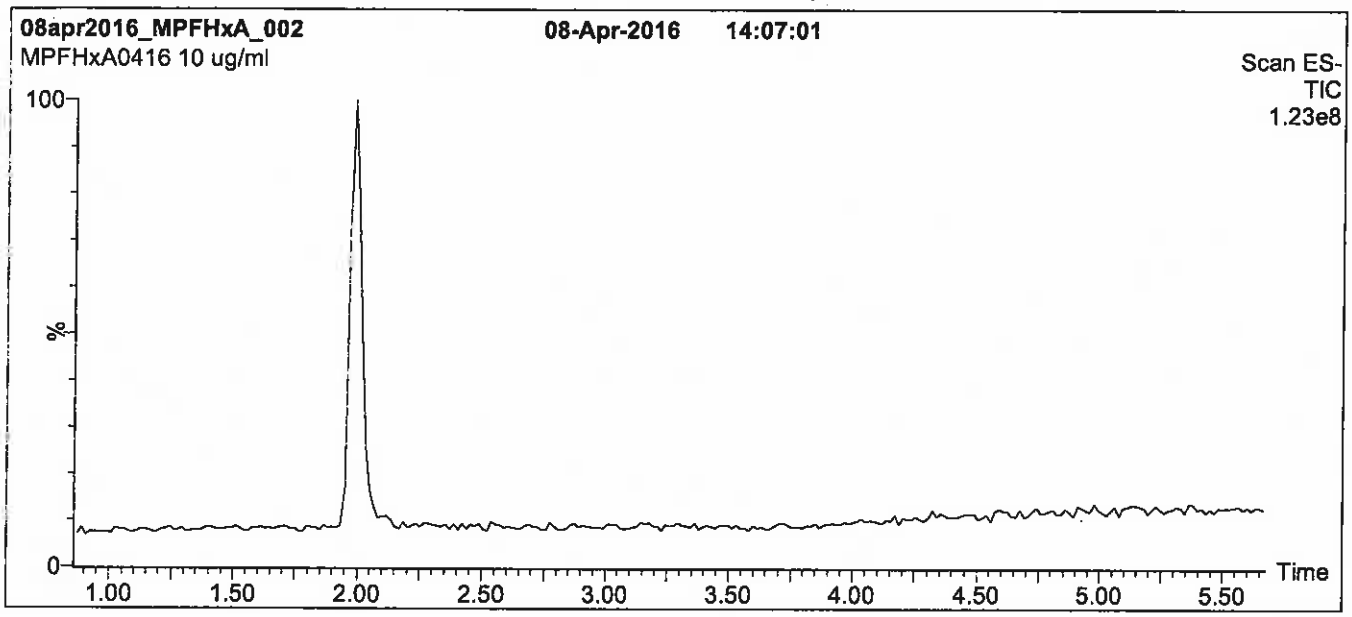
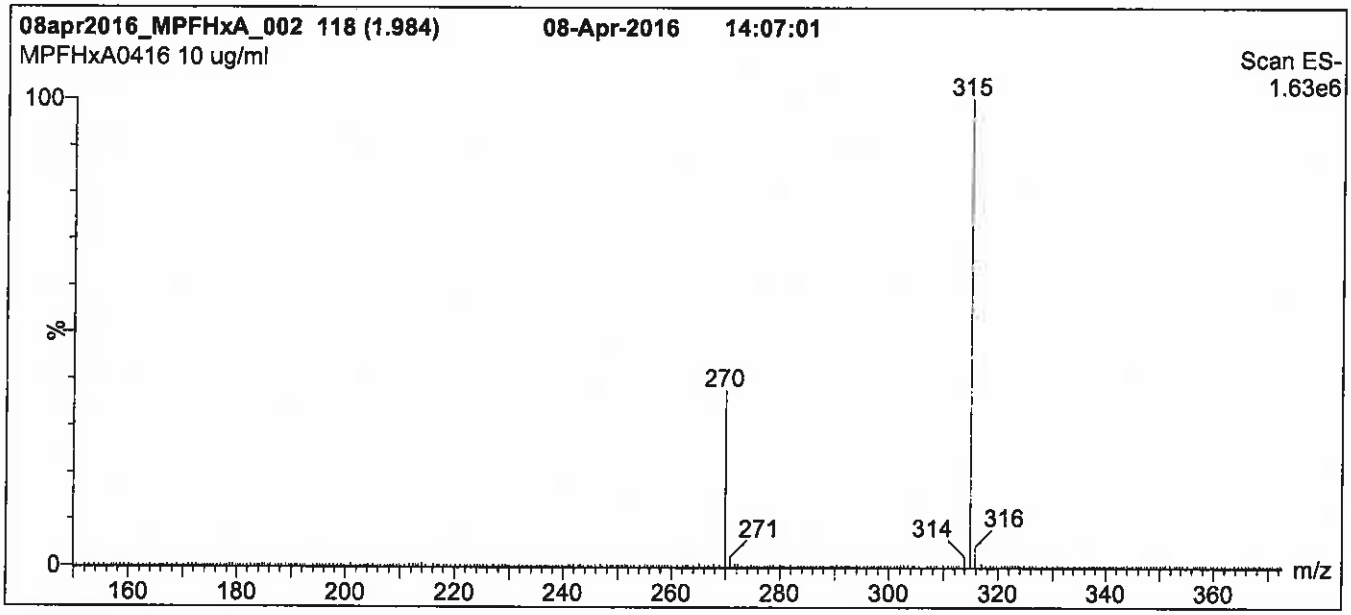




Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min before returning to initial conditions over 0.5 min.
Time: 10 min

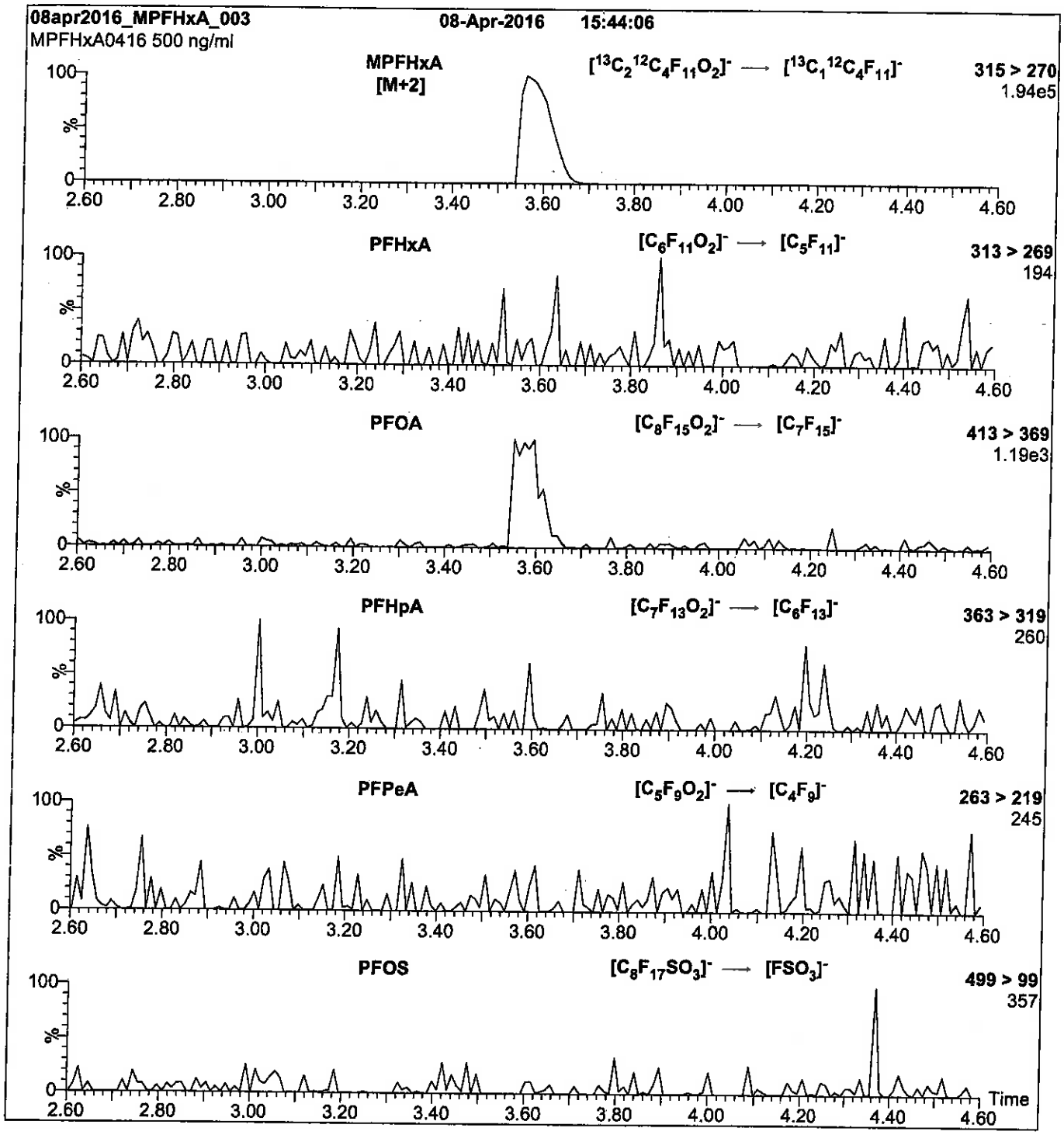
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFHxA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 10

Reagent

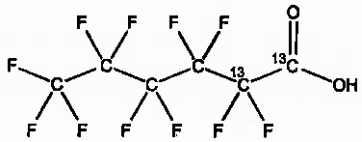
LCMPFHxA_00014

R: 3/9/17 SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	MPFHxA	**LOT NUMBER:**	MPFHxA1116
COMPOUND:	Perfluoro-n-[1,2-$^{13}C_2$]hexanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_4HF_{11}O_2$	**MOLECULAR WEIGHT:**	316.04
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2-$^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	11/22/2016		
EXPIRY DATE: (mm/dd/yyyy)	11/22/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-hexanoic acid and ~ 0.3% of perfluoro-n-octanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/13/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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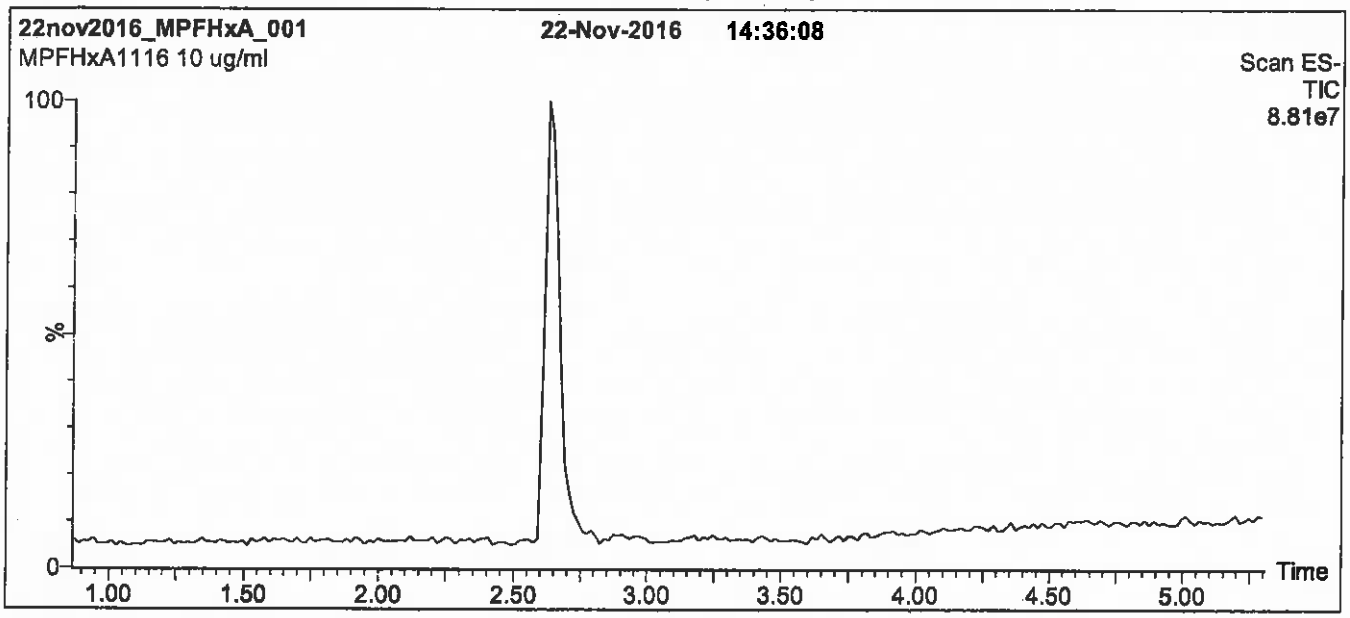
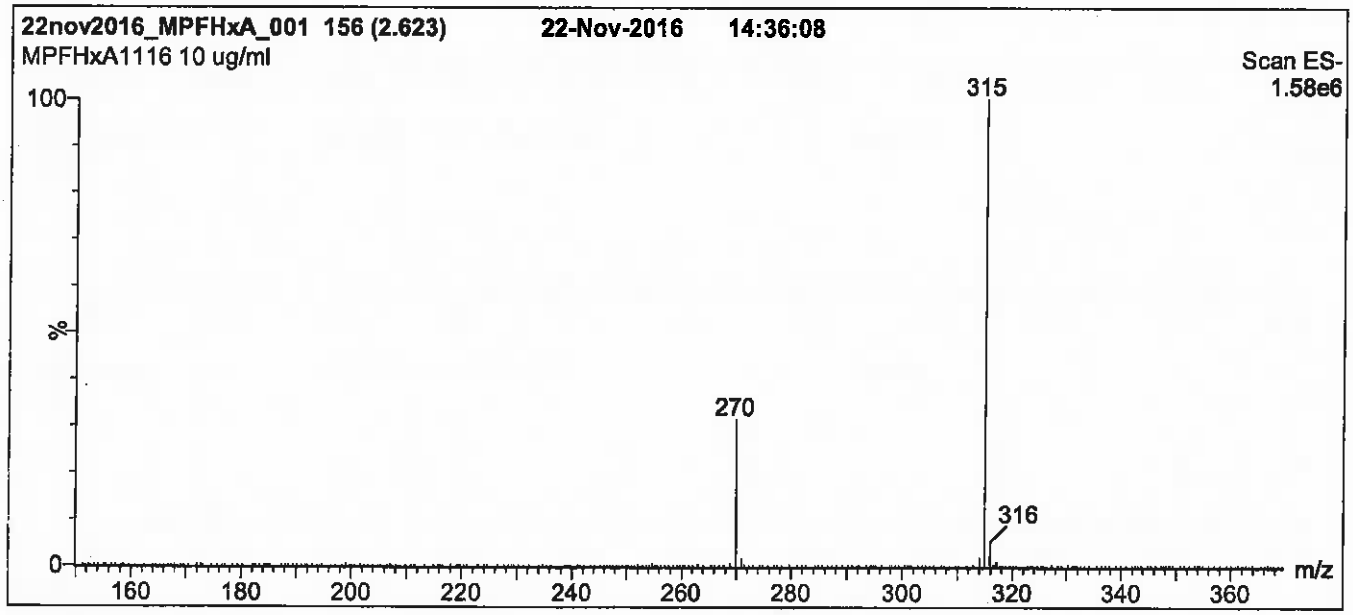
Figure 1: **MPFHxA; LC/MS Data (TIC and Mass Spectrum)**





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1.7 µm, 2.1 x 100 mm

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Time: 10 min

Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
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Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

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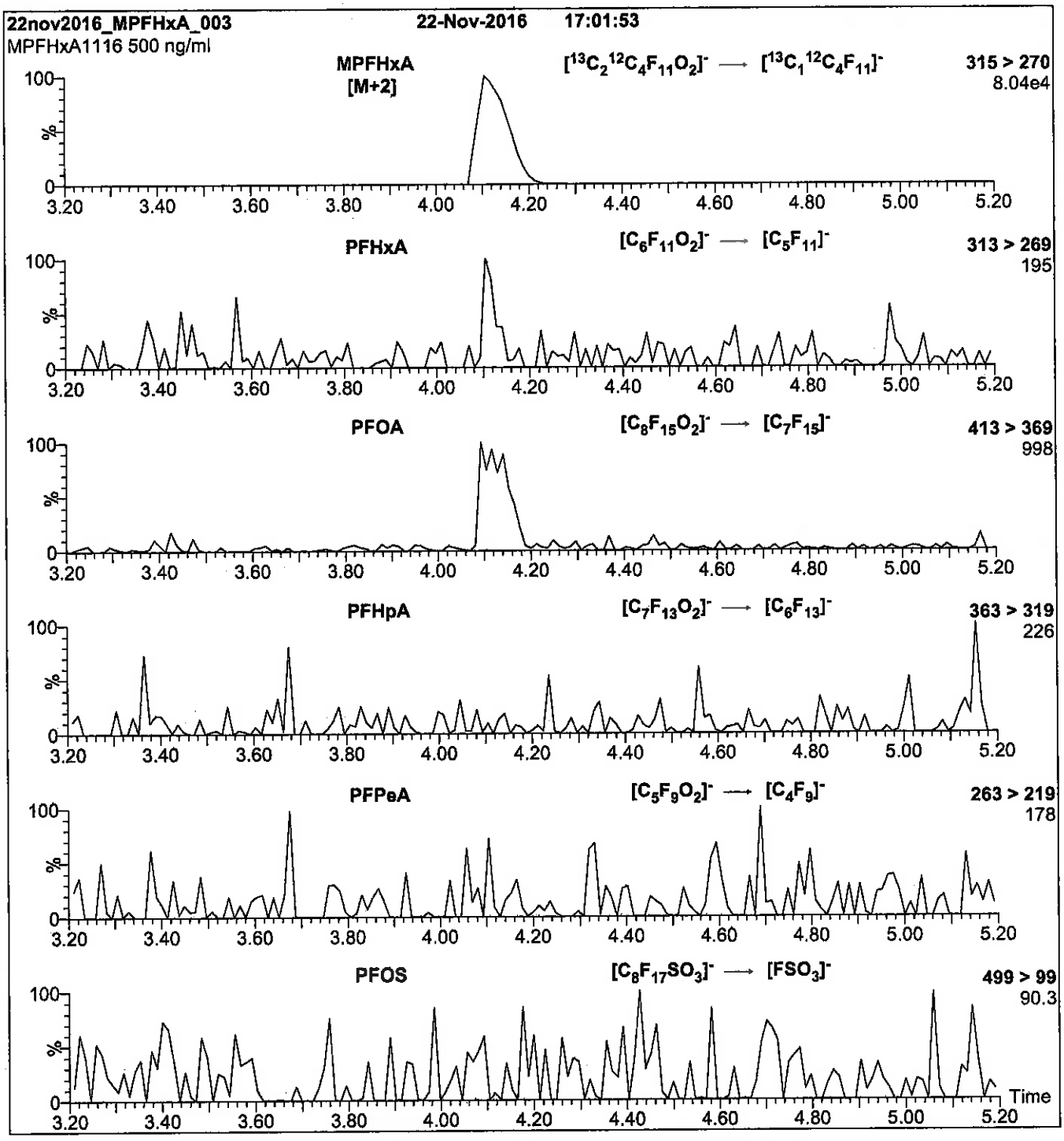


Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 10

Reagent

LCMPFHxS_00008

R: SBC 9/22/16

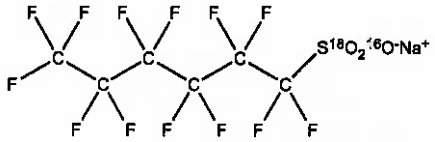
739601
ID: LCMPFHxS_00008
Exp: 10/23/20 Prpd: SBC
18O2-Perfluorohexanesulfo

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

Scanned 10/14/16 SR

PRODUCT CODE:	MPFHxS	**LOT NUMBER:**	MPFHxS1015
COMPOUND:	Sodium perfluoro-1-hexane[$^{18}O_2$]sulfonate		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$C_6F_{13}S^{18}O_2{}^{16}ONa$	**MOLECULAR WEIGHT:**	426.10
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt) 47.3 ± 2.4 µg/ml (MPFHxS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	>94% ($^{18}O_2$)
LAST TESTED: (mm/dd/yyyy)	10/23/2015		
EXPIRY DATE: (mm/dd/yyyy)	10/23/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The response factor for MPFHxS ($C_6F_{13}S^{18}O_2{}^{16}O^-$) has been observed to be up to 10% lower than for PFHxS ($C_6F_{13}S^{16}O_3^-$) when both compounds are injected together. This difference may vary between instruments.
- Due to the isotopic purity of the starting material ($^{18}O_2$ >94%), MPFHxS contains ~ 0.3% of PFHxS. This value agrees with the theoretical percent relative abundance that is expected based on the stated isotopic purity.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 10/28/2015 (mm/dd/yyyy)

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519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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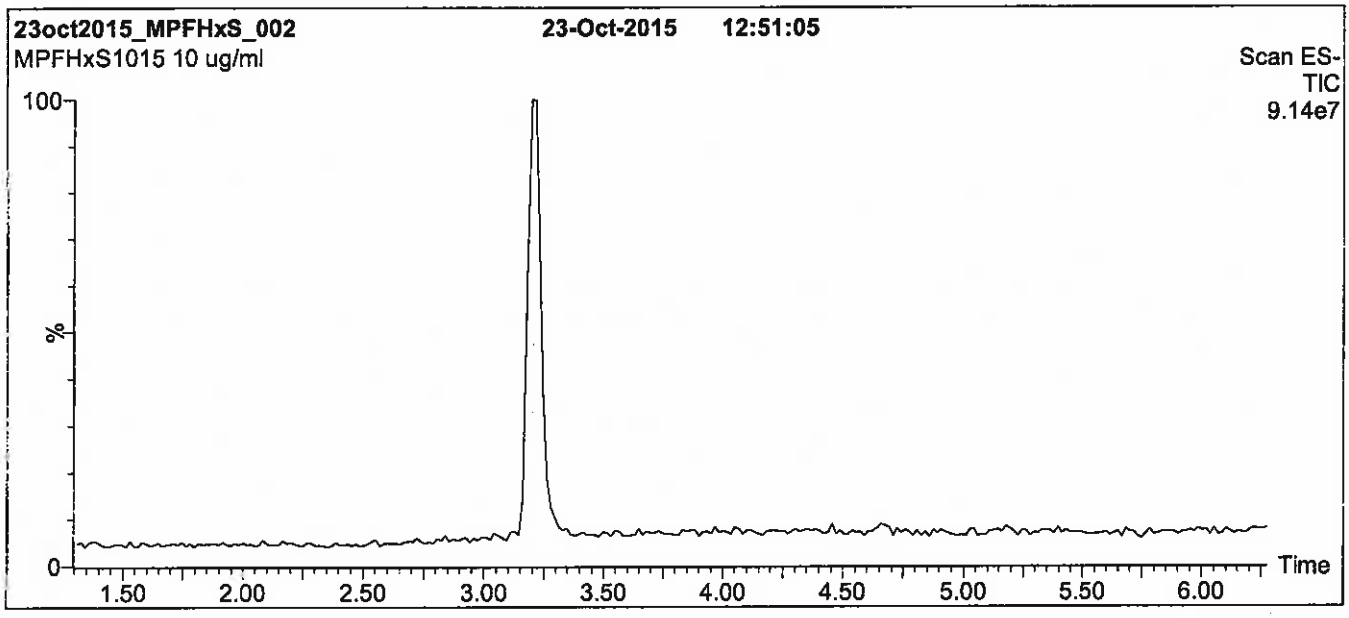

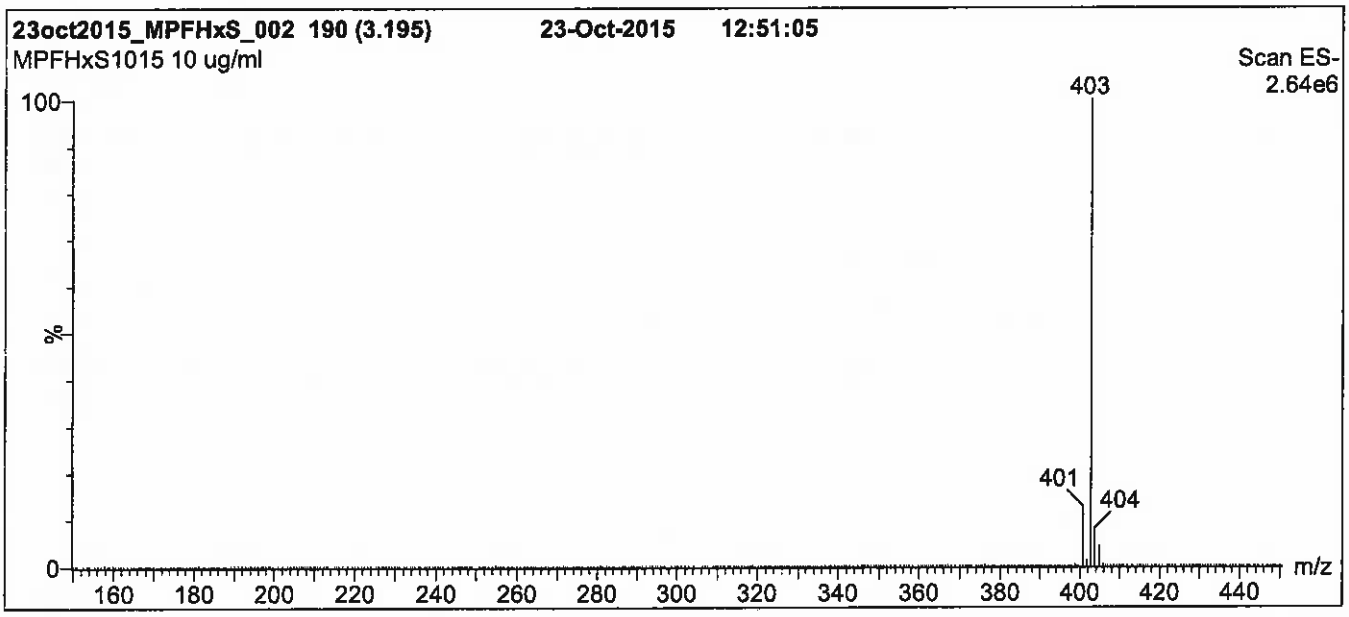

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Ramp to 90% organic over 7 min and hold for 2 min before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

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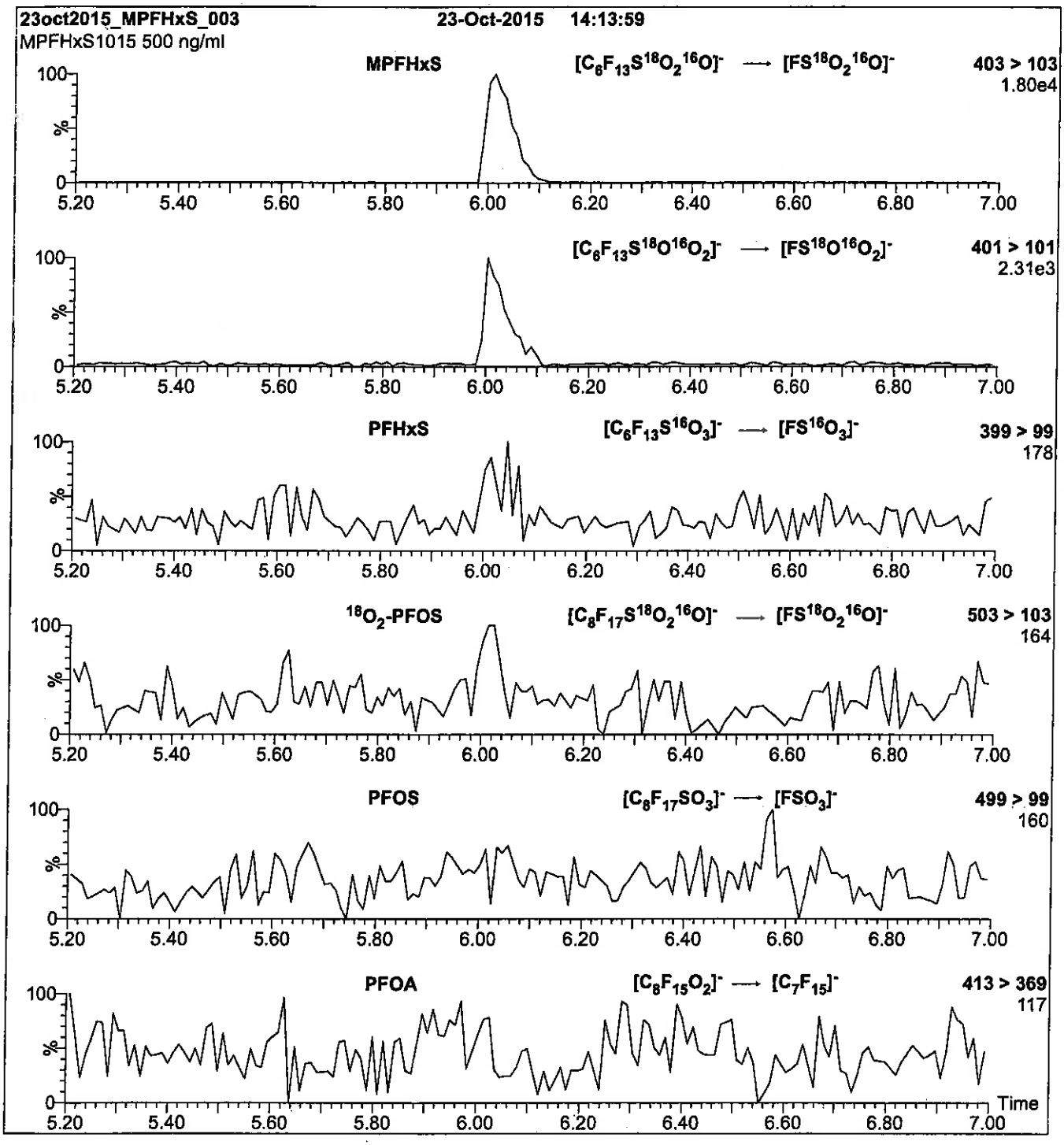


Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml MPFHxS)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 30

Reagent

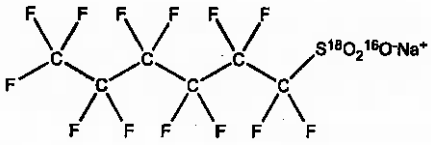
LCMPFHxS_00009

r: 3/9/17 SRV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:	MPFHxS	**LOT NUMBER:**	MPFHxS1015
COMPOUND:	Sodium perfluoro-1-hexane[$^{18}O_2$]sulfonate		
STRUCTURE:		**CAS #:**	Not available



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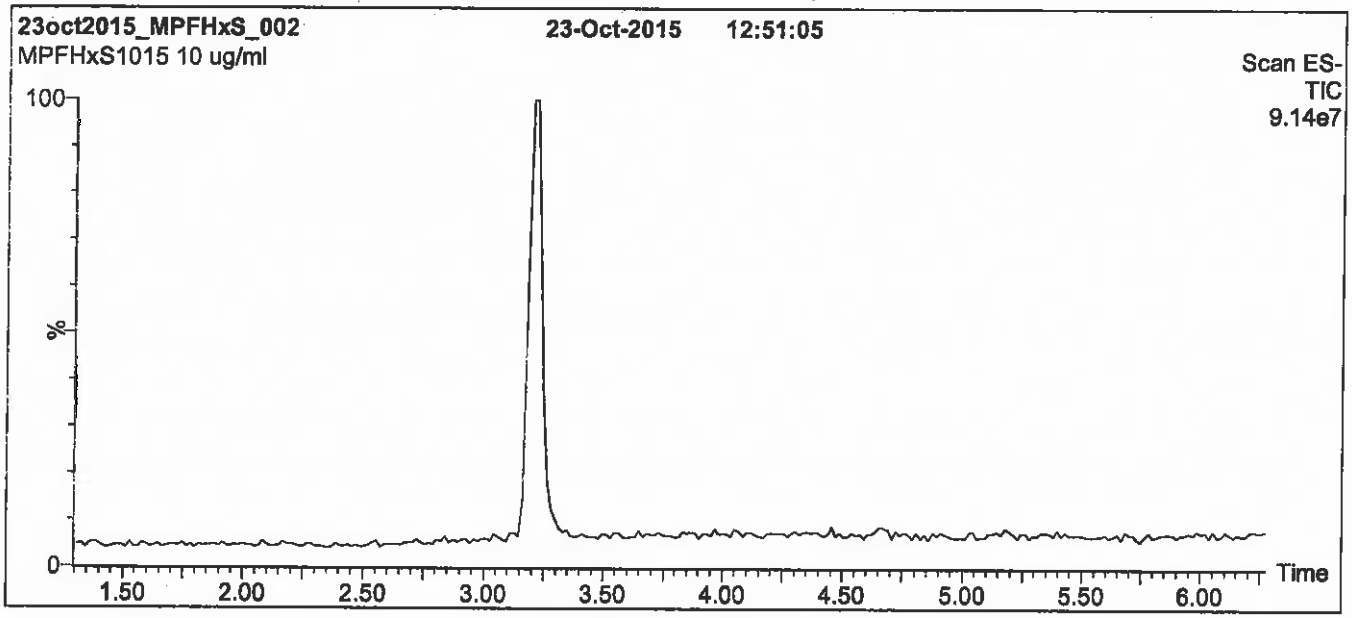

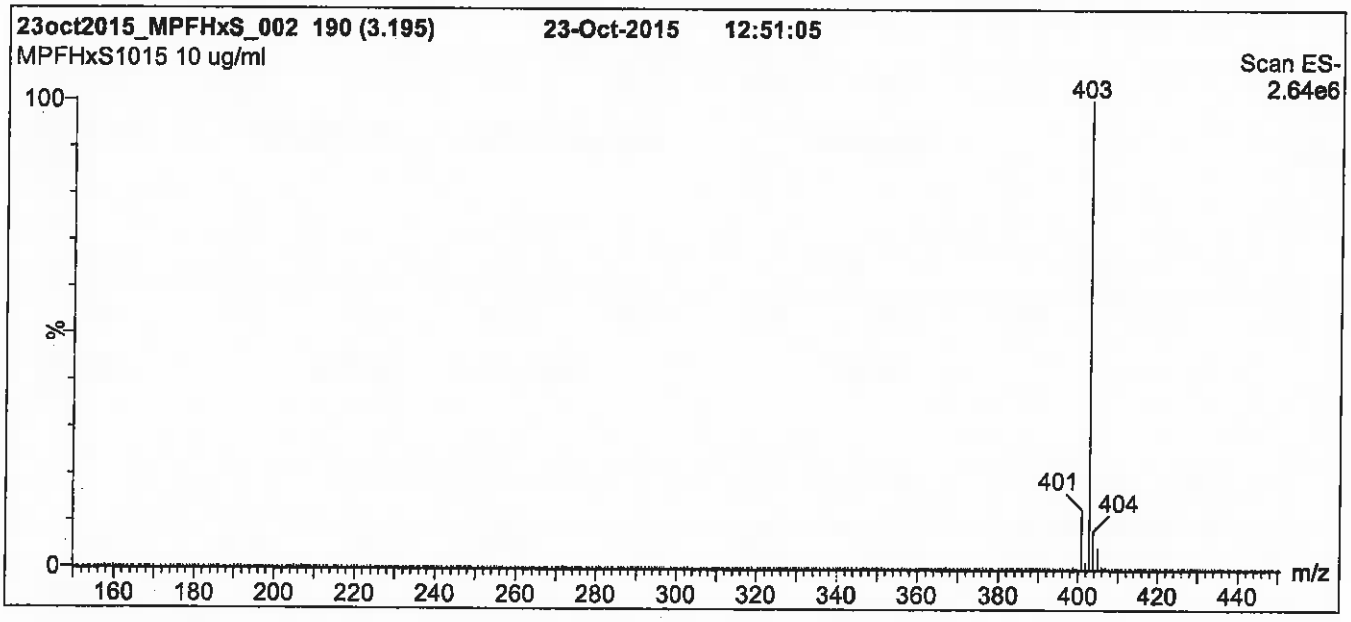

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1.7 µm, 2.1 x 100 mm

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Flow: 300 µl/min

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Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
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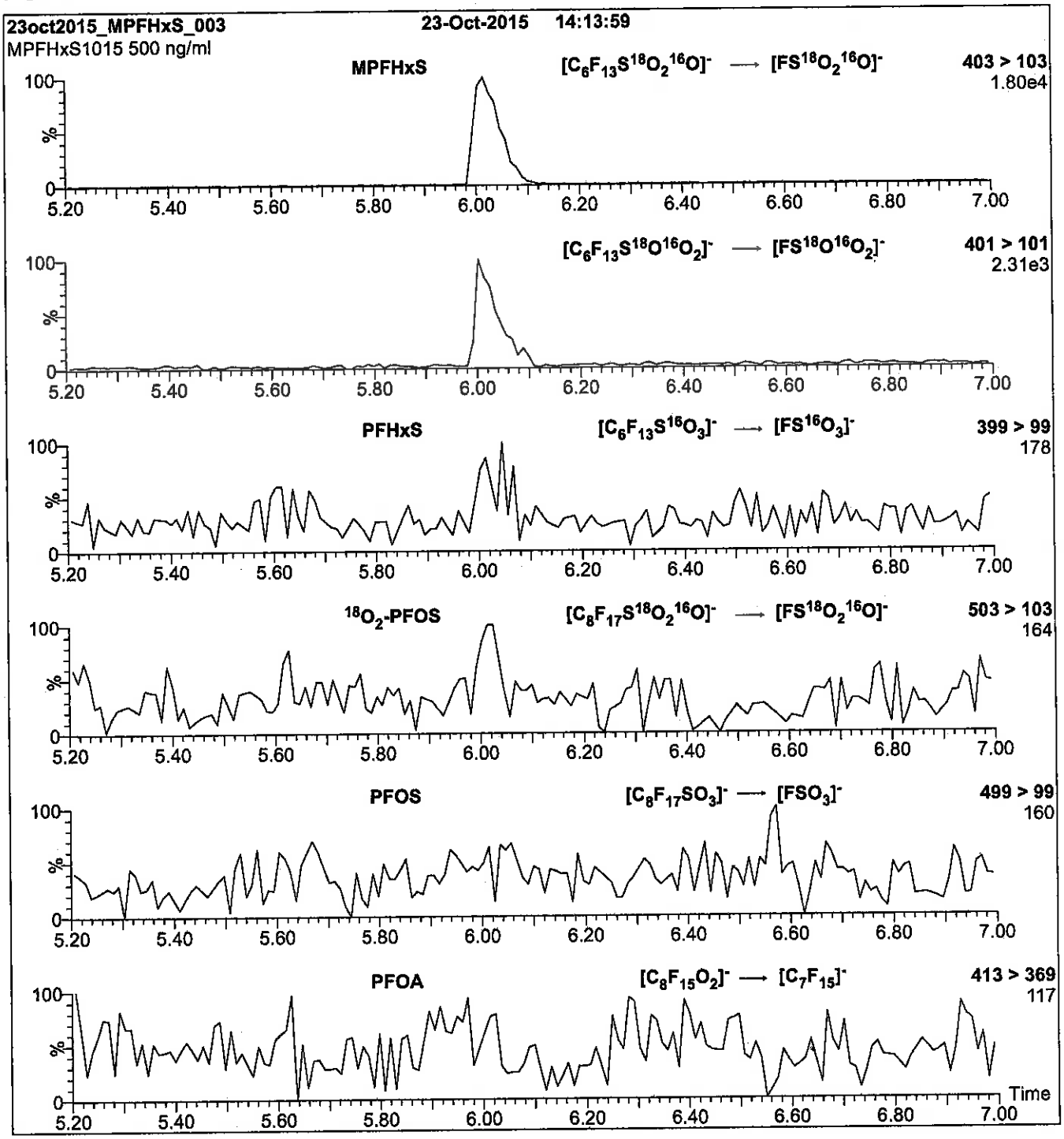
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFHxS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFHxS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 30

Reagent

LCMPFNA_00008

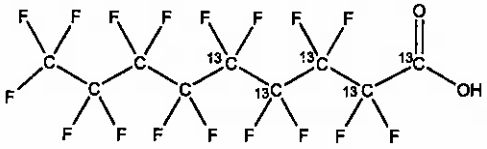
Scanned 10/14/16 R: SBC 9/22/16

739637
ID: LCMPFNA_00008
Exp: 04/13/19 Prpd: SBC
13C5-Perfluorononanoic aci

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	MPFNA	**LOT NUMBER:**	MPFNA0414
COMPOUND:	Perfluoro-n-[1,2,3,4,5-$^{13}C_5$]nonanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_5{}^{12}C_4HF_{17}O_2$	**MOLECULAR WEIGHT:**	469.04
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2,3,4,5-$^{13}C_5$)
LAST TESTED: (mm/dd/yyyy)	04/13/2014		
EXPIRY DATE: (mm/dd/yyyy)	04/13/2019		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 04/01/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

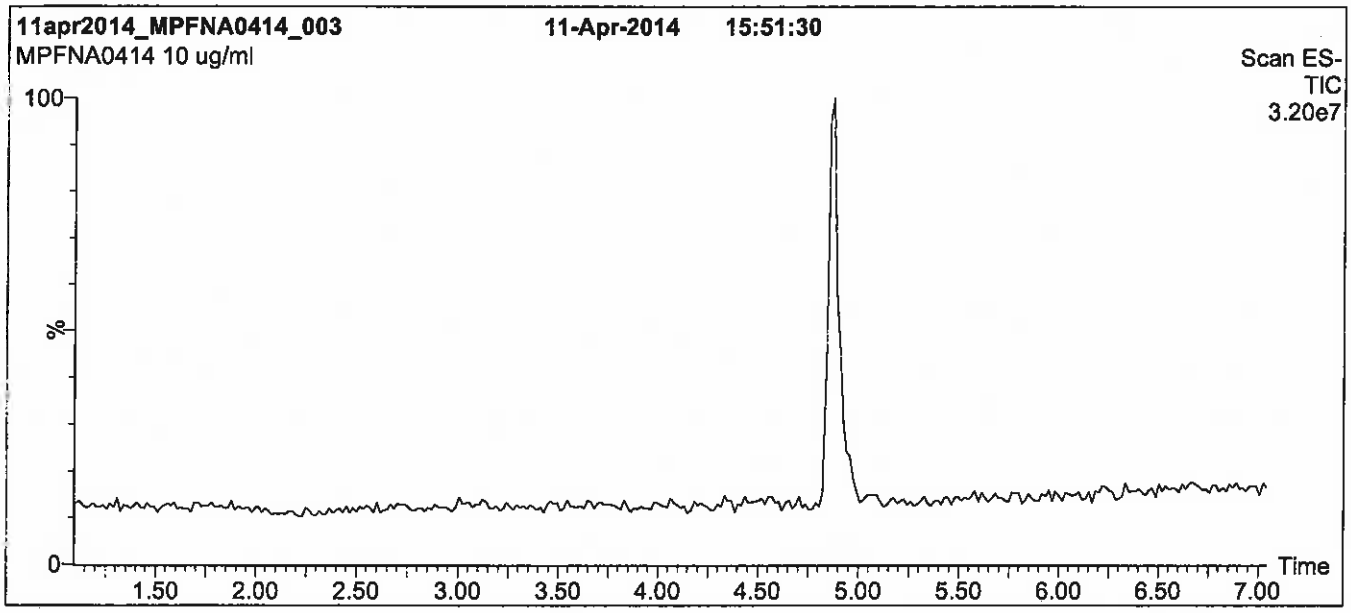
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

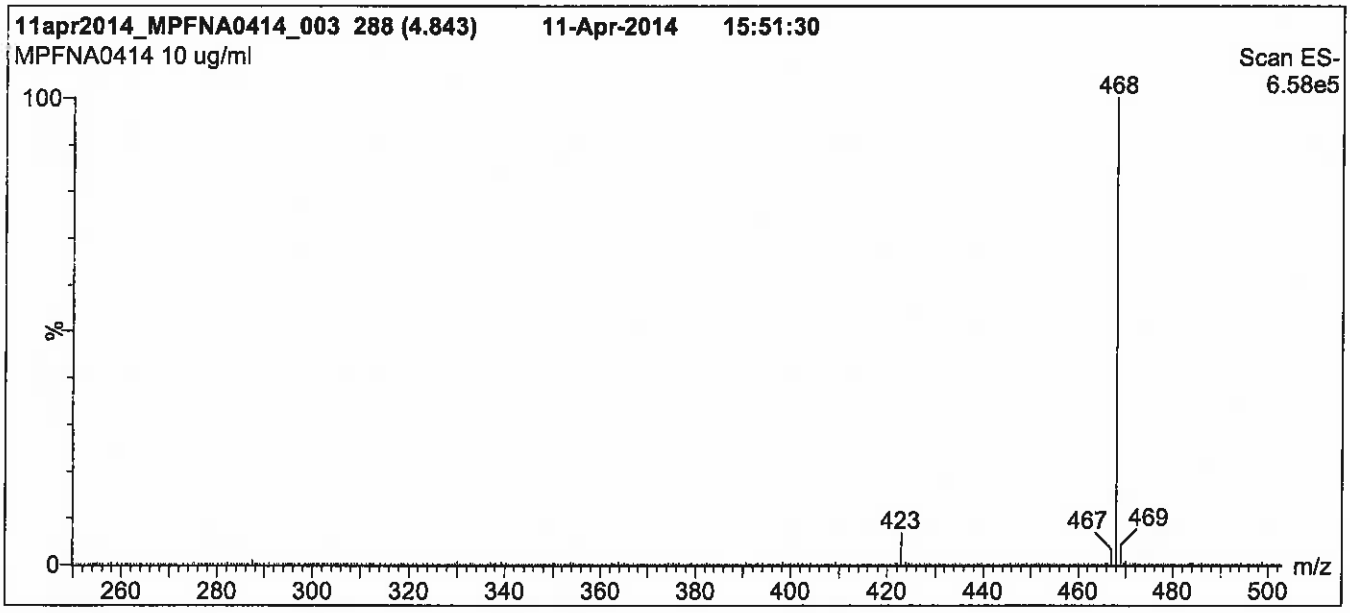
CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **MPFNA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min before returning to initial conditions in 0.5 min.
Time: 10 min

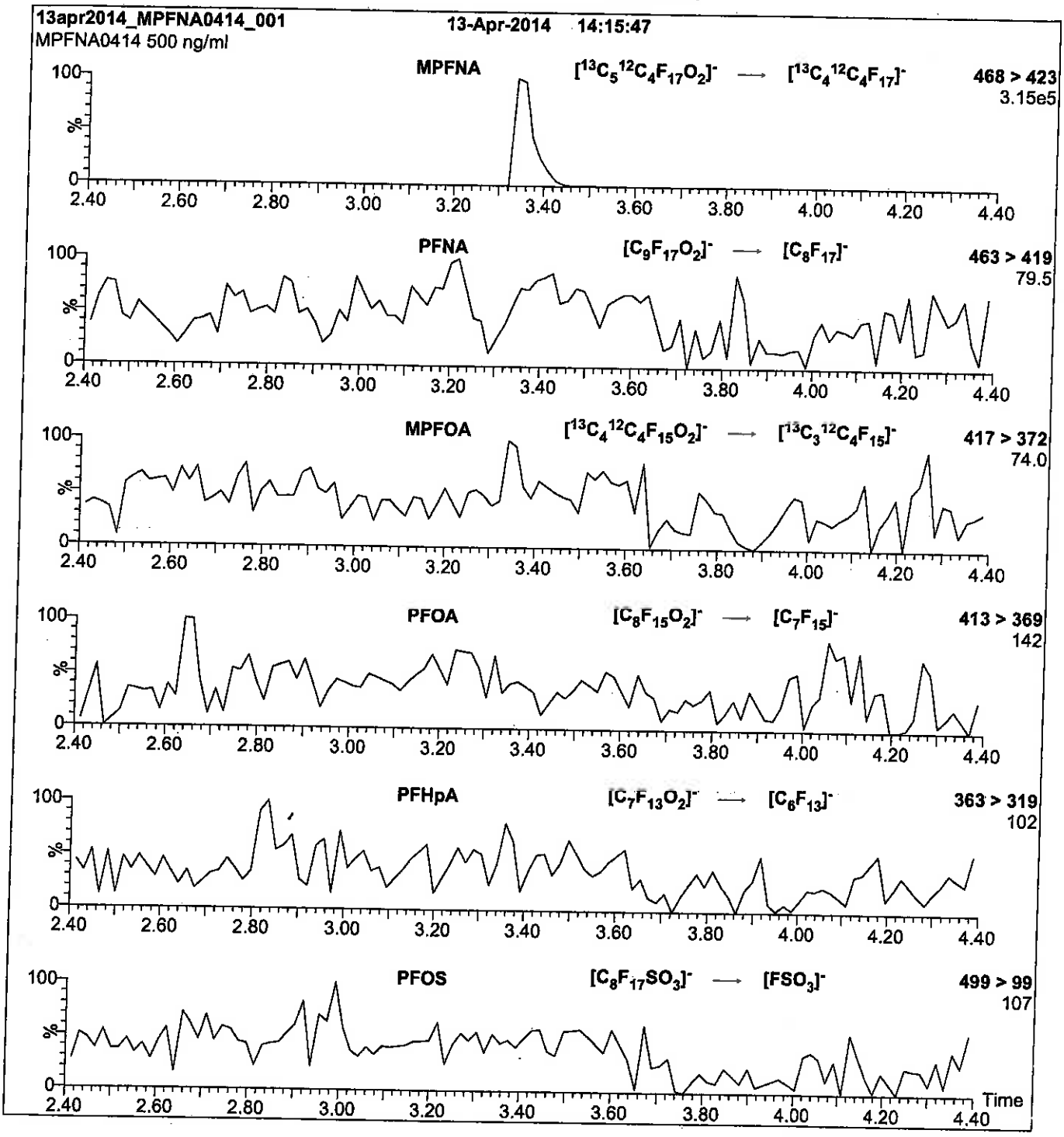
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFNA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 11

Reagent

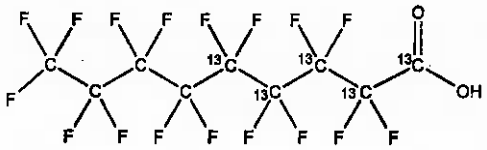
LCMPFNA_00009

P: 3/9/17 SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	MPFNA	**LOT NUMBER:**	MPFNA0916
COMPOUND:	Perfluoro-n-[1,2,3,4,5-$^{13}C_5$]nonanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_5{}^{12}C_4HF_{17}O_2$	**MOLECULAR WEIGHT:**	469.04
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2,3,4,5-$^{13}C_5$)
LAST TESTED: (mm/dd/yyyy)	09/30/2016		
EXPIRY DATE: (mm/dd/yyyy)	09/30/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 10/11/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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where x is expressed as a relative standard uncertainty of the individual parameter.

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EXPIRY DATE / PERIOD OF VALIDITY:

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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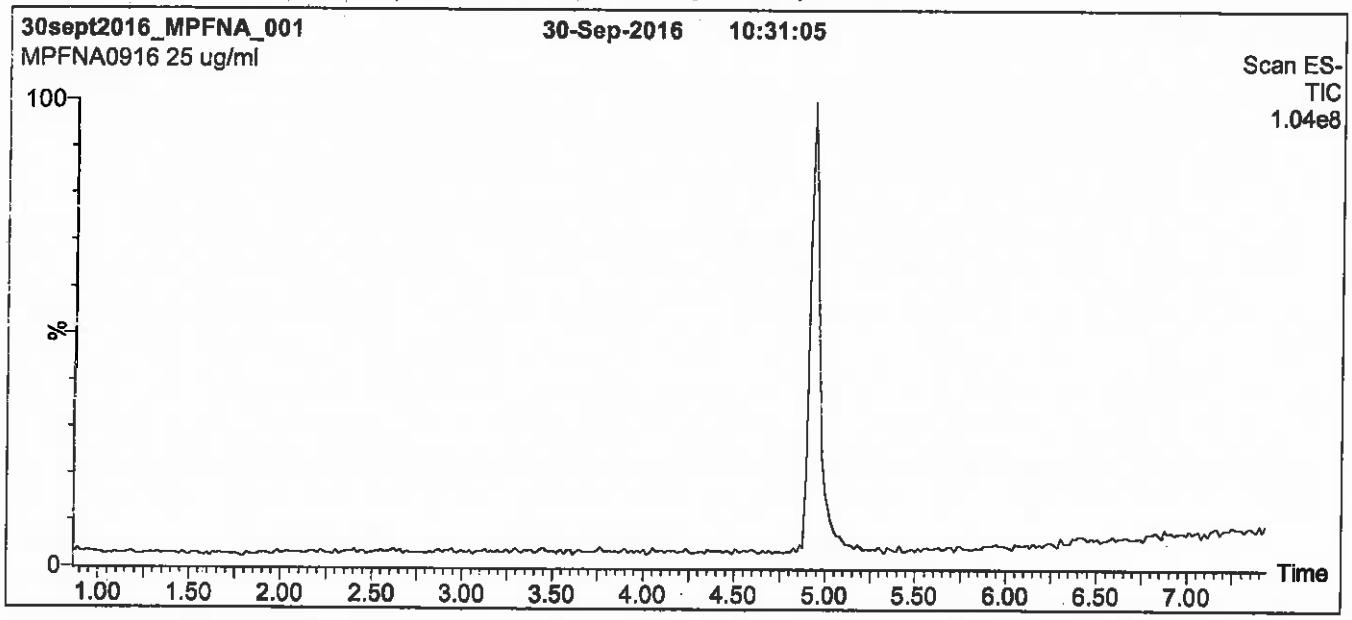
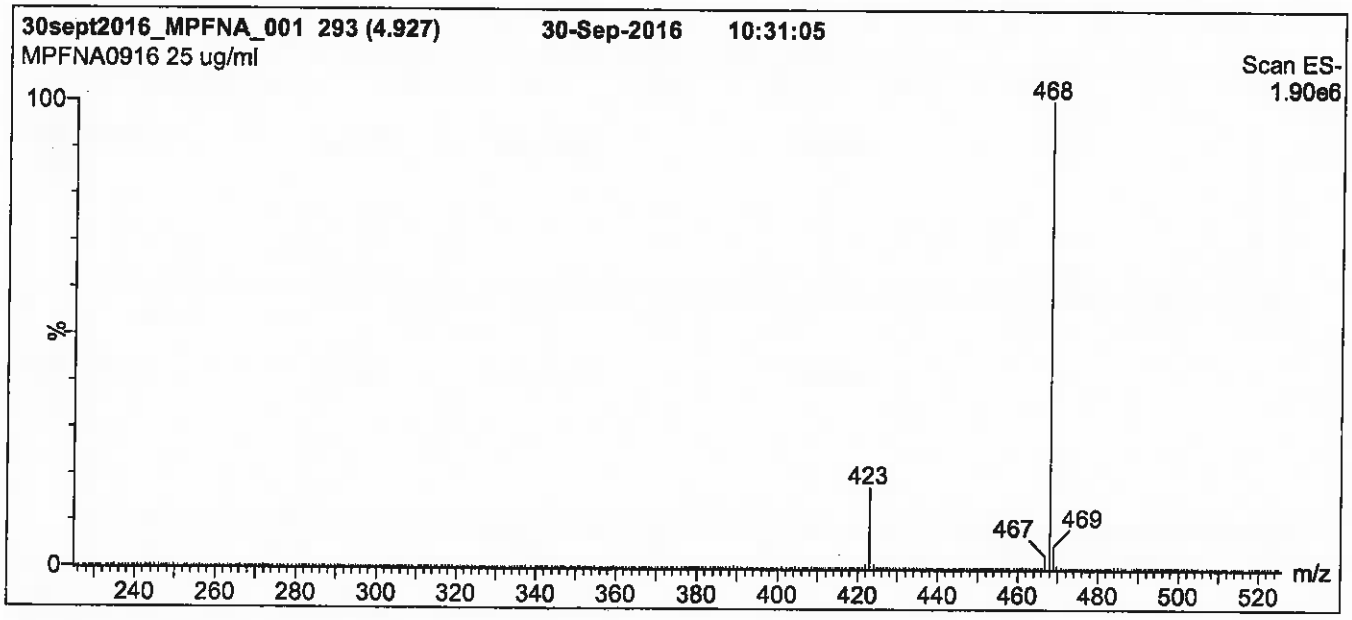




Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

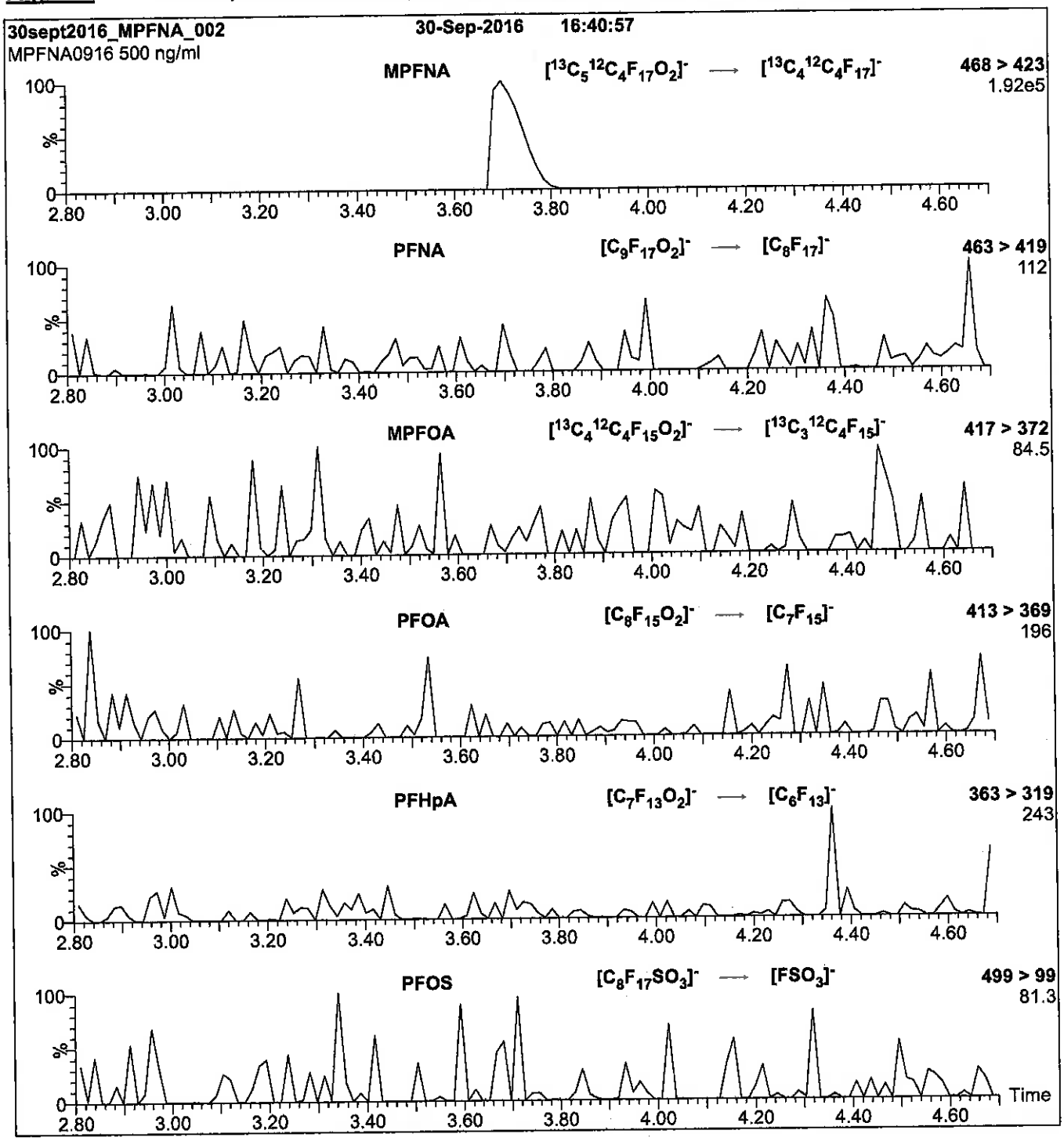
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFNA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 11

Reagent

LCMPFOA_00012

R: SBC 9/22/16

738683
ID: LCMPFOA_00012
Exp: 01/22/21 Prpd: SBC
13C4-Perfluorooctanoic ac

WELLINGTON LABORATORIES

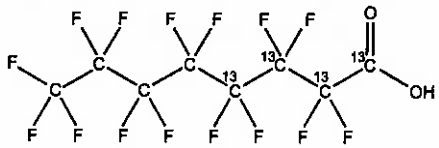
CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: MPFOA
COMPOUND: Perfluoro-n-[1,2,3,4-$^{13}C_4$]octanoic acid

LOT NUMBER: MPFOA0116

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $^{13}C_4{}^{12}C_4HF_{15}O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 01/22/2016
EXPIRY DATE: (mm/dd/yyyy) 01/22/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 418.04
SOLVENT(S): Methanol
Water (<1%)

ISOTOPIC PURITY: ≥99% ^{13}C ($1,2,3,4\text{-}^{13}C_4$)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of native perfluoro-n-octanoic acid (PFOA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 02/01/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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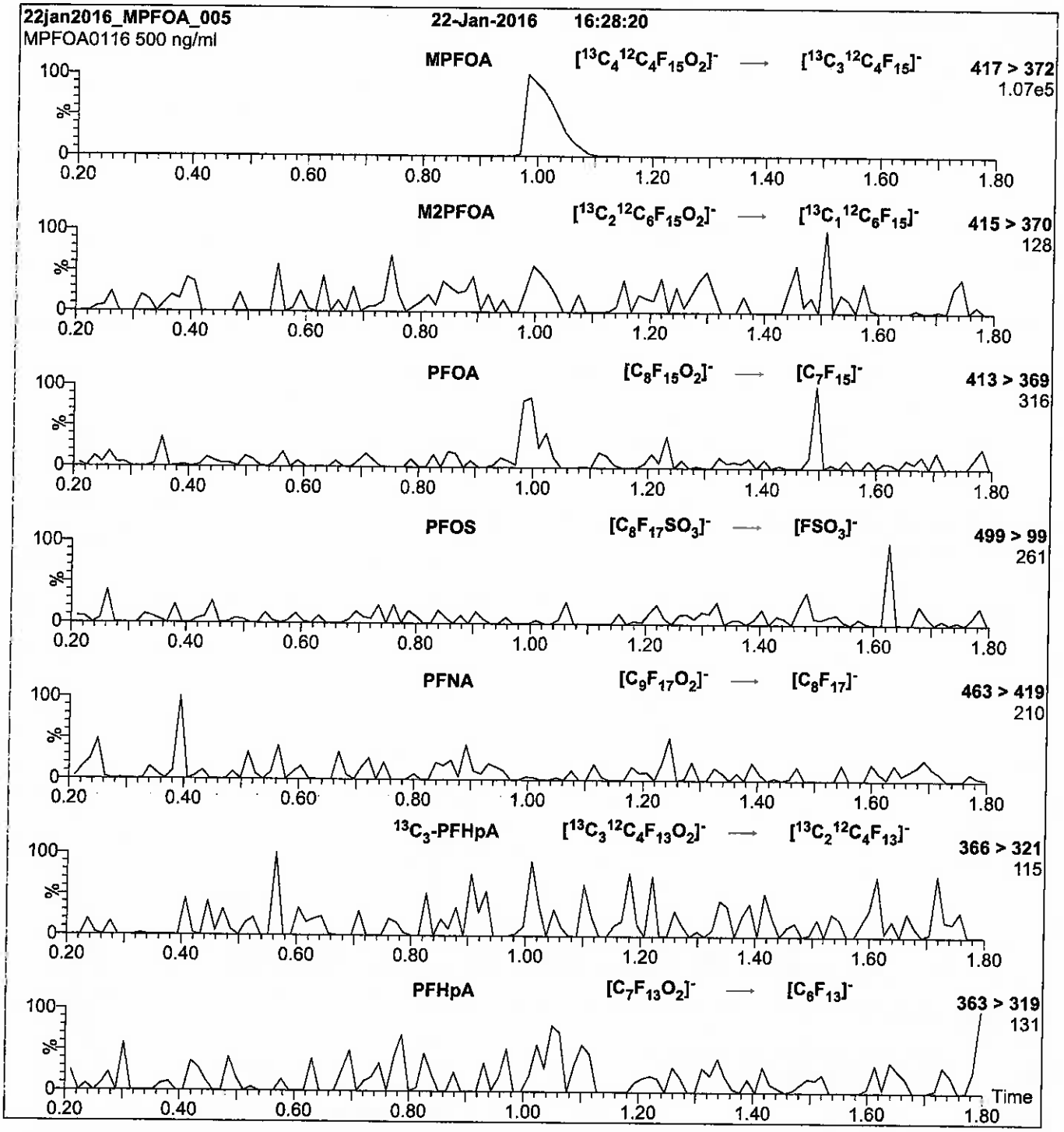
Figure 2: **MPFOA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFOA)

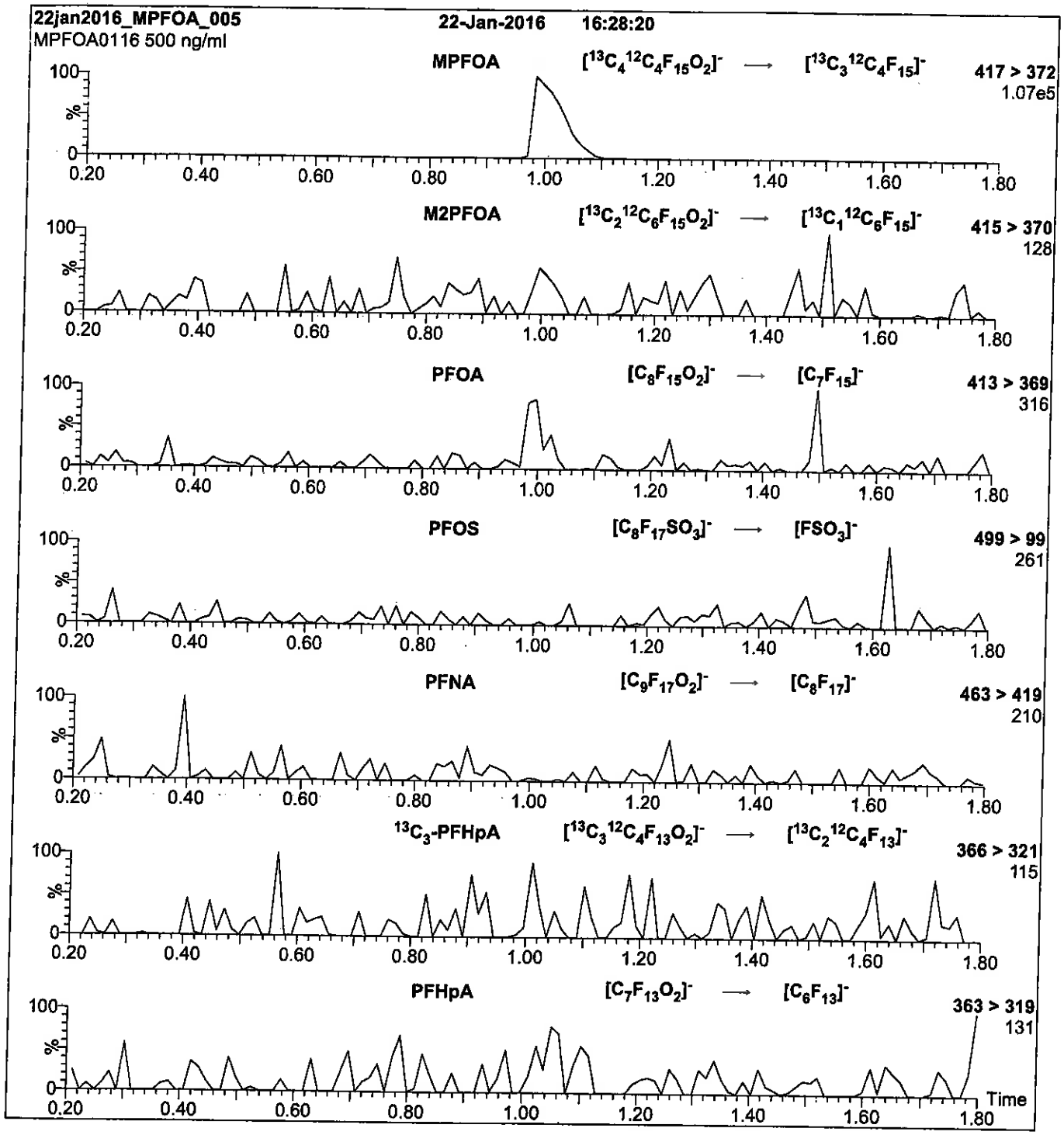
Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.58e-3
Collision Energy (eV) = 10

Figure 2: **MPFOA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml MPFOA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.58e-3
Collision Energy (eV) = 10

Reagent

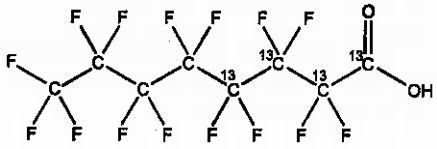
LCMPFOA_00013

r: 3/9/17 SRV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	MPFOA	**LOT NUMBER:**	MPFOA1016
COMPOUND:	Perfluoro-n-[1,2,3,4-$^{13}C_4$]octanoic acid		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_4{}^{12}C_4HF_{15}O_2$	**MOLECULAR WEIGHT:**	418.04
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2,3,4-$^{13}C_4$)
LAST TESTED: (mm/dd/yyyy)	10/18/2016		
EXPIRY DATE: (mm/dd/yyyy)	10/18/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of native perfluoro-n-octanoic acid (PFOA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 10/19/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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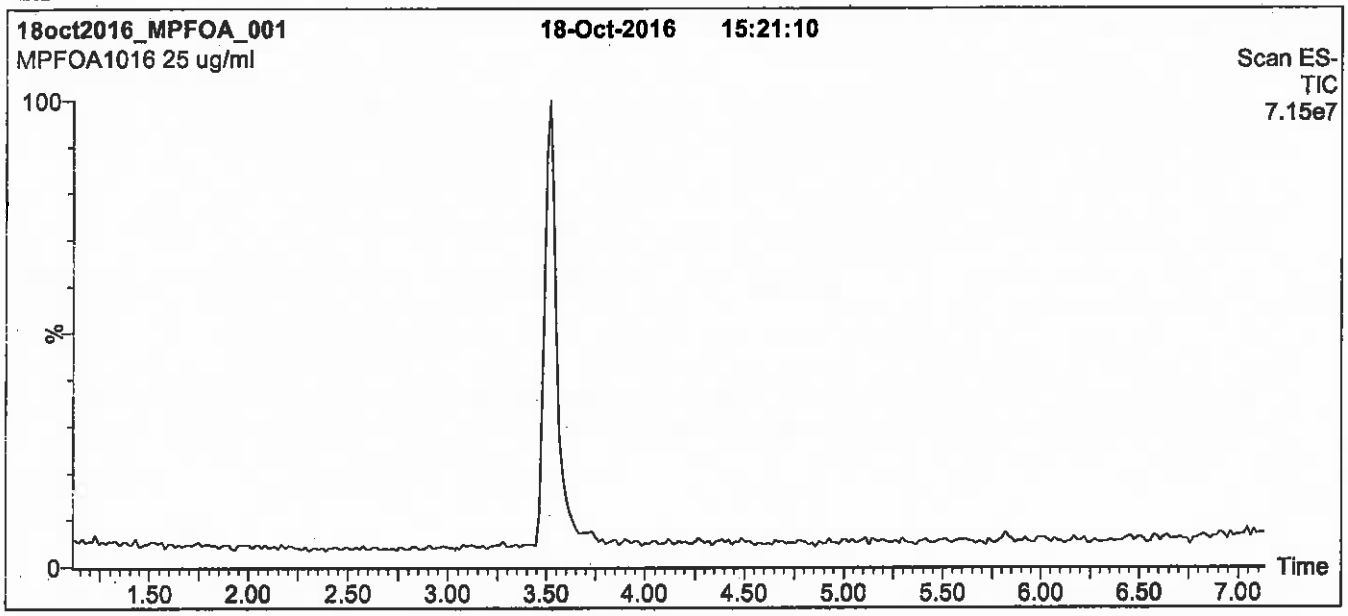
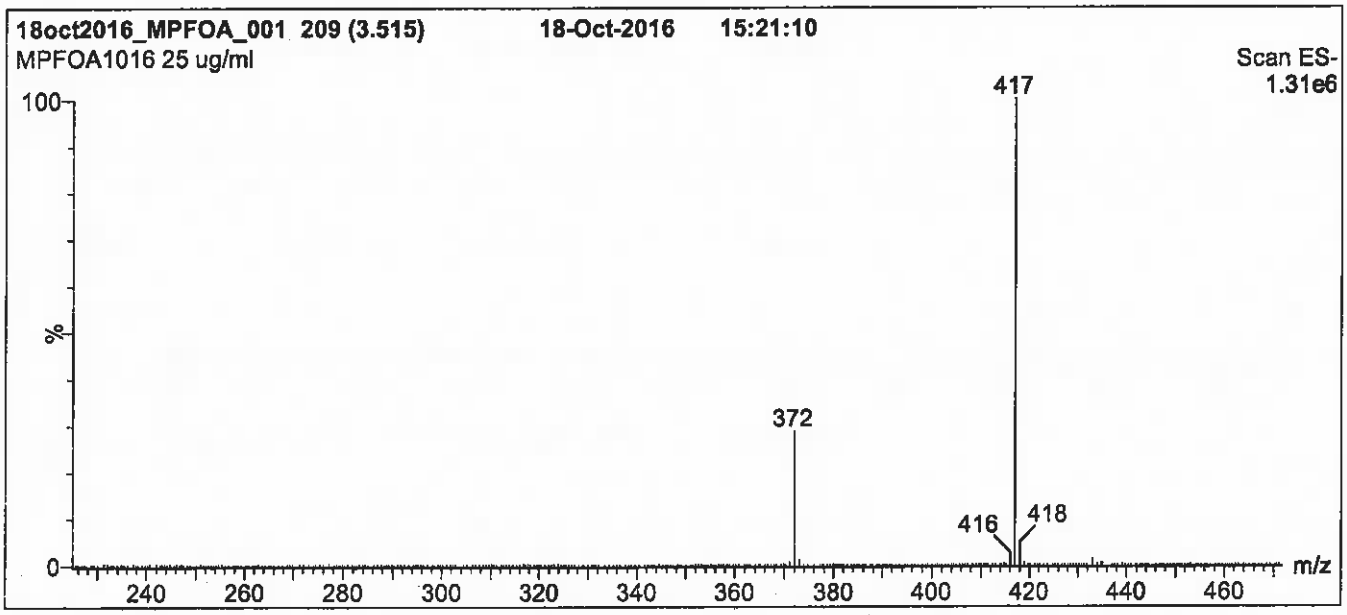
Figure 1: **MPFOA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

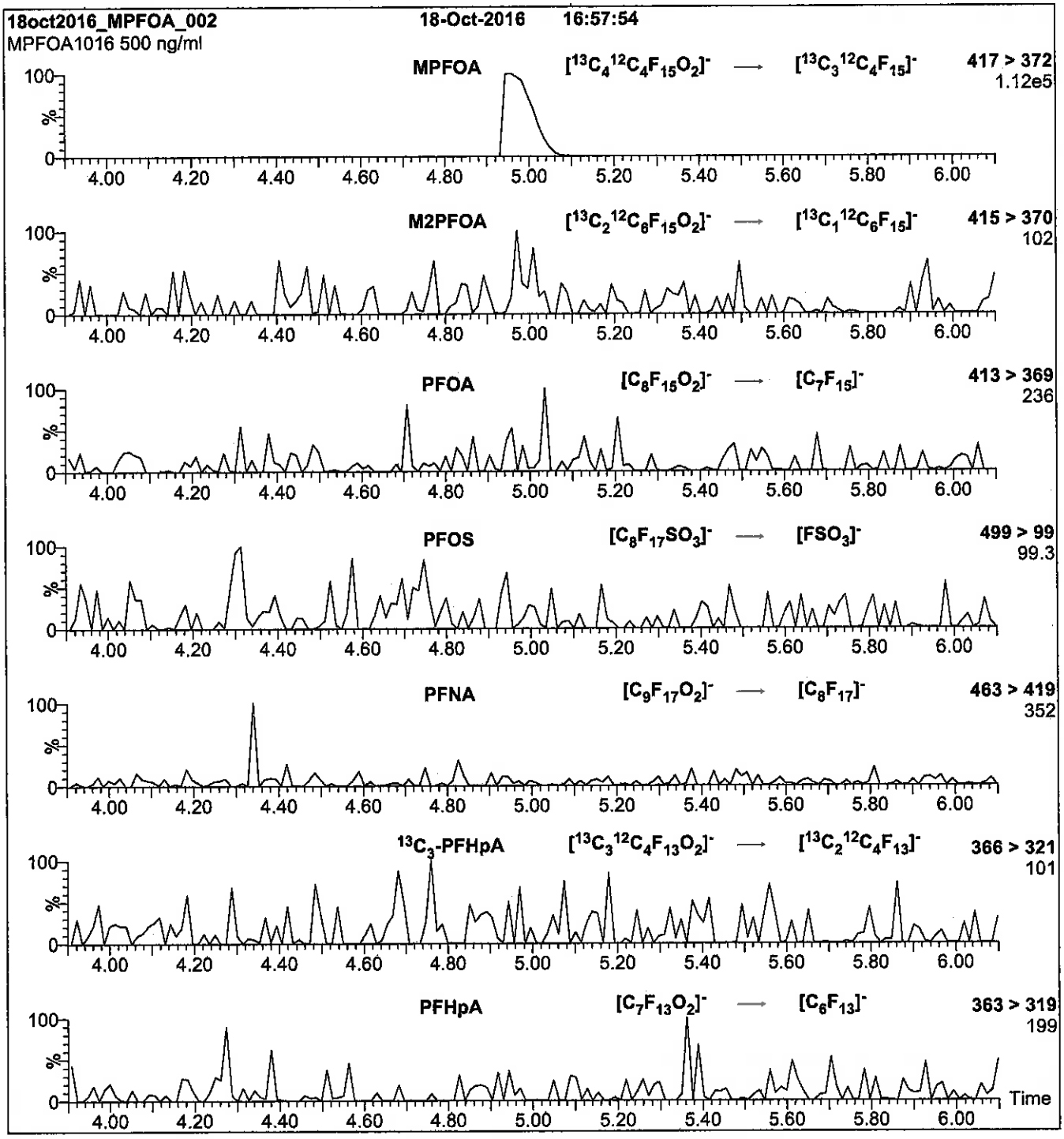
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFOA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 10

Reagent

LCMPFOS_00018

R: SBC 9/22/16

738686
ID: LCMPFOS_00018
Exp: 08/03/21 Ppd: SBC
13C4-Perfluorooctanesulfo

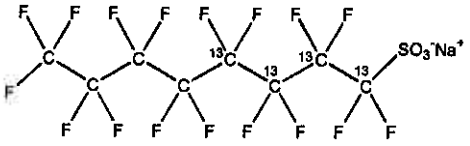
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFOS **LOT NUMBER:** MPFOS0816

COMPOUND: Sodium perfluoro-1-[1,2,3,4-$^{13}C_4$]octanesulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$^{13}C_4{}^{12}C_4F_{17}SO_3Na$	**MOLECULAR WEIGHT:**	526.08
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt) 47.8 ± 2.4 µg/ml (MPFOS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2,3,4\text{-}^{13}C_4$)
LAST TESTED: (mm/dd/yyyy)	08/03/2016		
EXPIRY DATE: (mm/dd/yyyy)	08/03/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.8% Sodium perfluoro-1-[1,2,3-$^{13}C_3$]heptanesulfonate.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 08/05/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Form#:27, Issued 2004-11-10
Revision#:3, Revised 2015-03-24

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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where x is expressed as a relative standard uncertainty of the individual parameter.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA

ANAB ACCREDITED

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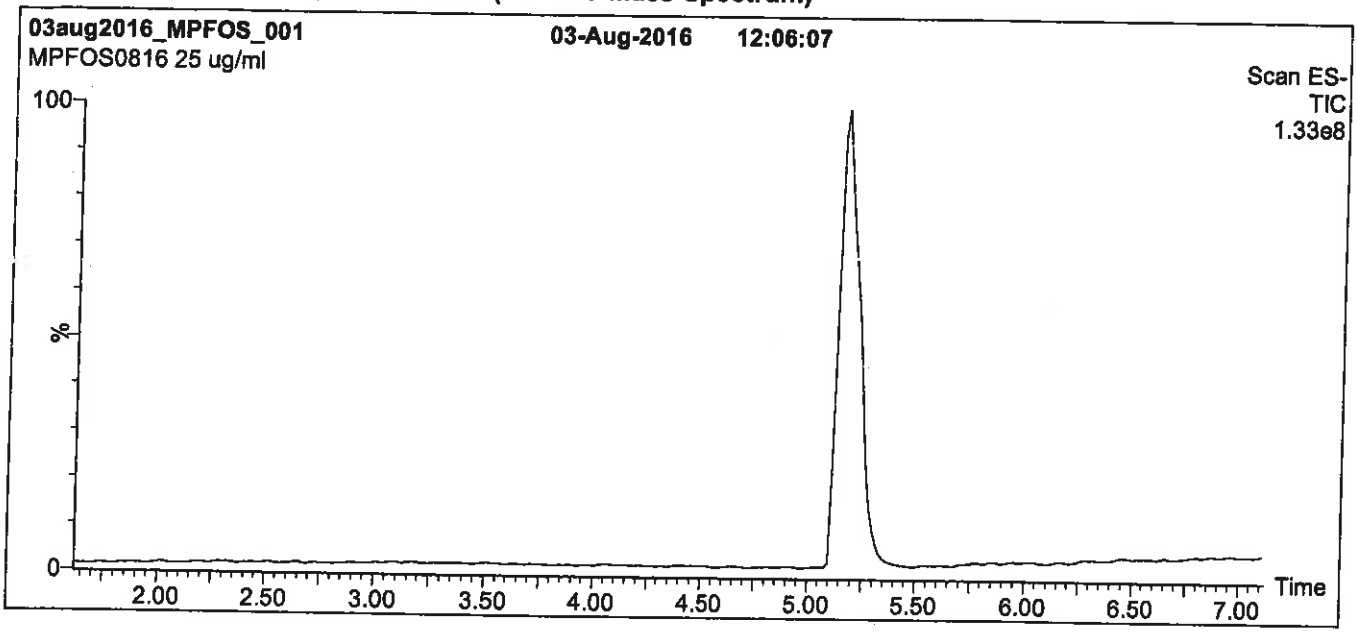
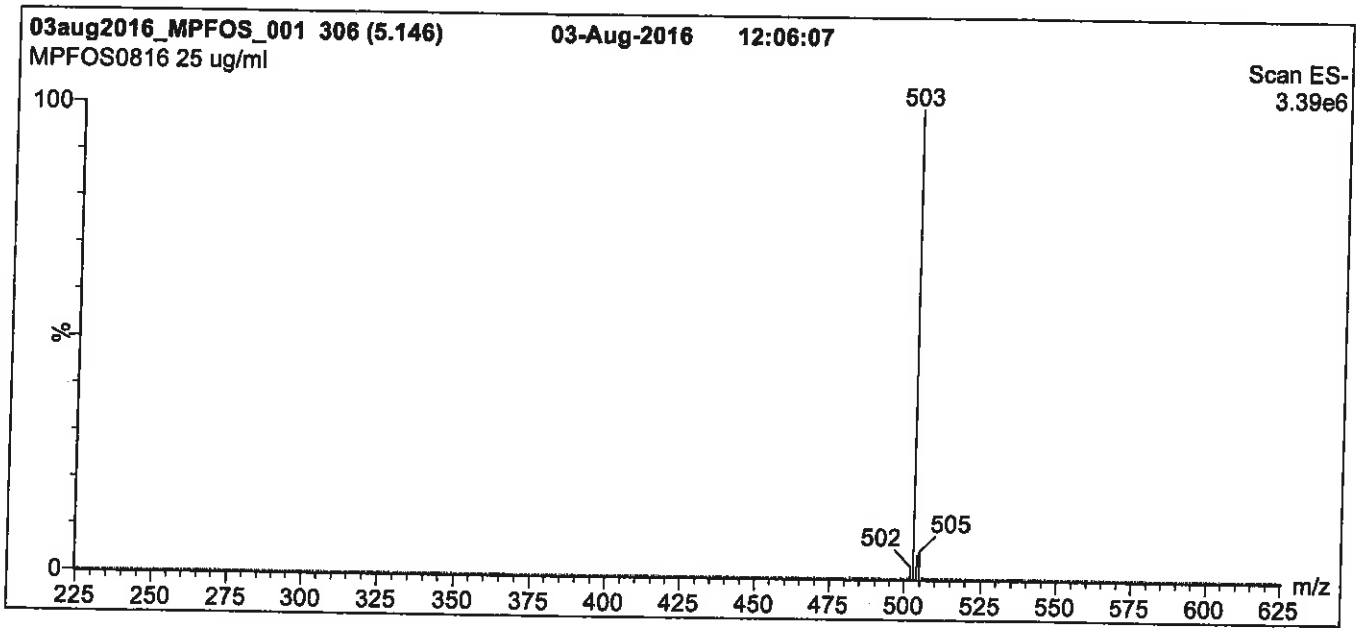
Figure 1: **MPFOS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

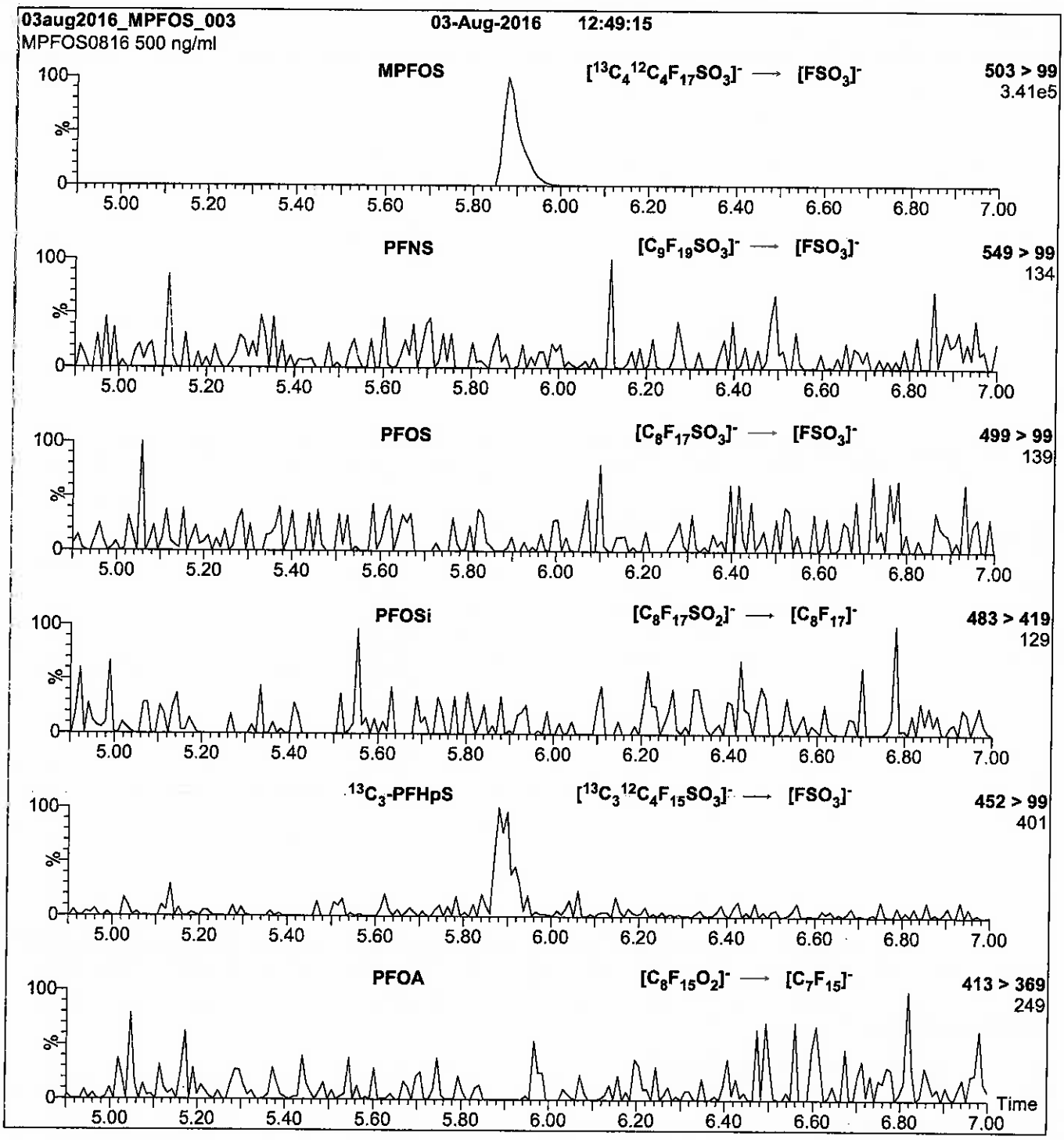
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFOS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFOS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 40

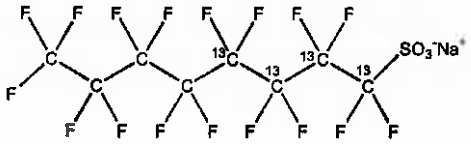
Reagent

LCMPFOS_00020

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	MPFOS	**LOT NUMBER:**	MPFOS1216
COMPOUND:	Sodium perfluoro-1-[1,2,3,4-$^{13}C_4$]octanesulfonate		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$^{13}C_4{}^{12}C_4F_{17}SO_3Na$	**MOLECULAR WEIGHT:**	526.08
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt) 47.8 ± 2.4 µg/ml (MPFOS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2,3,4\text{-}^{13}C_4$)
LAST TESTED: (mm/dd/yyyy)	12/12/2016		
EXPIRY DATE: (mm/dd/yyyy)	12/12/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.8% Sodium perfluoro-1-[1,2,3-$^{13}C_3$]heptanesulfonate.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/14/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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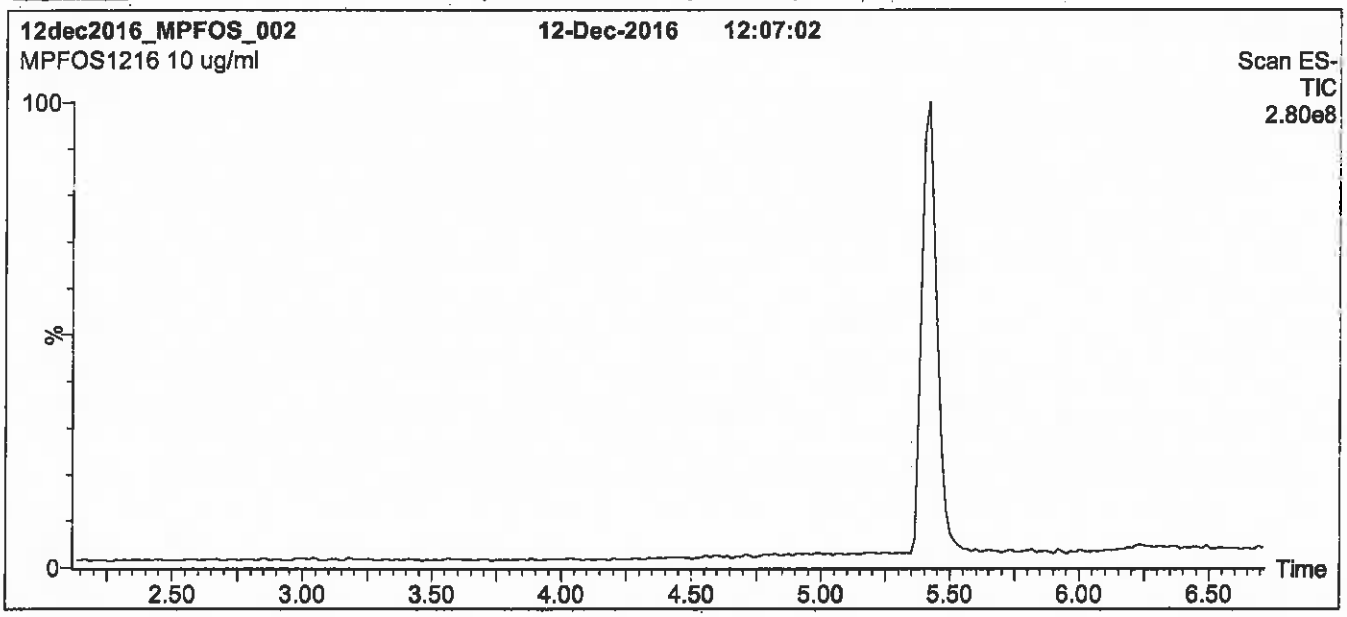
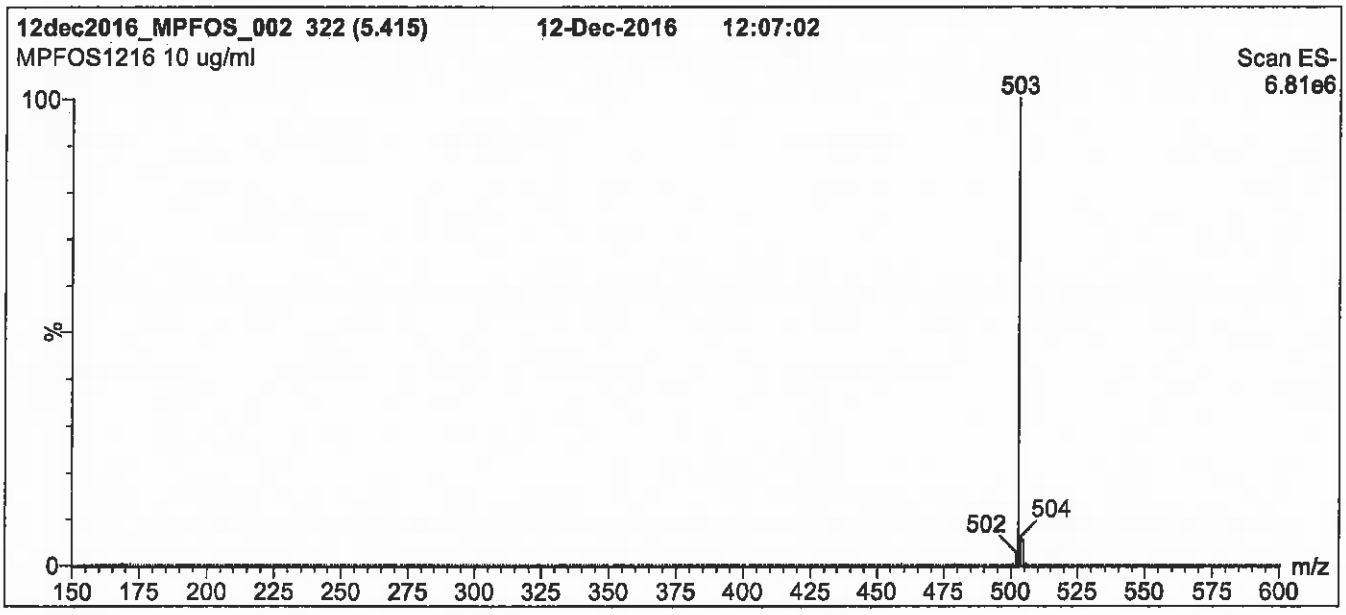




Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 85% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

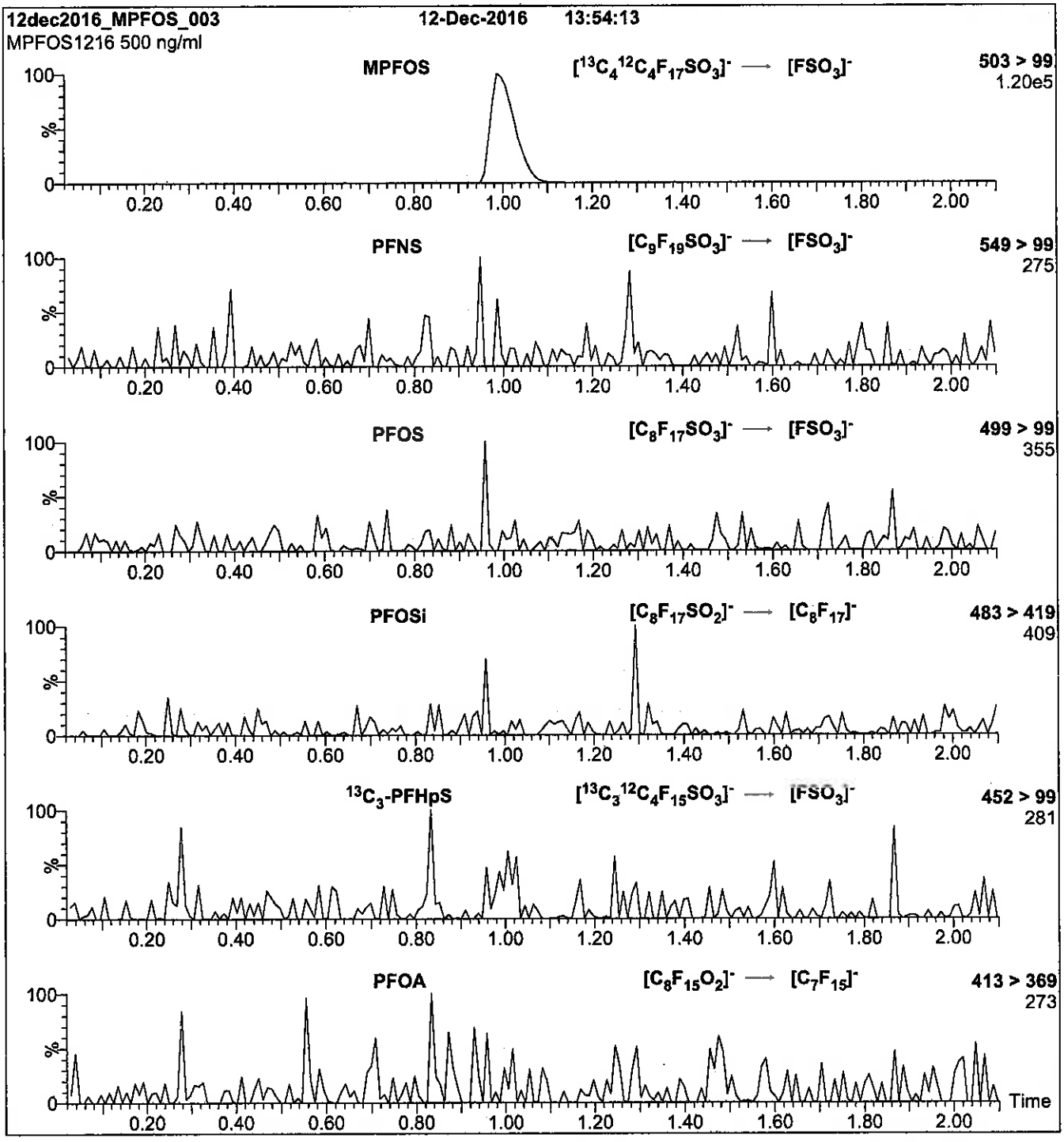
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFOS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml MPFOS)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 40

Reagent

LCMPFUdA_00009

R: SBC 9/22/16

739604
ID: LCMPFUdA_00009
Exp: 02/12/21 Prpd: SBC
13C2-Perfluoroundecanoic

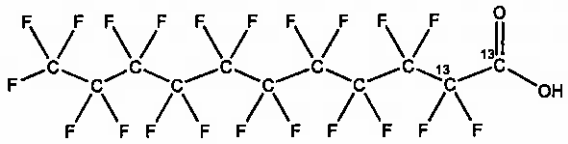
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

Scanned 10/14/16 SBC

PRODUCT CODE: MPFUdA
LOT NUMBER: MPFUdA0216
COMPOUND: Perfluoro-n-[1,2-$^{13}C_2$]undecanoic acid

STRUCTURE:
CAS #: Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_9HF_{21}O_2$	**MOLECULAR WEIGHT:**	566.08
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C (1,2-$^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	02/12/2016		
EXPIRY DATE: (mm/dd/yyyy)	02/12/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Presence of 1-$^{13}C_1$-PFUdA (~1%; see Figure 2), 2-$^{13}C_1$-PFUdA (~1%), and PFUdA (~0.2%; see Figure 2) are due to the isotopic purity of the ^{13}C-precursor.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 02/24/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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HOMOGENEITY:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

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$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

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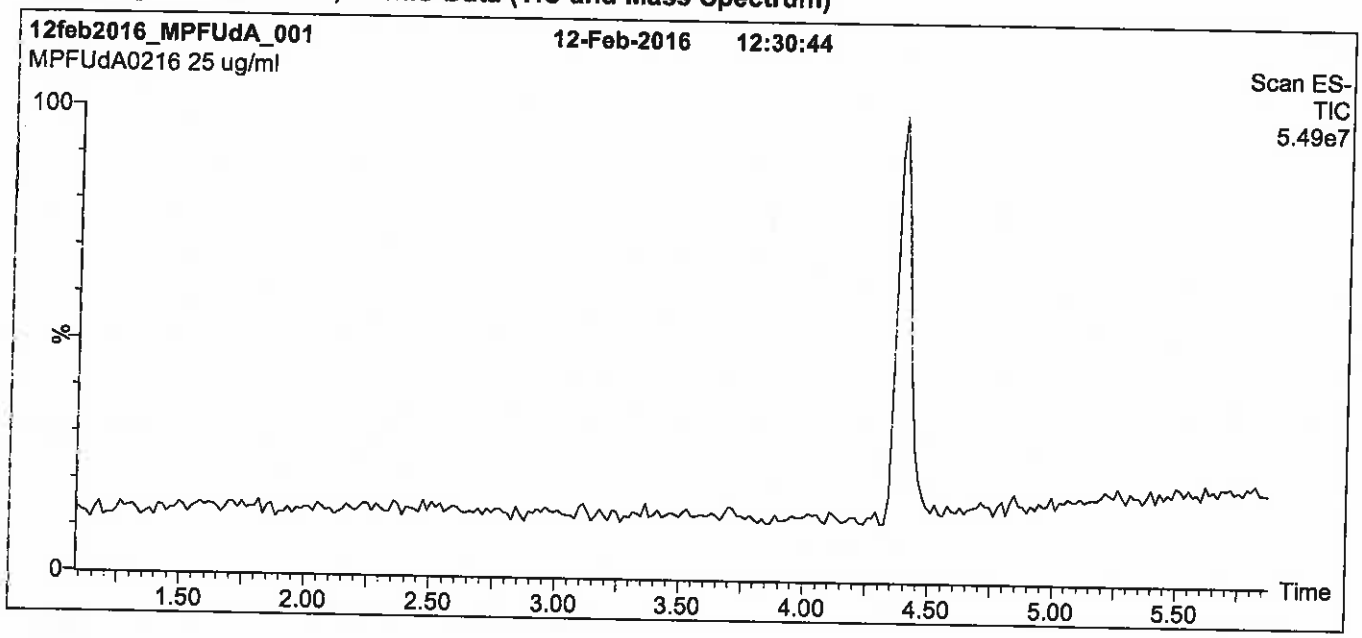
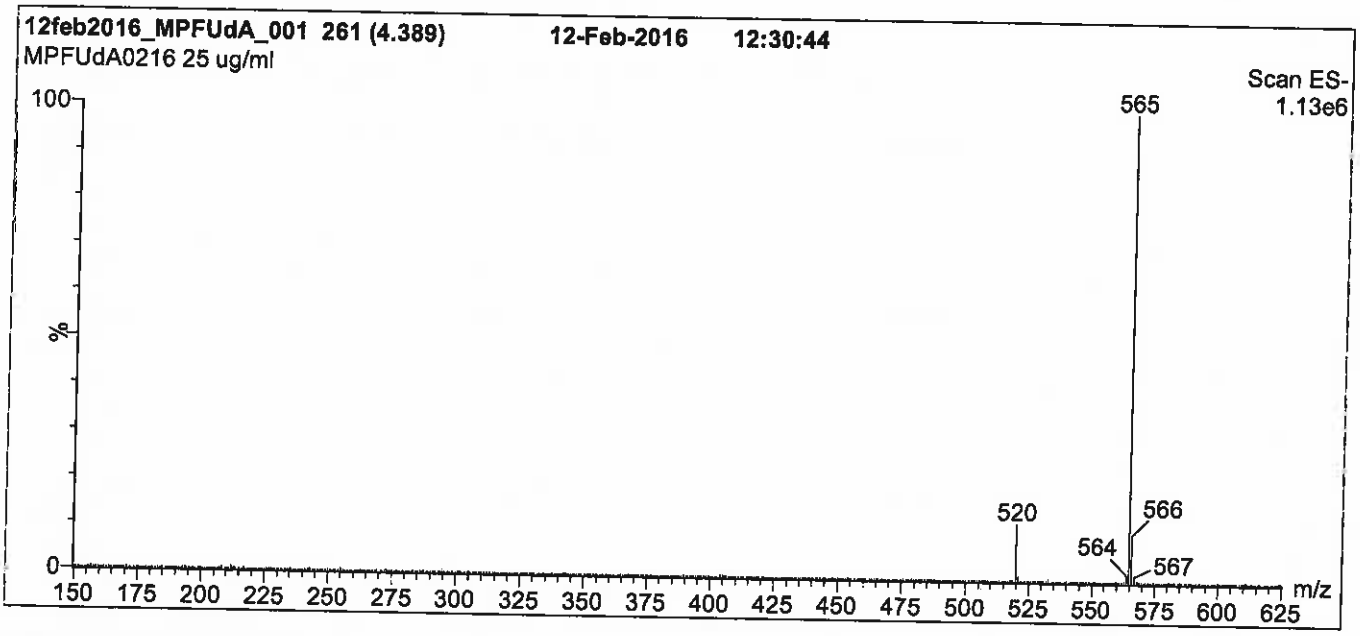
Figure 1: **MPFUdA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

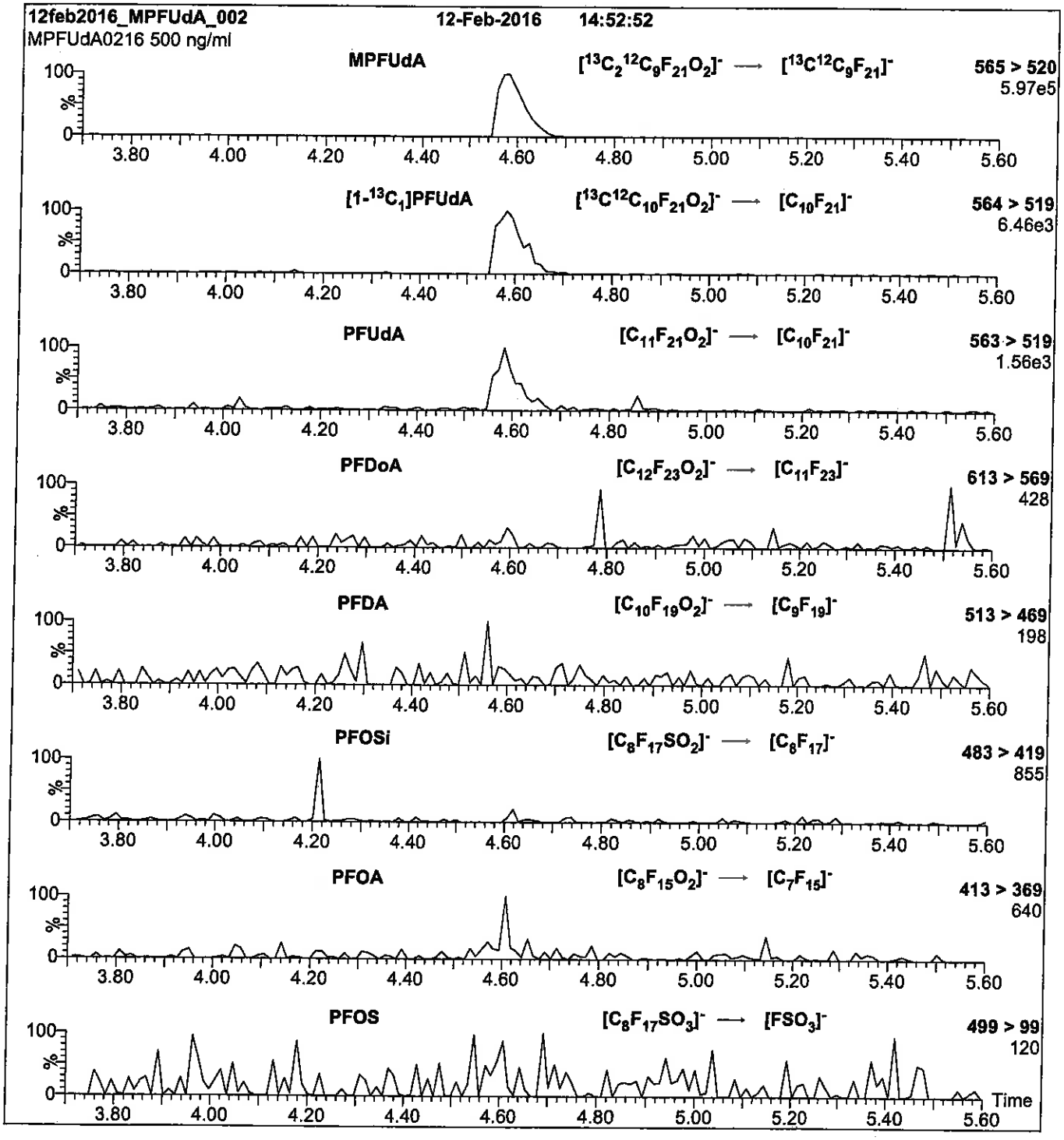
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFUdA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml MPFUdA)

Mobile phase: Isocratic 80% MeOH / 20% H_2O

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 11

Reagent

LCMPFUdA_00010

R:3/9/17 SM

WELLINGTON LABORATORIES

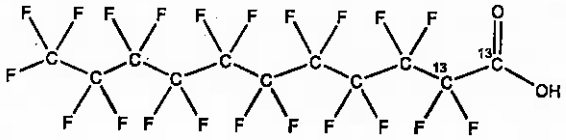
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFUdA
COMPOUND: Perfluoro-n-[1,2-$^{13}C_2$]undecanoic acid

LOT NUMBER: MPFUdA1116

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $^{13}C_2{}^{12}C_9HF_{21}O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 566.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 11/22/2016
EXPIRY DATE: (mm/dd/yyyy) 11/22/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

ISOTOPIC PURITY: ≥99% ^{13}C ($1,2\text{-}^{13}C_2$)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Presence of 1-$^{13}C_1$-PFUdA (~1%; see Figure 2), 2-$^{13}C_1$-PFUdA (~1%), and PFUdA (~0.2%; see Figure 2) are due to the isotopic purity of the ^{13}C-precursor.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/07/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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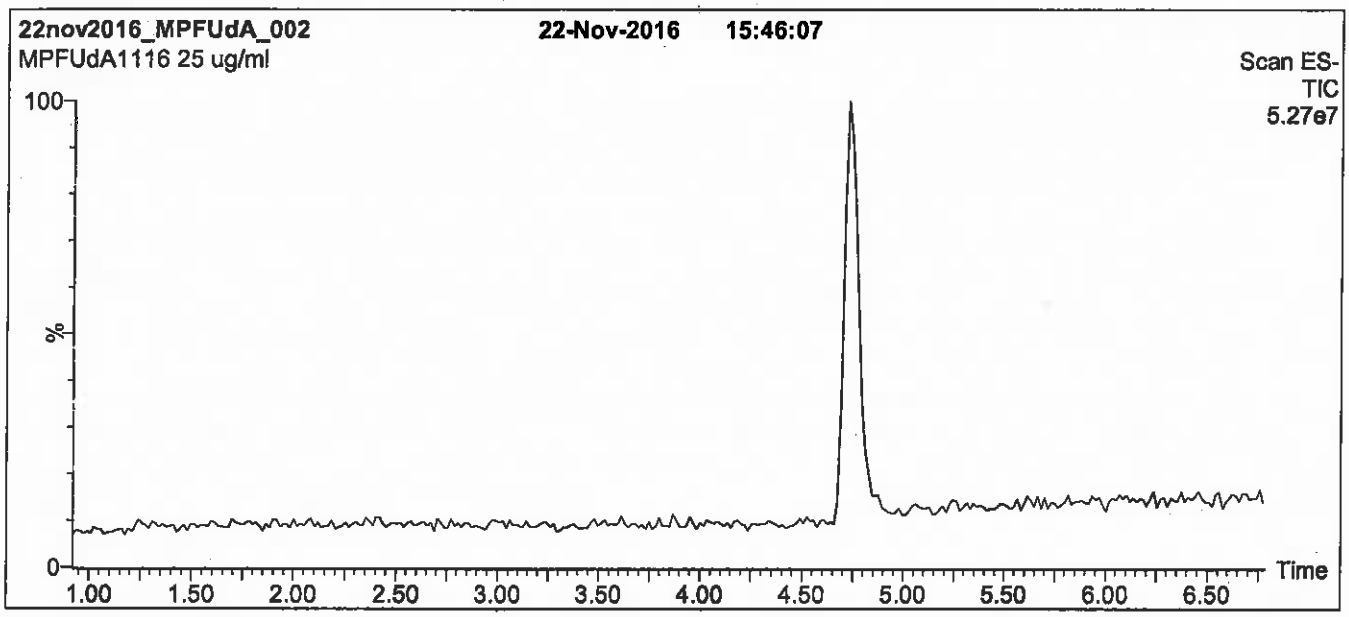
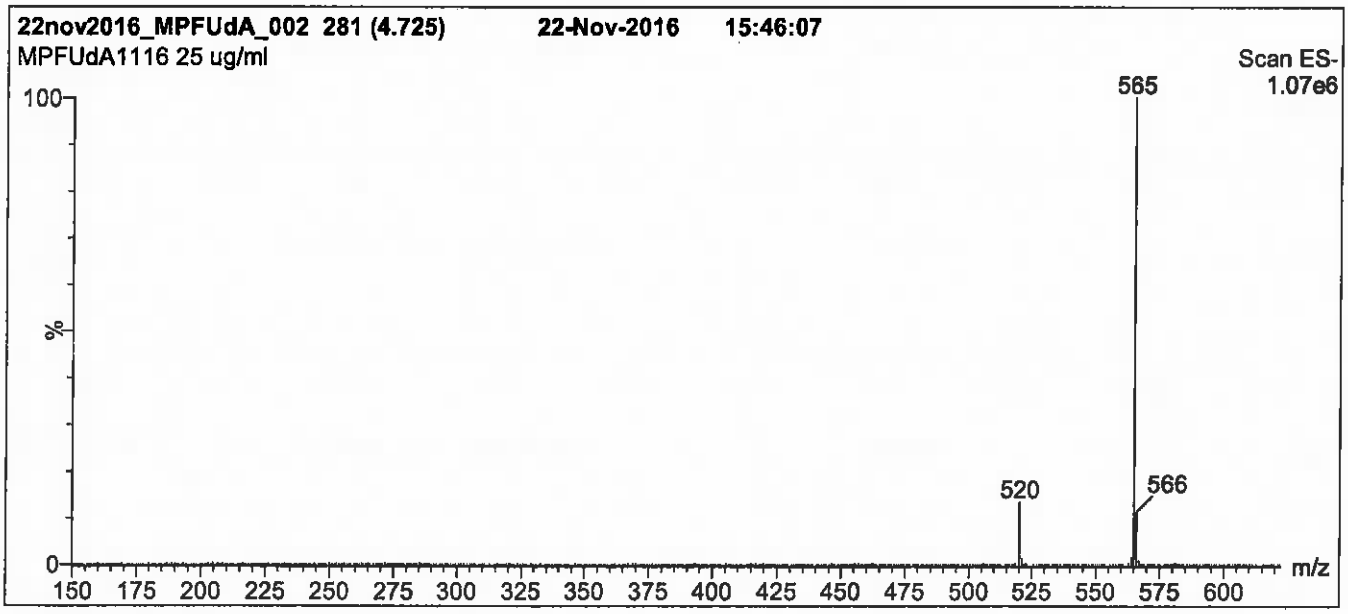




Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

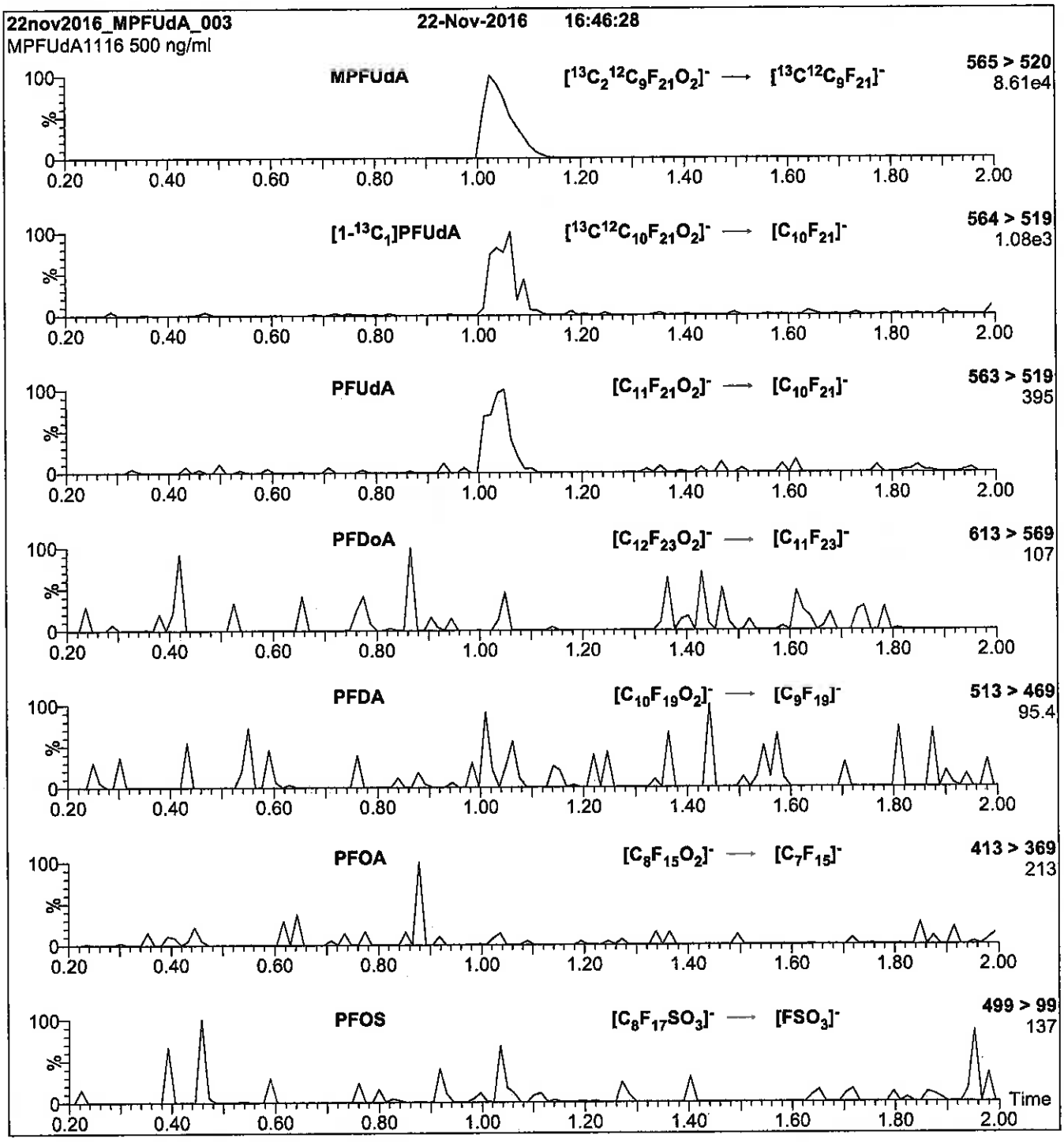
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFUdA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml MPFUdA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 11

Reagent

LCN-EtFOSA-M_00003

R: 8/23/16 SBC

715563
ID: LCN-EtFOSA-M_00003
Exp: 05/24/21 Prpd: SBC
N-EtFOSA-M

WELLINGTON LABORATORIES

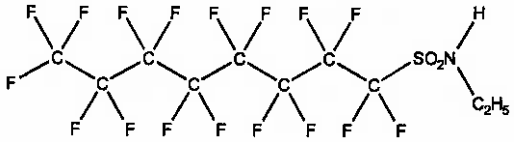
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-EtFOSA-M
COMPOUND: N-ethylperfluoro-1-octanesulfonamide

LOT NUMBER: NEtFOSA0516M

STRUCTURE:

CAS #: 4151-50-2



MOLECULAR FORMULA:	$C_{10}H_8F_{17}NO_2S$	**MOLECULAR WEIGHT:**	527.20
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	05/24/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/24/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 05/27/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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CALA Testing

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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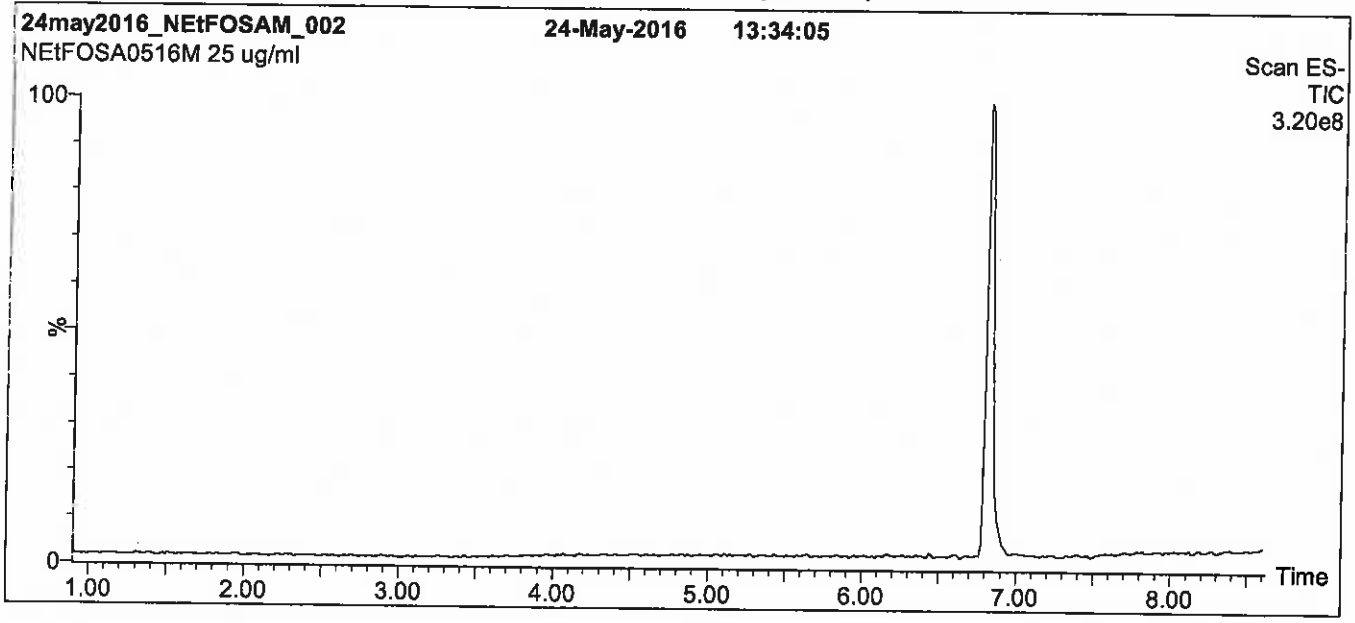
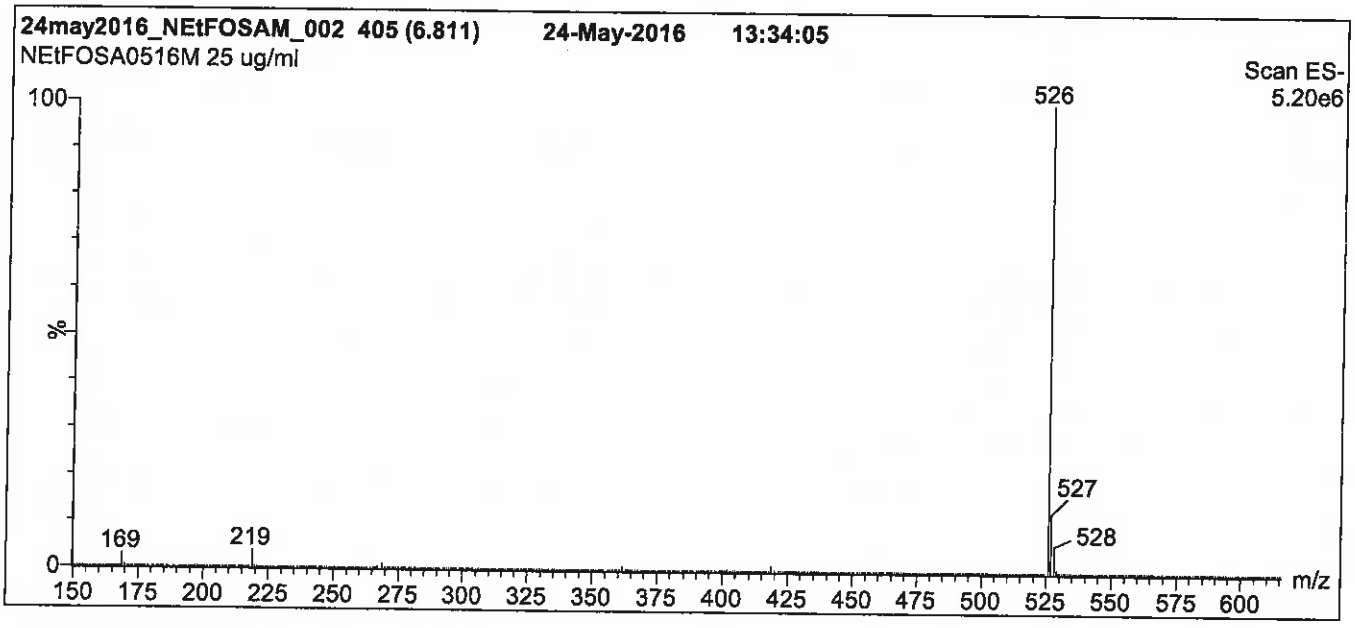
Figure 1: **N-EtFOSA-M; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% H_2O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

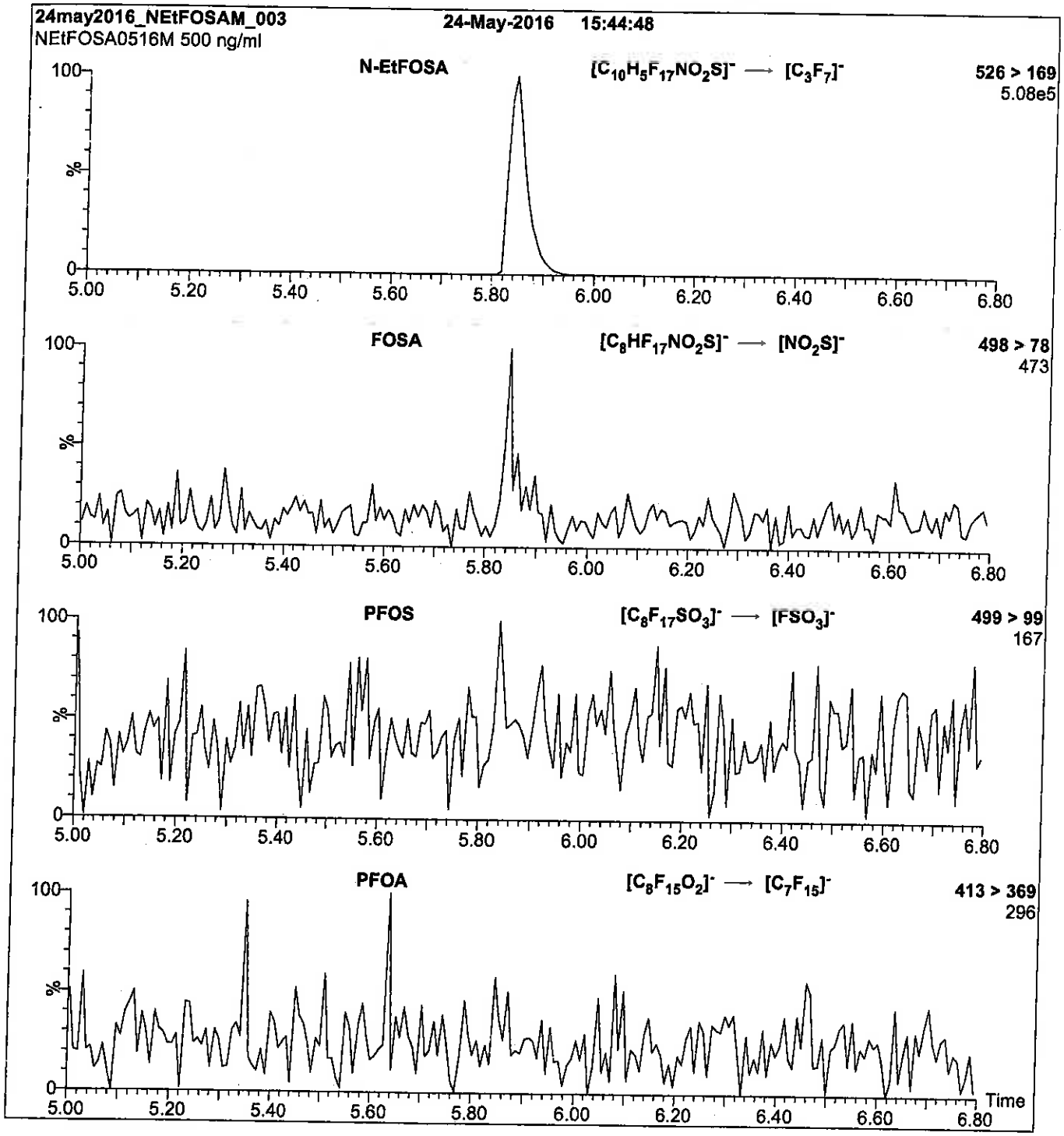
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **N-EtFOSA-M; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml N-EtFOSA-M)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 30

Reagent

LCN-EtFOSAA_00002

R: 8/23/16 SBE

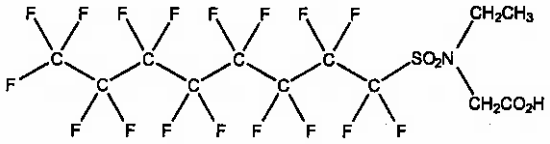
715561
ID: LCN-EtFOSAA_00002
Exp: 01/20/21 Prpd: SBC
N-EtFOSAA

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: N-EtFOSAA **LOT NUMBER:** NEtFOSAA0116
COMPOUND: N-ethylperfluoro-1-octanesulfonamidoacetic acid

STRUCTURE: **CAS #:** 2991-50-6



MOLECULAR FORMULA: $C_{12}H_8F_{17}NO_4S$ **MOLECULAR WEIGHT:** 585.23
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 01/20/2016
EXPIRY DATE: (mm/dd/yyyy) 01/20/2021
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

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Certified By: B.G. Chittim **Date:** 01/21/2016 (mm/dd/yyyy)

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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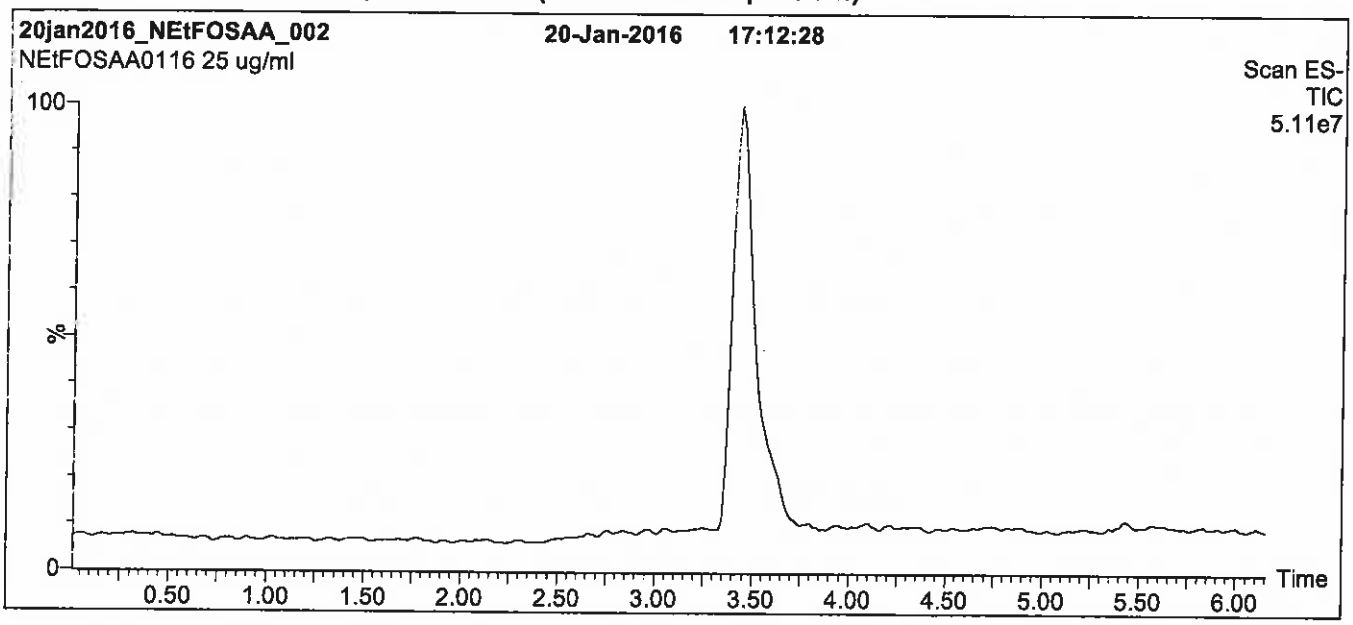
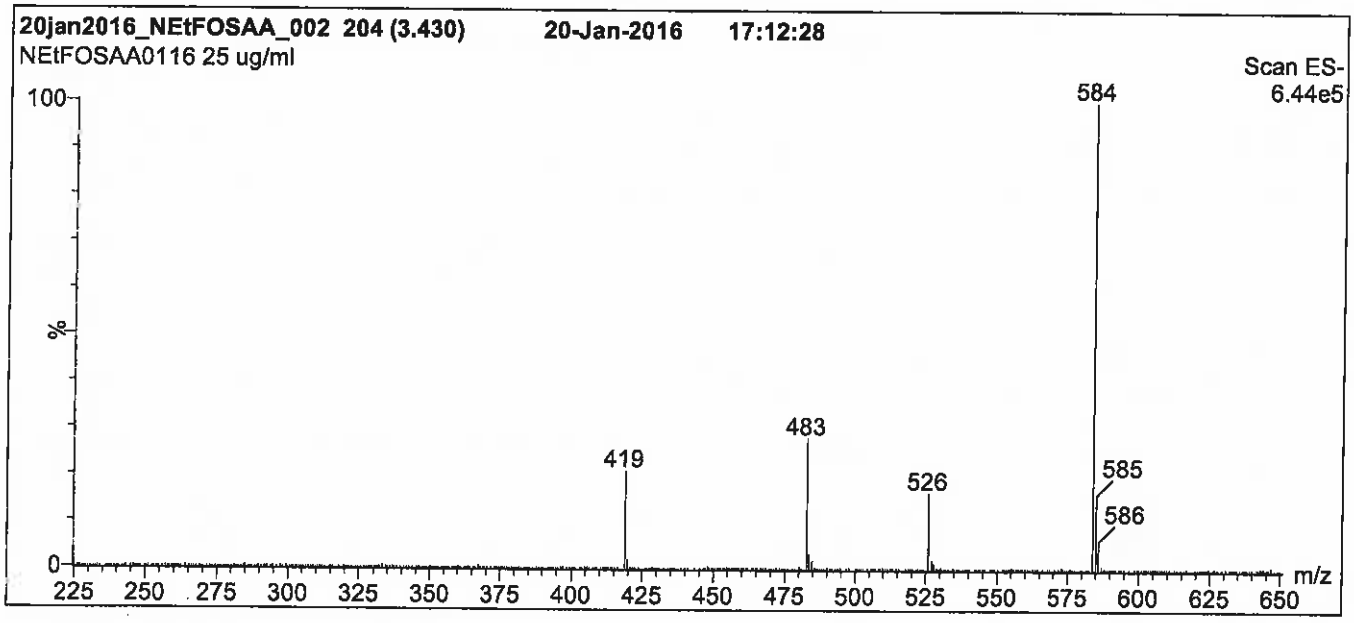
Figure 1: **N-EtFOSAA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

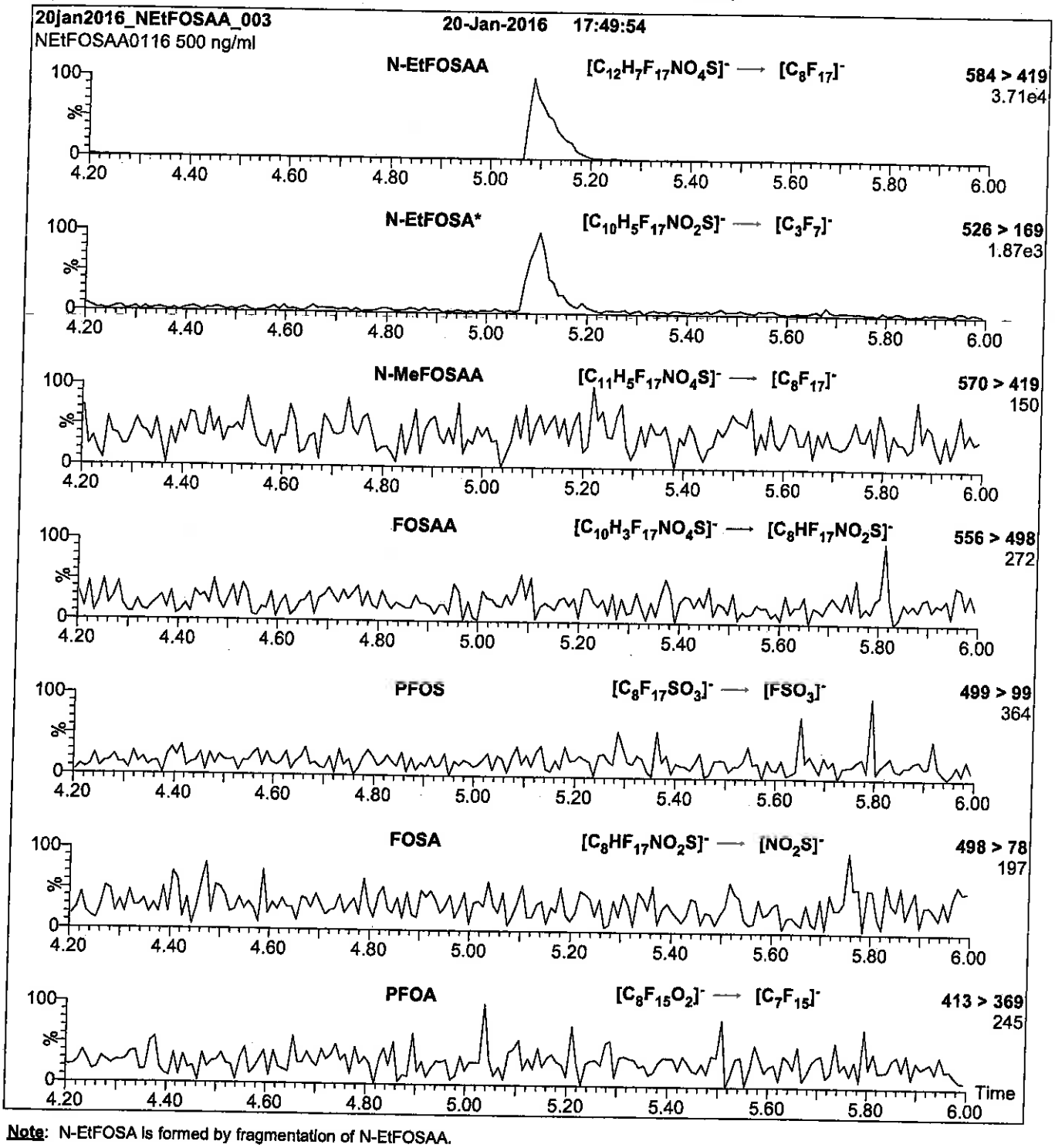
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **N-EtFOSAA; LC/MS/MS Data (Selected MRM Transitions)**



Note: N-EtFOSA is formed by fragmentation of N-EtFOSAA.

Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml N-EtFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.66e-3
Collision Energy (eV) = 25

Reagent

LCN-MeFOSA-M_00002

R: 8/23/16 SBC

715564
ID: LCN-MeFOSA-M_00002
Exp: 05/24/21 Prpd: SBC
N-MeFOSA-M

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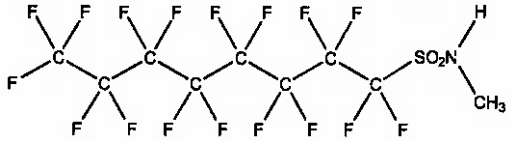
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:	N-MeFOSA-M	**LOT NUMBER:**	NMeFOSA0516M
COMPOUND:	N-methylperfluoro-1-octanesulfonamide		
STRUCTURE:		**CAS #:**	31506-32-8



MOLECULAR FORMULA:	$C_9H_4F_{17}NO_2S$	**MOLECULAR WEIGHT:**	513.17
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	05/24/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/24/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 05/26/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

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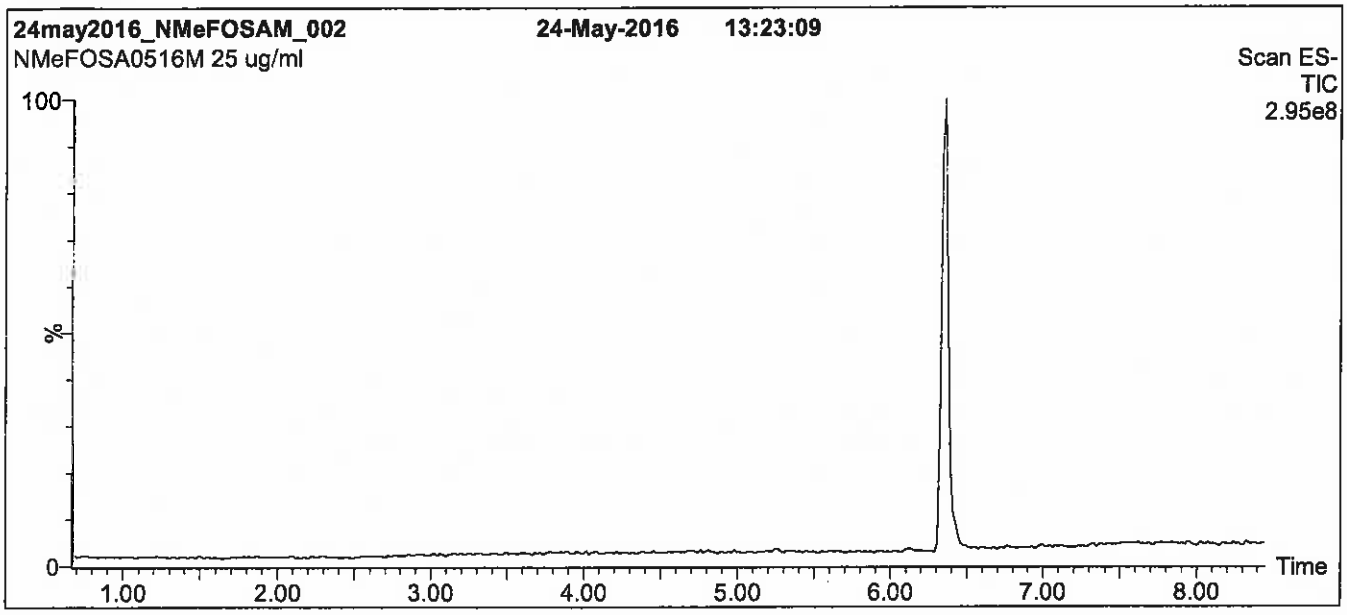
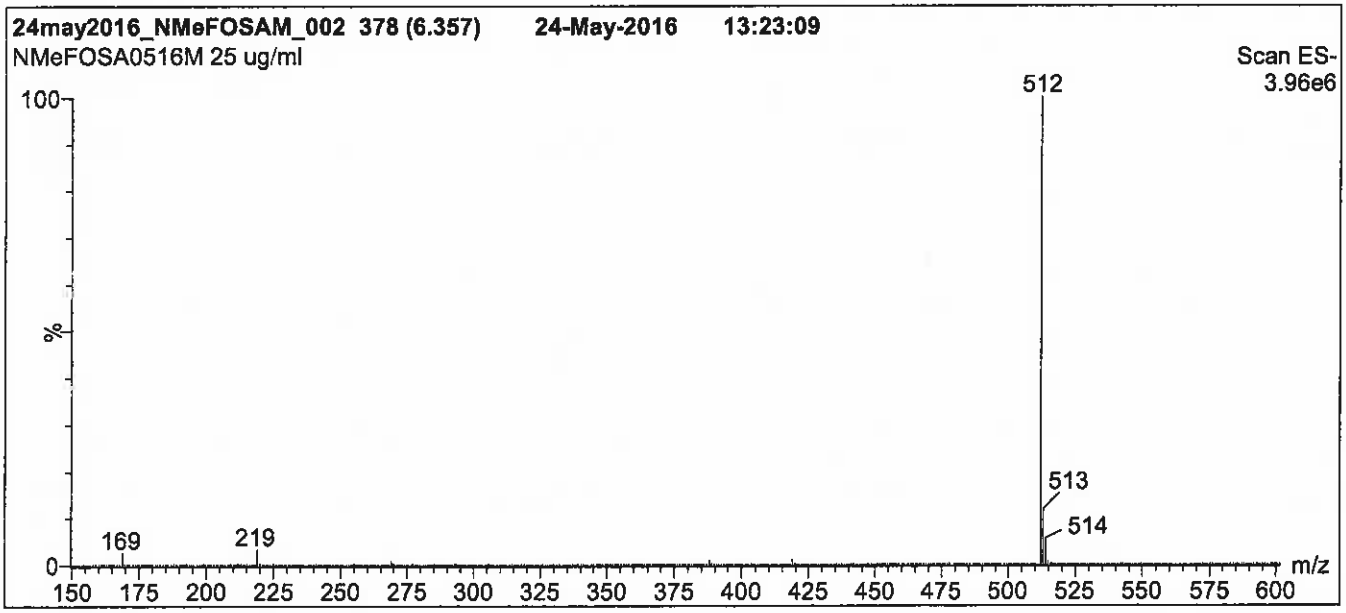
Figure 1: **N-MeFOSA-M; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% H_2O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

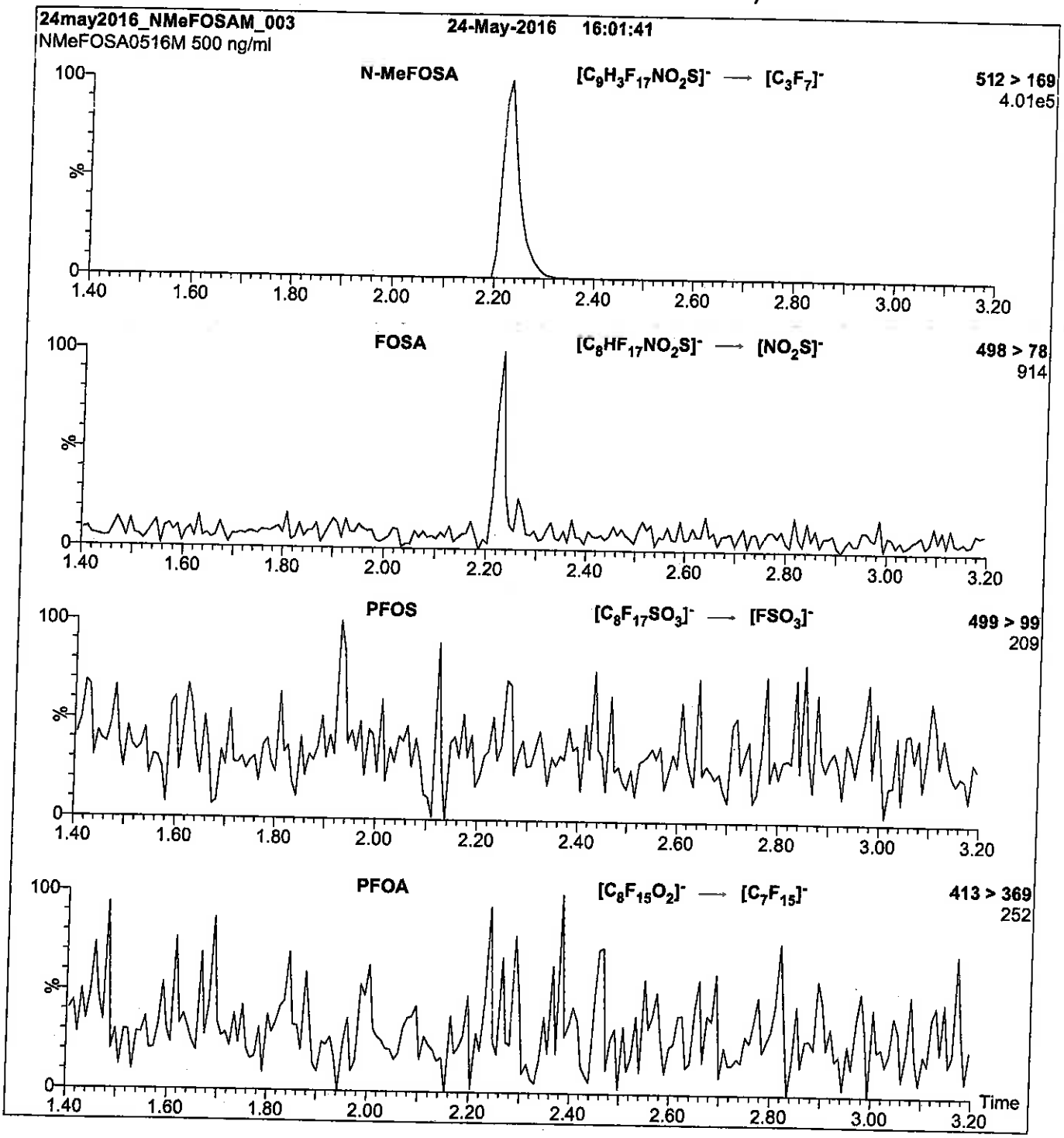
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **N-MeFOSA-M; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml N-MeFOSA-M)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 30

Reagent

LCN-MeFOSAA_00003

R: 8/23/16 SBC

715562
ID: LCN-MeFOSAA_00003
Exp: 01/20/21 Prpd: SBC
N-MeFOSAA

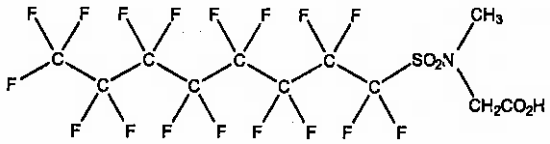
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: N-MeFOSAA **LOT NUMBER:** NMeFOSAA0116

COMPOUND: N-methylperfluoro-1-octanesulfonamidoacetic acid

STRUCTURE: **CAS #:** 2355-31-9



MOLECULAR FORMULA: $C_{11}H_6F_{17}NO_4S$ **MOLECULAR WEIGHT:** 571.21

CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol, Water (<1%)

CHEMICAL PURITY: >98%

LAST TESTED: (mm/dd/yyyy) 01/20/2016

EXPIRY DATE: (mm/dd/yyyy) 01/20/2021

RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 01/21/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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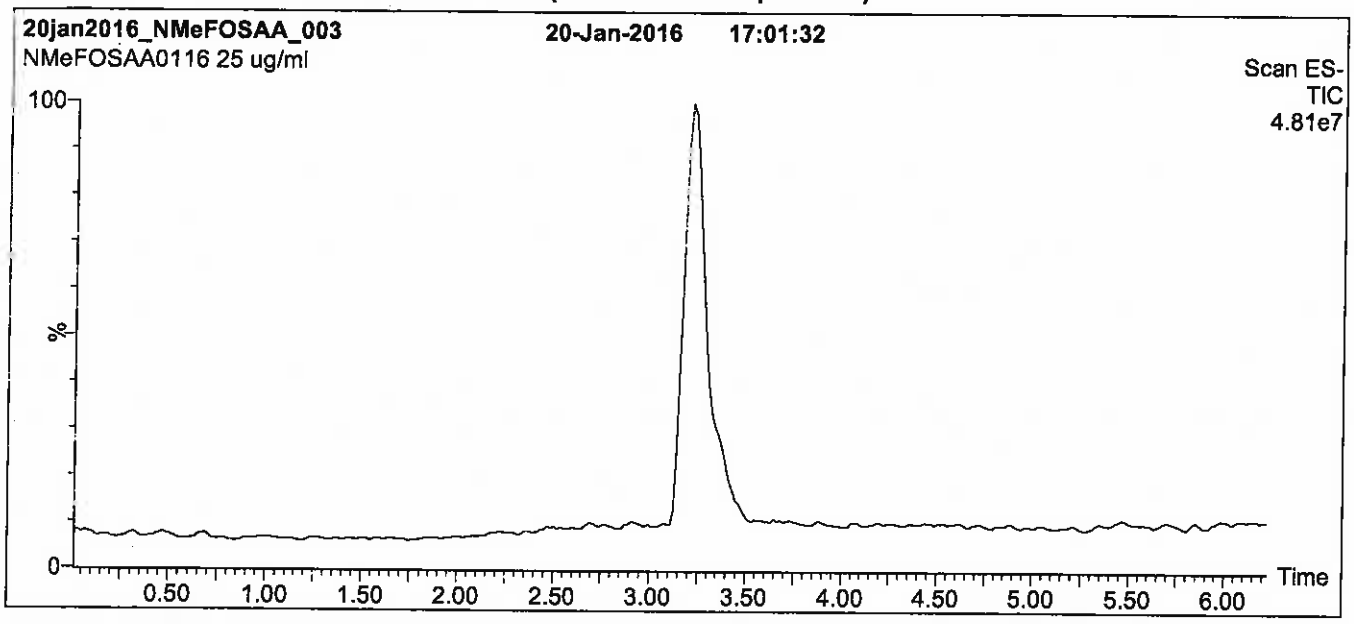
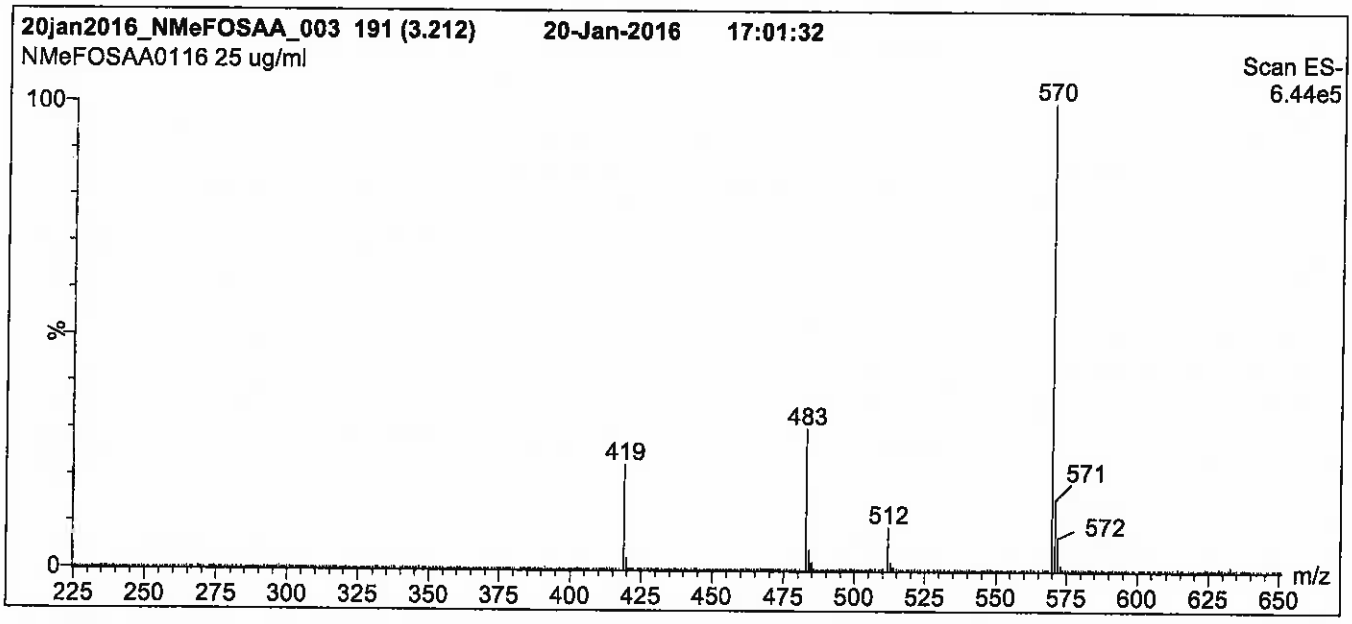
Figure 1: **N-MeFOSAA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

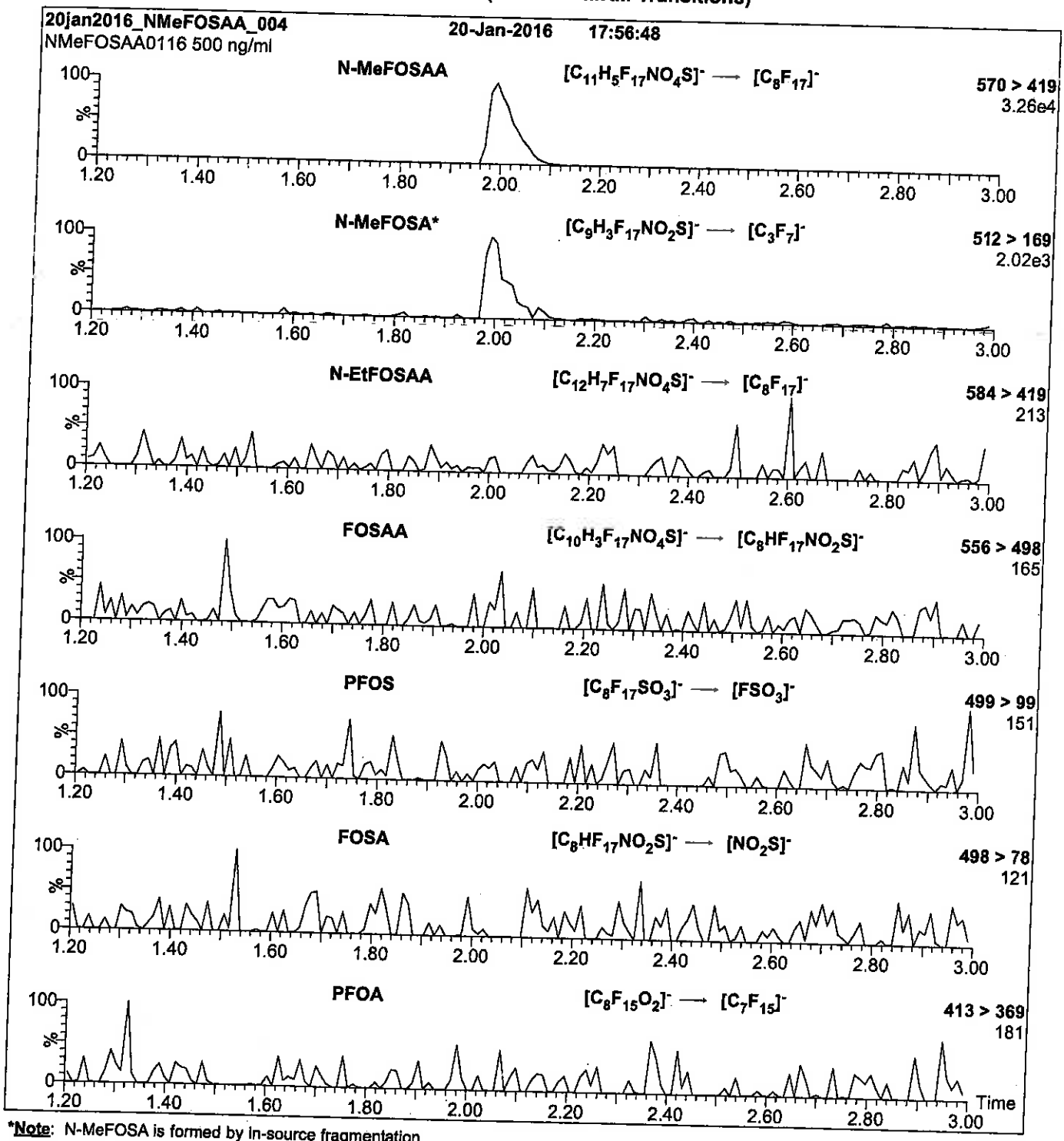
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **N-MeFOSAA; LC/MS/MS Data (Selected MRM Transitions)**



***Note**: N-MeFOSA is formed by in-source fragmentation.

Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml N-MeFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.66e-3
Collision Energy (eV) = 25

Reagent

LCPFACMXB_00007

P: 12/30/15 CW

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PFAC-MXB

Solution/Mixture of Native Perfluoroalkylcarboxylic Acids and Native Perfluoroalkylsulfonates

PRODUCT CODE:	PFAC-MXB
LOT NUMBER:	PFACMXB1115
SOLVENT(S):	Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy)	11/04/2015
LAST TESTED: (mm/dd/yyyy)	11/06/2015
EXPIRY DATE: (mm/dd/yyyy)	11/06/2020
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

PFAC-MXB is a solution/mixture of thirteen native perfluoroalkylcarboxylic acids (C_4-C_{14}, C_{16}, and C_{18}) and four native perfluoroalkylsulfonates (C_4, C_6, C_8 and C_{10}). The full name, abbreviation and concentration for each of the components are given in Table A.

The individual perfluoroalkylcarboxylic acids and perfluoroalkylsulfonates all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

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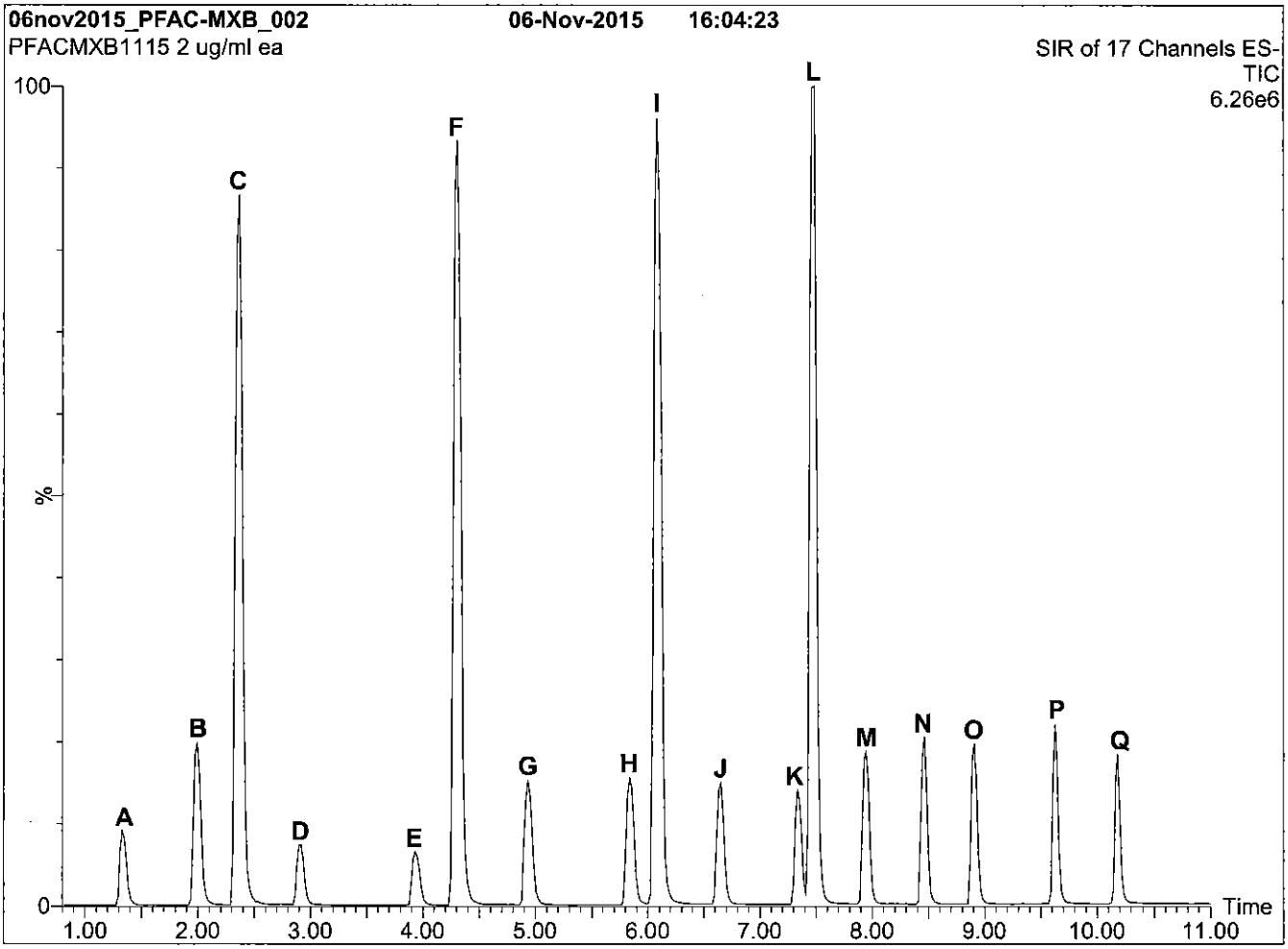
Table A: **PFAC-MXB; Components and Concentrations (ng/ml, ± 5% in Methanol / Water (<1%))**

Name	Abbreviation	Concentration (ng/ml)	Peak Assignment In Figure 1
Perfluoro-n-butanoic acid	PFBA	2000	A
Perfluoro-n-pentanoic acid	PFPeA	2000	B
Perfluoro-n-hexanoic acid	PFHxA	2000	D
Perfluoro-n-heptanoic acid	PFHpA	2000	E
Perfluoro-n-octanoic acid	PFOA	2000	G
Perfluoro-n-nonanoic acid	PFNA	2000	H
Perfluoro-n-decanoic acid	PFDA	2000	J
Perfluoro-n-undecanoic acid	PFUdA	2000	K
Perfluoro-n-dodecanoic acid	PFDoA	2000	M
Perfluoro-n-tridecanoic acid	PFTrDA	2000	N
Perfluoro-n-tetradecanoic acid	PFTeDA	2000	O
Perfluoro-n-hexadecanoic acid	PFHxDA	2000	P
Perfluoro-n-octadecanoic acid	PFODA	2000	Q

Name	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000	1770	C
Sodium perfluoro-1-hexanesulfonate	L-PFHxS	2000	1890	F
Sodium perfluoro-1-octanesulfonate	L-PFOS	2000	1910	I
Sodium perfluoro-1-decanesulfonate	L-PFDS	2000	1930	L

Certified By: B.G. Chittim **Date:** 11/11/2015 (mm/dd/yyyy)

Figure 1: **PFAC-MXB; LC/MS Data (Total Ion Current Chromatogram; SIR)**



Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% H_2O / 45% (80:20 MeOH:ACN)
(both with 10 mM NH_4OAc buffer)
Ramp to 95% organic over 10 min and hold for 1 min
before returning to initial conditions in 0.5 min.

Time: 12 min

Flow: 300 µl/min

MS Parameters

Experiment: SIR of 17 Channels

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = variable (10-70)
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFAC-MXB; LC/MS/MS Data (Selected MRM Transitions)**

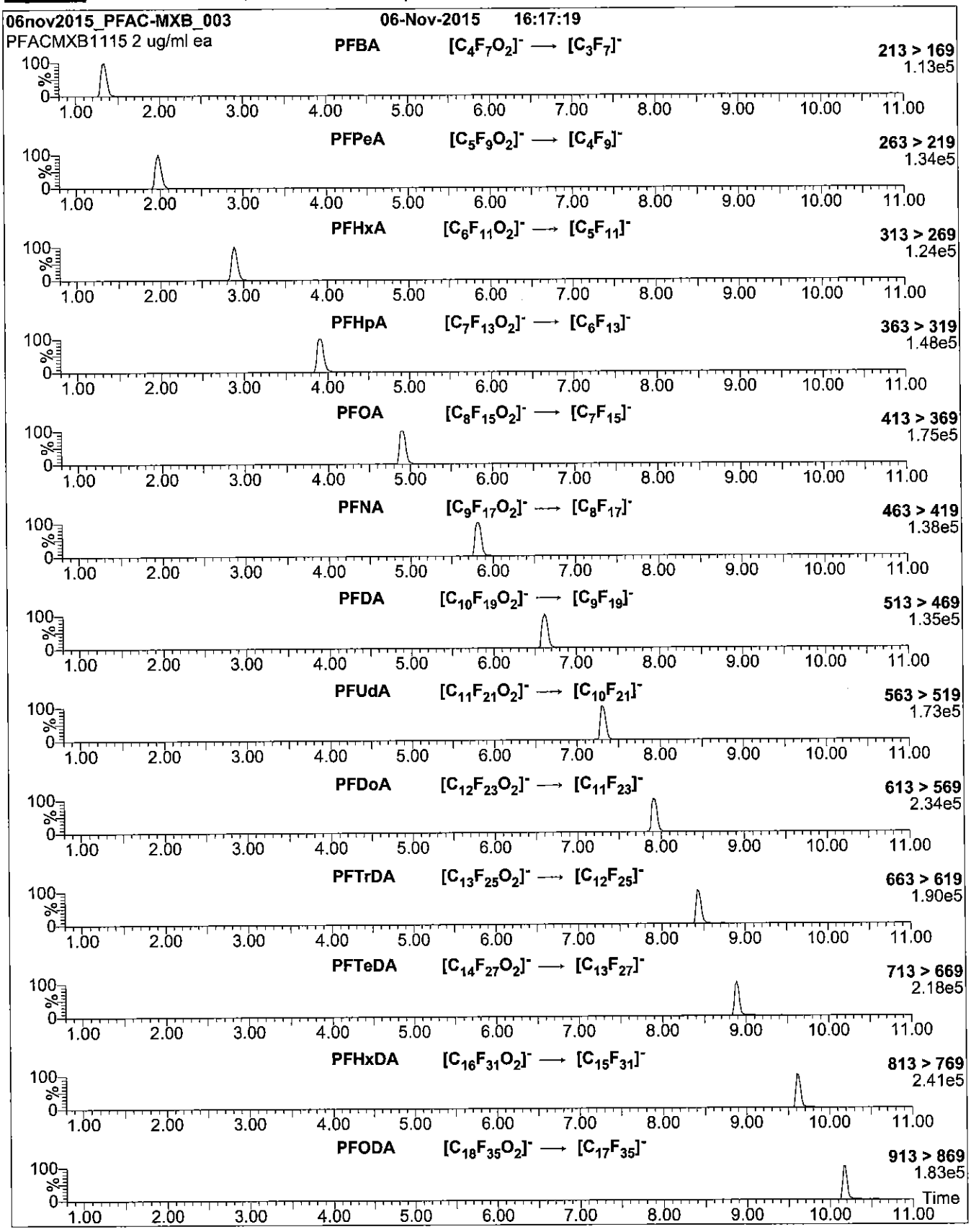
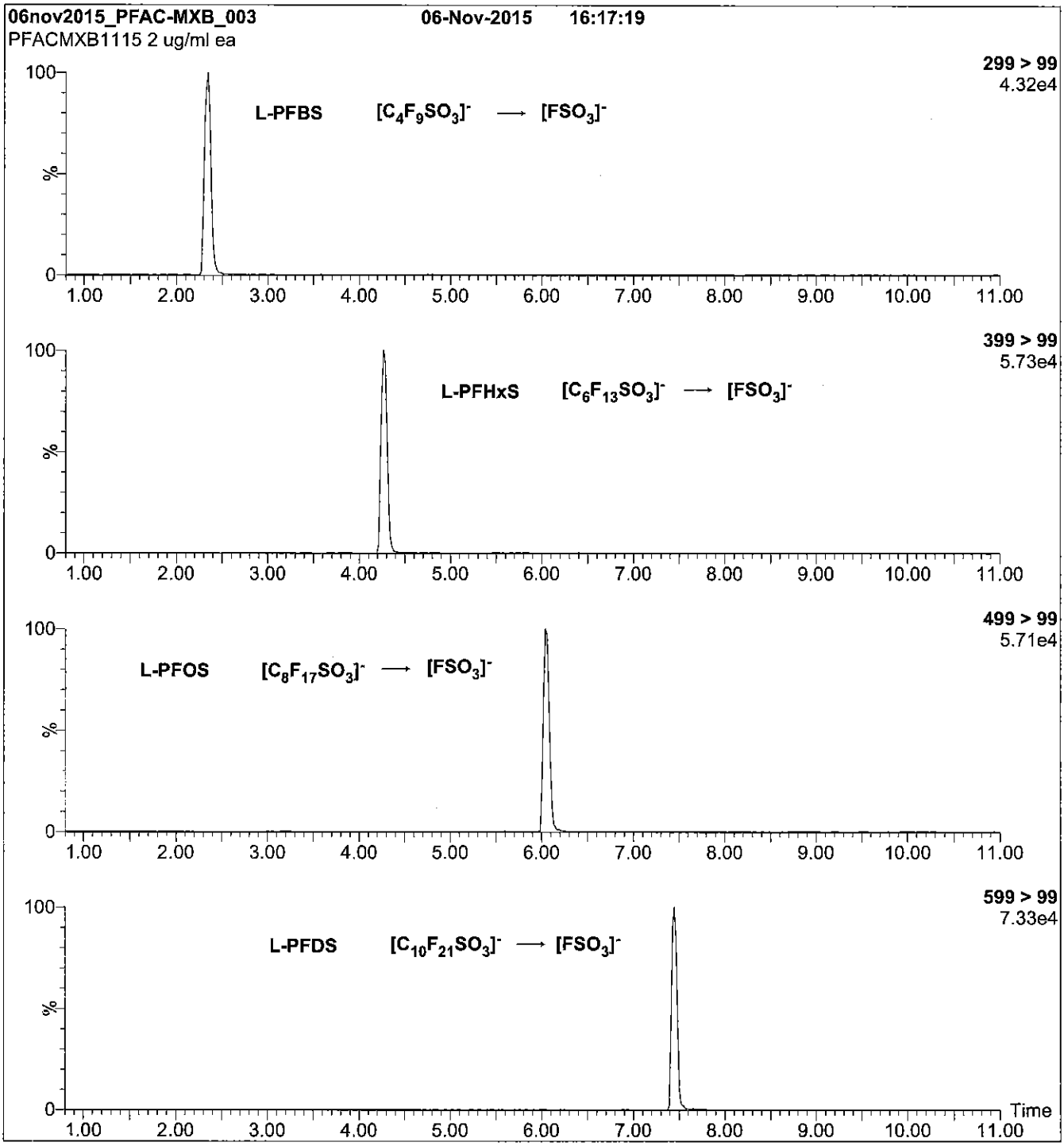


Figure 3: **PFAC-MXB; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figures 2 and 3:

Injection: on-column (PFAC-MXB)

Mobile phase: Same as Figure 1

Flow: 300 µl/min

MS Parameters
Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 8-50 (variable)

Reagent

LCPFBA_00005

Scanned 10/16/14

R: SBC 9/13/16

730531
ID: LCPFBA_00005
Exp: 05/27/21 Prpd: SBC
PF-n-butanoic acid

730532
ID: LCPFBA_00006
Exp: 05/27/21 Prpd: SBC
PF-n-butanoic acid

WELLINGTON LABORATORIES

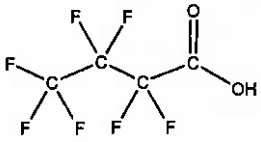
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFBA
COMPOUND: Perfluoro-n-butanoic acid

LOT NUMBER: PFBA0516

STRUCTURE:

CAS #: 375-22-4



MOLECULAR FORMULA: $C_4HF_7O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 214.04
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 05/27/2016
EXPIRY DATE: (mm/dd/yyyy) 05/27/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 05/31/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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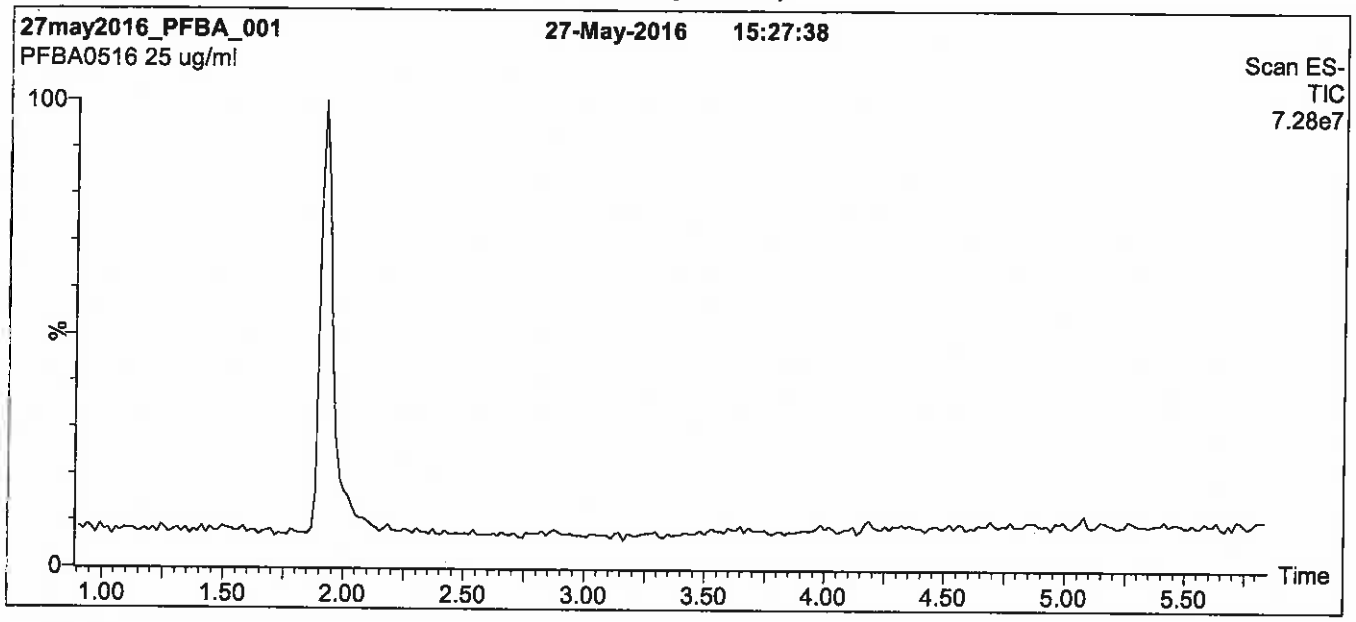
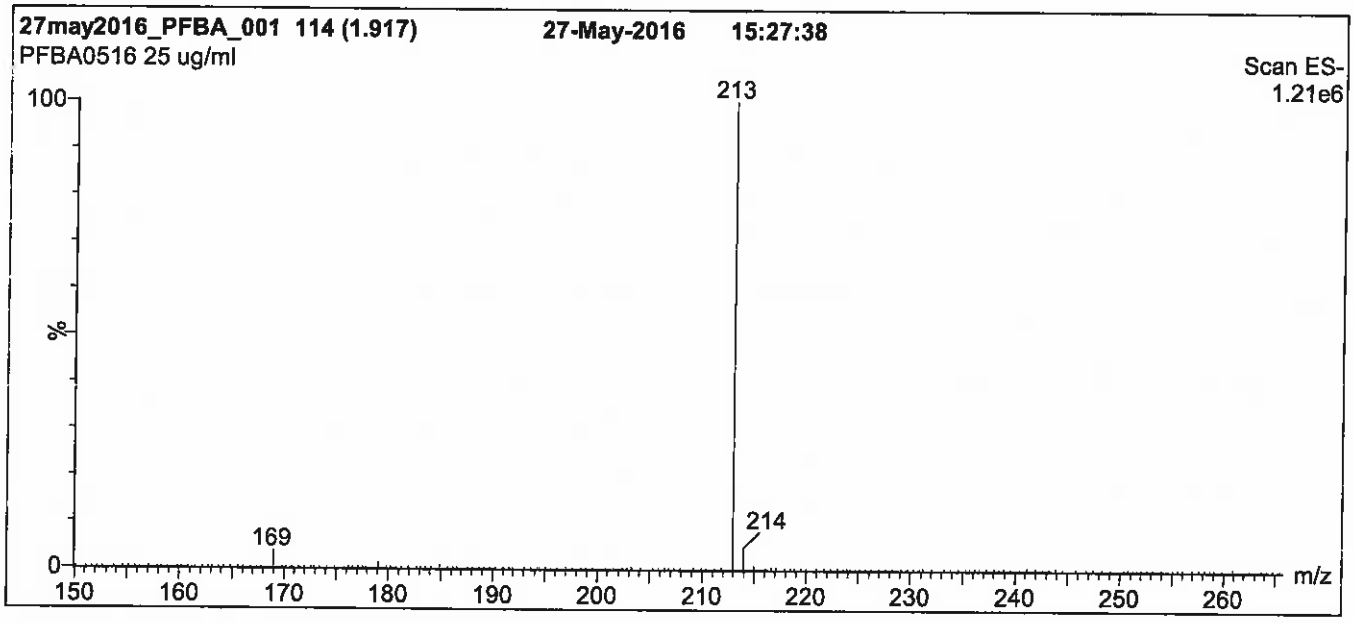




Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

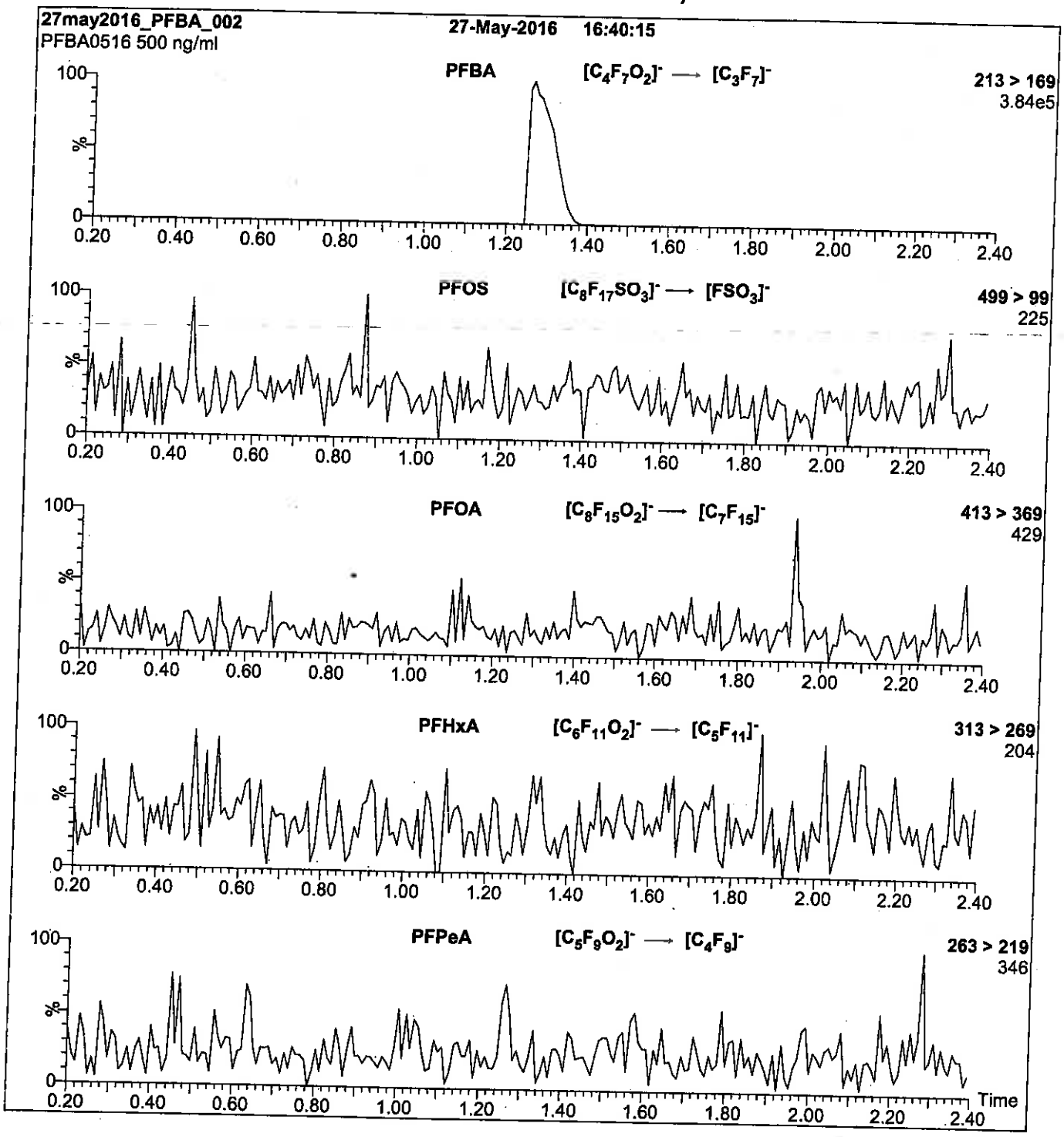
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 10.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFBA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.62e-3
Collision Energy (eV) = 10

Reagent

LCPFBA_00006

Scanned 10/16/14

R: SBC 9/13/16

730531
ID: LCPFBA_00005
Exp: 05/27/21 Prpd: SBC
PF-n-butanoic acid

730532
ID: LCPFBA_00006
Exp: 05/27/21 Prpd: SBC
PF-n-butanoic acid

WELLINGTON LABORATORIES

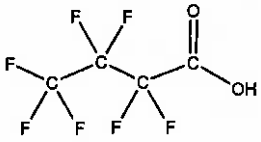
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFBA
COMPOUND: Perfluoro-n-butanoic acid

LOT NUMBER: PFBA0516

STRUCTURE:

CAS #: 375-22-4



MOLECULAR FORMULA: $C_4HF_7O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 214.04
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 05/27/2016
EXPIRY DATE: (mm/dd/yyyy) 05/27/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

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Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

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Certified By: B.G. Chittim **Date:** 05/31/2016 (mm/dd/yyyy)

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519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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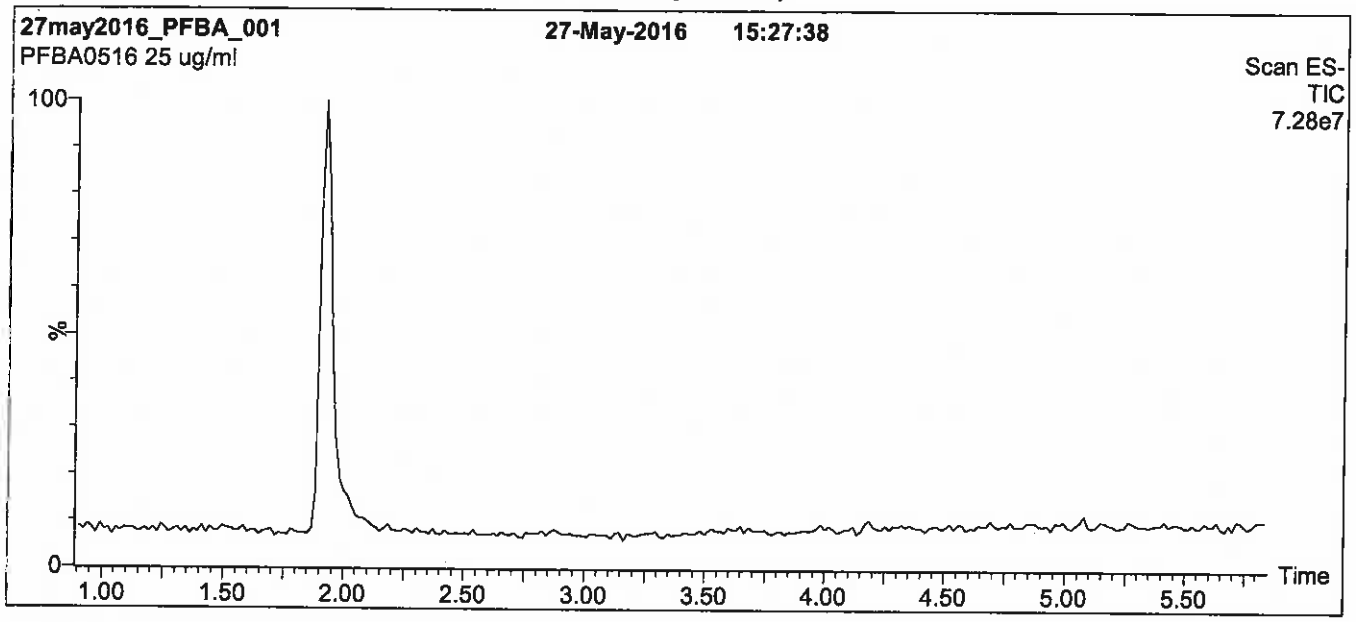
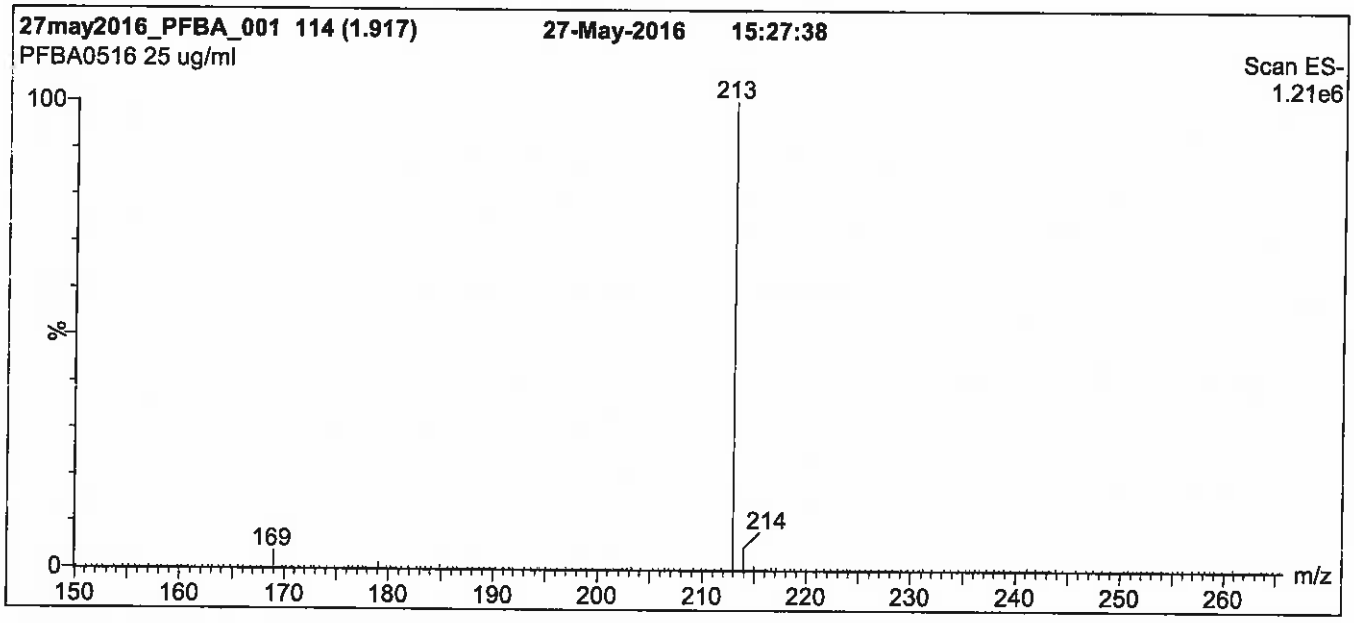
Figure 1: **PFBA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

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MS: **Micromass Quattro *micro* API MS**

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1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

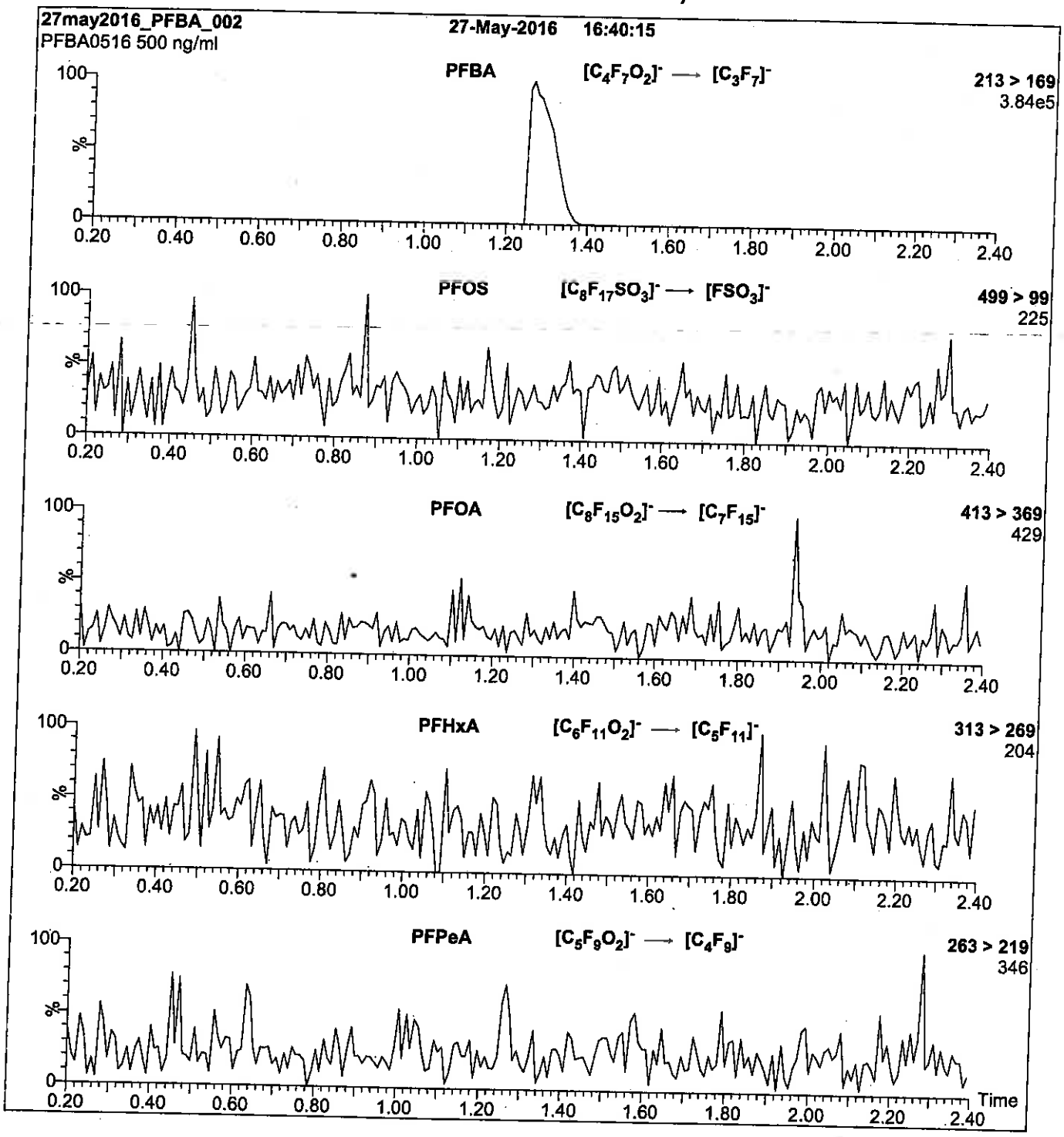
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 10.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFBA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.62e-3
Collision Energy (eV) = 10

Reagent

LCPFBS_00005

R: 9/9/16 SBC

728306
ID: LCM2-8:2FTS_00003
Exp: 01/08/21 Prpd: SBC
M2-8:2FTS

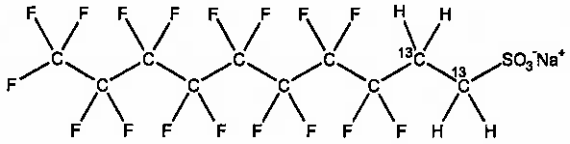
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: M2-8:2FTS **LOT NUMBER:** M282FTS0116

COMPOUND: Sodium 1H,1H,2H,2H-perfluoro-[1,2-$^{13}C_2$]decane sulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA:	$^{13}C_2{}^{12}C_8H_4F_{17}SO_3Na$	**MOLECULAR WEIGHT:**	552.15
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt)	**SOLVENT(S):**	Methanol
	47.9 ± 2.4 µg/ml (M2-8:2FTS anion)		
CHEMICAL PURITY:	>98%	**ISOTOPIC PURITY:**	≥99% ^{13}C ($1,2\text{-}^{13}C_2$)
LAST TESTED: (mm/dd/yyyy)	01/08/2016		
EXPIRY DATE: (mm/dd/yyyy)	01/08/2021		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The native 8:2FTS contains 4.22% of ^{34}S (due to natural isotopic abundance) therefore both native 8:2FTS and M2-8:2FTS will produce signals in the m/z 529 to m/z 509 channel during SRM analysis. We recommend using the m/z 529 to m/z 81 transition to monitor for M2-8:2FTS during quantitative analysis as it will be free of any native contribution (see Figure 2).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 01/18/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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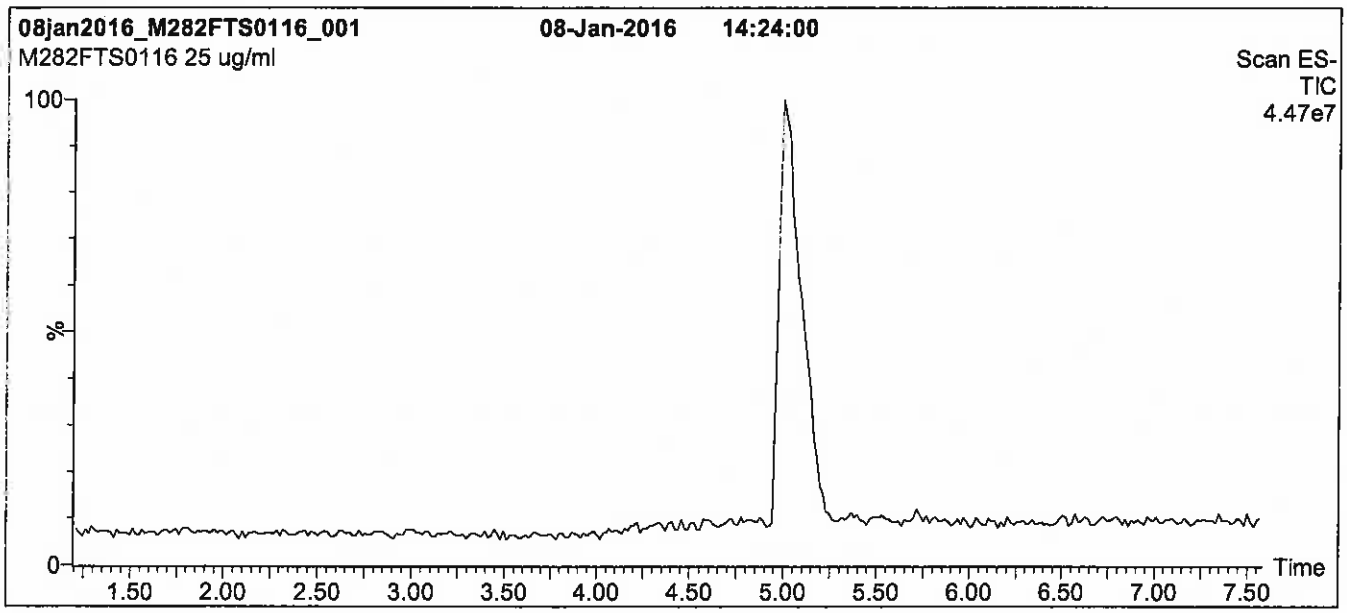
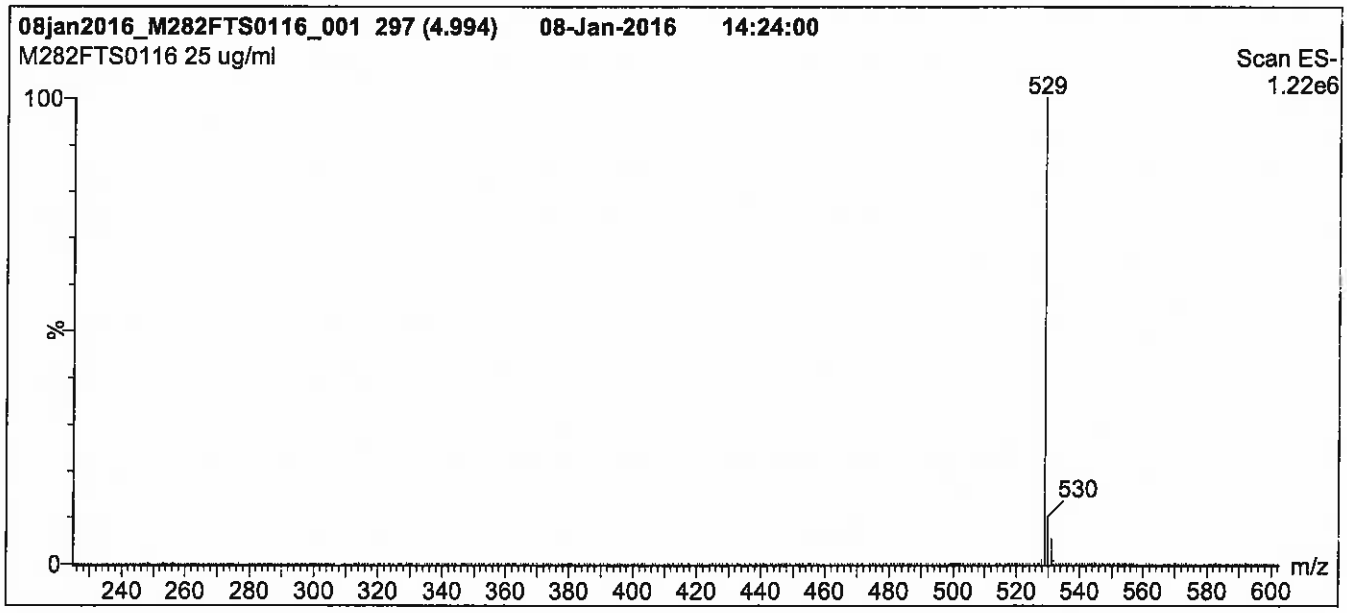
Figure 1: **M2-8:2FTS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min
and hold for 2 min before returning
to initial conditions in 0.5 min.
Time: 10 min

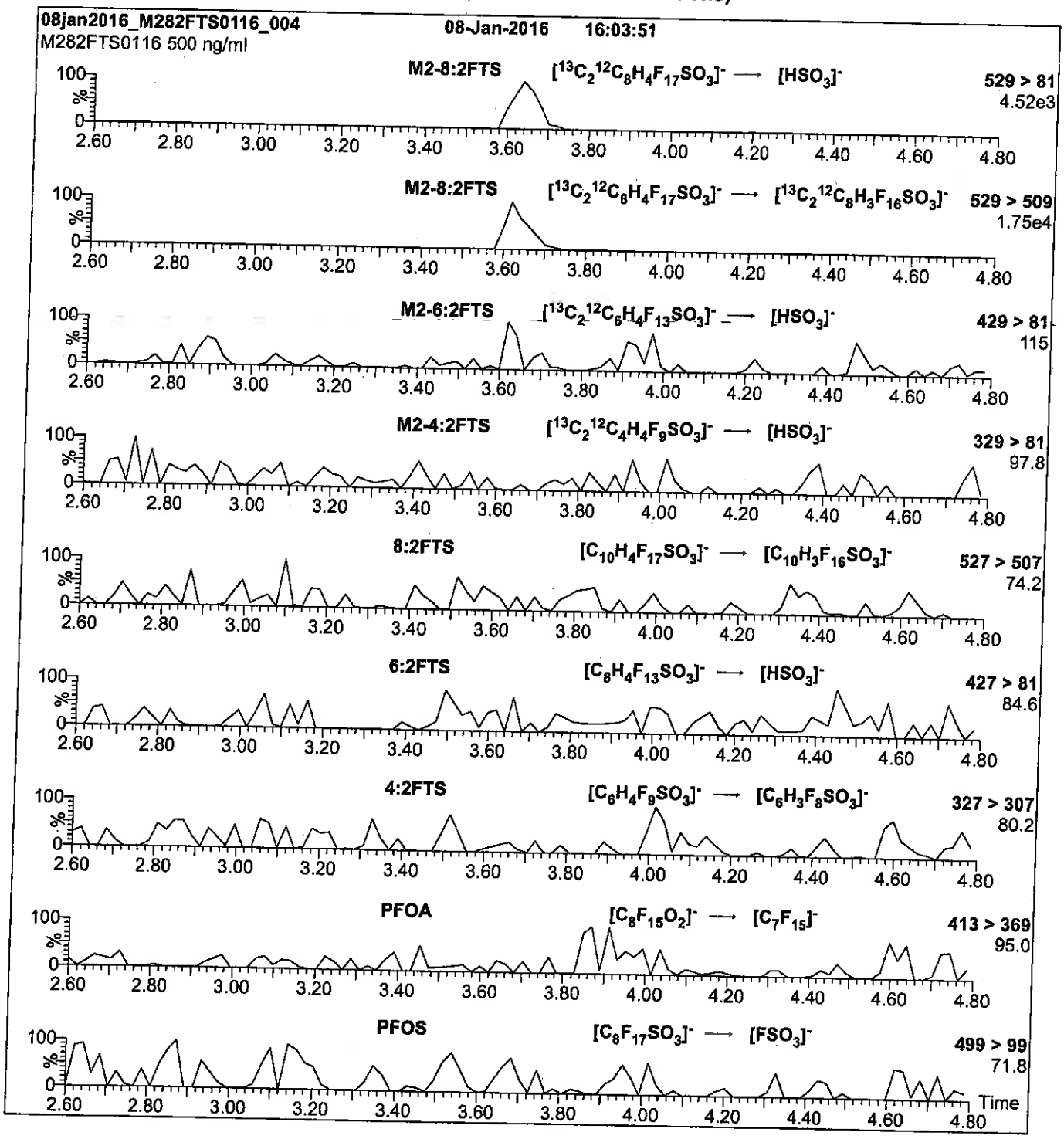
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **M2-8:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml M2-8:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 30

R: SBC 9/13/16

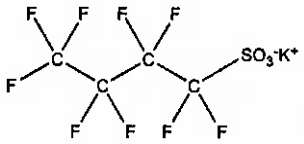
730511
ID: LCPFBS_00005
Exp: 03/15/21 Prpd: SBC
PF-1-butanesulfonate K sa

730512
ID: LCPFBS_00006
Exp: 03/15/21 Prpd: SBC
PF-1-butanesulfonate K sa

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFBS
LOT NUMBER: LPFBS0316
COMPOUND: Potassium perfluoro-1-butanesulfonate
STRUCTURE:
CAS #: 29420-49-3



MOLECULAR FORMULA:	$C_4F_9SO_3K$	**MOLECULAR WEIGHT:**	338.19
CONCENTRATION:	50.0 ± 2.5 µg/ml (K salt) 44.2 ± 2.2 µg/ml (PFBS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	03/15/2016		
EXPIRY DATE: (mm/dd/yyyy)	03/15/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 03/21/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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$$u_c(y(x_1, x_2,...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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CALA Testing Accreditation No. A1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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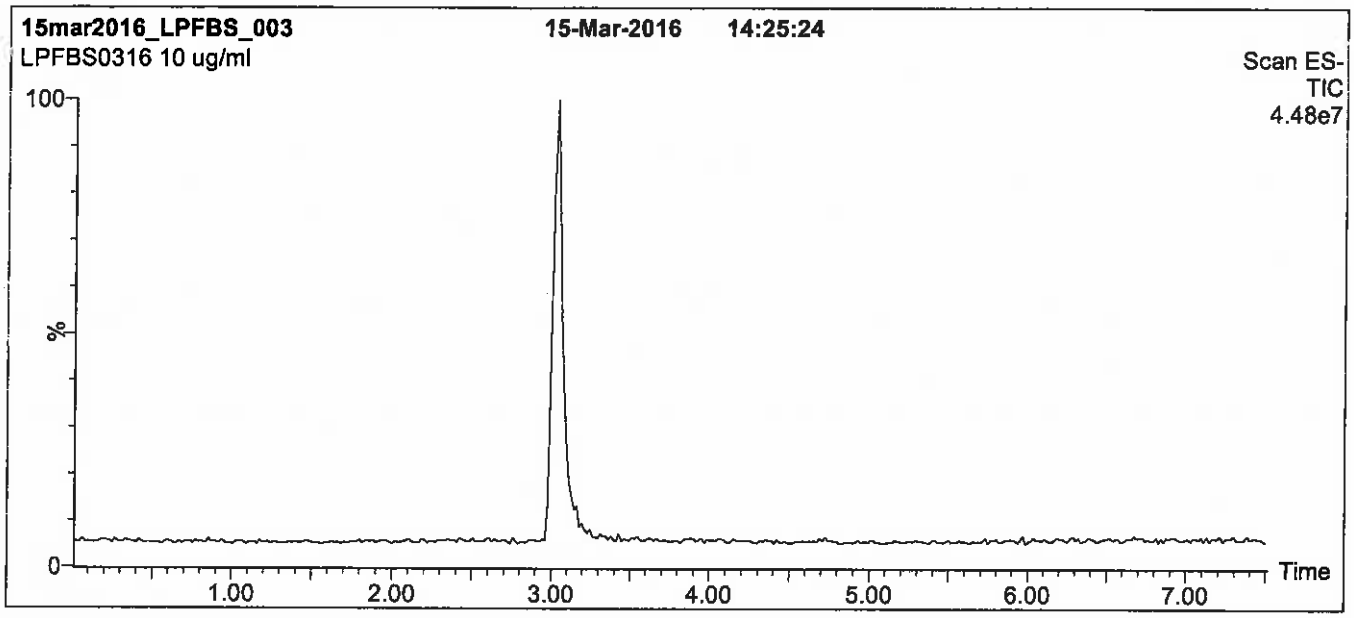

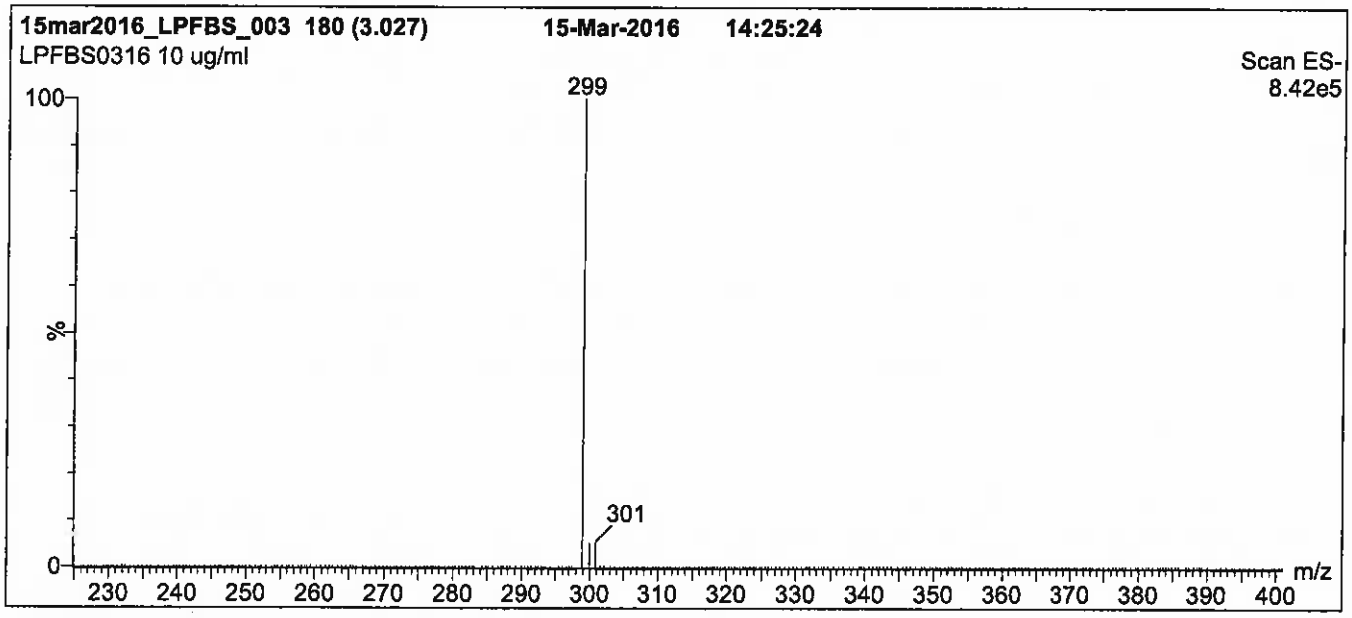

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Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
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(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

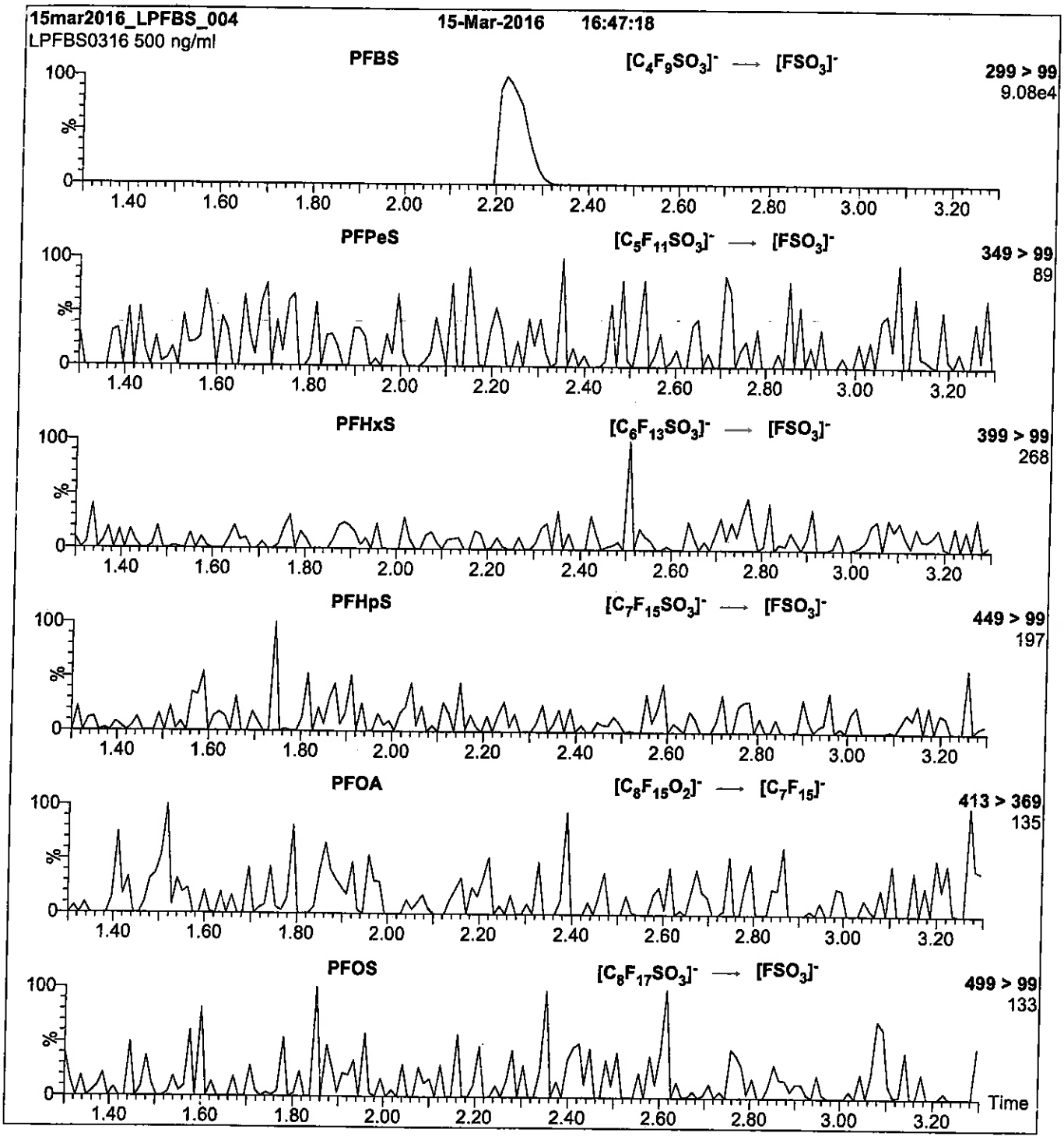
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **L-PFBS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml L-PFBS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 25

Reagent

LCPFBS_00006

R: SBC 9/13/16

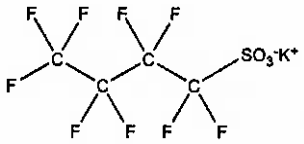
730511
ID: LCPFBS_00005
Exp: 03/15/21 Prpd: SBC
PF-1-butanesulfonate K sa

730512
ID: LCPFBS_00006
Exp: 03/15/21 Prpd: SBC
PF-1-butanesulfonate K sa

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFBS
LOT NUMBER: LPFBS0316
COMPOUND: Potassium perfluoro-1-butanesulfonate
STRUCTURE:
CAS #: 29420-49-3



MOLECULAR FORMULA: $C_4F_9SO_3K$
MOLECULAR WEIGHT: 338.19
CONCENTRATION: 50.0 ± 2.5 µg/ml (K salt)
44.2 ± 2.2 µg/ml (PFBS anion)
SOLVENT(S): Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 03/15/2016
EXPIRY DATE: (mm/dd/yyyy) 03/15/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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Certified By: B.G. Chittim **Date:** 03/21/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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CALA Testing Accreditation No. A1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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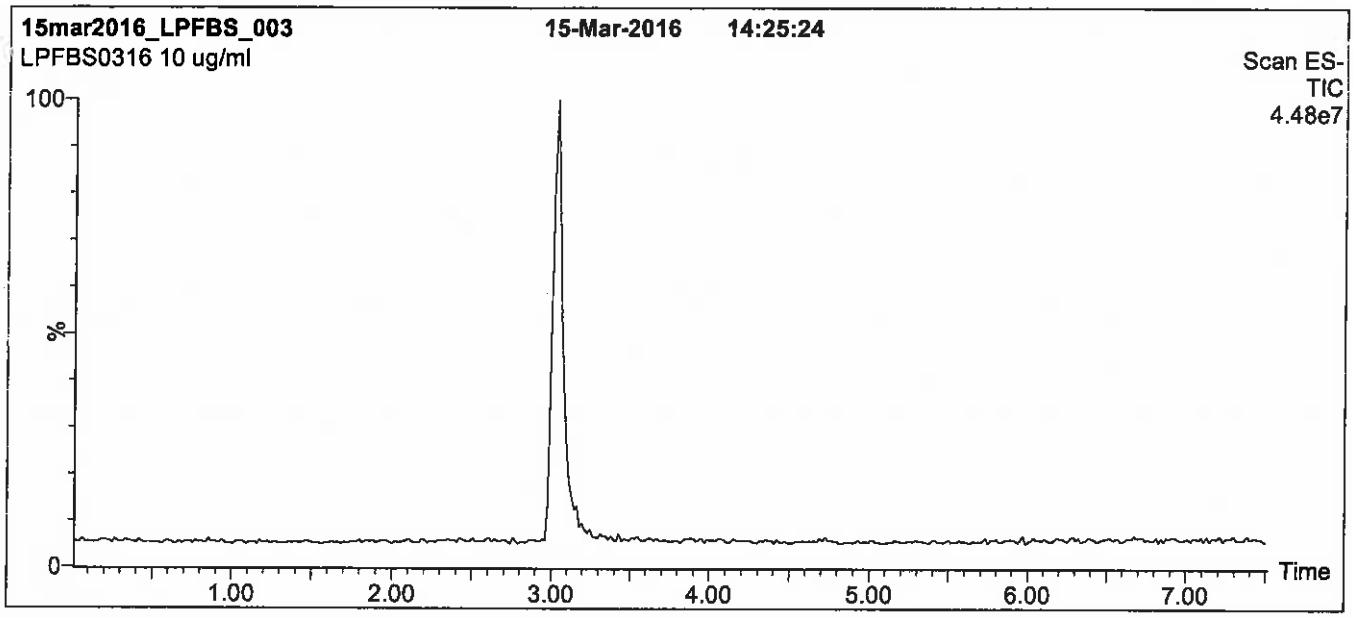
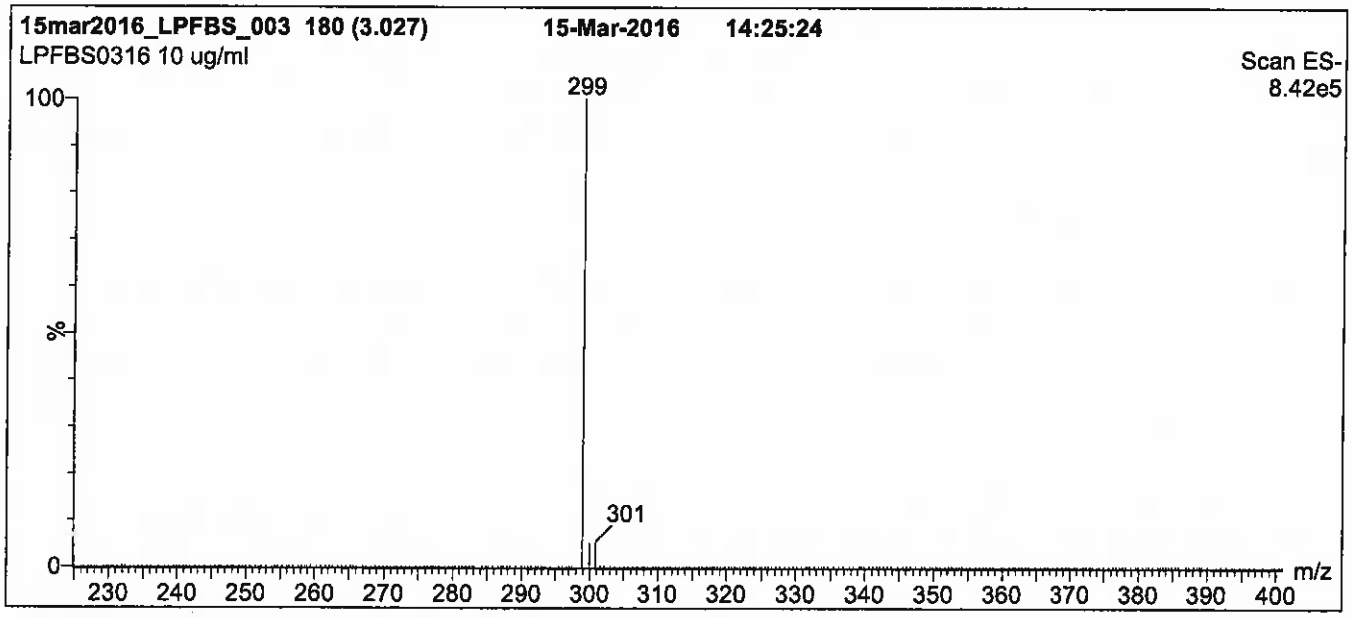
Figure 1: **L-PFBS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

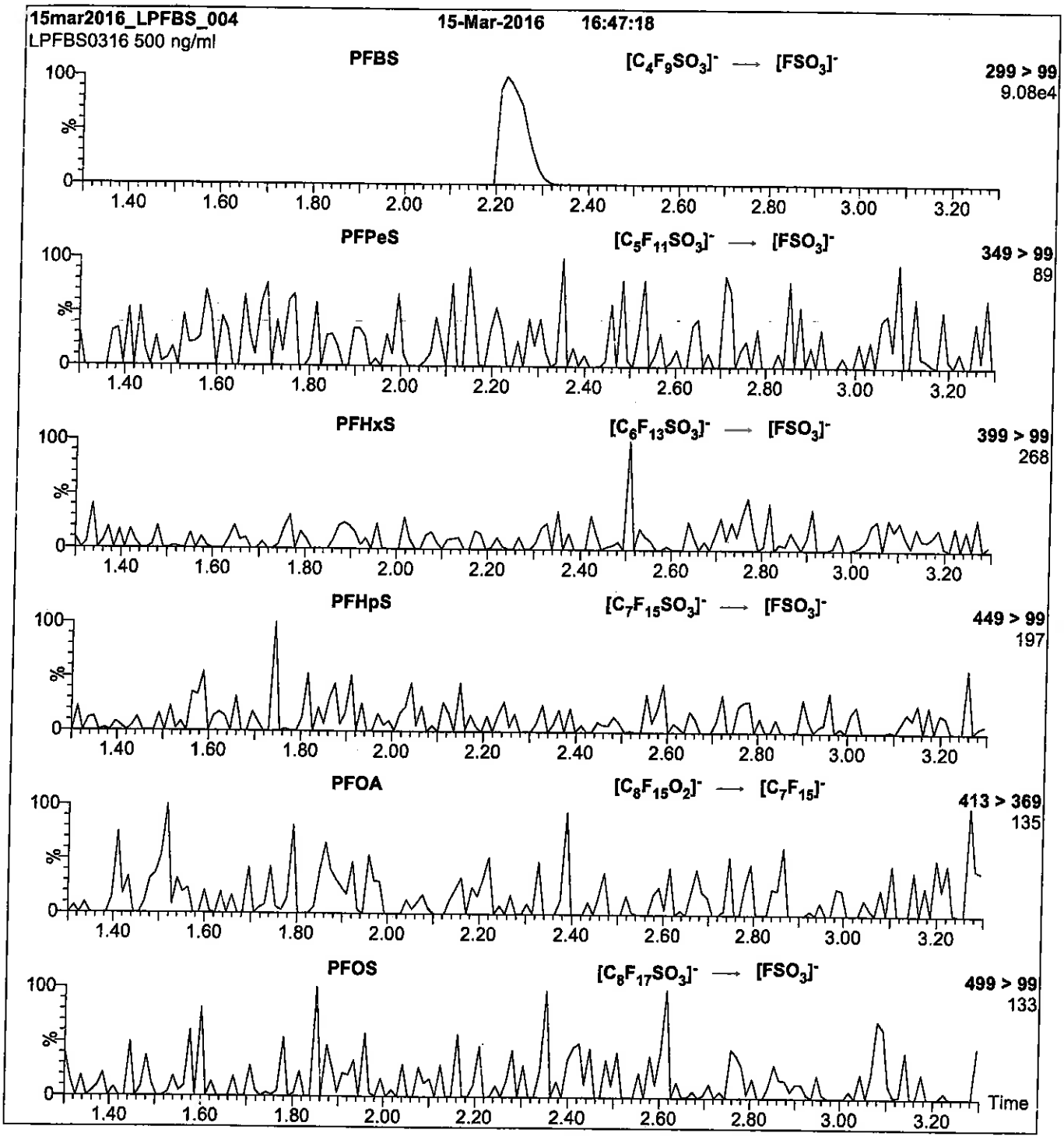
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **L-PFBS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml L-PFBS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 25

Reagent

LCPFDA_00006

R: SBC 9/13/16
scanned 10/4/16 SR

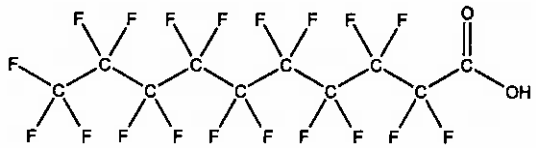
730620
ID: LCPFDA_00006
Exp: 05/31/21 Prpd: SBC
PF-n-decanoic acid

730621
ID: LCPFDA_00007
Exp: 05/31/21 Prpd: SBC
PF-n-decanoic acid

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	PFDA	**LOT NUMBER:**	PFDA0516
COMPOUND:	Perfluoro-n-decanoic acid		
STRUCTURE:		**CAS #:**	335-76-2



MOLECULAR FORMULA:	$C_{10}HF_{19}O_2$	**MOLECULAR WEIGHT:**	514.08
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	05/31/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/31/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.2% of Perfluoro-n-nonanoic acid (PFNA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____ B.G. Chittim **Date:** 06/13/2016 (mm/dd/yyyy)

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CALA

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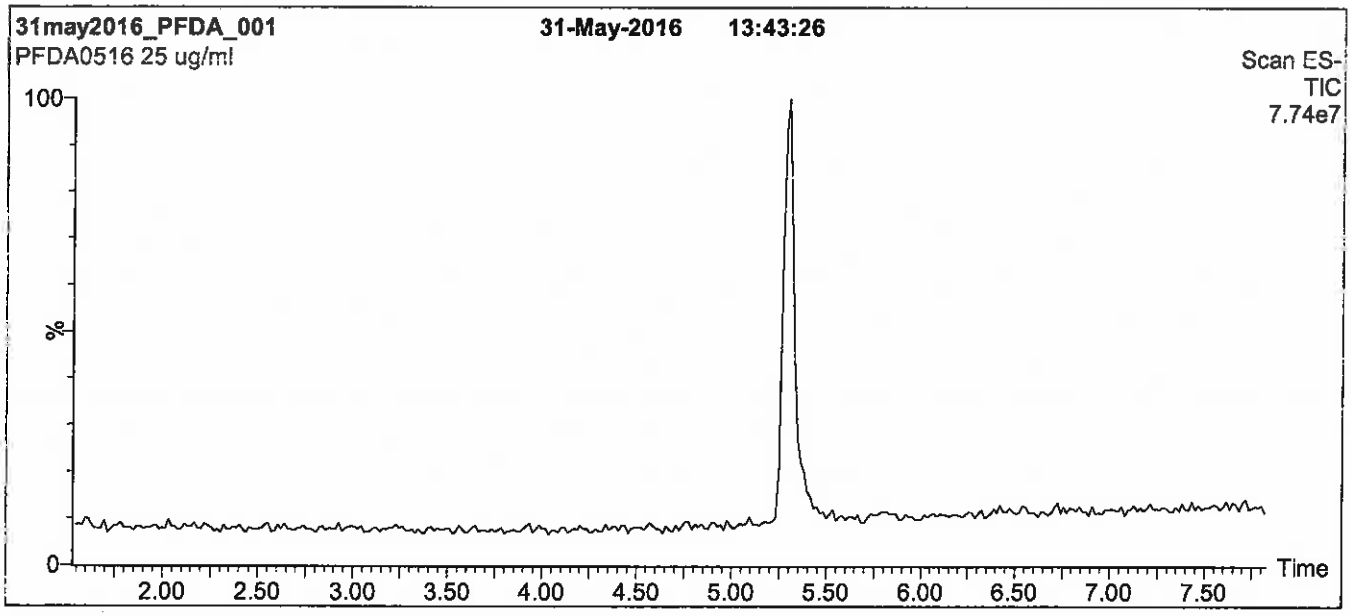

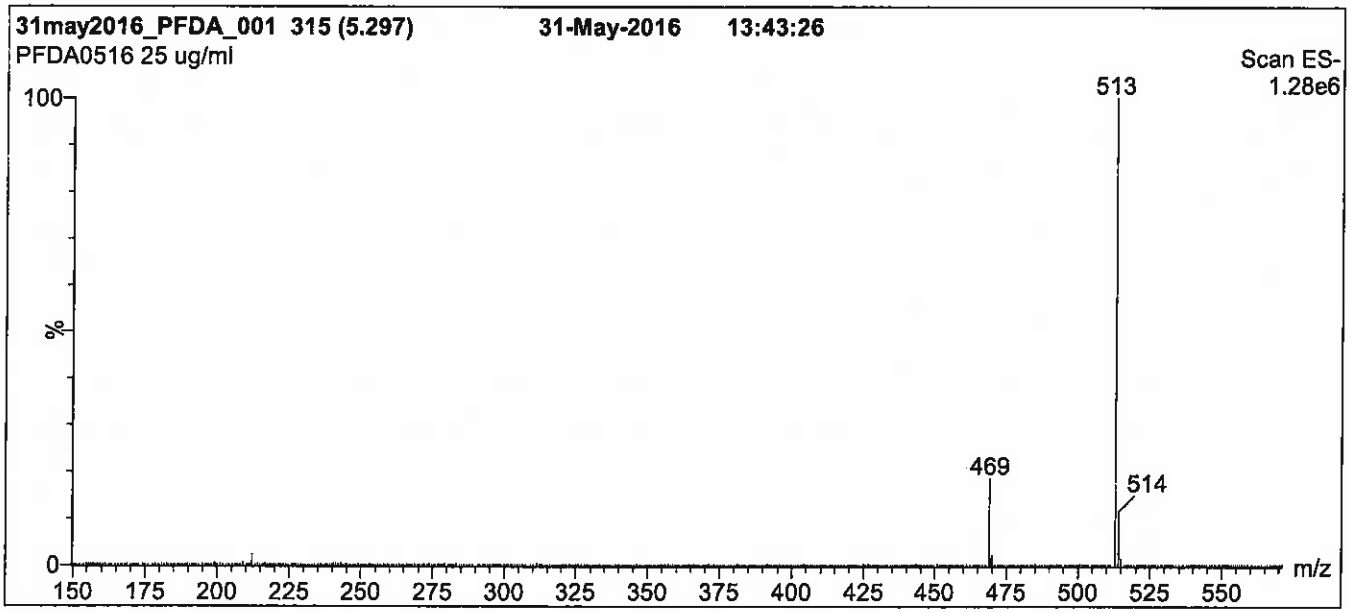

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Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

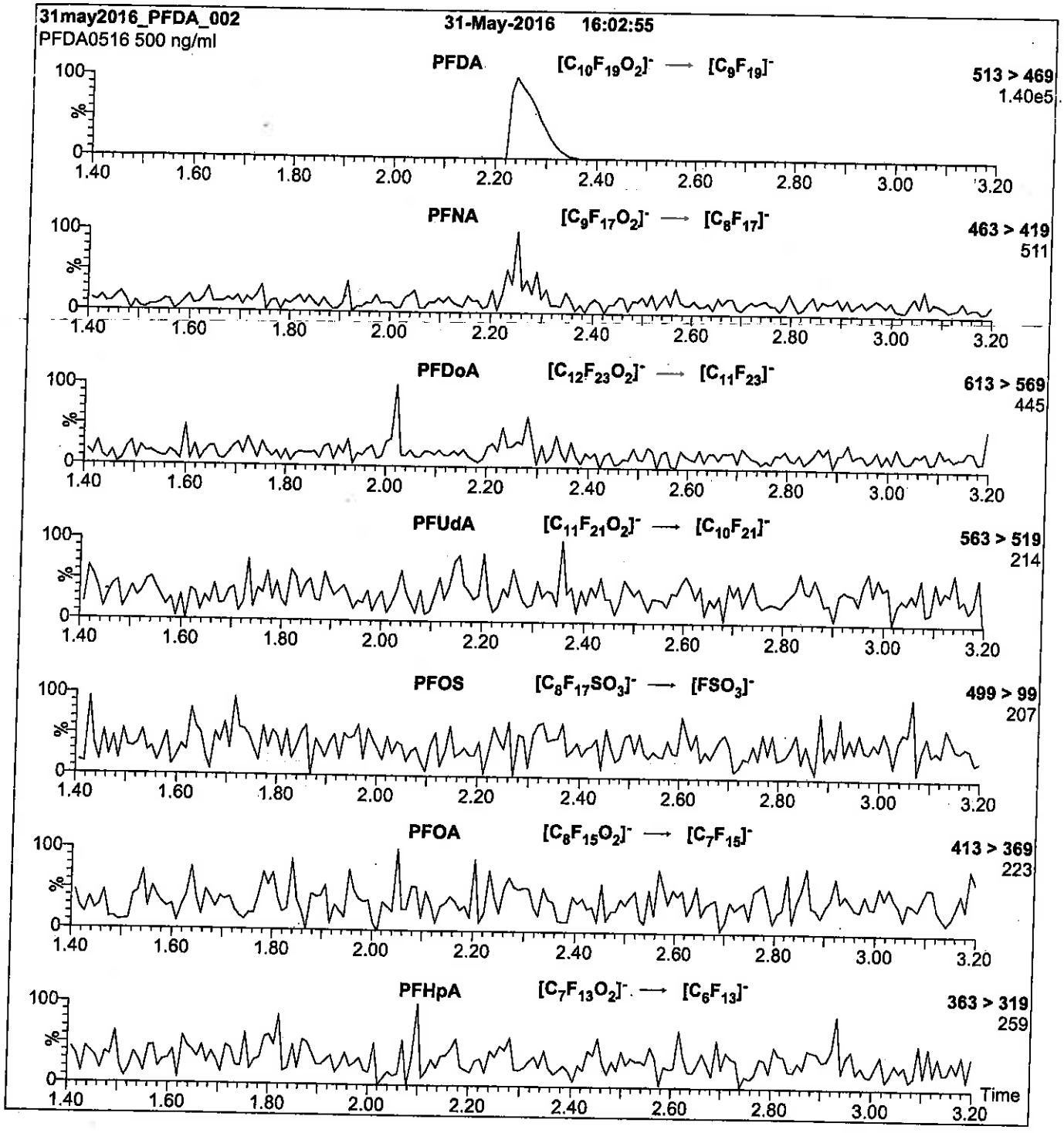
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 13

Reagent

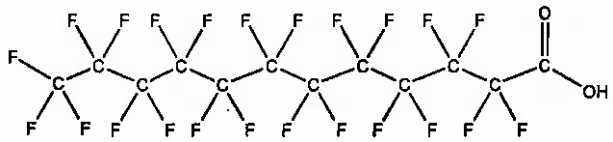
LCPFDoA_00006

R: 12/21/16 SPV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	PFDoA	**LOT NUMBER:**	PFDoA0516
COMPOUND:	Perfluoro-n-dodecanoic acid		
STRUCTURE:		**CAS #:**	307-55-1



MOLECULAR FORMULA:	$C_{12}HF_{23}O_2$	**MOLECULAR WEIGHT:**	614.10
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	05/31/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/31/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 06/02/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

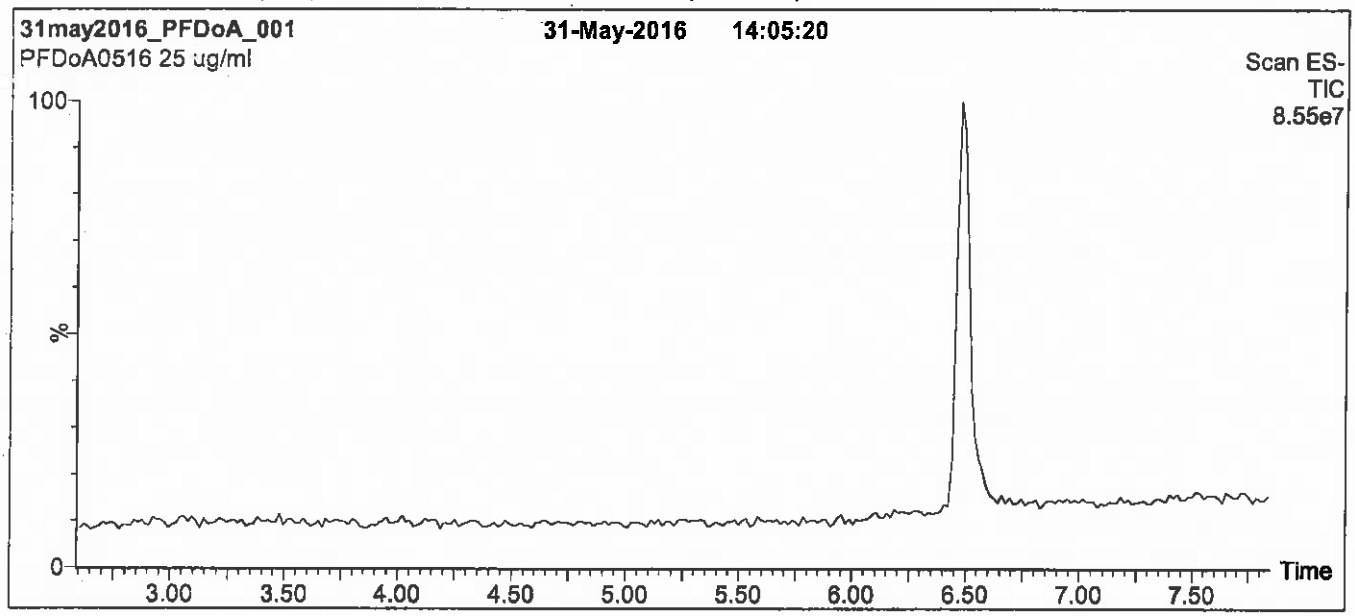
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

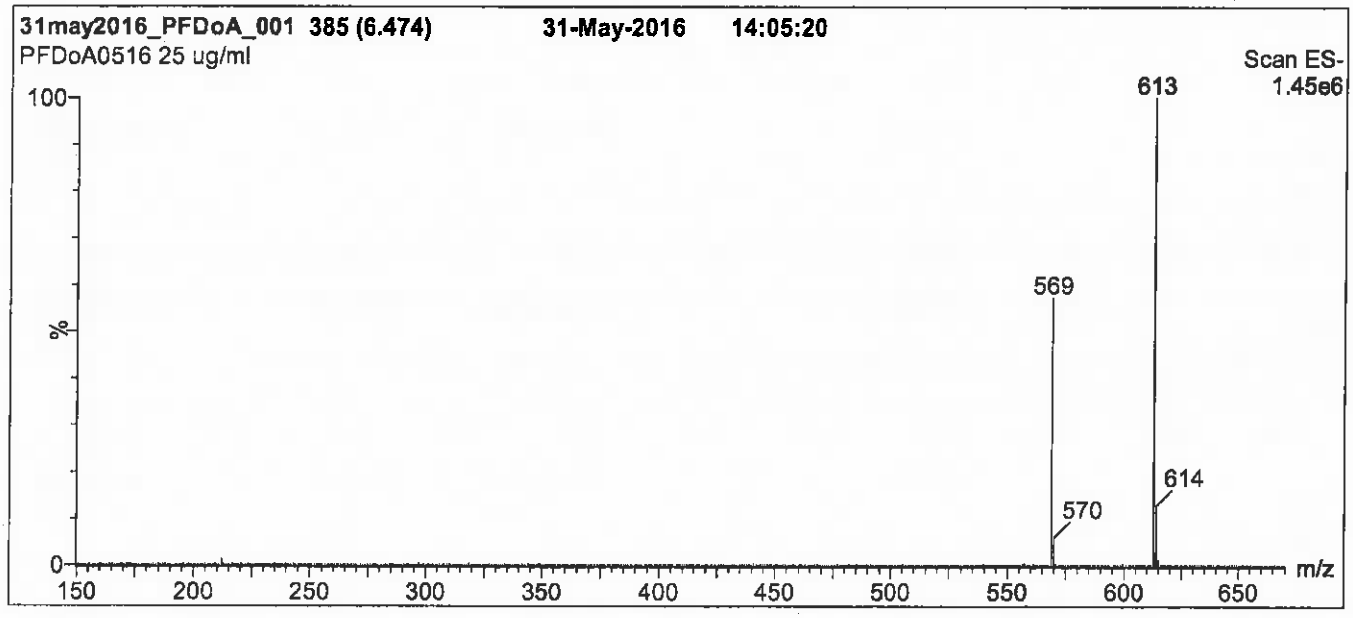
CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **PFDoA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

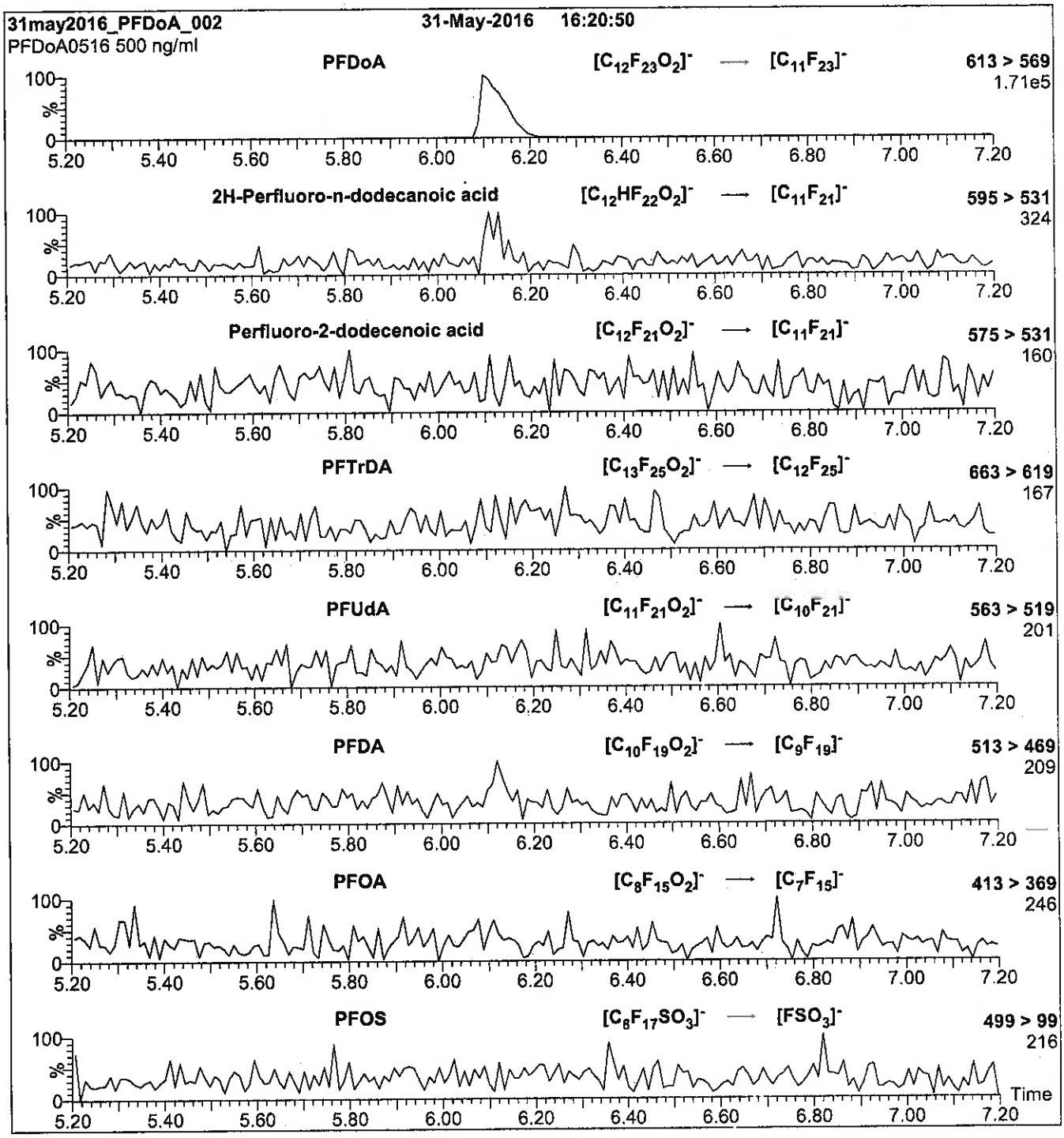
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFDoA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFDoA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 13

Reagent

LCPFDS_00005

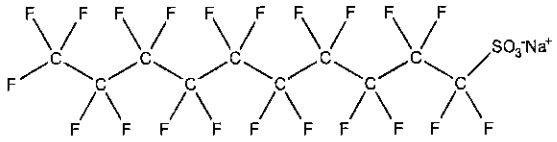
Rec. 3/29/16 JRB

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: L-PFDS
LOT NUMBER: LPFDS0615
COMPOUND: Sodium perfluoro-1-decanesulfonate

STRUCTURE:
CAS #: 2806-15-7



MOLECULAR FORMULA:	$C_{10}F_{21}SO_3Na$	**MOLECULAR WEIGHT:**	622.13
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt) 48.2 ± 2.4 µg/ml (PFDS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	07/02/2015		
EXPIRY DATE: (mm/dd/yyyy)	07/02/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.9% of sodium perfluoro-1-dodecanesulfonate (L-PFDoS).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/07/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

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where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

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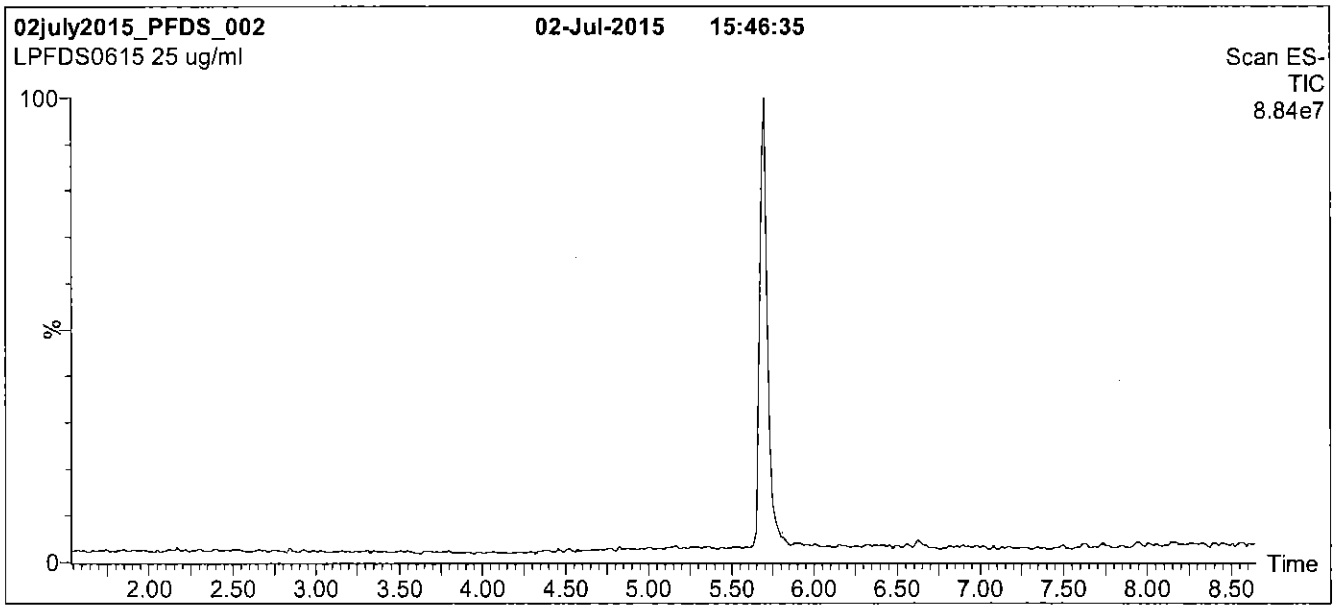
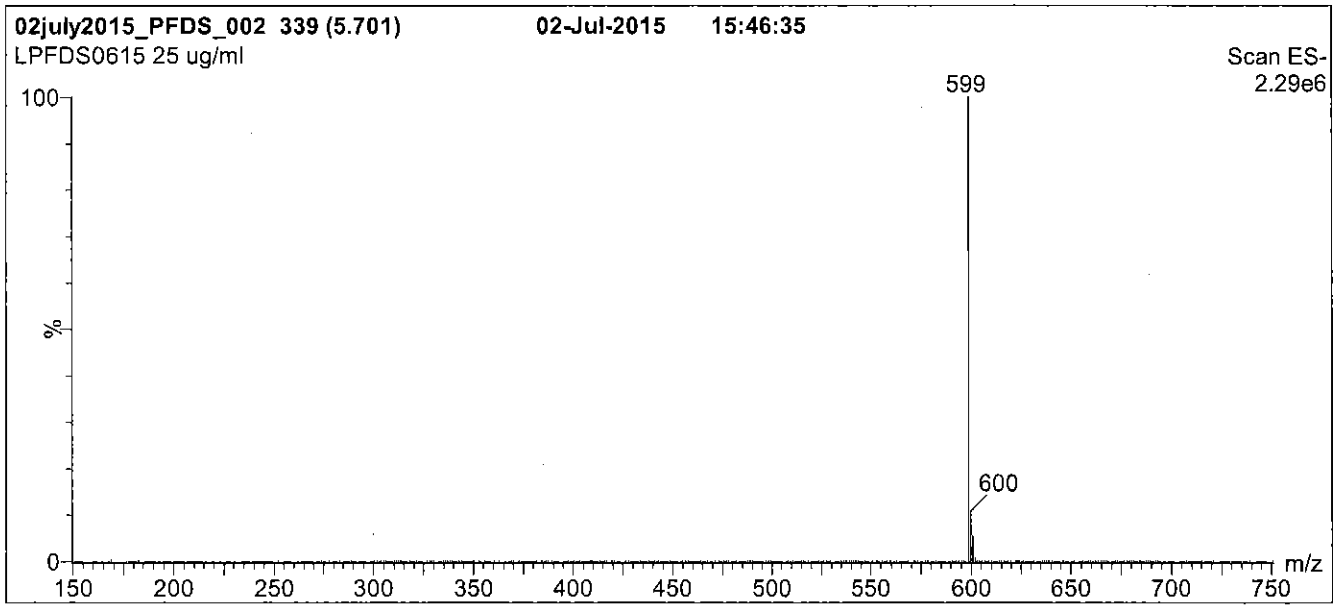
CALA

ANAB ACCREDITED

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **L-PFDS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

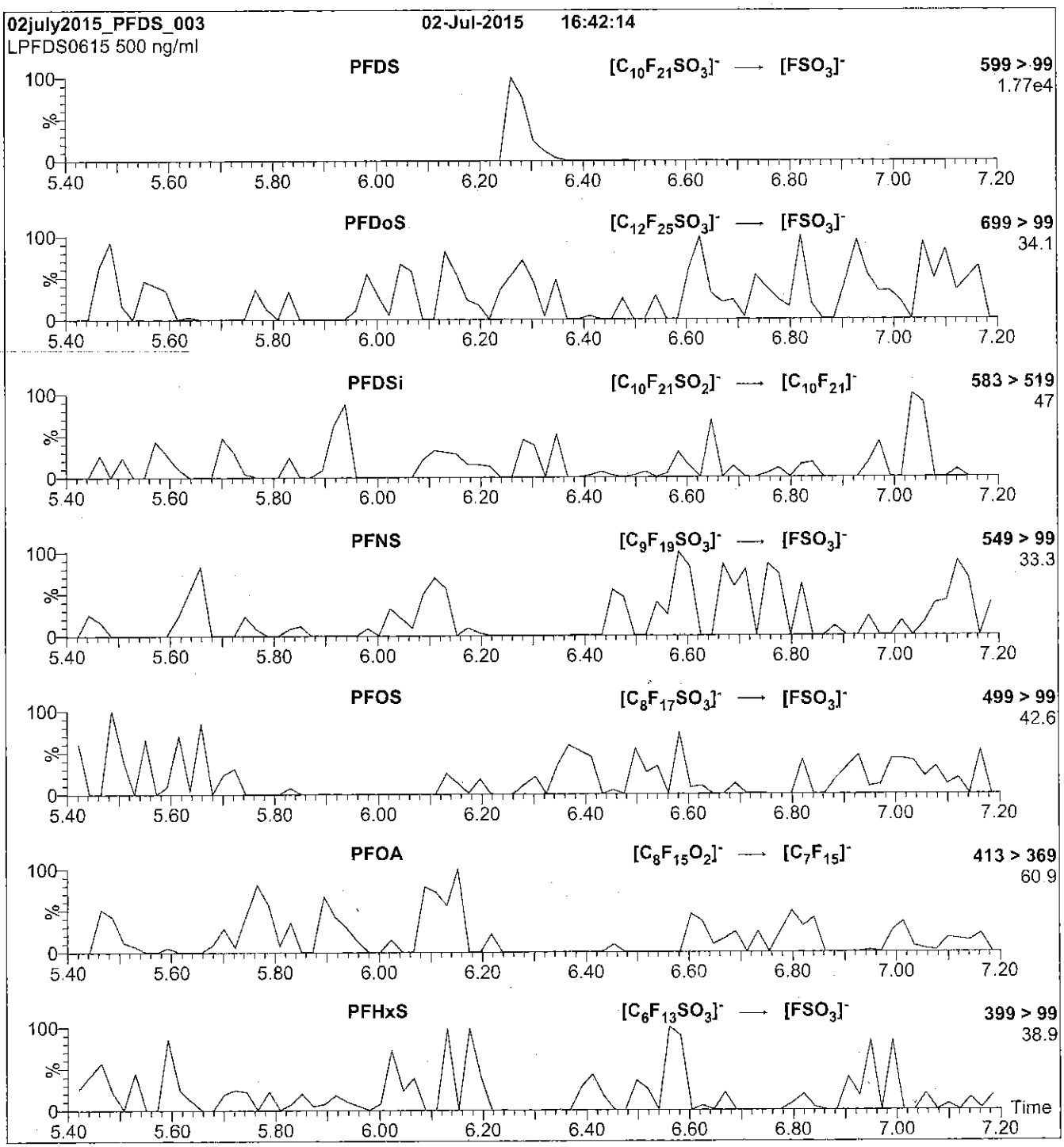
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 70.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **L-PFDS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml L-PFDS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 50

Reagent

LCPFHpA_00006

Scanned 10/14/16 SM R: SBC 9/13/16

730517
ID: LCPFHpA_00006
Exp: 01/22/21 Prpd: SBC
PF-n-heptanoic acid

730518
ID: LCPFHpA_00007
Exp: 01/22/21 Prpd: SBC
PF-n-heptanoic acid

WELLINGTON LABORATORIES

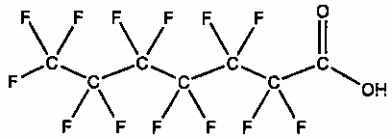
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFHpA
COMPOUND: Perfluoro-n-heptanoic acid

LOT NUMBER: PFHpA0116

STRUCTURE:

CAS #: 375-85-9



MOLECULAR FORMULA: $C_7HF_{13}O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 364.06
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 01/22/2016
EXPIRY DATE: (mm/dd/yyyy) 01/22/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 02/02/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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where x is expressed as a relative standard uncertainty of the individual parameter.

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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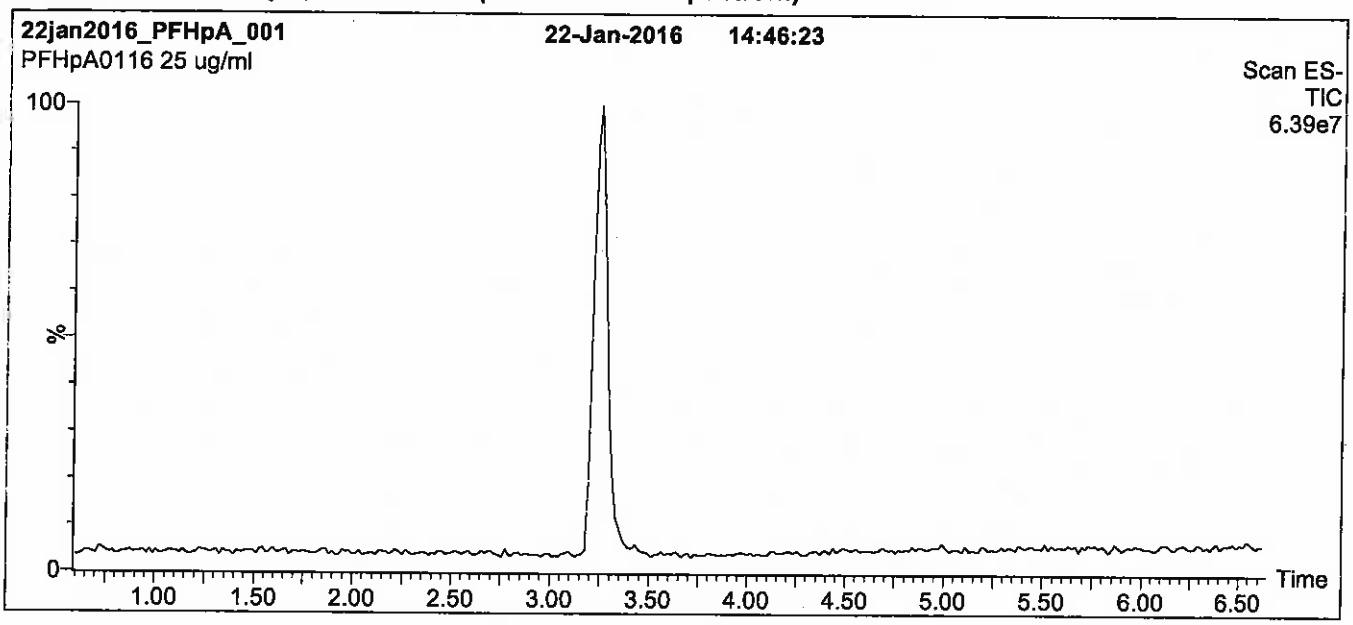
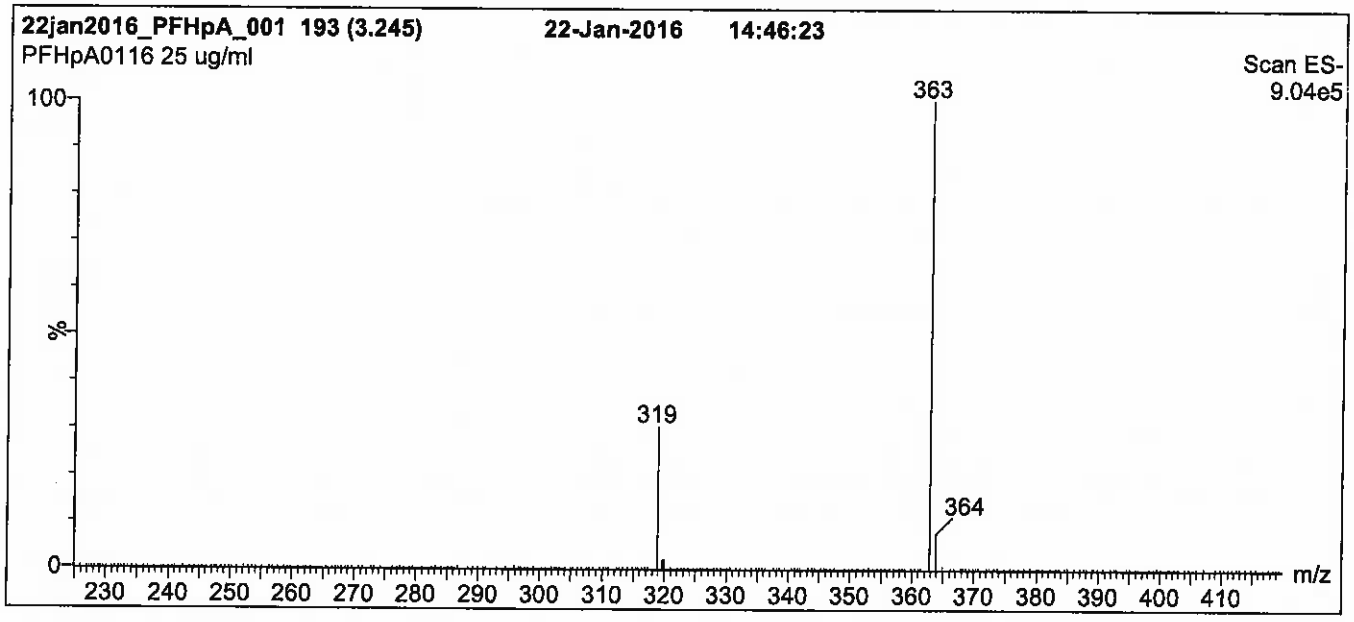
Figure 1: **PFHpA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

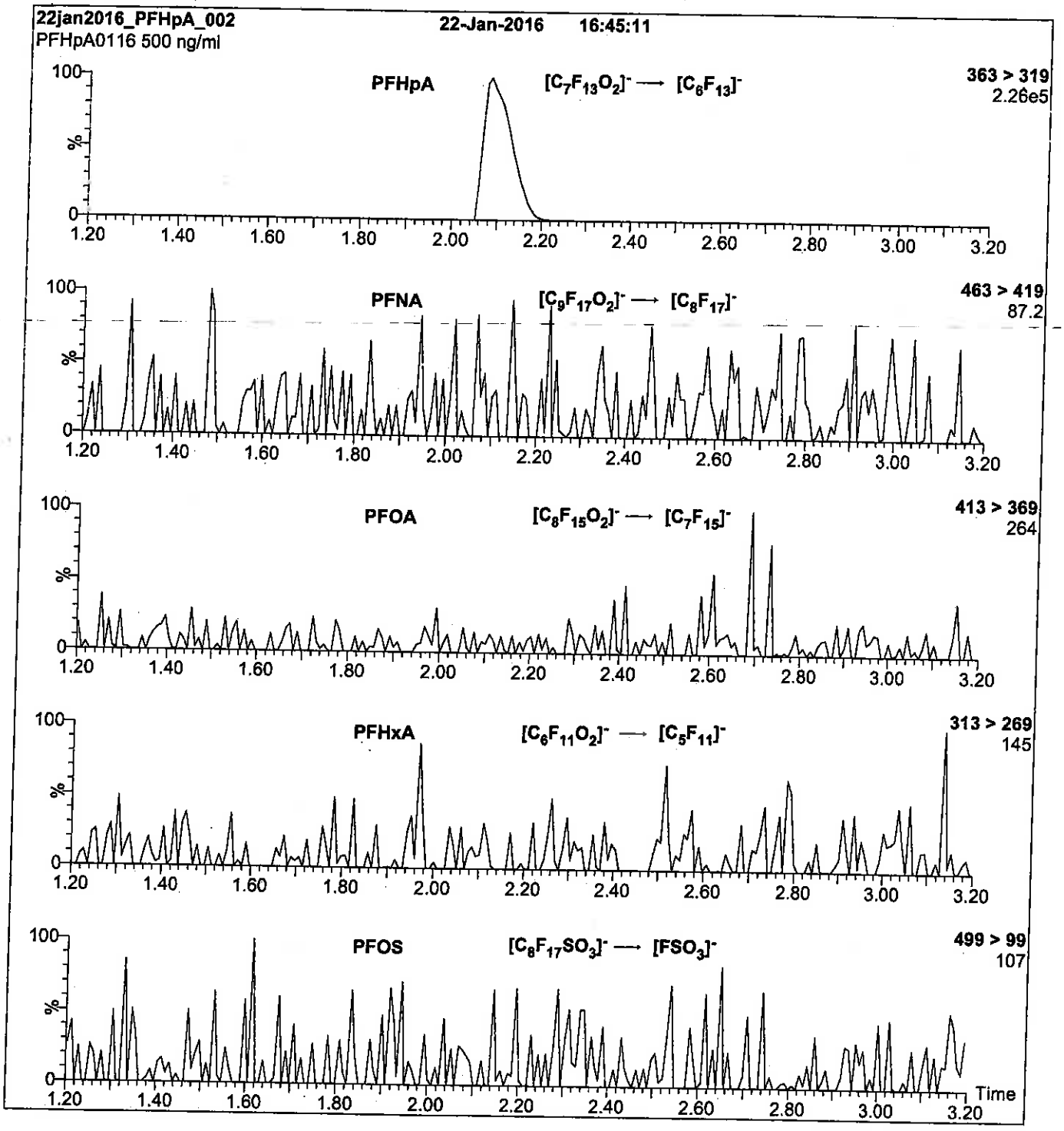
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFHpA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.50e-3
Collision Energy (eV) = 11

Reagent

LCPFHpS_00009

Scanned 10/14/16 SP R: SBC 9/13/16

730635
ID: LCPFHpS_00009
Exp: 11/06/20 Prpd: SBC
PFHpS at 47.6ug/mL

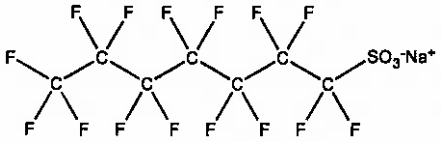
730639
ID: LCPFHpS_00010
Exp: 11/06/20 Prpd: SBC
PFHpS at 47.6ug/mL

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: L-PFHpS
COMPOUND: Sodium perfluoro-1-heptanesulfonate
LOT NUMBER: LPFHpS1115
CAS #: Not available

STRUCTURE:



MOLECULAR FORMULA:	$C_7F_{15}SO_3Na$	**MOLECULAR WEIGHT:**	472.10
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt) 47.6 ± 2.4 µg/ml (PFHpS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	11/06/2015		
EXPIRY DATE: (mm/dd/yyyy)	11/06/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.1% of L-PFHxS ($C_6F_{13}SO_3Na$) and ~ 0.2% of L-PFOS ($C_8F_{17}SO_3Na$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 11/09/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA

ANAB ACCREDITED

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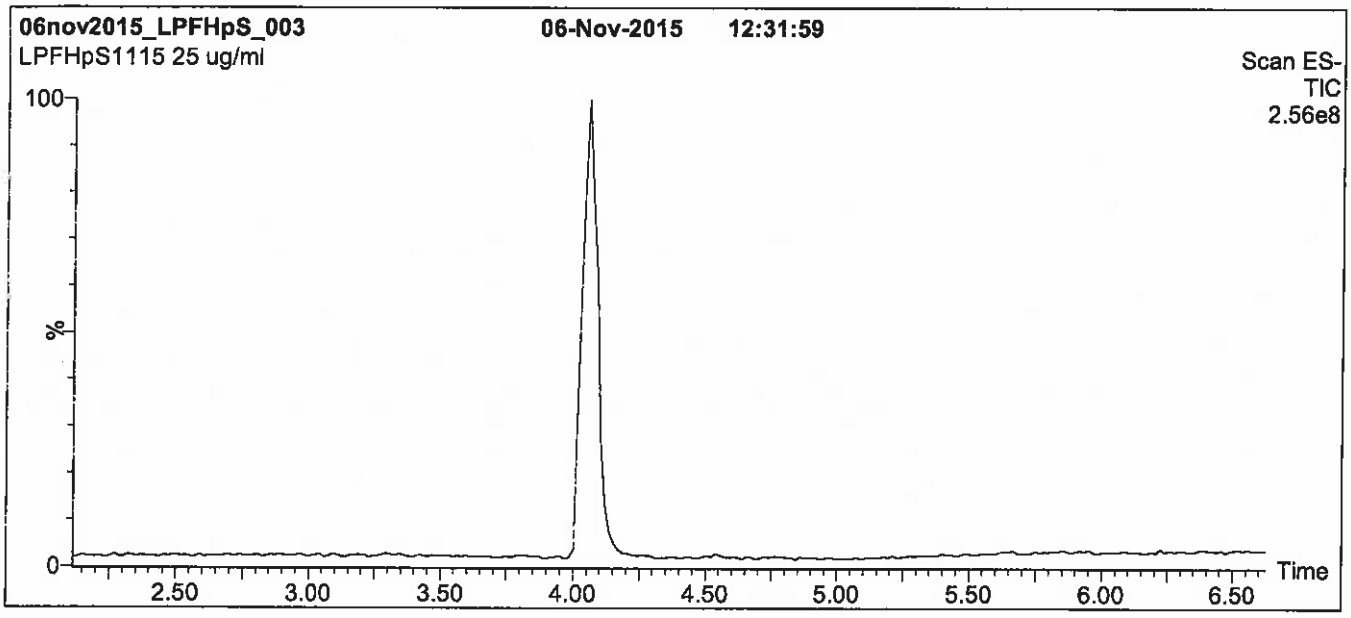
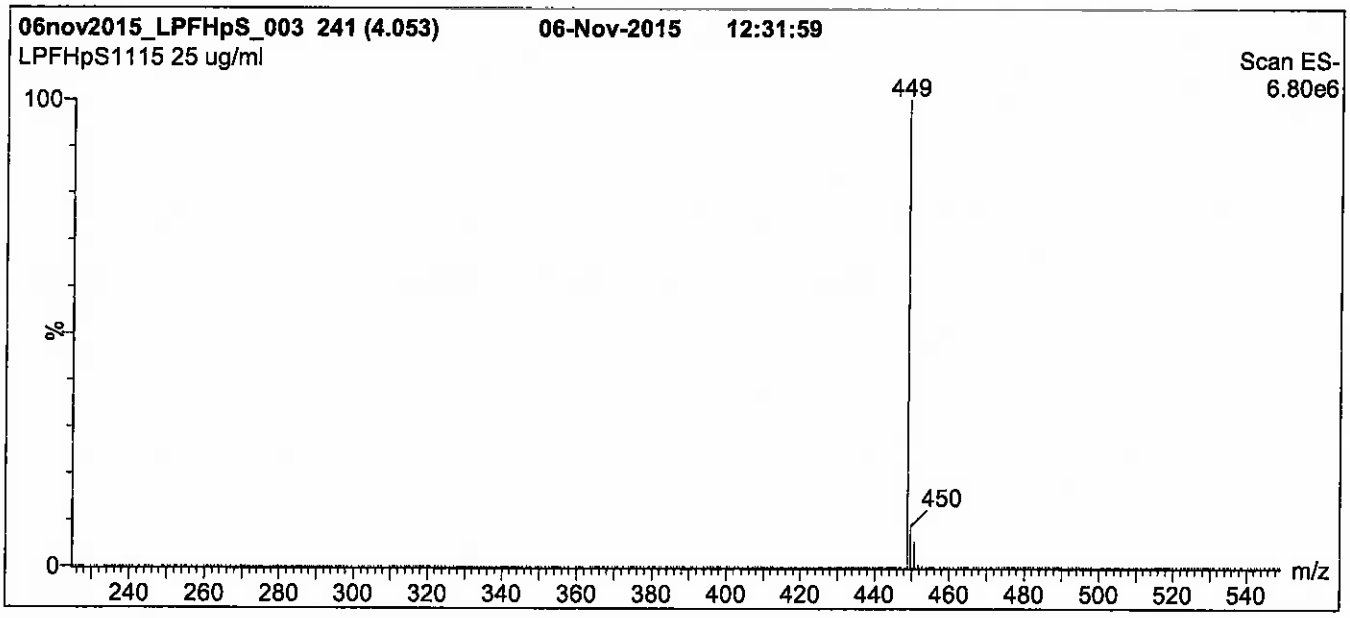
Figure 1: **L-PFHpS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold
for 2 min before returning to initial conditions in 0.5 min.
Time: 10 min

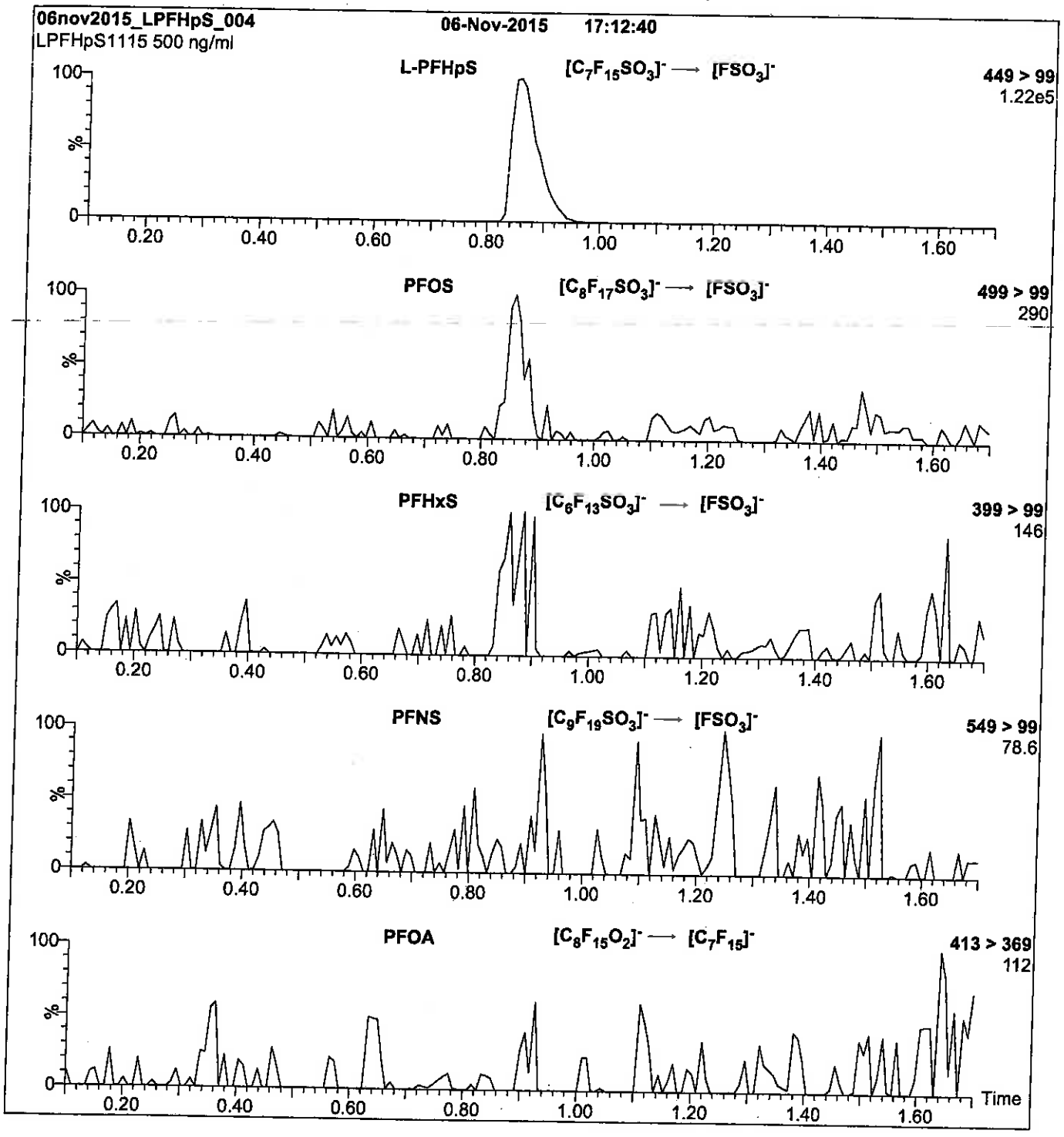
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **L-PFHpS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml L-PFHpS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 35

Reagent

LCPFHpS_00010

Scanned 10/14/16 SR R: SBC 9/13/16

730635
ID: LCPFHpS_00009
Exp: 11/06/20 Prpd: SBC
PFHpS at 47.6ug/mL

730639
ID: LCPFHpS_00010
Exp: 11/06/20 Prpd: SBC
PFHpS at 47.6ug/mL

WELLINGTON LABORATORIES

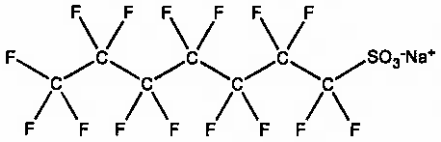
CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: L-PFHpS
COMPOUND: Sodium perfluoro-1-heptanesulfonate

LOT NUMBER: LPFHpS1115

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA:	$C_7F_{15}SO_3Na$	**MOLECULAR WEIGHT:**	472.10
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt) 47.6 ± 2.4 µg/ml (PFHpS anion)	**SOLVENT(S):**	Methanol
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	11/06/2015		
EXPIRY DATE: (mm/dd/yyyy)	11/06/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.1% of L-PFHxS ($C_6F_{13}SO_3Na$) and ~ 0.2% of L-PFOS ($C_8F_{17}SO_3Na$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 11/09/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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where x is expressed as a relative standard uncertainty of the individual parameter.

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EXPIRY DATE / PERIOD OF VALIDITY:

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QUALITY MANAGEMENT:

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CALA

ANAB ACCREDITED

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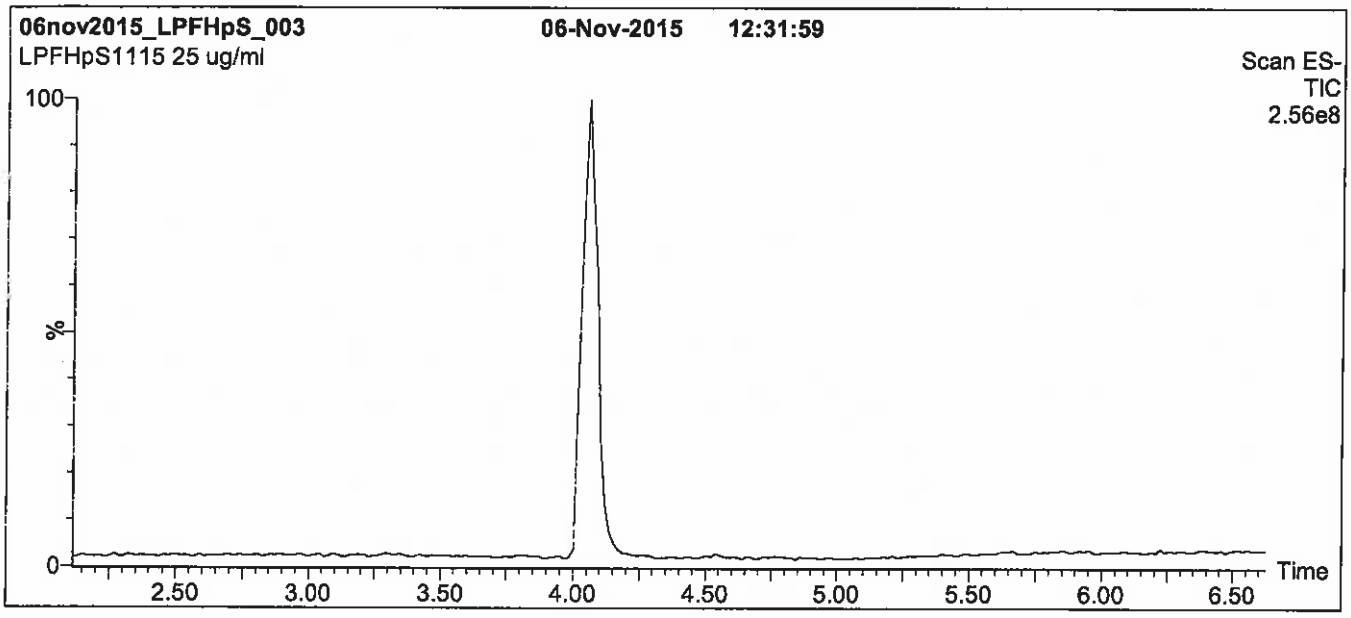
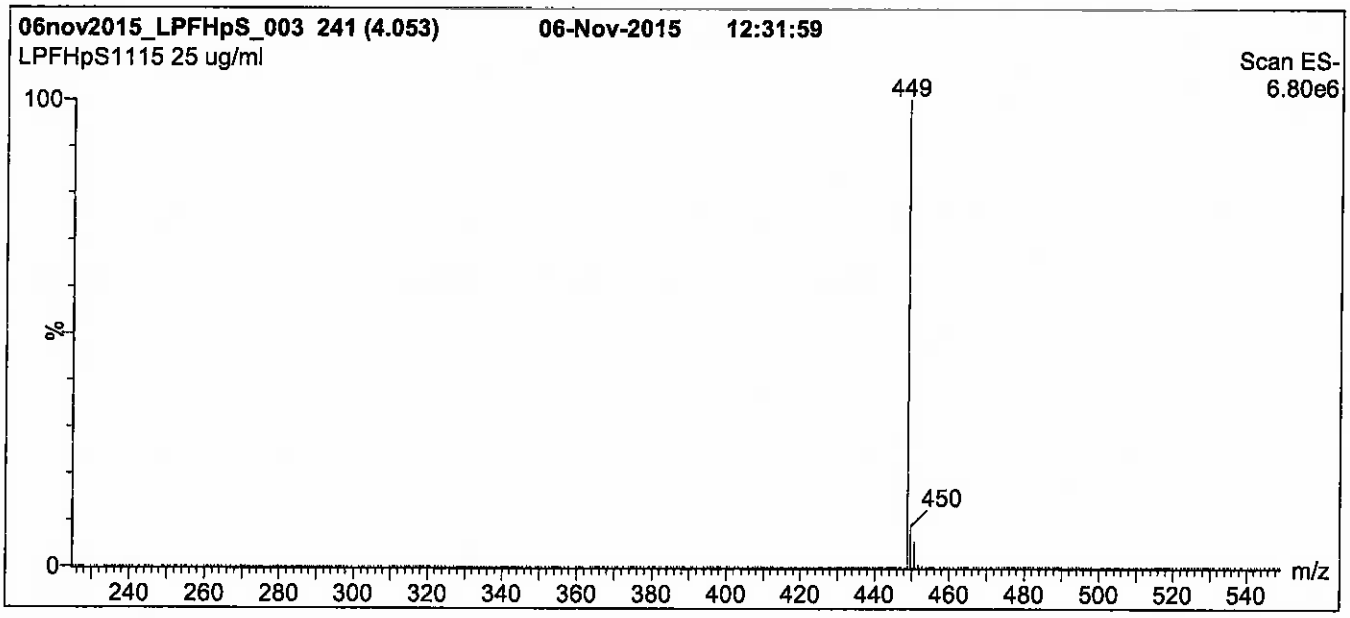
Figure 1: **L-PFHpS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold
for 2 min before returning to initial conditions in 0.5 min.
Time: 10 min

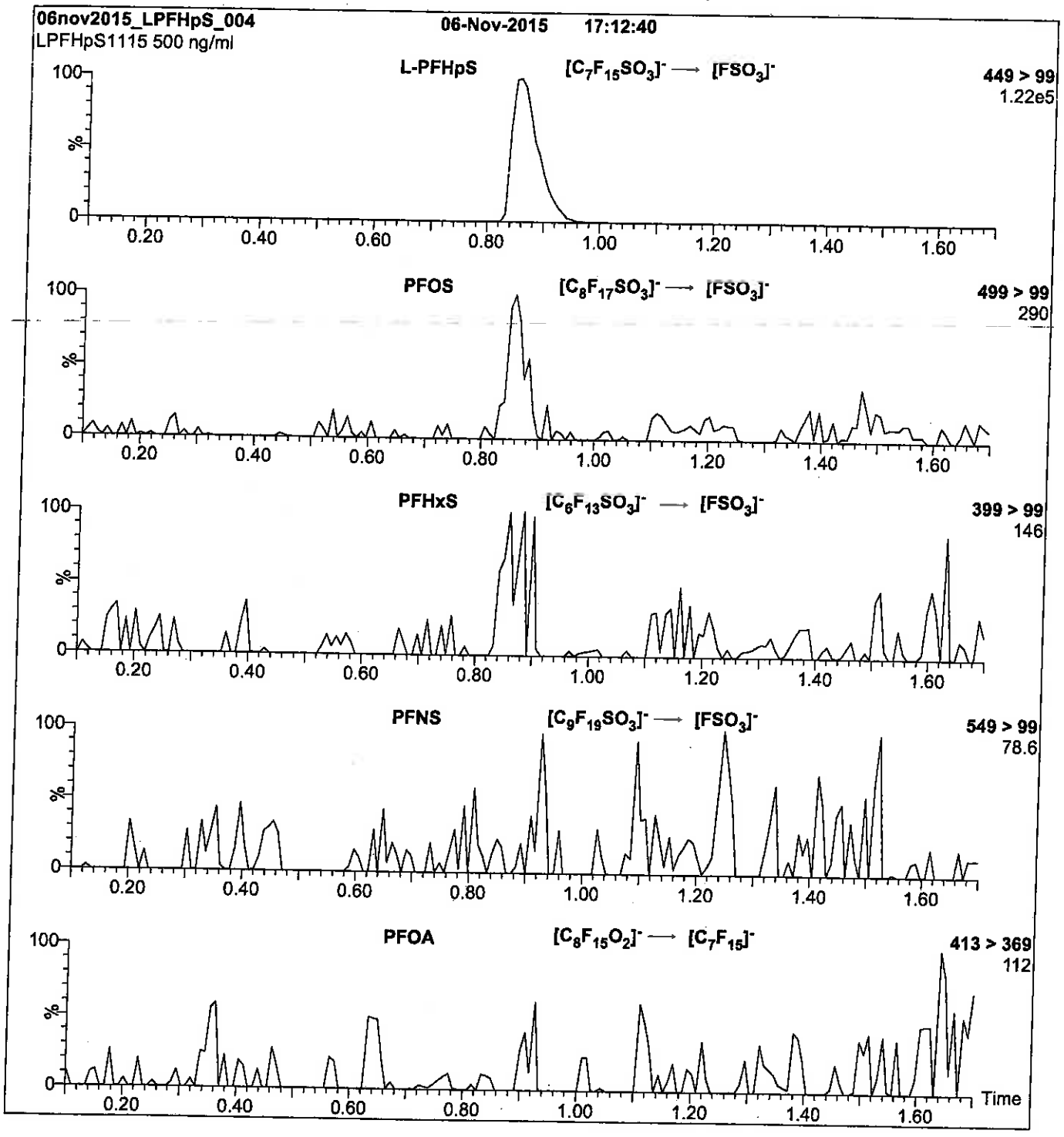
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **L-PFHpS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml L-PFHpS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 35

Reagent

LCPFHxA_00005

R: SBC 9/13/16

730551
ID: LCPFHxA_00005
Exp: 12/22/20 Prpd: SBC
PF-n-hexanoic acid

730552
ID: LCPFHxA_00006
Exp: 12/22/20 Prpd: SBC
PF-n-hexanoic acid

WELLINGTON LABORATORIES

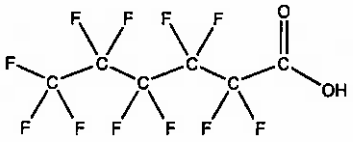
CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: PFHxA
COMPOUND: Perfluoro-n-hexanoic acid

LOT NUMBER: PFHxA1215

STRUCTURE:

CAS #: 307-24-4



MOLECULAR FORMULA: $C_6HF_{11}O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 314.05
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 12/22/2015
EXPIRY DATE: (mm/dd/yyyy) 12/22/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.2% of Perfluoro-n-pentanoic acid (PFPeA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/23/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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where x is expressed as a relative standard uncertainty of the individual parameter.

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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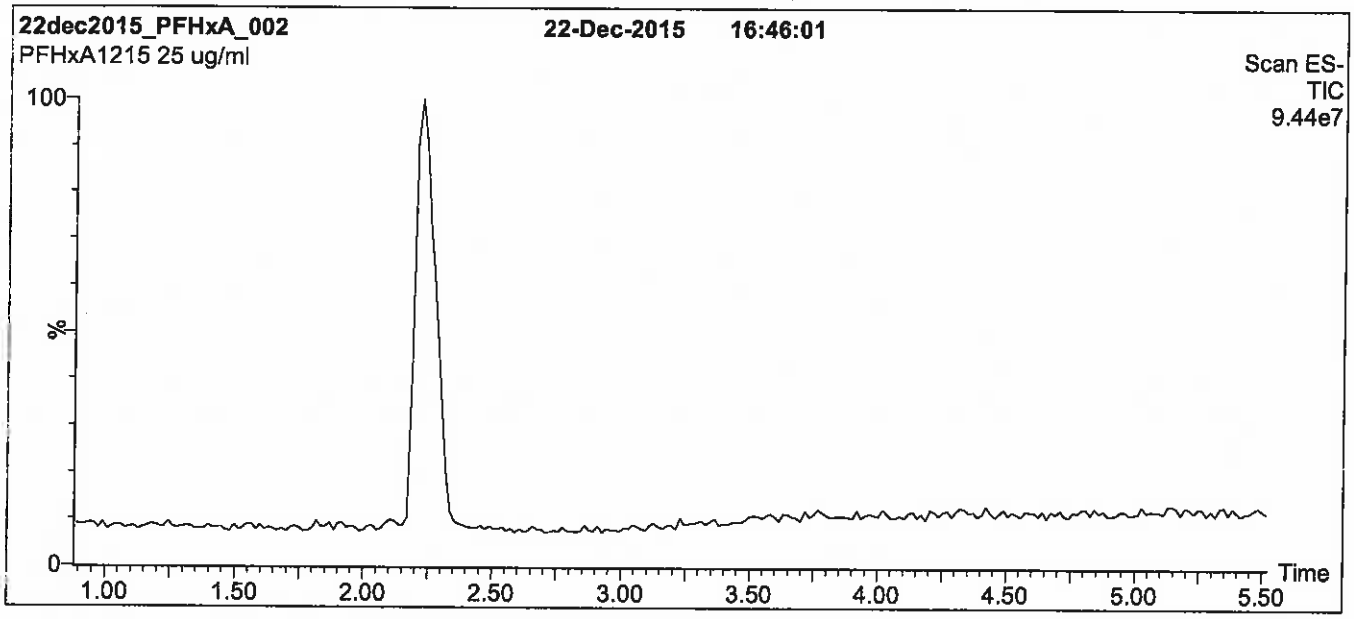
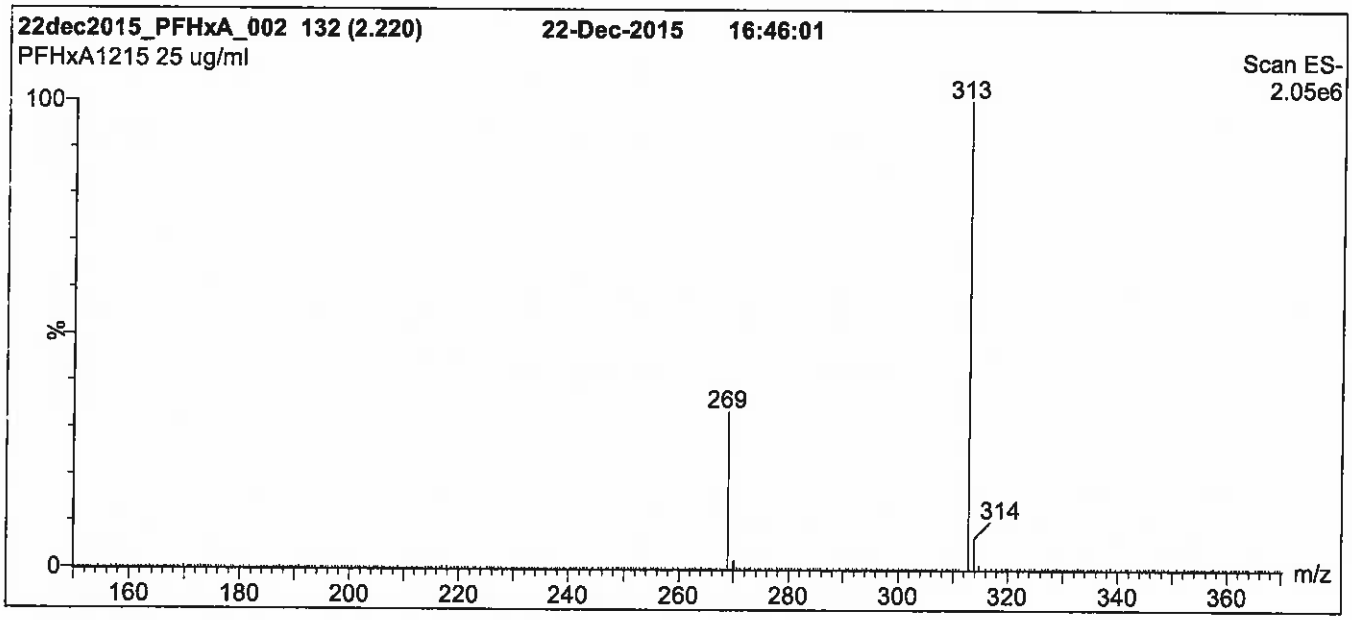
Figure 1: **PFHxA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

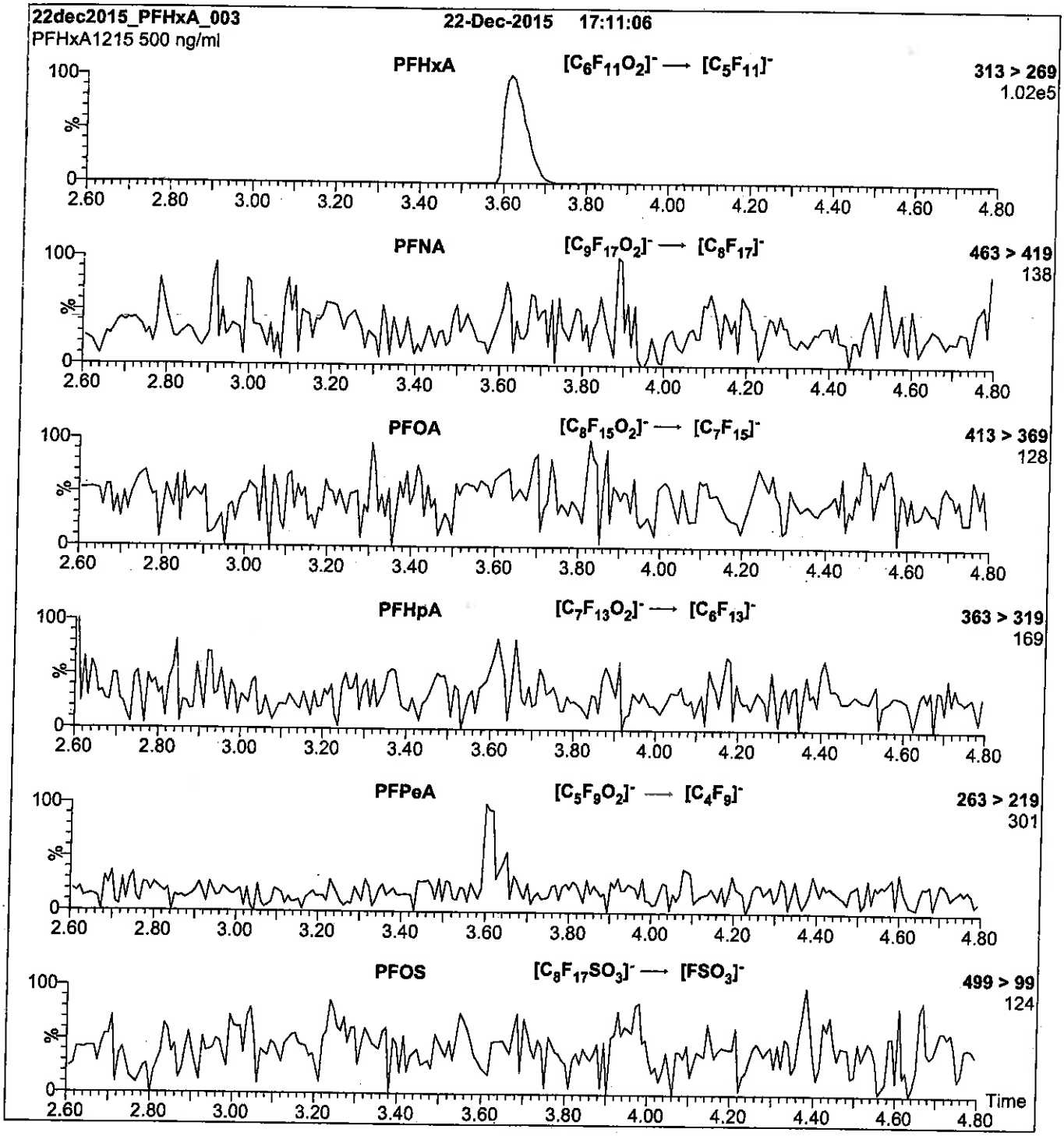
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFHxA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 10

Reagent

LCPFHxDA_00006

R: SBC 9/13/16
Scanned 10/14/16 SK

730630
ID: LCPFHxDA_00006
Exp: 05/25/21 Prpd: SBC
PFHxDA stock 50ug/mL

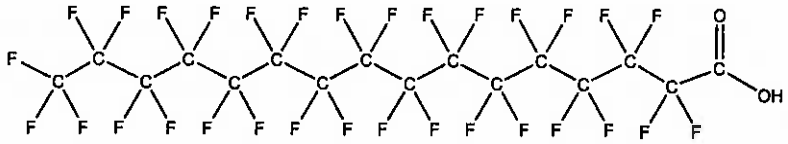
730631
ID: LCPFHxDA_00007
Exp: 05/25/21 Prpd: SBC
PFHxDA stock 50ug/mL

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: PFHxDA
LOT NUMBER: PFHxDA0516
COMPOUND: Perfluoro-n-hexadecanoic acid

STRUCTURE:
CAS #: 67905-19-5



MOLECULAR FORMULA: $C_{16}HF_{31}O_2$
MOLECULAR WEIGHT: 814.13
CONCENTRATION: 50 ± 2.5 µg/ml
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 05/25/2016
EXPIRY DATE: (mm/dd/yyyy) 05/25/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.4% of PFODA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 05/27/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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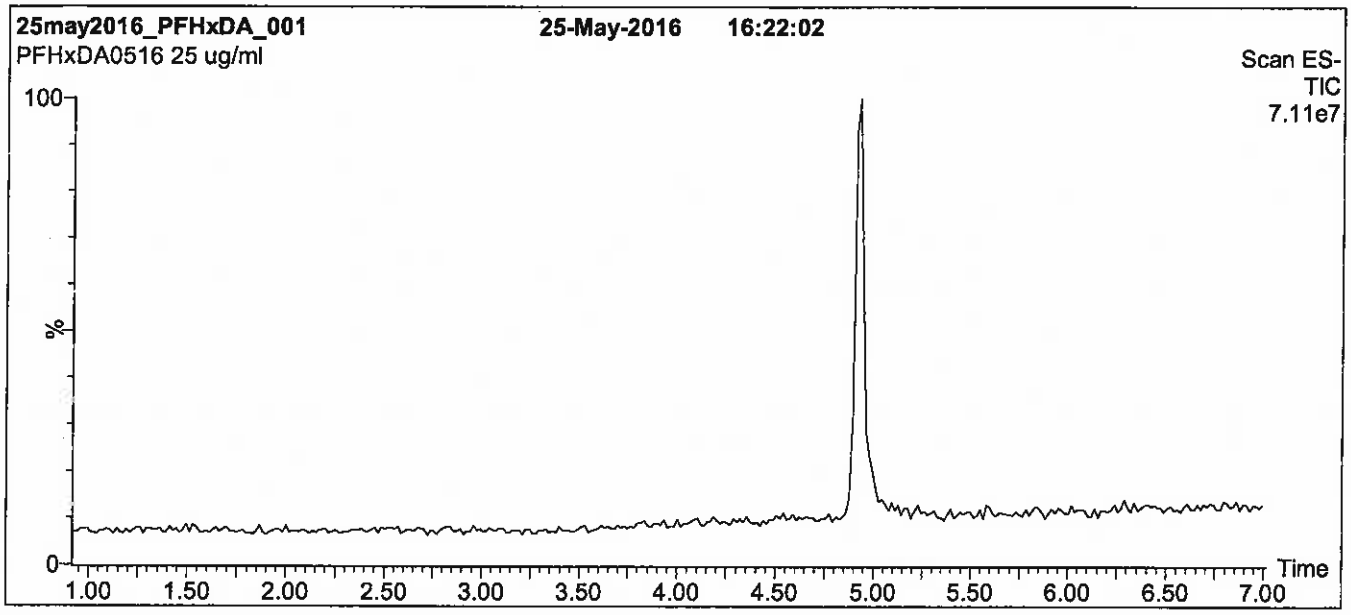
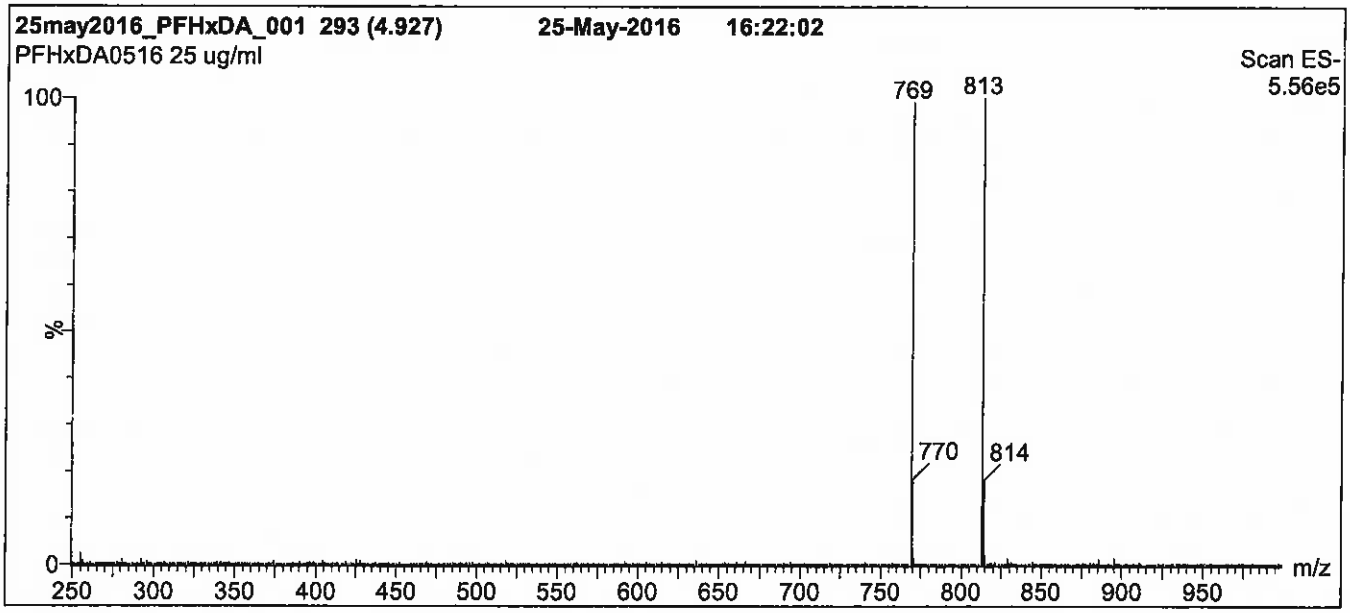
Figure 1: **PFHxDA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 70% (80:20 MeOH:ACN) / 30% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 95% organic over 6 min and hold for 2.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

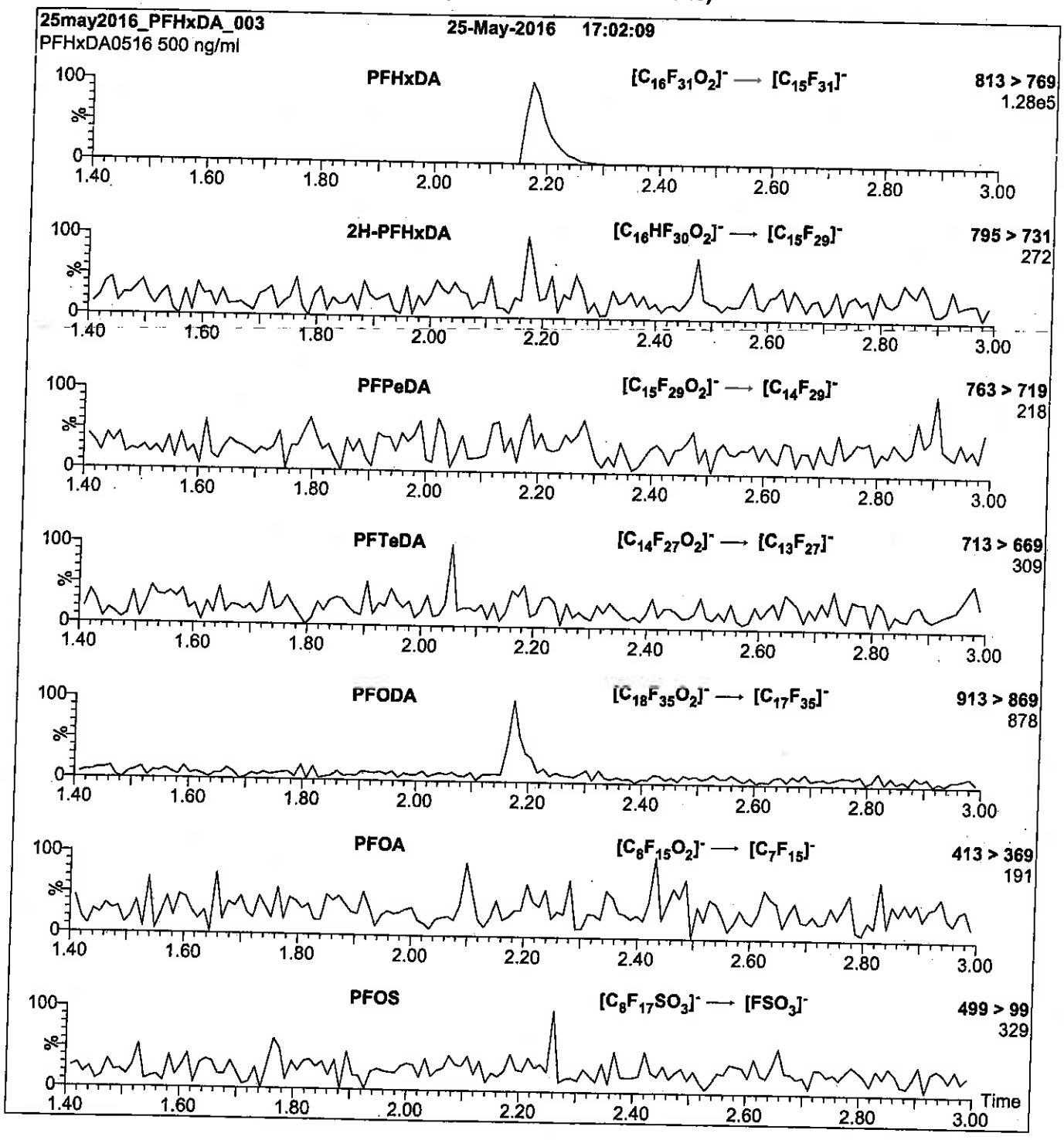
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 1250 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFHxDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.66e-3
Collision Energy (eV) = 15

Reagent

LCPFHxDA_00007

R: SBC 9/13/16
Scanned 10/14/16 SK

730630
ID: LCPFHxDA_00006
Exp: 05/25/21 Prpd: SBC
PFHxDA stock 50ug/mL

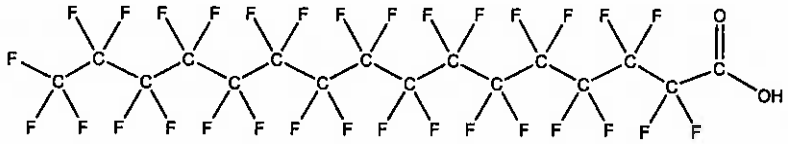
730631
ID: LCPFHxDA_00007
Exp: 05/25/21 Prpd: SBC
PFHxDA stock 50ug/mL

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: PFHxDA
LOT NUMBER: PFHxDA0516
COMPOUND: Perfluoro-n-hexadecanoic acid

STRUCTURE:
CAS #: 67905-19-5



MOLECULAR FORMULA: $C_{16}HF_{31}O_2$
MOLECULAR WEIGHT: 814.13
CONCENTRATION: 50 ± 2.5 µg/ml
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 05/25/2016
EXPIRY DATE: (mm/dd/yyyy) 05/25/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.4% of PFODA.

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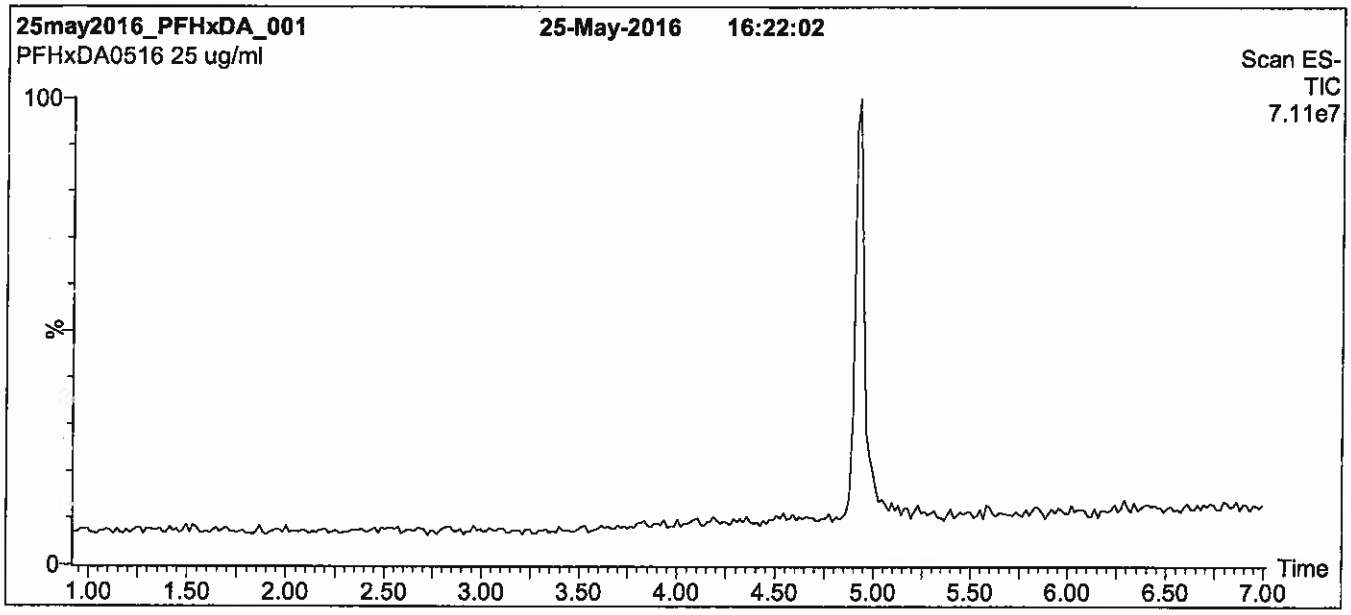

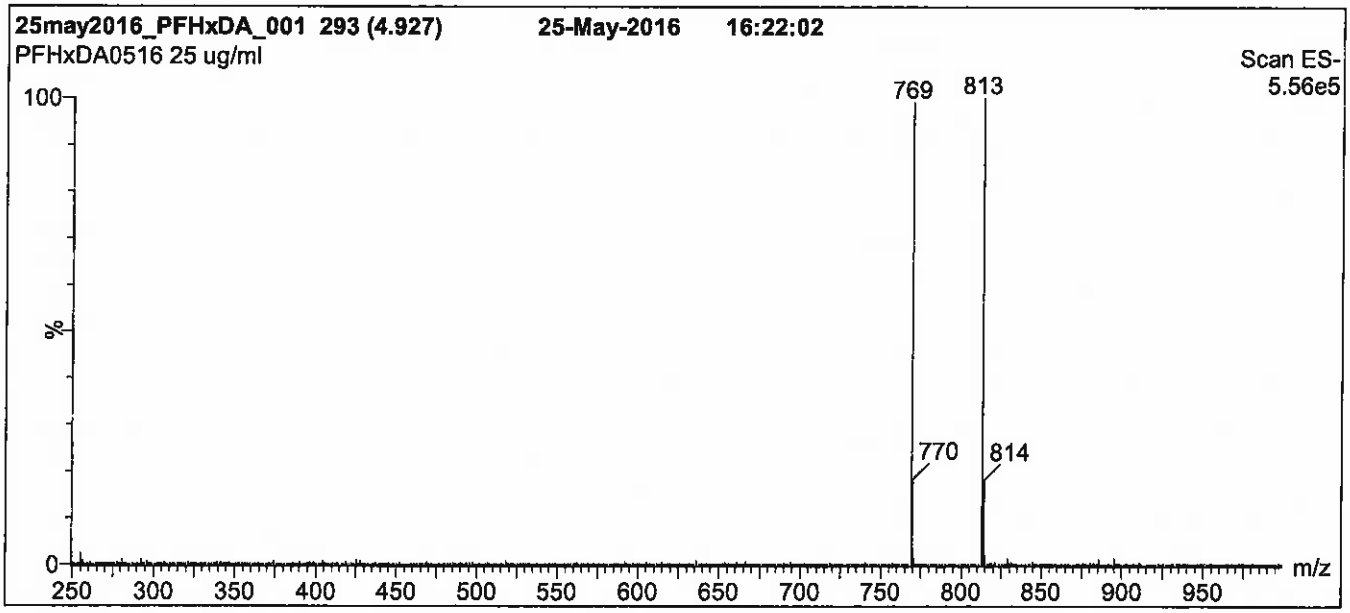

Conditions for Figure 1:

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MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 70% (80:20 MeOH:ACN) / 30% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 95% organic over 6 min and hold for 2.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

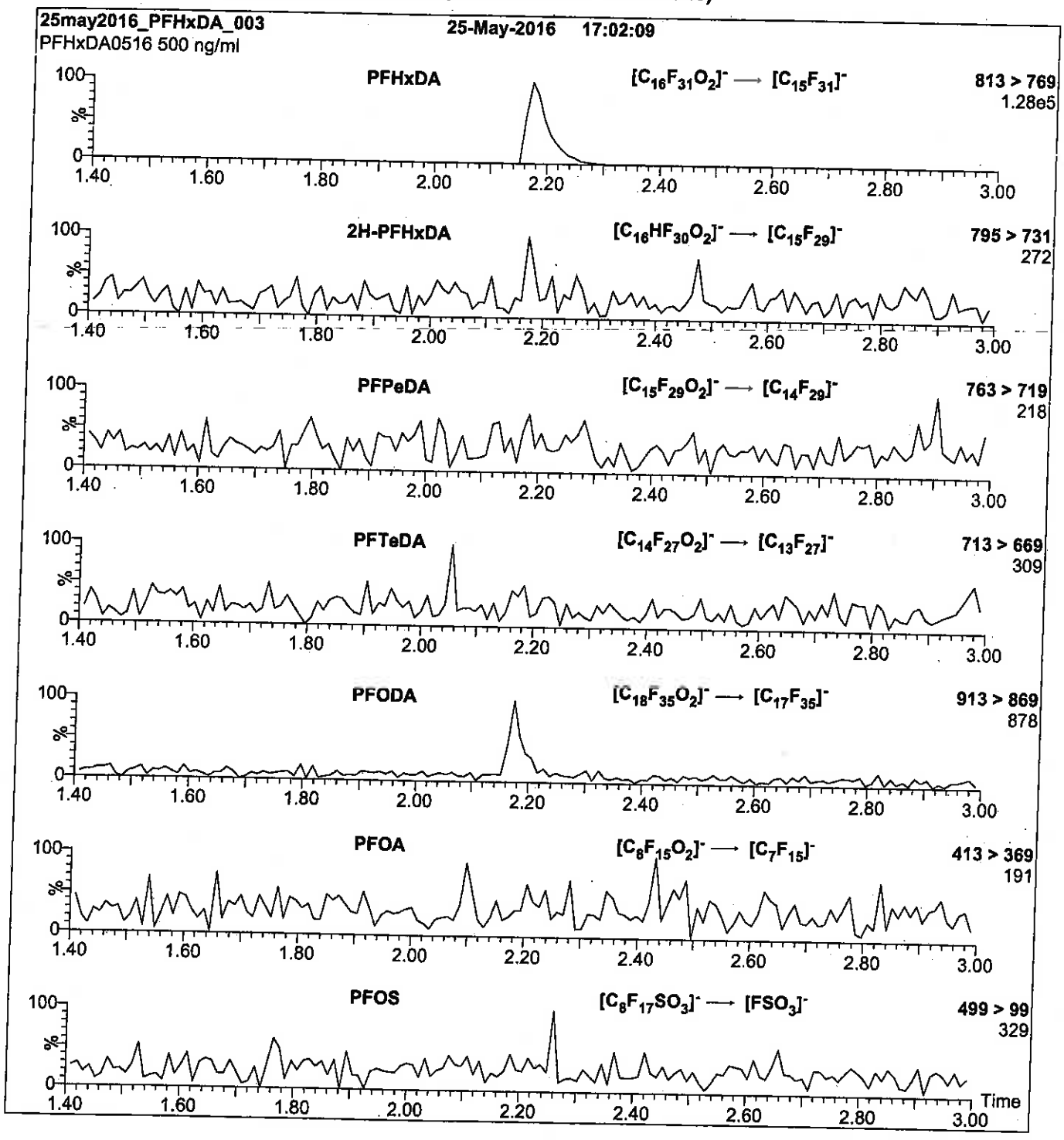
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 1250 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFHxDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
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Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.66e-3
Collision Energy (eV) = 15

Reagent

LCPFHxS-br_00002

SBC
R: 9/13/16

730513
ID: LCPFHxS-br_00002
Exp: 07/03/20 Prpd: SBC
Potassium Perfluorohexane

730514
ID: LCPFHxS-br_00003
Exp: 07/03/20 Prpd: SBC
Potassium Perfluorohexane

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFHxSK

Potassium Perfluorohexanesulfonate Solution/Mixture of Linear and Branched Isomers

PRODUCT CODE:	br-PFHxSK
LOT NUMBER:	brPFHxSK0615
CONCENTRATION:	50.0 ± 2.5 µg/ml (total potassium salt)
	45.5 ± 2.3 µg/ml (total PFHxS anion)
SOLVENT(S):	Methanol
DATE PREPARED: (mm/dd/yyyy)	06/29/2015
LAST TESTED: (mm/dd/yyyy)	07/03/2015
EXPIRY DATE: (mm/dd/yyyy)	07/03/2020
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorohexanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the identified isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ^{19}F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.5% of perfluoro-1-pentanesulfonate and ~ 0.2% of perfluoro-1-octanesulfonate.
- CAS#: 3871-99-6 (for linear isomer; potassium salt).

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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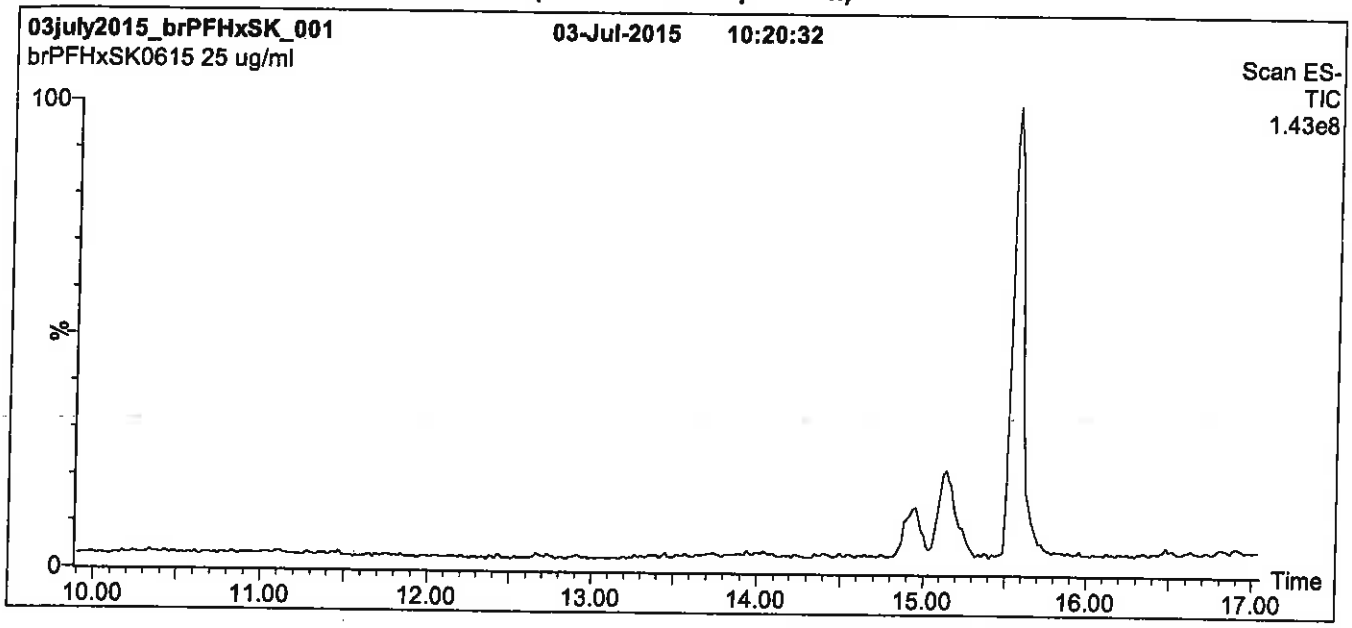
Table A: **br-PFHxSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

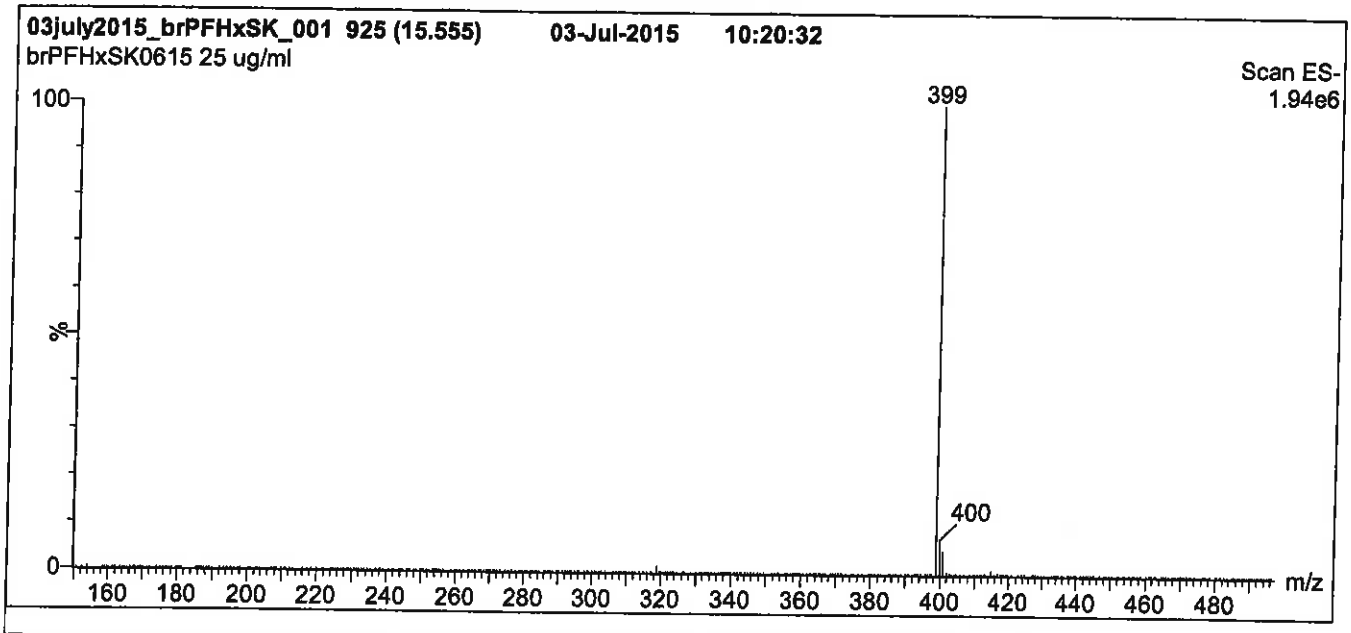
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-hexanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$CF_3CF_2CF_2CF_2CF_2SO_3^-K^+$ (CF3 branch)	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF_2CF_2CF_2SO_3^-K^+$ (CF3 branch)	1.4
4	Potassium 3-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF_2CF_2CF_2SO_3^-K^+$ (CF3 branch)	5.0
5	Potassium 4-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF_2CF_2CF_2SO_3^-K^+$ (CF3 branch)	8.9
6	Potassium 3,3-di(trifluoromethyl)perfluorobutanesulfonate	$CF_3CCF_2CF_2SO_3^-K^+$ (two CF3 branches)	0.2
7	Other Unidentified Isomers		0.5

* Percent of total perfluorohexanesulfonate isomers only.
** Systematic Name: Potassium perfluorohexane-2-sulfonate.

Certified By: B.G. Chittim **Date:** 07/15/2015 (mm/dd/yyyy)

Figure 1: **br-PFHxSK; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 50% organic over 14 min. Ramp to 90% organic over 3 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 20 min

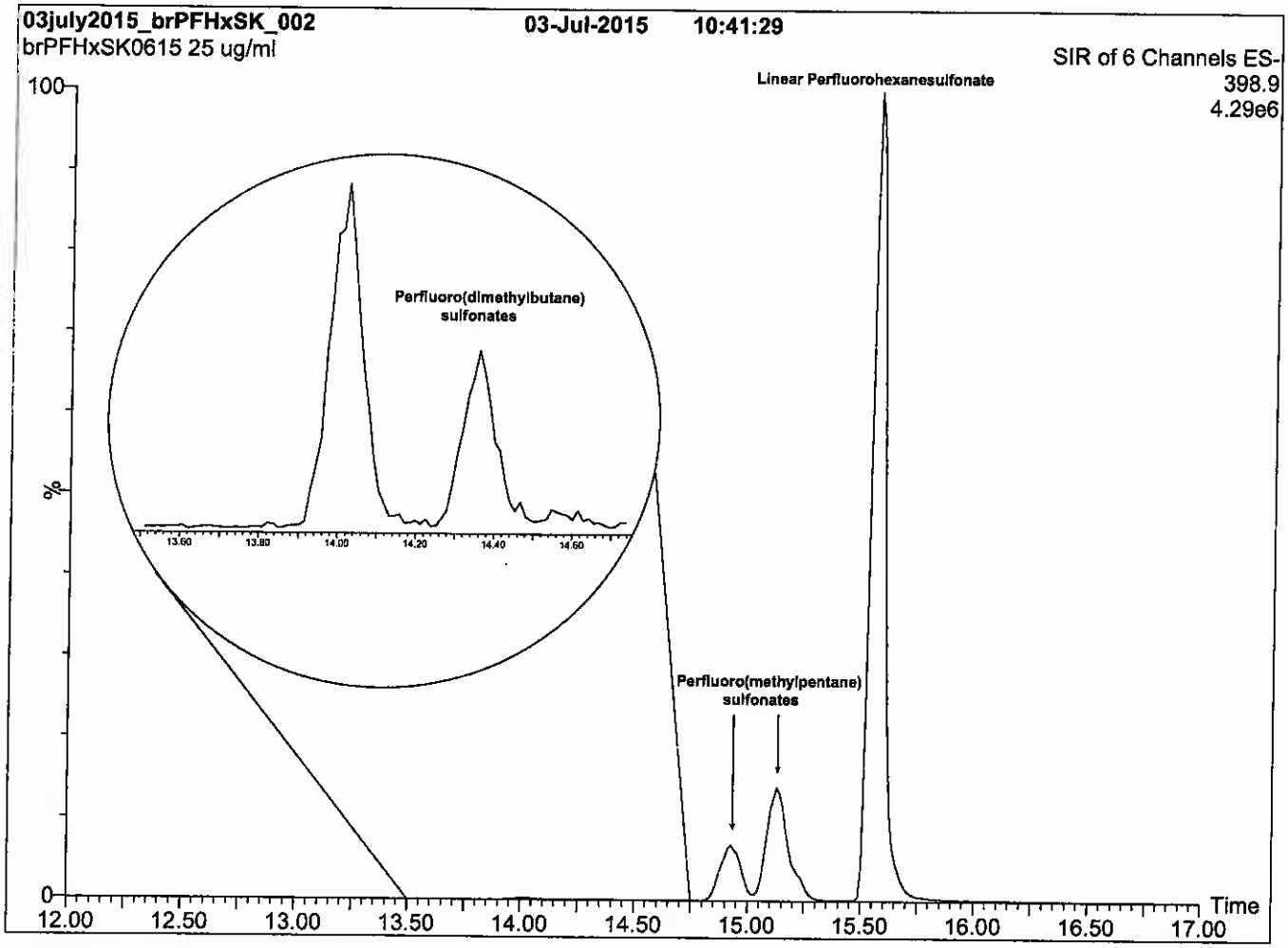
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **br-PFHxSK; LC/MS Data**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 50% organic over 14 min. Ramp to 90% organic over 3 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 20 min

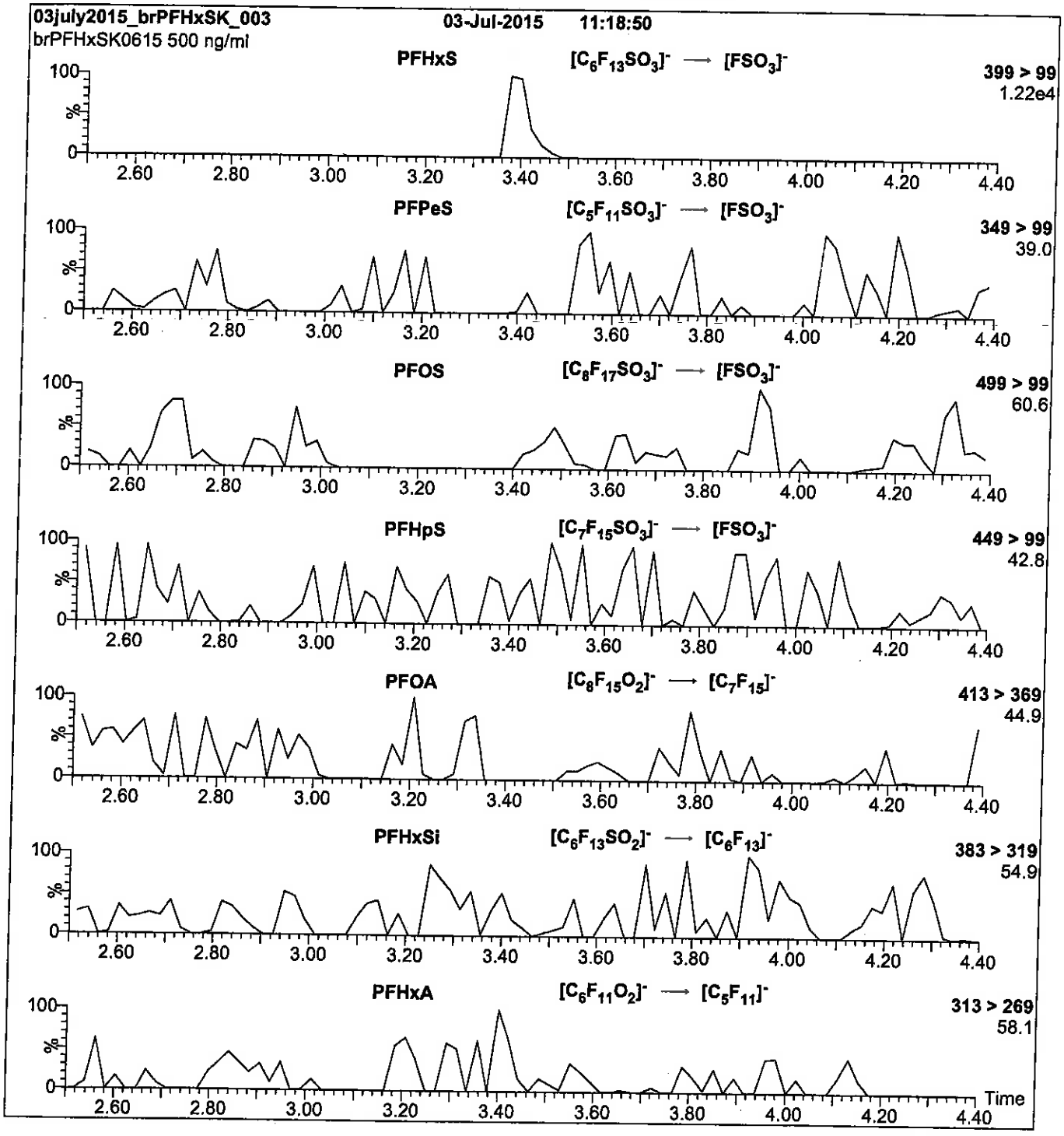
Flow: 300 µl/min

MS Parameters

Experiment: SIR (6 channels)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 3: **br-PFHxSK; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 3:

Injection: Direct loop injection
10 µl (500 ng/ml br-PFHxSK)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 30

Reagent

LCPFHxS-br_00003

SBC
R: 9/13/16

730513
ID: LCPFHxS-br_00002
Exp: 07/03/20 Prpd: SBC
Potassium Perfluorohexane

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Exp: 07/03/20 Prpd: SBC
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WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFHxSK

Potassium Perfluorohexanesulfonate Solution/Mixture of Linear and Branched Isomers

PRODUCT CODE:	br-PFHxSK
LOT NUMBER:	brPFHxSK0615
CONCENTRATION:	50.0 ± 2.5 µg/ml (total potassium salt)
	45.5 ± 2.3 µg/ml (total PFHxS anion)
SOLVENT(S):	Methanol
DATE PREPARED: (mm/dd/yyyy)	06/29/2015
LAST TESTED: (mm/dd/yyyy)	07/03/2015
EXPIRY DATE: (mm/dd/yyyy)	07/03/2020
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorohexanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the identified isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ^{19}F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.5% of perfluoro-1-pentanesulfonate and ~ 0.2% of perfluoro-1-octanesulfonate.
- CAS#: 3871-99-6 (for linear isomer; potassium salt).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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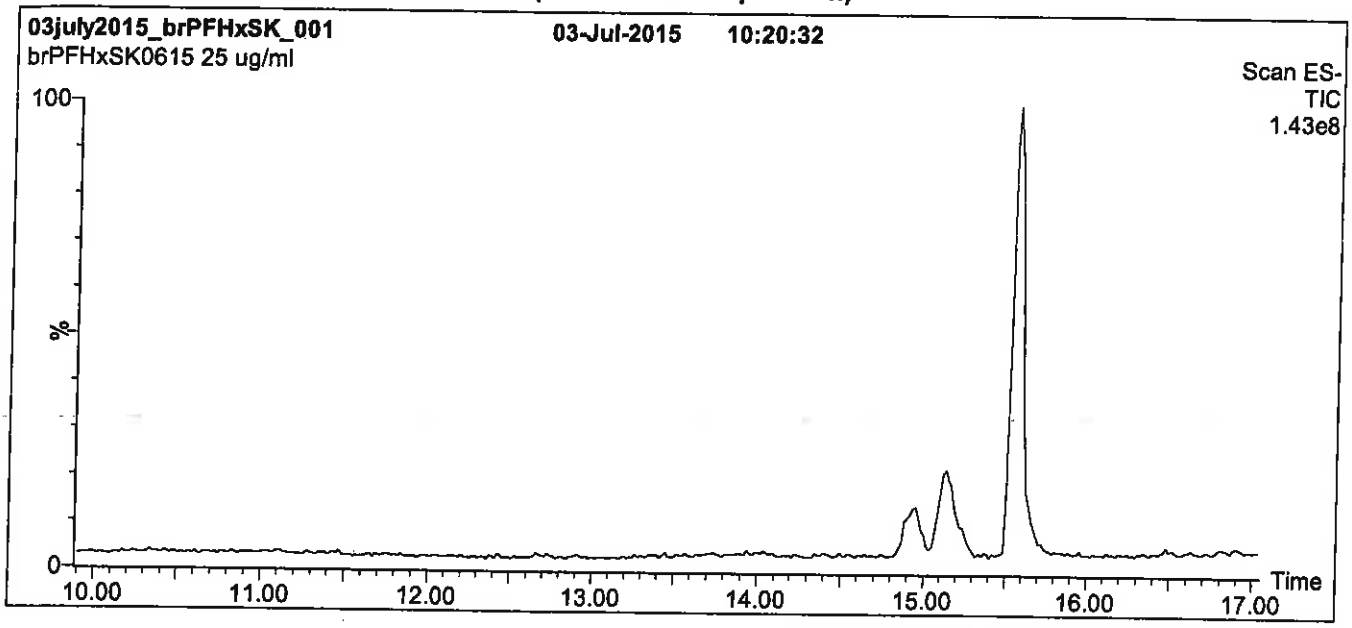
Table A: **br-PFHxSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

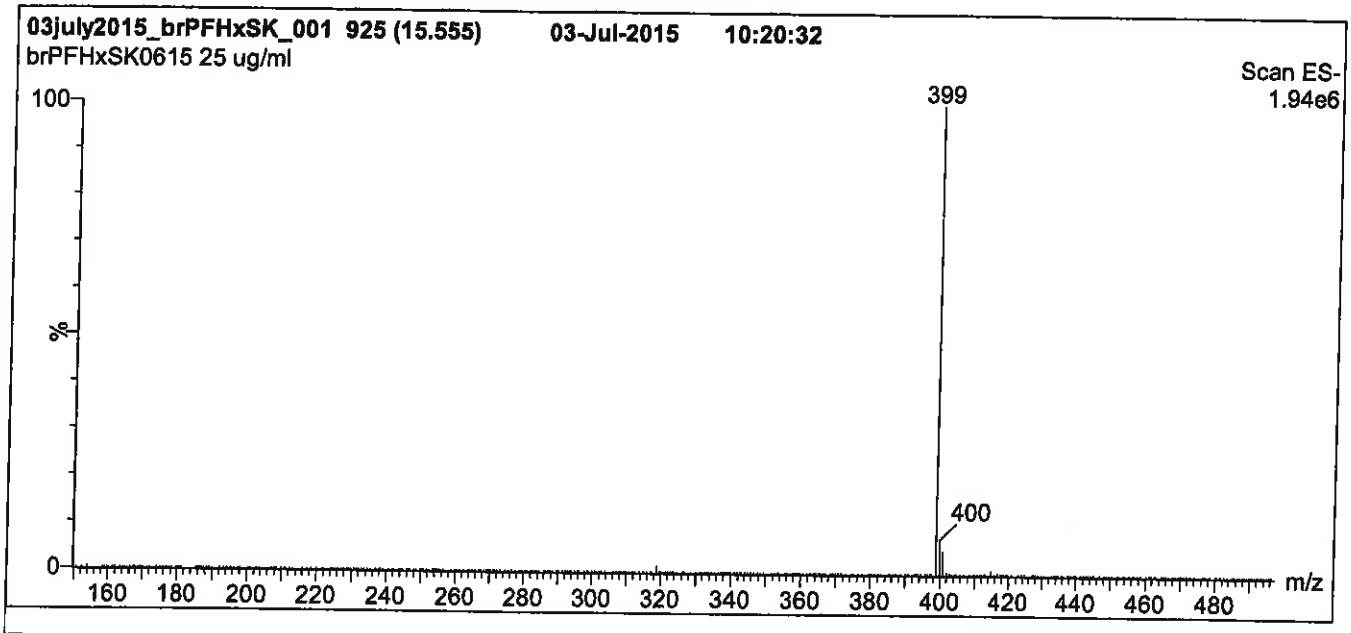
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-hexanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$CF_3CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$	1.4
4	Potassium 3-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF(CF_3)CF_2CF_2SO_3^-K^+$	5.0
5	Potassium 4-trifluoromethylperfluoropentanesulfonate	$CF_3CF(CF_3)CF_2CF_2CF_2SO_3^-K^+$	8.9
6	Potassium 3,3-di(trifluoromethyl)perfluorobutanesulfonate	$CF_3C(CF_3)CF_2CF_2SO_3^-K^+$	0.2
7	Other Unidentified Isomers		0.5

* Percent of total perfluorohexanesulfonate isomers only.
** Systematic Name: Potassium perfluorohexane-2-sulfonate.

Certified By: B.G. Chittim **Date:** 07/15/2015 (mm/dd/yyyy)

Figure 1: **br-PFHxSK; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 50% organic over 14 min. Ramp to 90% organic over 3 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 20 min

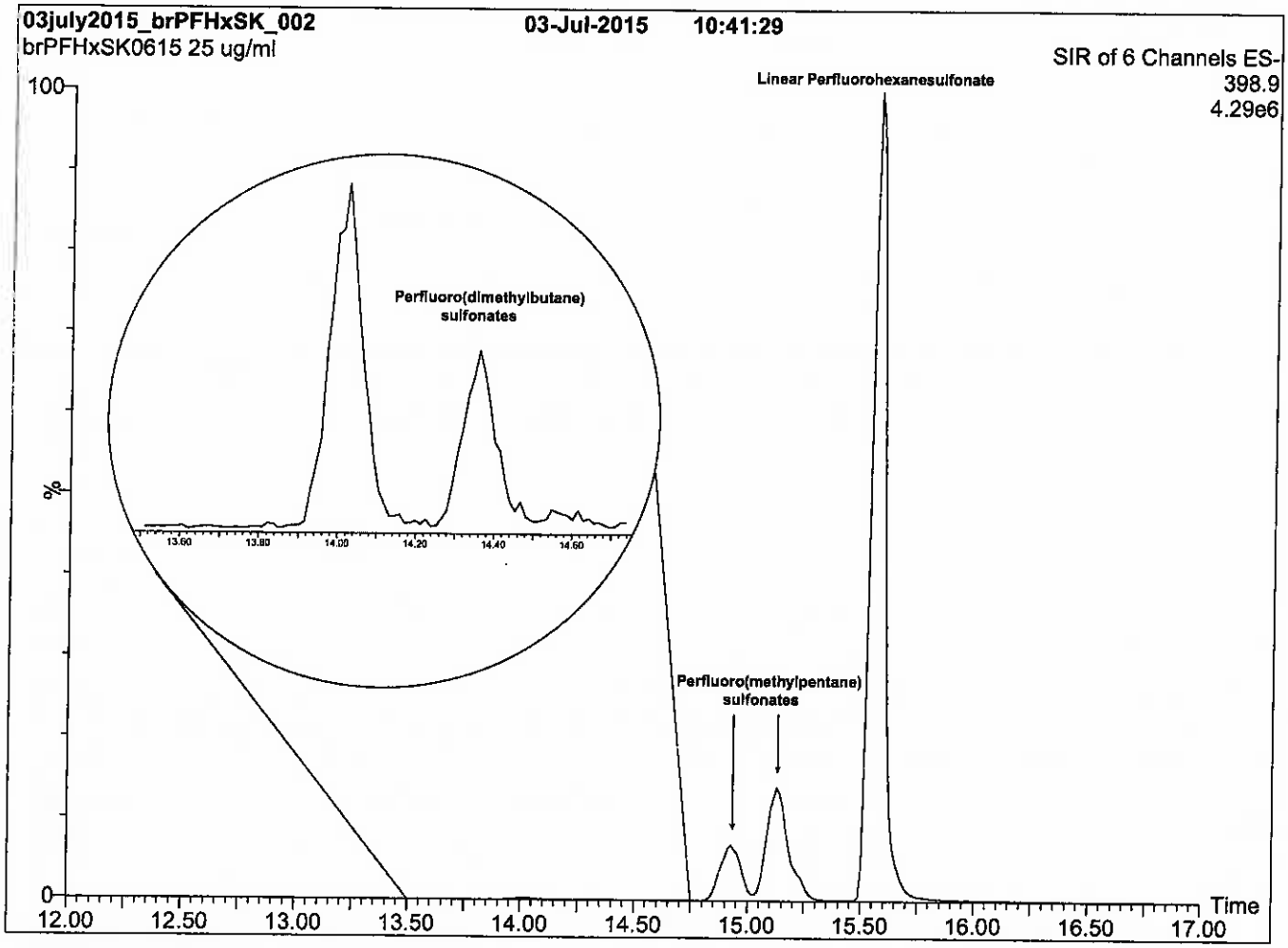
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **br-PFHxSK; LC/MS Data**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 50% organic over 14 min. Ramp to 90% organic over 3 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 20 min

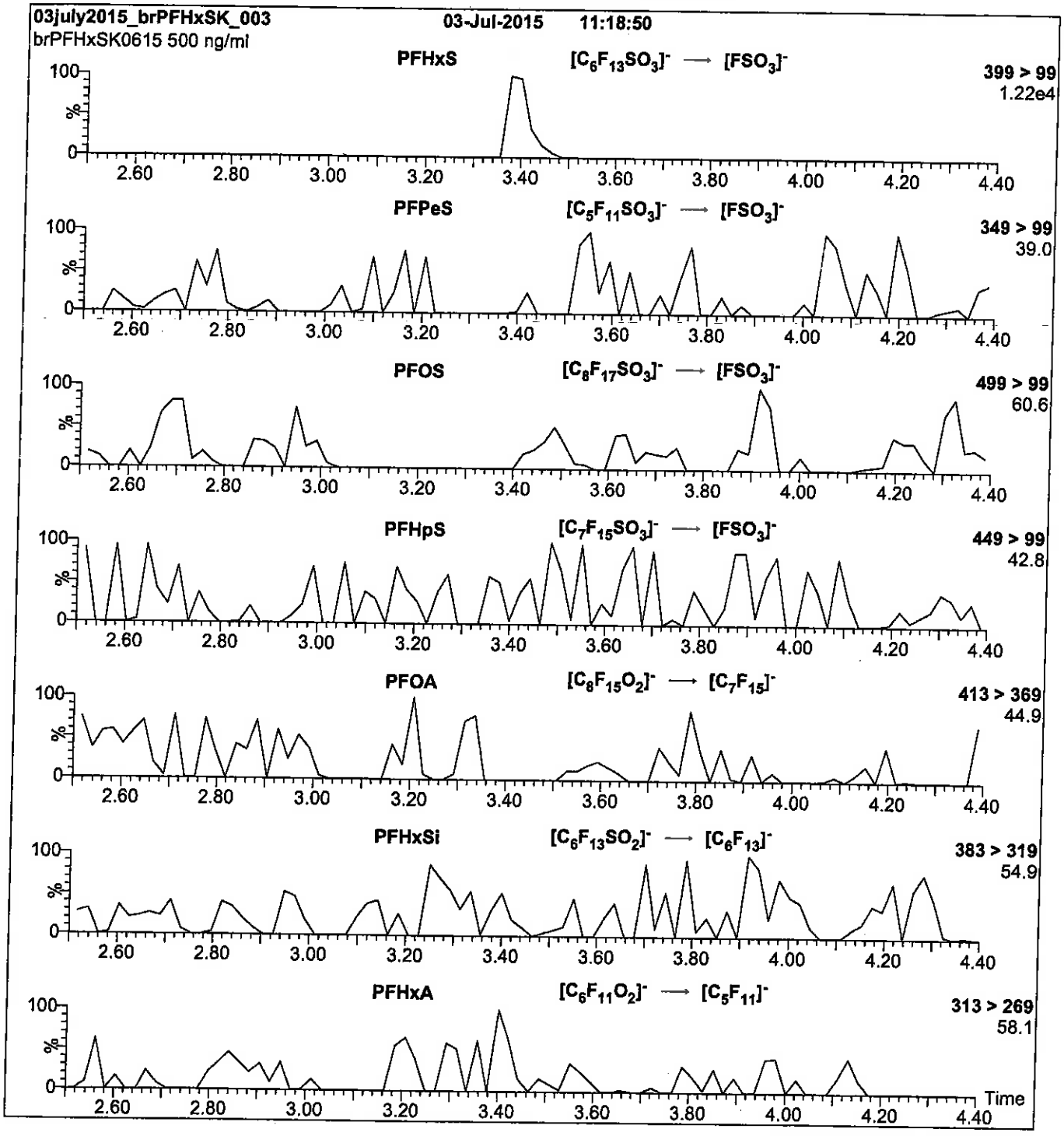
Flow: 300 µl/min

MS Parameters

Experiment: SIR (6 channels)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 3: **br-PFHxSK; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 3:

Injection: Direct loop injection
10 µl (500 ng/ml br-PFHxSK)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 30

Reagent

LCPFNA_00006

R: SBC 9/13/16
Scanned 10/14/16

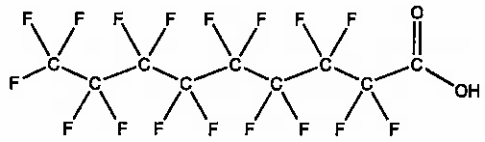
730559
ID: LCPFNA_00006
Exp: 10/23/20 Prpd: SBC
PF-n-nonanoic acid

730560
ID: LCPFNA_00007
Exp: 10/23/20 Prpd: SBC
PF-n-nonanoic acid

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	PFNA	**LOT NUMBER:**	PFNA1015
COMPOUND:	Perfluoro-n-nonanoic acid		
STRUCTURE:		**CAS #:**	375-95-1



MOLECULAR FORMULA:	$C_9HF_{17}O_2$	**MOLECULAR WEIGHT:**	464.08
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	10/23/2015		
EXPIRY DATE: (mm/dd/yyyy)	10/23/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of perfluoro-n-octanoic acid (PFOA) and < 0.1% of perfluoro-n-heptanoic acid (PFHpA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 10/30/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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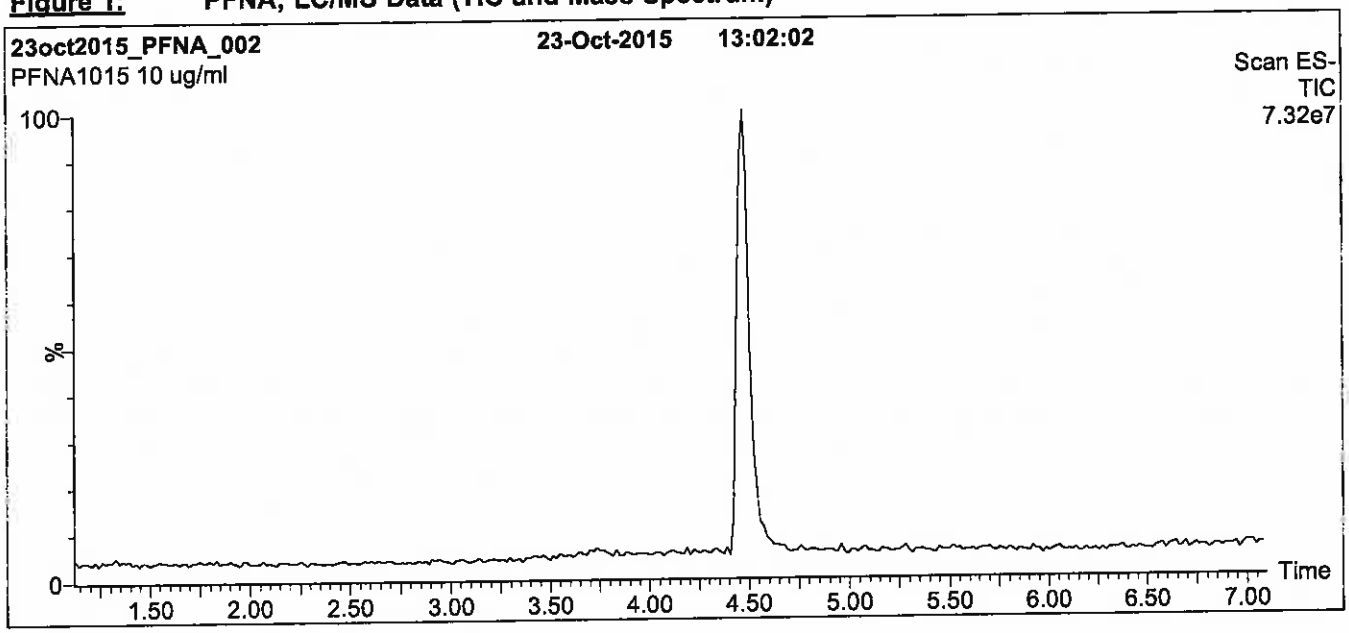

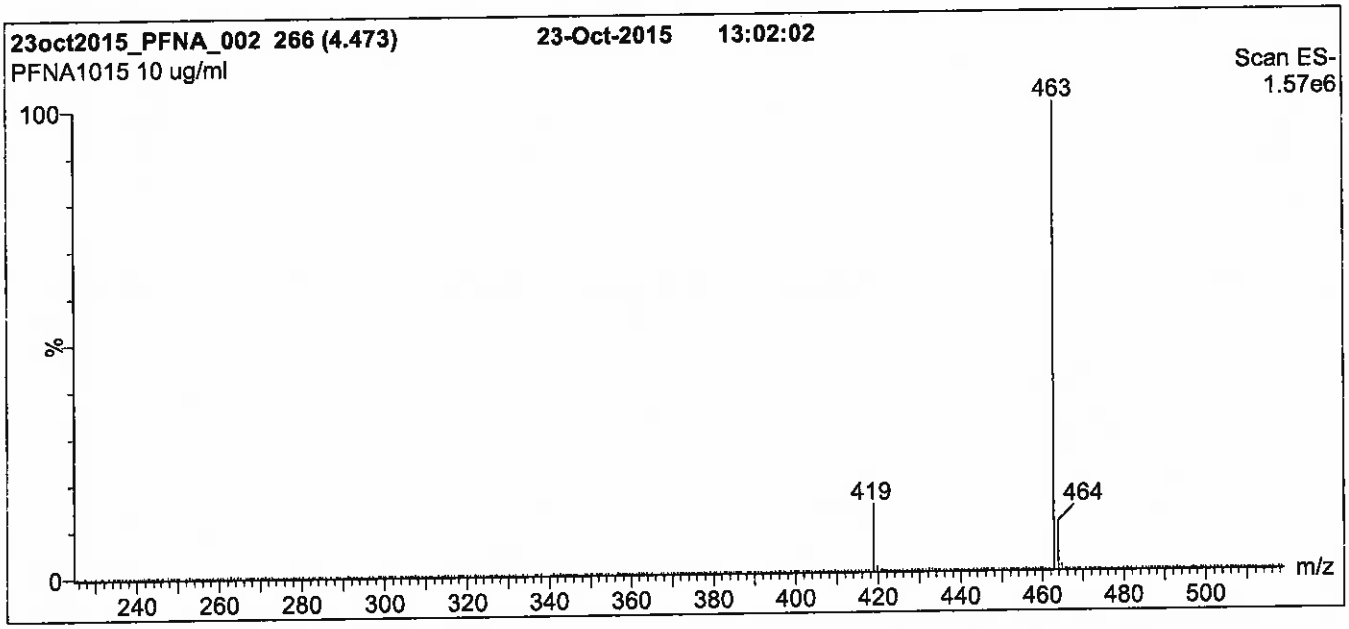

Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
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Cone Gas Flow (l/hr) = 50
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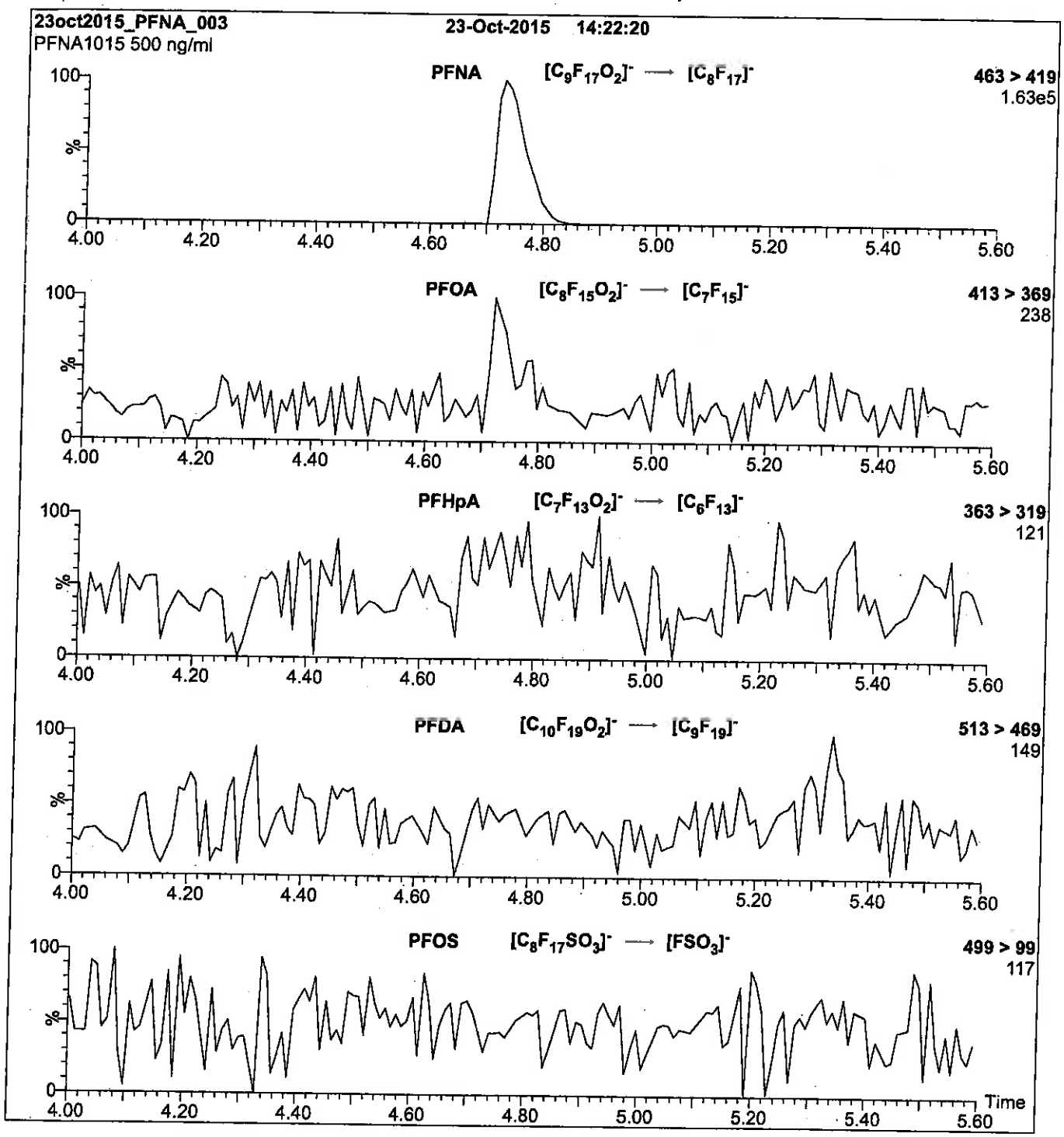
Figure 2: **PFNA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 11

Reagent

LCPFNA_00007

R: SBC 9/13/16
Scanned 10/14/16

730559
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PF-n-nonanoic acid

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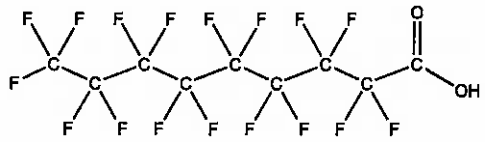

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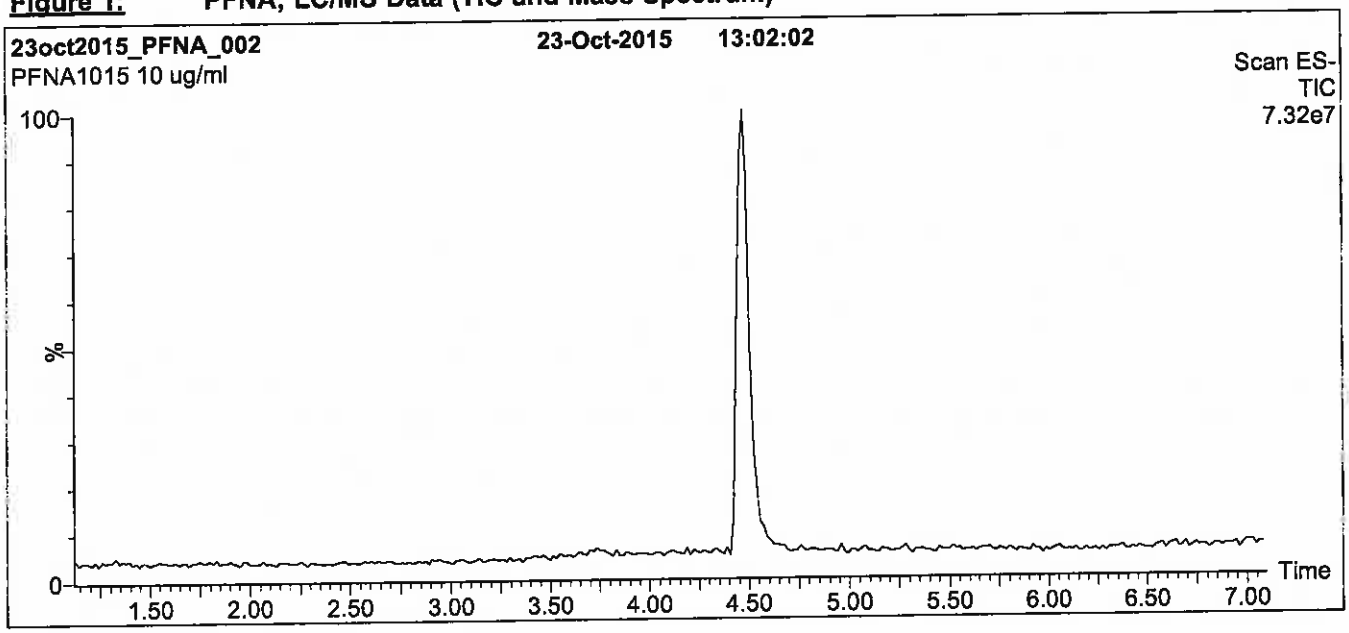

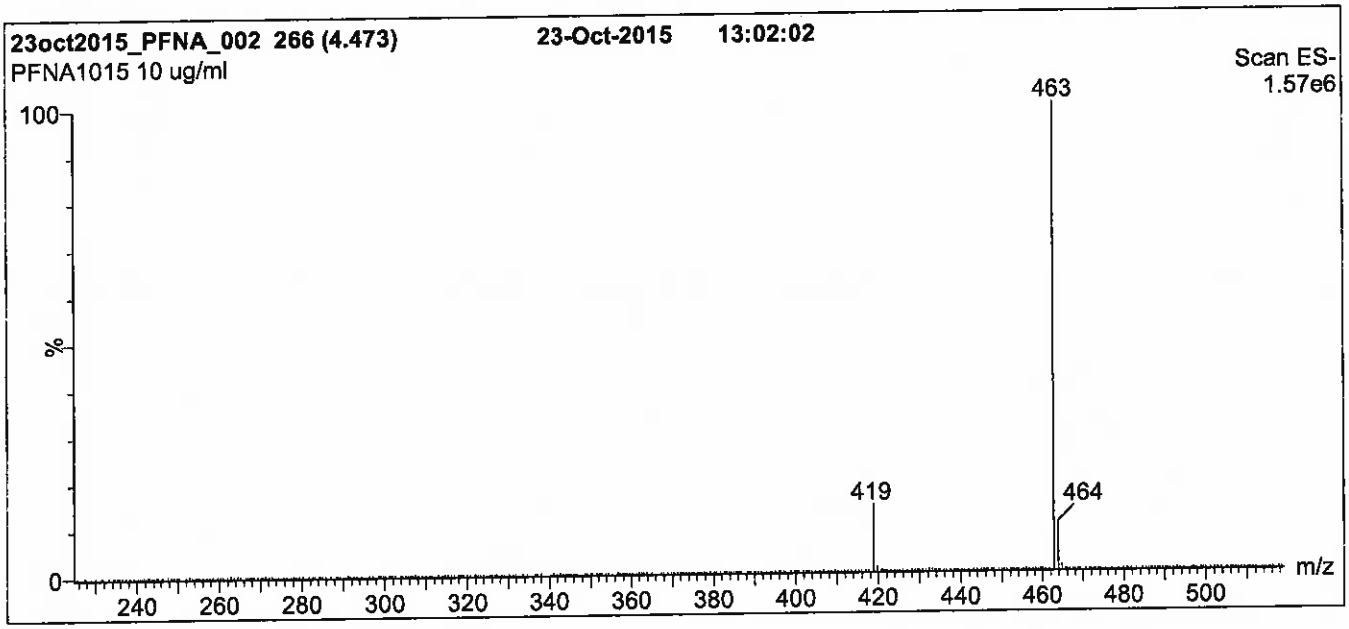

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Time: 10 min

Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
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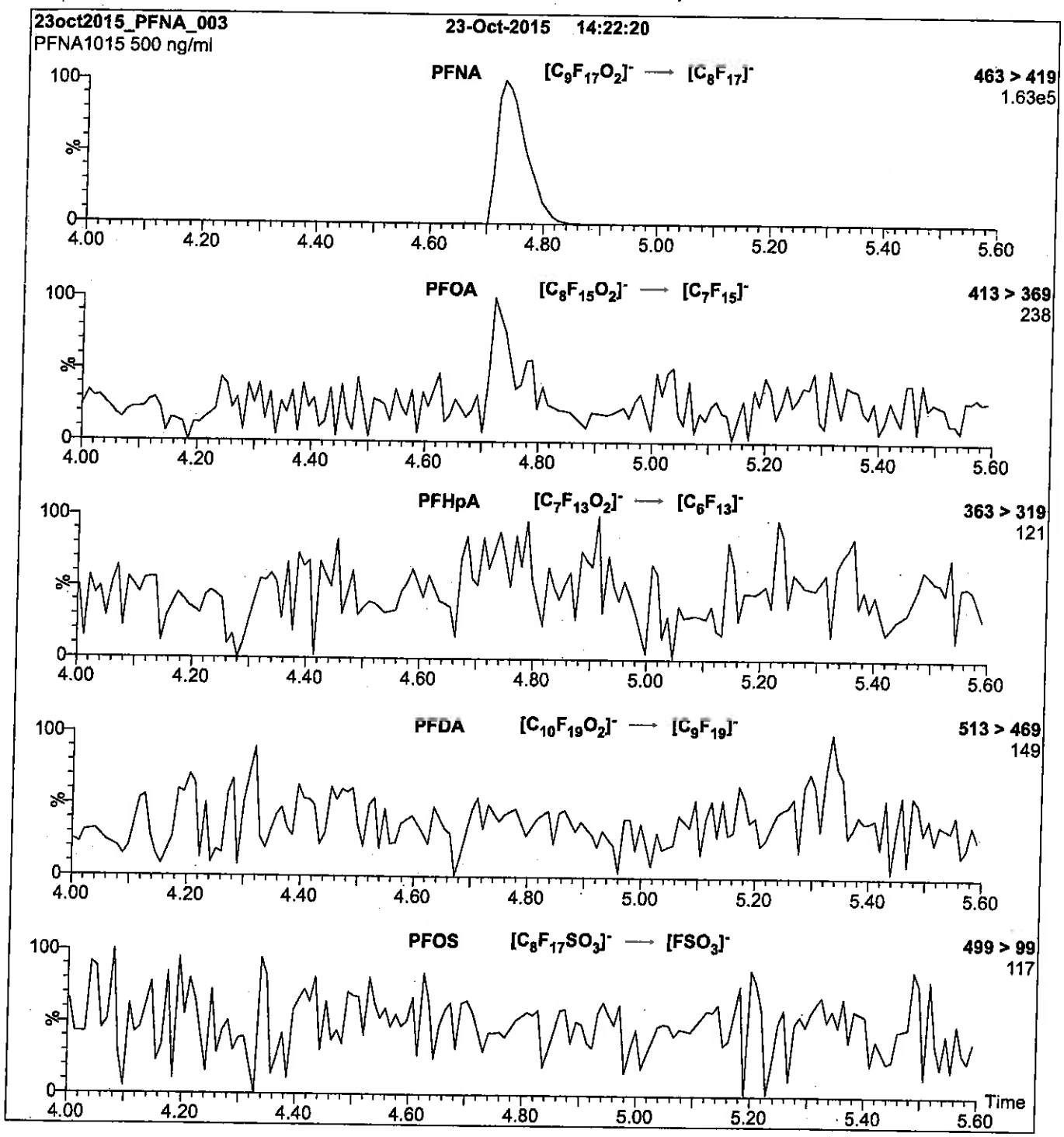
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFNA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 11

Reagent

LCPFOA_00006

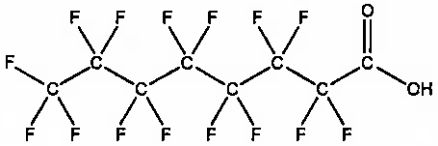
R-7/6/16 CBW

671577
ID: LCPFOA_00006
Exp: 11/06/20 Prpd: CBW
PF-n-octanoic acid

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	PFOA	**LOT NUMBER:**	PFOA1115
COMPOUND:	Perfluoro-n-octanoic acid		
STRUCTURE:		**CAS #:**	335-67-1



MOLECULAR FORMULA:	$C_8HF_{15}O_2$	**MOLECULAR WEIGHT:**	414.07
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	11/06/2015		
EXPIRY DATE: (mm/dd/yyyy)	11/06/2020		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 11/11/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

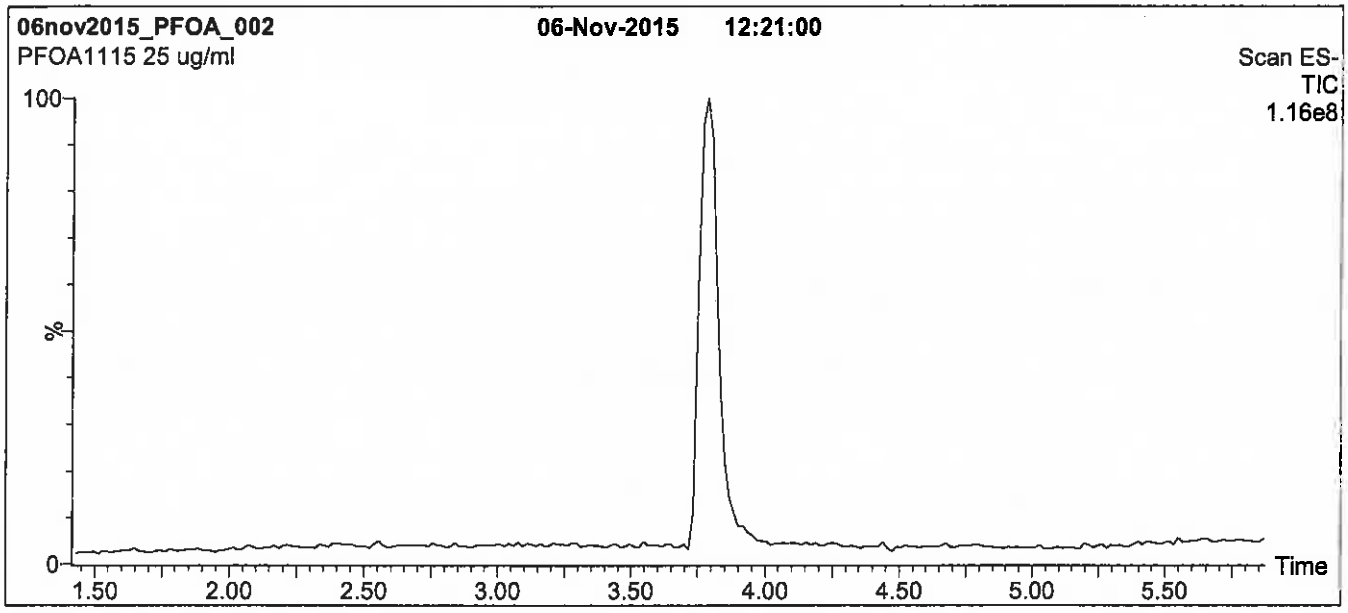
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

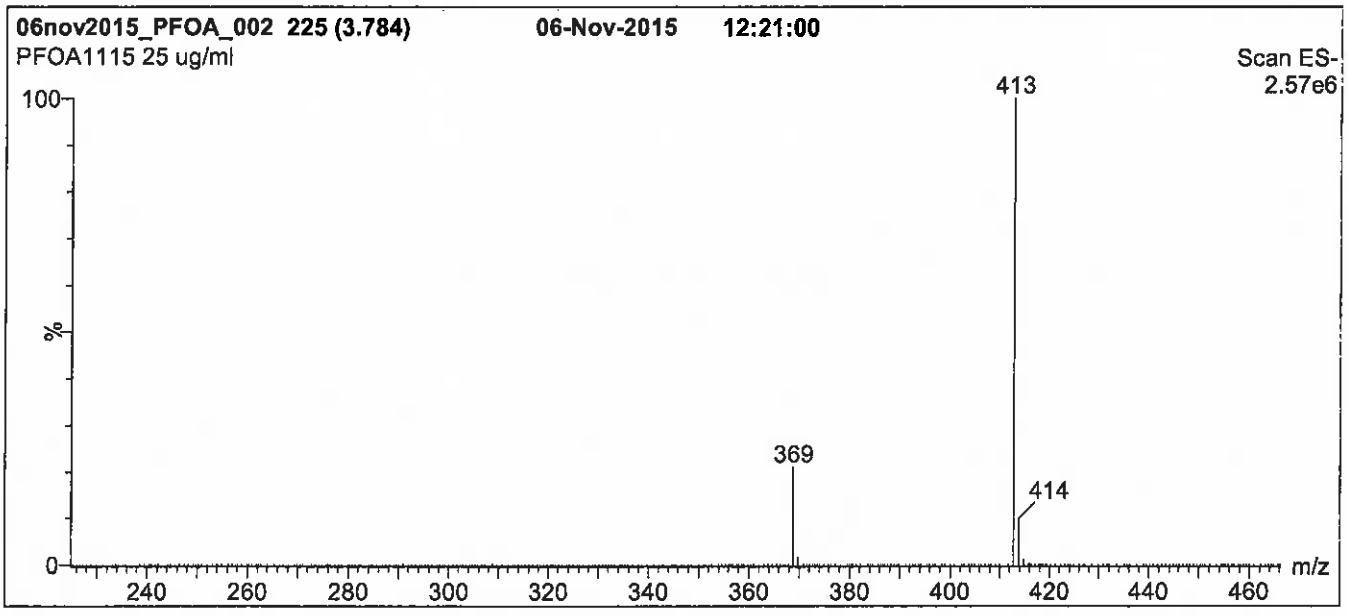
CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **PFOA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

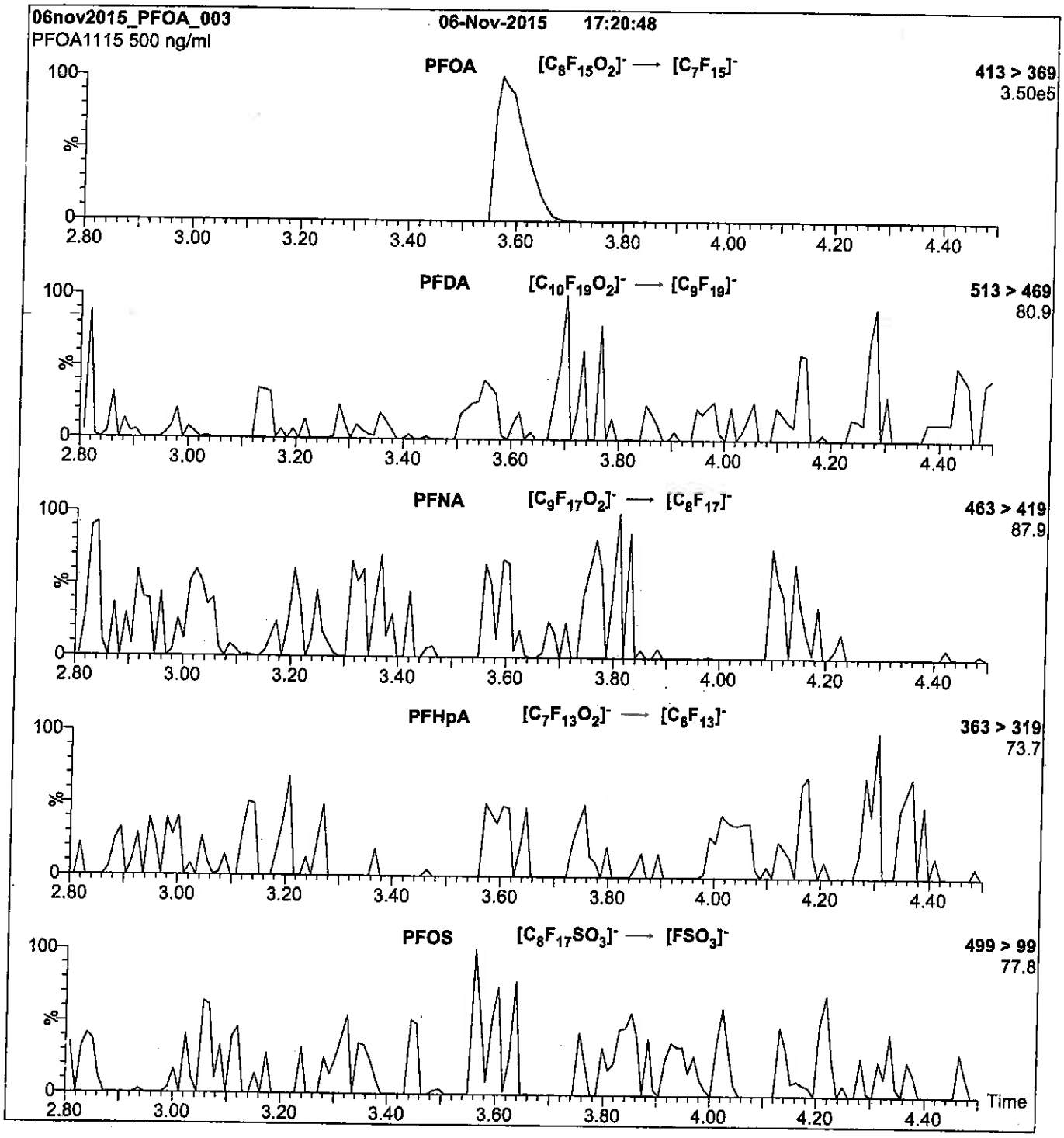
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFOA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.17e-3
Collision Energy (eV) = 10

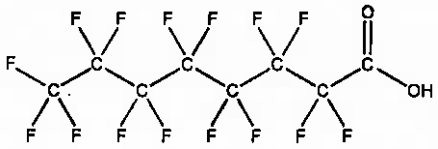
Reagent

LCPFOA_00007

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	PFOA	**LOT NUMBER:**	PFOA0716
COMPOUND:	Perfluoro-n-octanoic acid		
STRUCTURE:		**CAS #:**	335-67-1



MOLECULAR FORMULA:	$C_8HF_{15}O_2$	**MOLECULAR WEIGHT:**	414.07
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	08/02/2016		
EXPIRY DATE: (mm/dd/yyyy)	08/02/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 08/05/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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CALA

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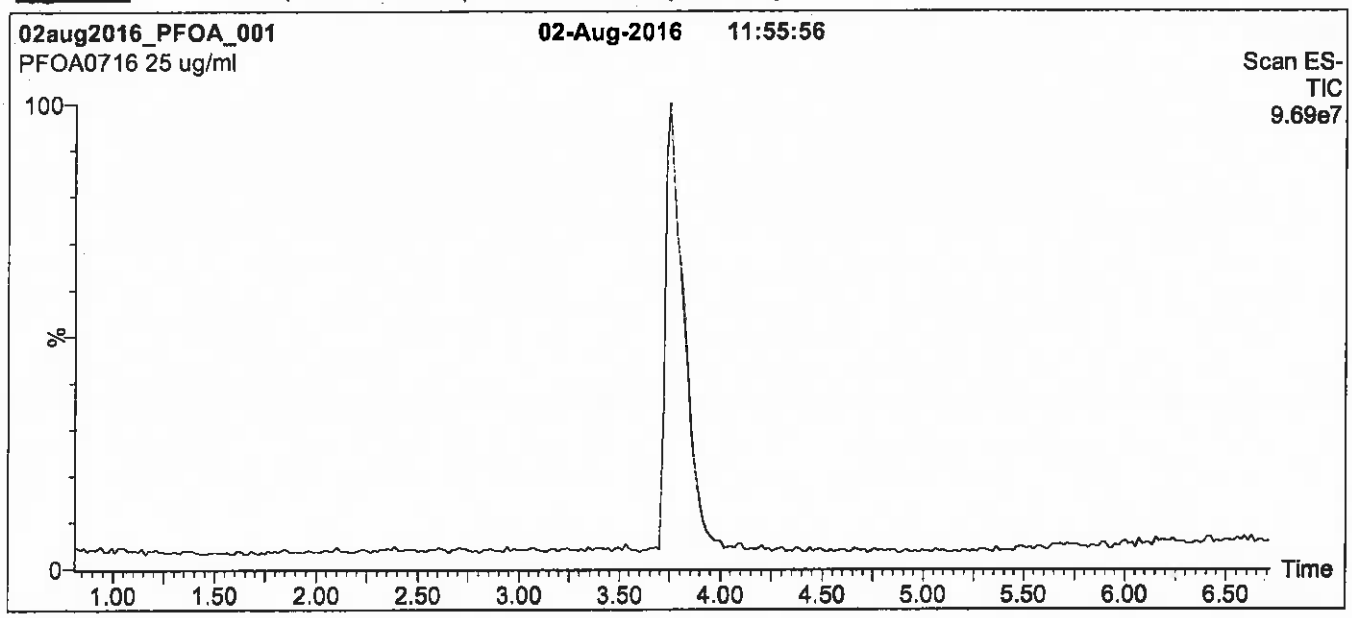
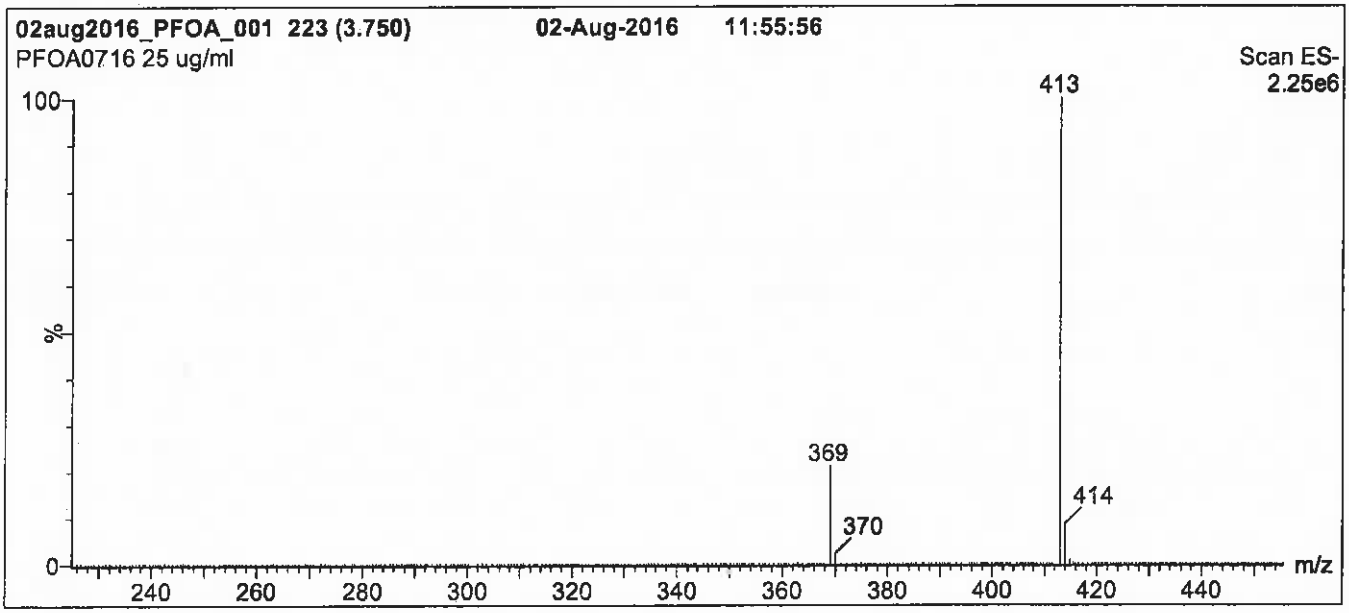




Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

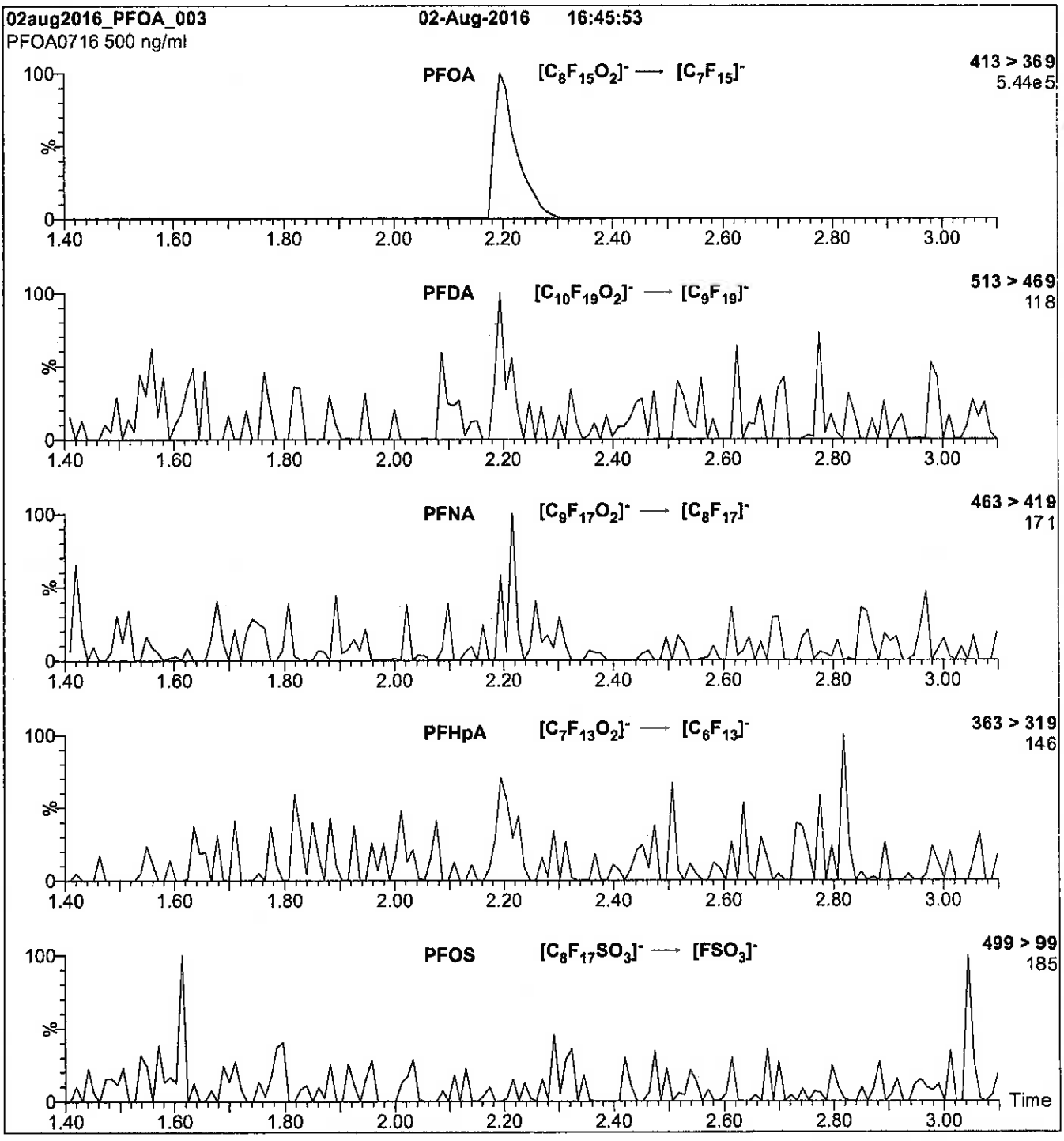
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFOA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection:	Direct loop injection 10 µl (500 ng/ml PFOA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 10

Reagent

LCPFODA_00006

Scanned 10/14/16 R: SBC 9/13/16

730632
ID: LCPFODA_00006
Exp: 04/29/21 Prpd: SBC
PFODA stock 50ug/mL

730633
ID: LCPFODA_00007
Exp: 04/29/21 Prpd: SBC
PFODA stock 50ug/mL

WELLINGTON LABORATORIES

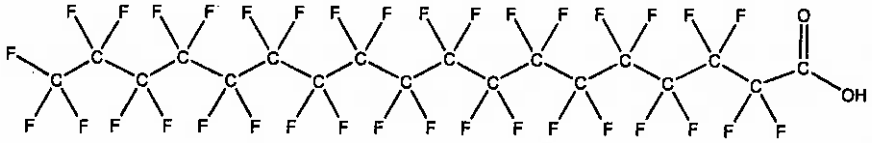
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFODA
COMPOUND: Perfluoro-n-octadecanoic acid

LOT NUMBER: PFODA0416

STRUCTURE:

CAS #: 16517-11-6



MOLECULAR FORMULA: $C_{18}HF_{35}O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 914.14
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/29/2016
EXPIRY DATE: (mm/dd/yyyy) 04/29/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 05/20/2016 (mm/dd/yyyy)

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CALA Testing A1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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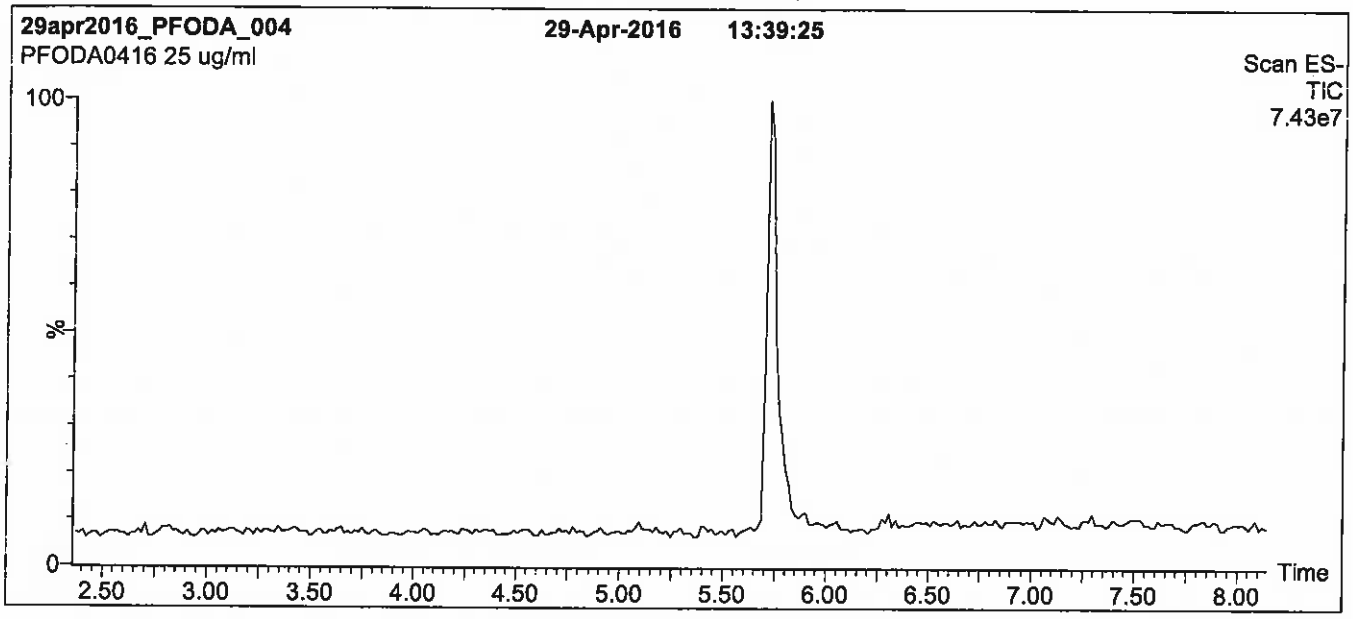
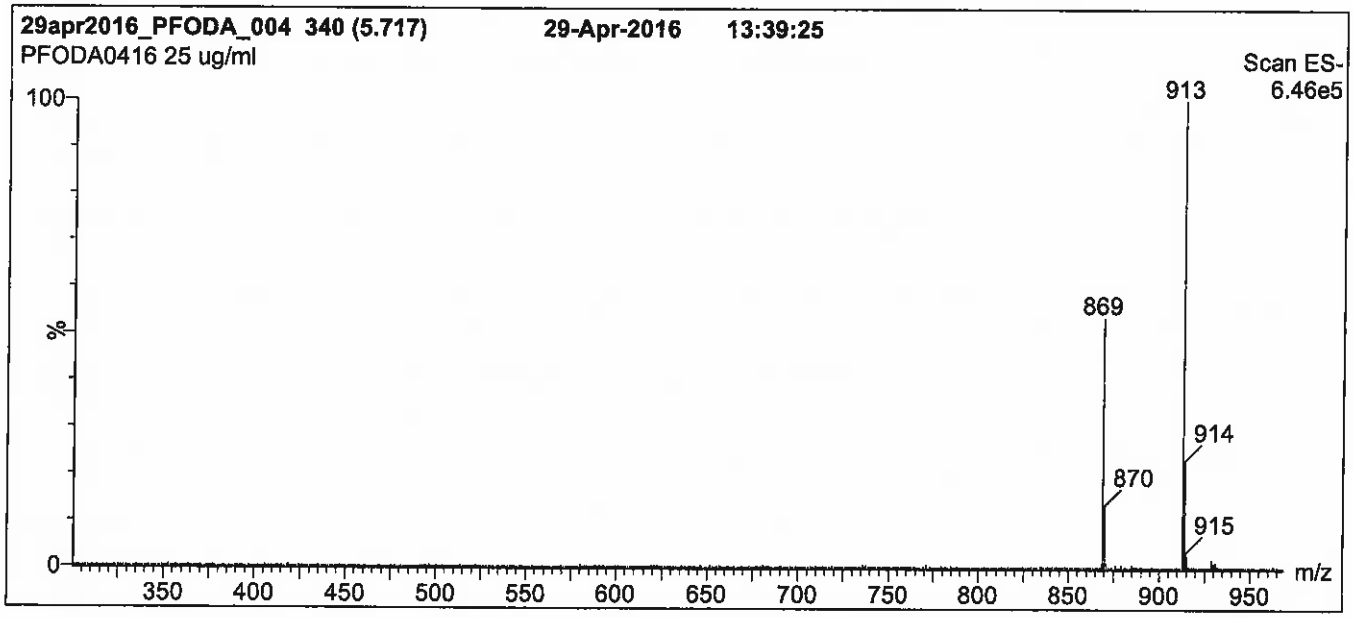
Figure 1: **PFODA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 70% (80:20 MeOH:ACN) / 30% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 95% organic over 6 min and hold for
2.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

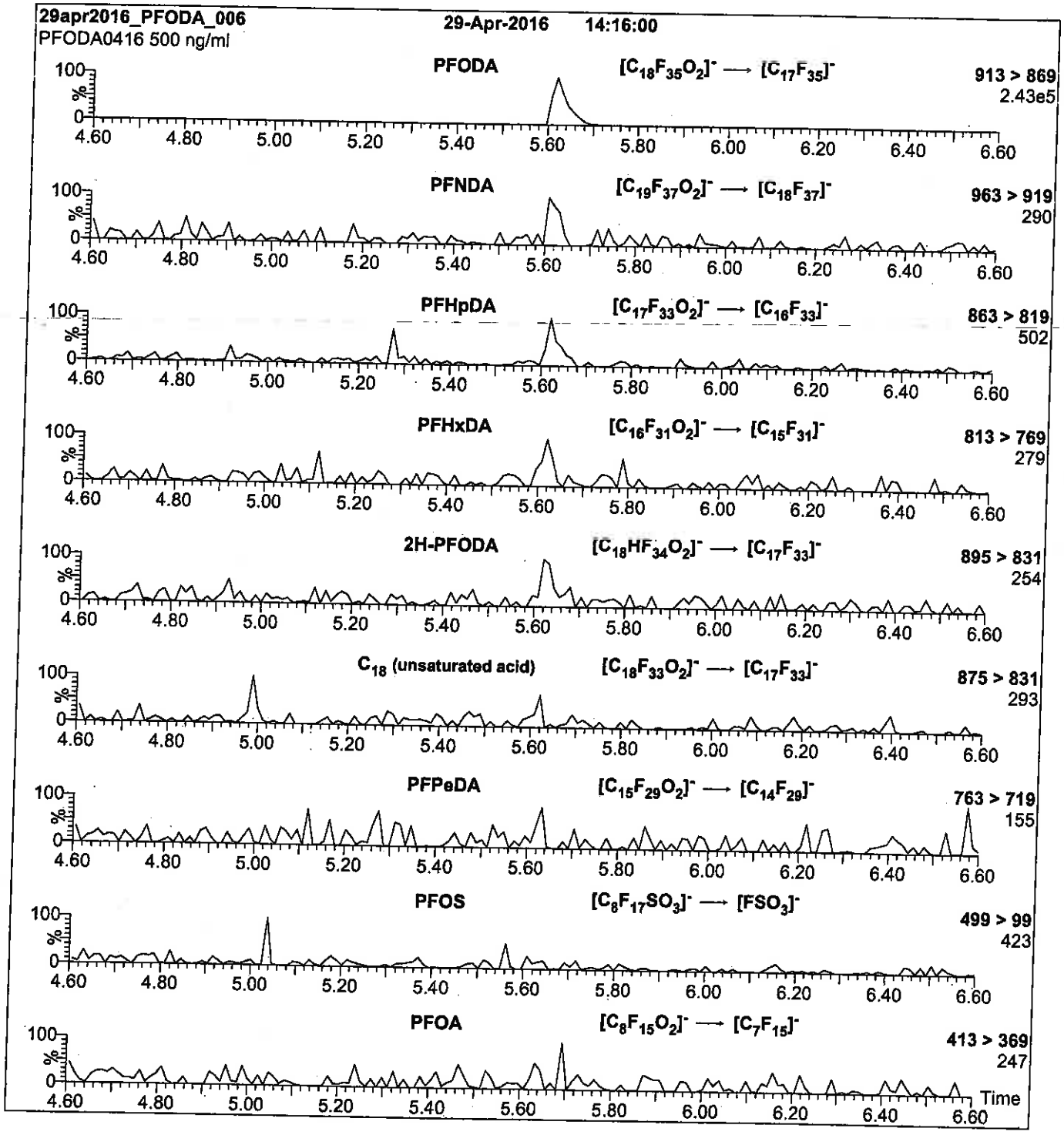
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 1000 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFODA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFODA)

Mobile phase: Isocratic 90% (80:20 MeOH:ACN) / 10% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

Reagent

LCPFODA_00007

Scanned 10/14/16 R: SBC 9/13/16

730632
ID: LCPFODA_00006
Exp: 04/29/21 Prpd: SBC
PFODA stock 50ug/mL

730633
ID: LCPFODA_00007
Exp: 04/29/21 Prpd: SBC
PFODA stock 50ug/mL

WELLINGTON LABORATORIES

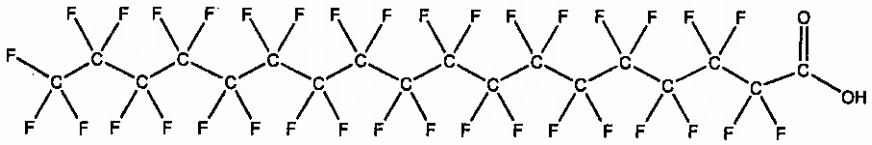
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFODA
COMPOUND: Perfluoro-n-octadecanoic acid

LOT NUMBER: PFODA0416

STRUCTURE:

CAS #: 16517-11-6



MOLECULAR FORMULA: $C_{18}HF_{35}O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 914.14
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/29/2016
EXPIRY DATE: (mm/dd/yyyy) 04/29/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 05/20/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing A1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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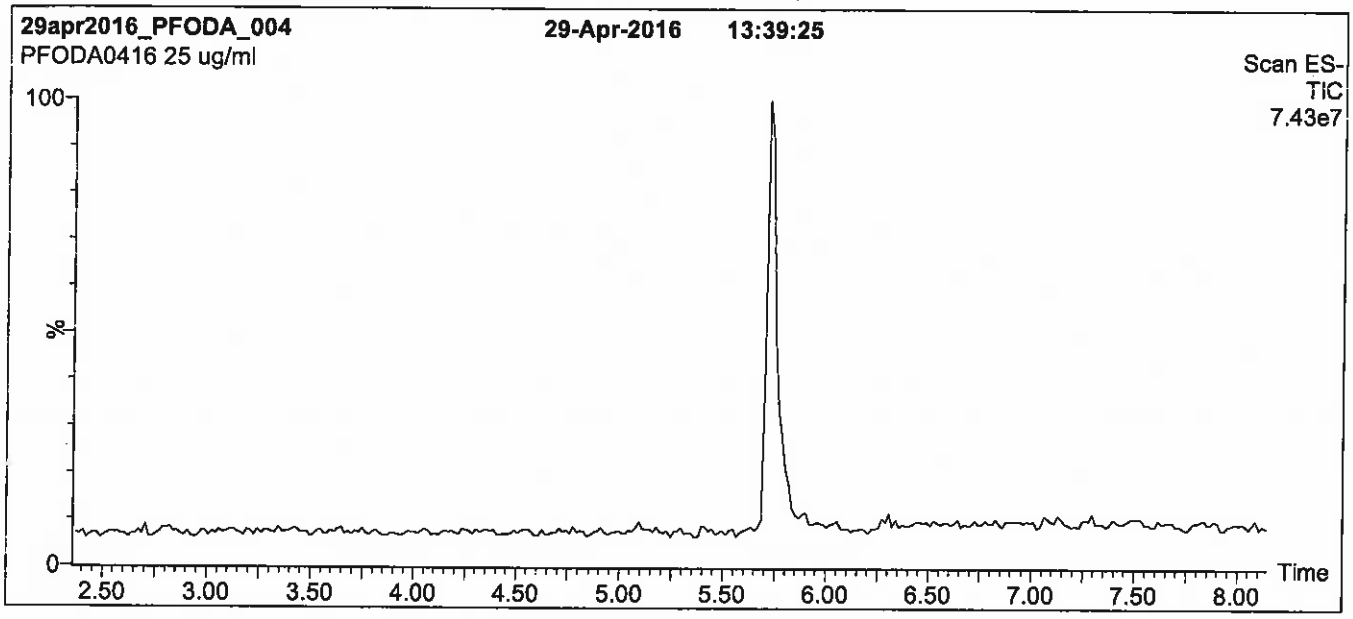
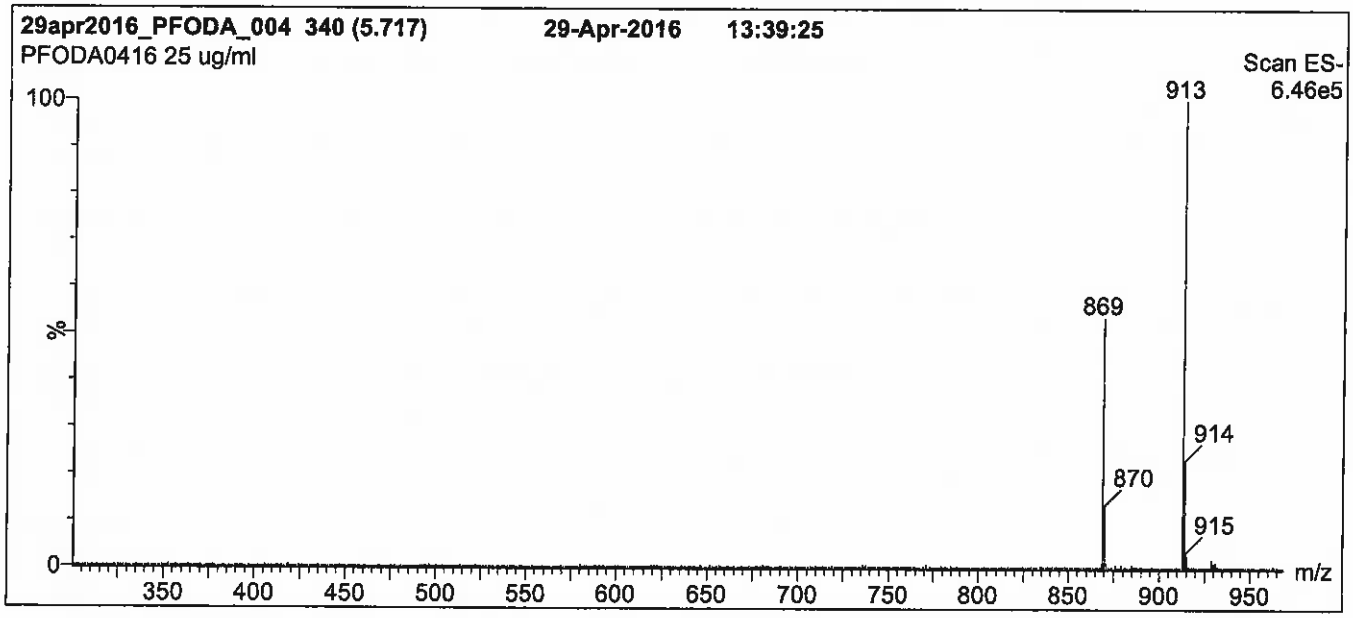
Figure 1: **PFODA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 70% (80:20 MeOH:ACN) / 30% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 95% organic over 6 min and hold for
2.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

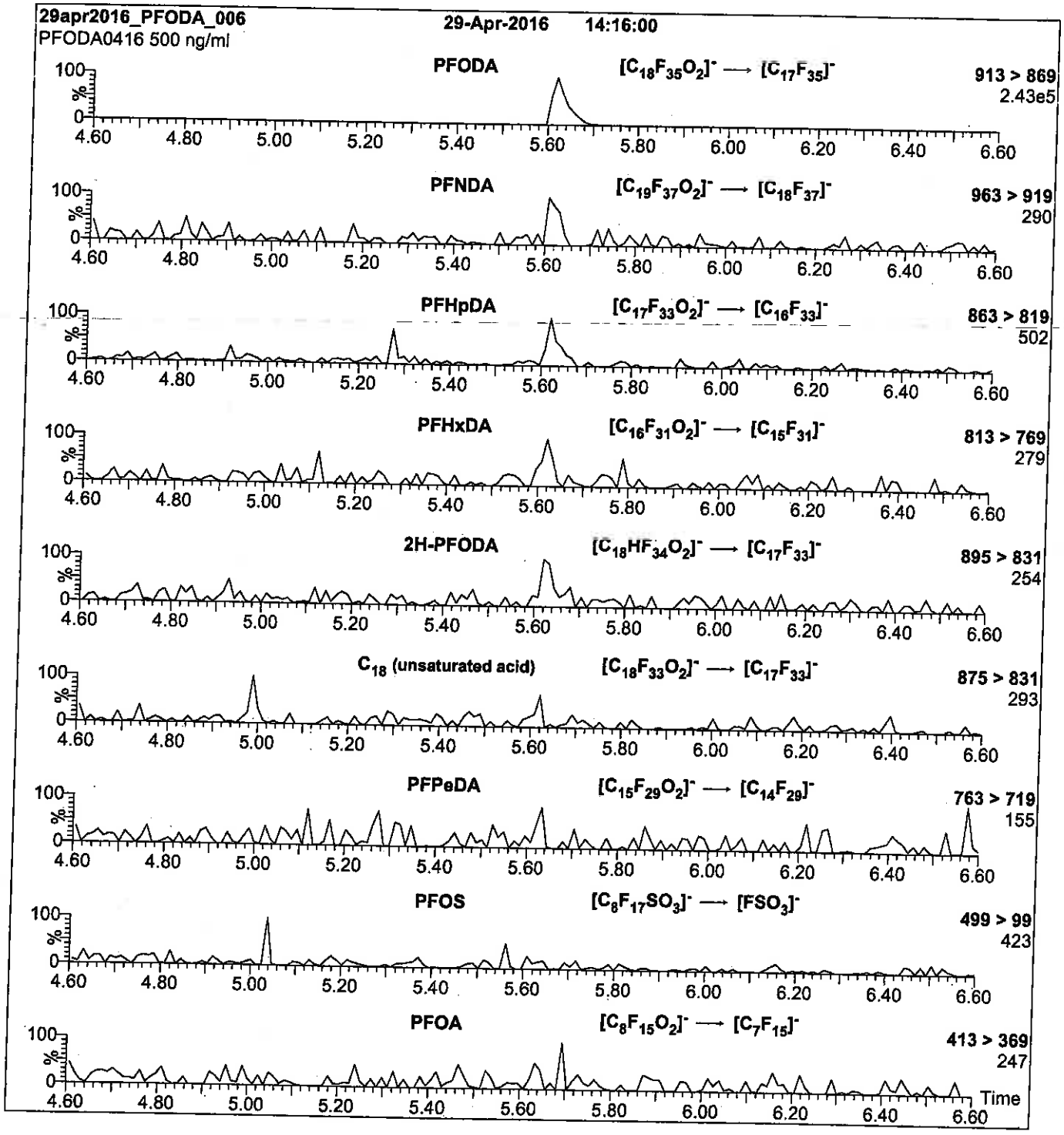
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 1000 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFODA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFODA)

Mobile phase: Isocratic 90% (80:20 MeOH:ACN) / 10% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

Reagent

LCPFOS-br_00002

Scanned 10/14/16 R: SBC 9/13/16

730515
ID: LCPFOS-br_00002
Exp: 10/14/20 Prpd: SBC
Potassium Perfluorooctane

730516
ID: LCPFOS-br_00003
Exp: 10/14/20 Prpd: SBC
Potassium Perfluorooctane

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFOSK

Potassium Perfluorooctanesulfonate Solution/Mixture of Linear and Branched Isomers

PRODUCT CODE:	br-PFOSK
LOT NUMBER:	brPFOSK1015
CONCENTRATION:	50 ± 2.5 µg/ml (total potassium salt)
	46.4 ± 2.3 µg/ml (total PFOS anion)
SOLVENT(S):	Methanol
DATE PREPARED: (mm/dd/yyyy)	10/13/2015
LAST TESTED: (mm/dd/yyyy)	10/14/2015
EXPIRY DATE: (mm/dd/yyyy)	10/14/2020
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorooctanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ^{19}F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- A 5-point calibration curve was generated using linear PFOS (potassium salt) and mass-labelled PFOS as an internal standard to enable quantitation of br-PFOSK using isotopic dilution.
- CAS#: 2795-39-3 (for linear isomer; potassium salt).

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519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA

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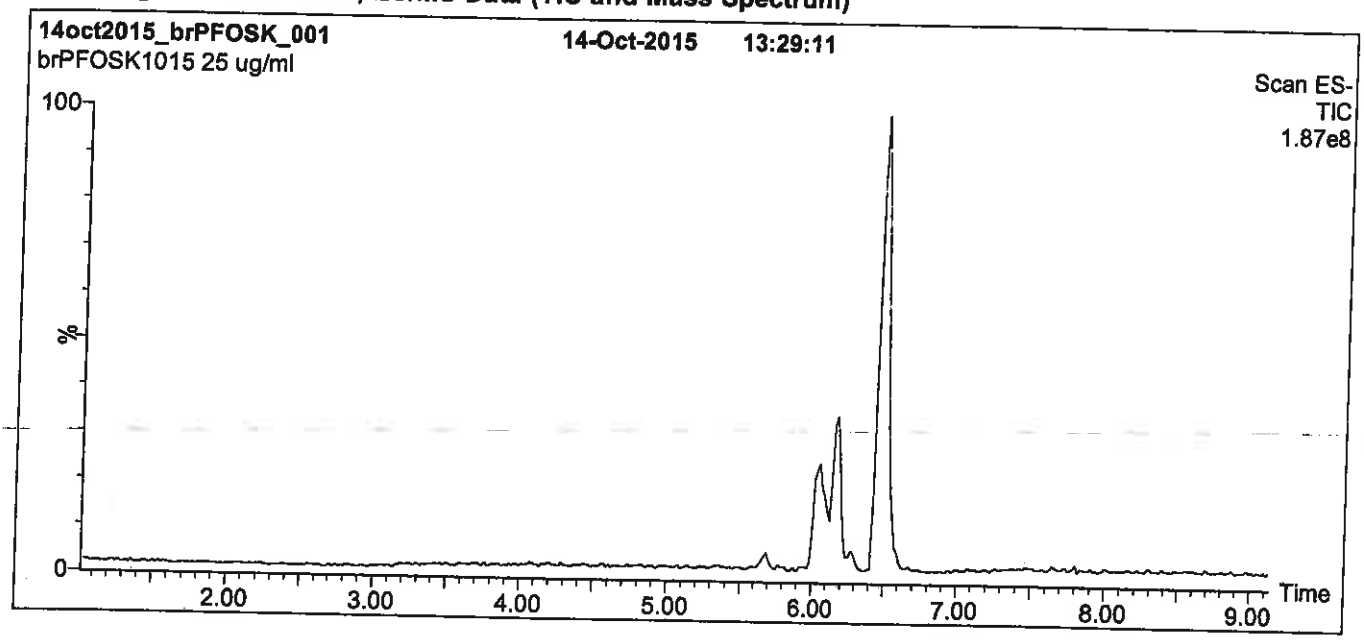
Table A: **br-PFOSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

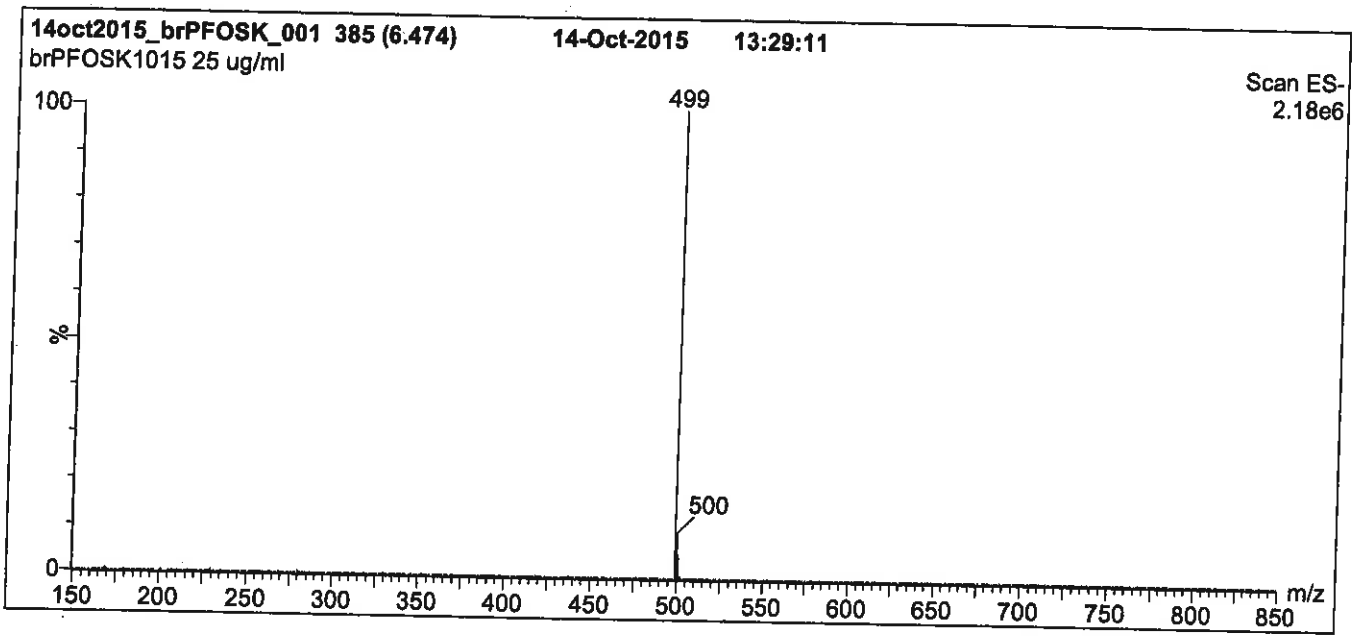
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-octanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	$CF_3CF_2CF_2CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$	0.6
4	Potassium 3-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF_2CF(CF_3)CF_2CF_2SO_3^-K^+$	1.9
5	Potassium 4-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF(CF_3)CF_2CF_2CF_2SO_3^-K^+$	2.2
6	Potassium 5-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF(CF_3)CF_2CF_2CF_2CF_2SO_3^-K^+$	4.5
7	Potassium 6-trifluoromethylperfluoroheptanesulfonate	$CF_3CF(CF_3)CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	10.0
8	Potassium 5,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3-C(CF_3)CF_2CF_2CF_2CF_2SO_3^-K^+$	0.2
9	Potassium 4,4-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3CF_2-C(CF_3)-CF_2CF_2CF_2SO_3^-K^+$	0.03
10	Potassium 4,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3-CF(CF_3)-CF(CF_3)-CF_2CF_2CF_2SO_3^-K^+$	0.4
11	Potassium 3,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3-CF(CF_3)-CF_2-CF(CF_3)-CF_2CF_2SO_3^-K^+$	0.07

* Percent of total perfluorooctanesulfonate isomers only. Isomers are labelled in Figure 2.
** Systematic Name: Potassium perfluorooctane-2-sulfonate.

Certified By: _____ **Date:** 10/15/2015
B.G. Chittim (mm/dd/yyyy)

Figure 1: **br-PFOSK; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 12 min and hold for 2 min.
Return to initial conditions over 0.5 min.
Time: 16 min

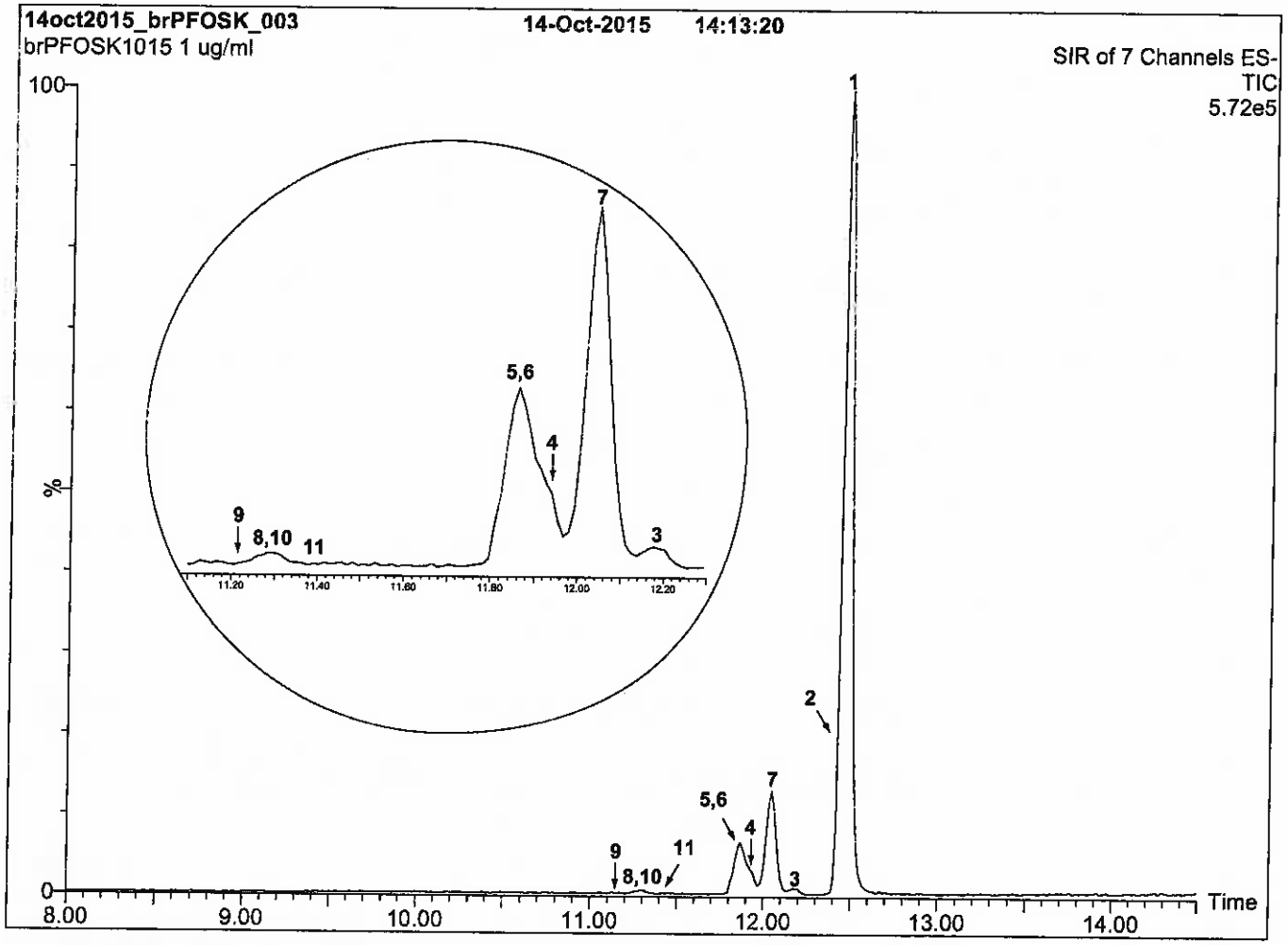
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **br-PFOSK; LC/MS Data (SIR)**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP_{18} (1.7 µm, 2.1 x 100 mm)

Injection: 1.0 µg/ml of br-PFOSK

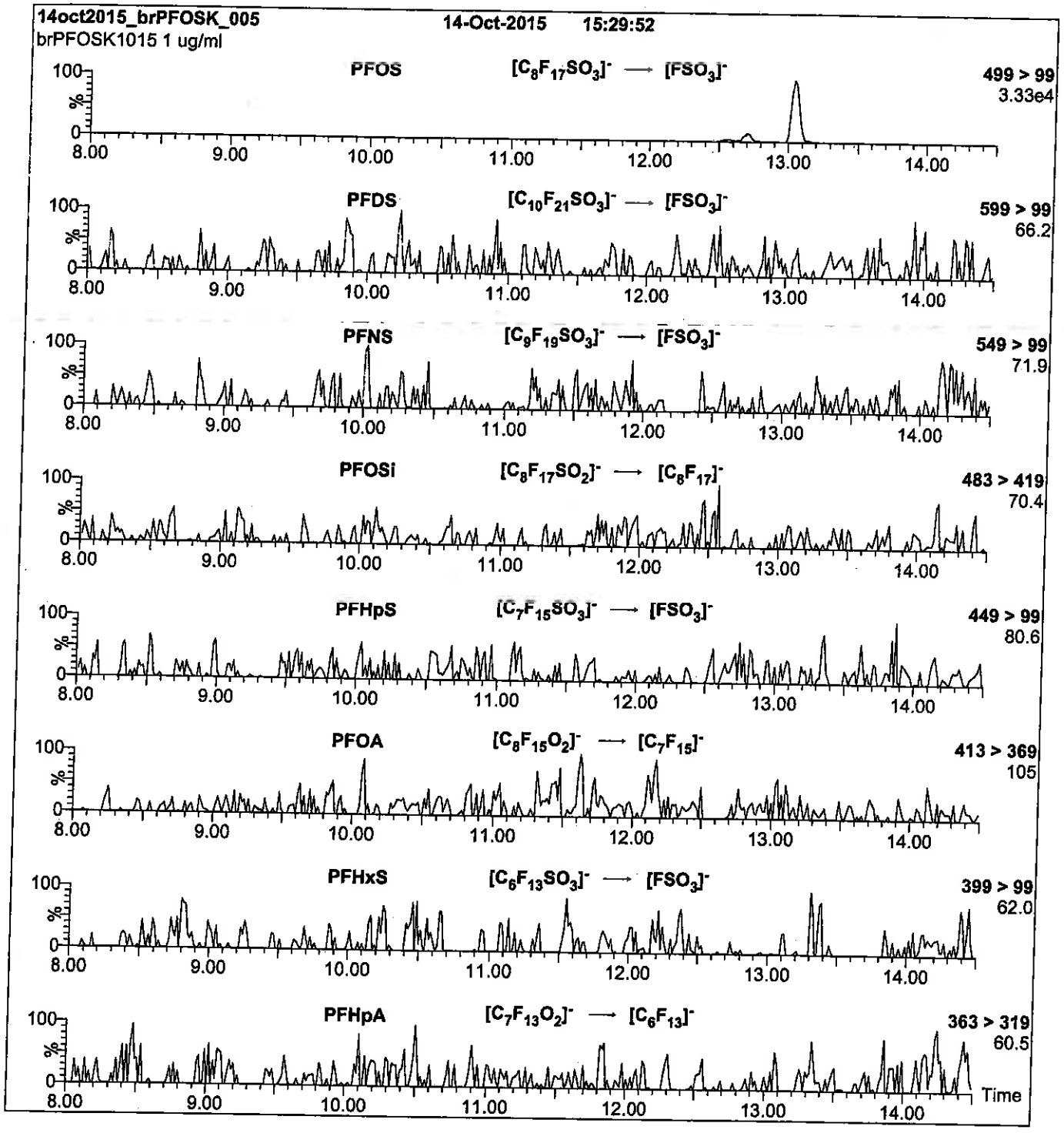
Mobile Phase: Gradient
45% (80:20 MeOH:ACN) / 55% H_2O (both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 15 min and hold for 3 min.
Return to initial conditions over 1 min.
Time: 20 min

Flow: 300 µl/min

MS Conditions:

SIR (ES^-)
Source = 110 °C
Desolvation = 325 °C
Cone Voltage = 60V

Figure 3: **br-PFOSK; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.06e-3
Collision Energy (eV) = 11-50 (variable)

Reagent

LCPFOS-br_00003

Scanned 10/14/16 SR R: SBC 9/13/16

730515
ID: LCPFOS-br_00002
Exp: 10/14/20 Prpd: SBC
Potassium Perfluorooctane

730516
ID: LCPFOS-br_00003
Exp: 10/14/20 Prpd: SBC
Potassium Perfluorooctane

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFOSK

Potassium Perfluorooctanesulfonate Solution/Mixture of Linear and Branched Isomers

PRODUCT CODE:	br-PFOSK
LOT NUMBER:	brPFOSK1015
CONCENTRATION:	50 ± 2.5 µg/ml (total potassium salt)
	46.4 ± 2.3 µg/ml (total PFOS anion)
SOLVENT(S):	Methanol
DATE PREPARED: (mm/dd/yyyy)	10/13/2015
LAST TESTED: (mm/dd/yyyy)	10/14/2015
EXPIRY DATE: (mm/dd/yyyy)	10/14/2020
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorooctanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ^{19}F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- A 5-point calibration curve was generated using linear PFOS (potassium salt) and mass-labelled PFOS as an internal standard to enable quantitation of br-PFOSK using isotopic dilution.
- CAS#: 2795-39-3 (for linear isomer; potassium salt).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

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$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

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ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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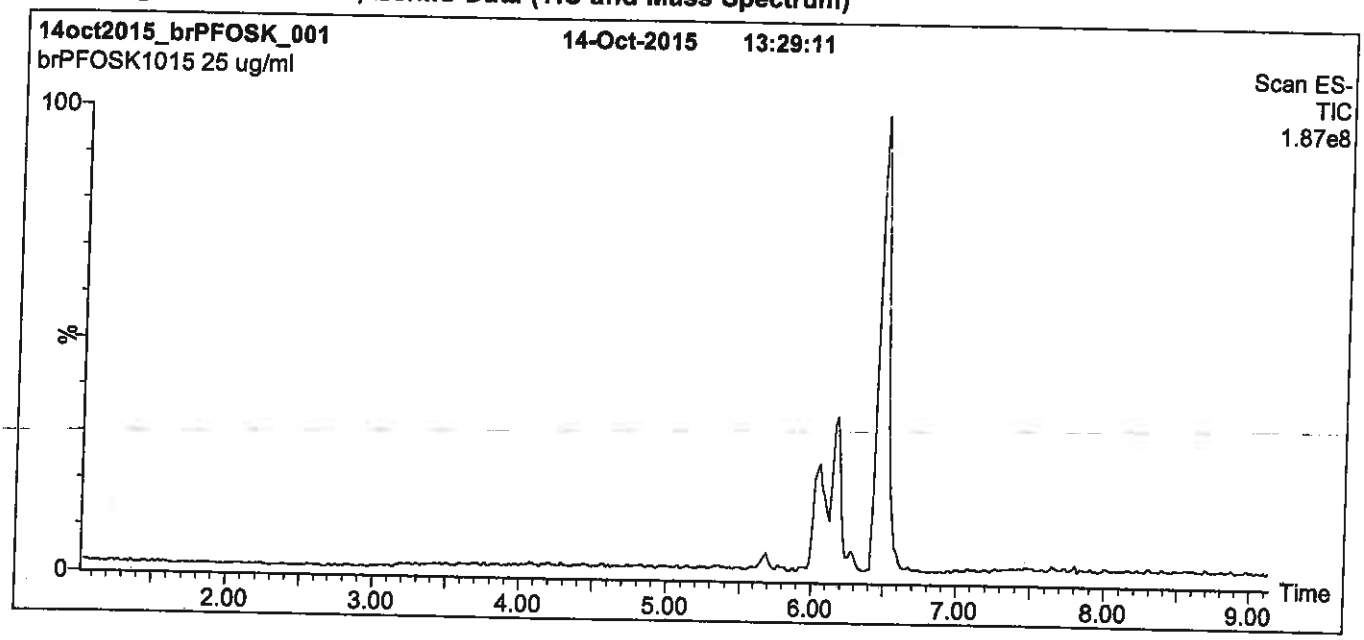
Table A: **br-PFOSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

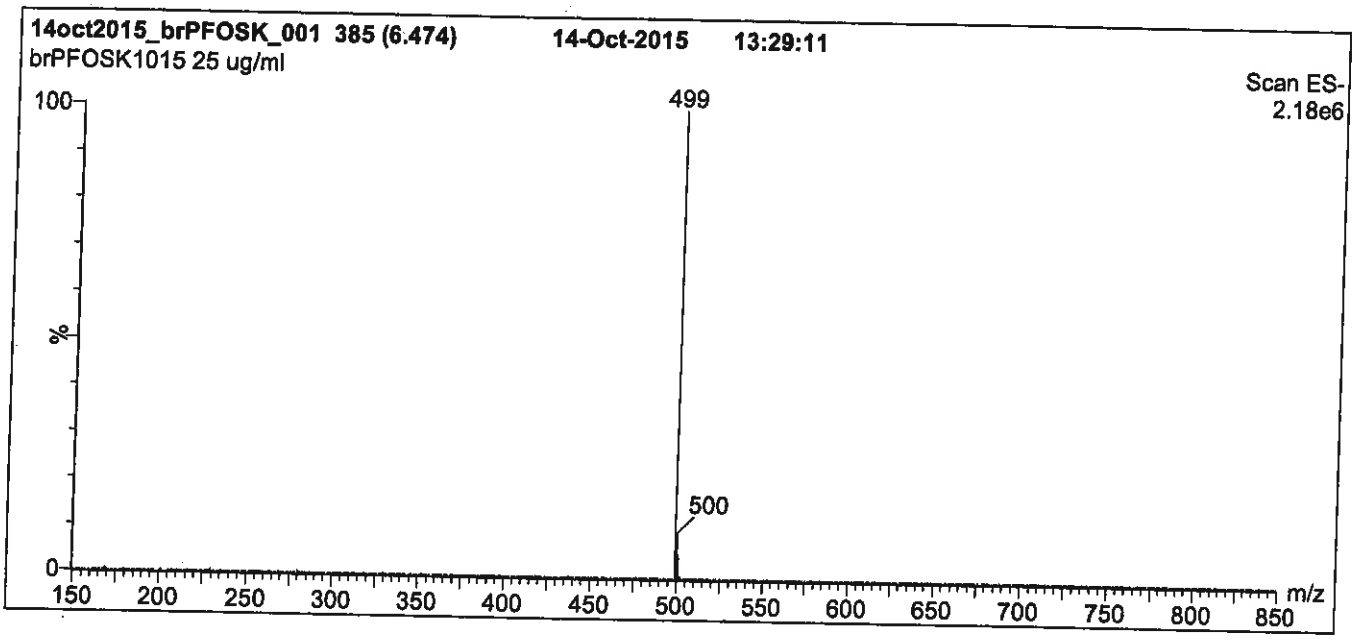
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-octanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	$CF_3CF_2CF_2CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$	0.6
4	Potassium 3-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF_2CF(CF_3)CF_2CF_2SO_3^-K^+$	1.9
5	Potassium 4-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF(CF_3)CF_2CF_2CF_2SO_3^-K^+$	2.2
6	Potassium 5-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF(CF_3)CF_2CF_2CF_2CF_2SO_3^-K^+$	4.5
7	Potassium 6-trifluoromethylperfluoroheptanesulfonate	$CF_3CF(CF_3)CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	10.0
8	Potassium 5,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3-C(CF_3)CF_2CF_2CF_2CF_2SO_3^-K^+$	0.2
9	Potassium 4,4-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3CF_2-C(CF_3)-CF_2CF_2CF_2SO_3^-K^+$	0.03
10	Potassium 4,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3-CF(CF_3)-CF(CF_3)-CF_2CF_2CF_2SO_3^-K^+$	0.4
11	Potassium 3,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3-CF(CF_3)-CF_2-CF(CF_3)-CF_2CF_2SO_3^-K^+$	0.07

* Percent of total perfluorooctanesulfonate isomers only. Isomers are labelled in Figure 2.
** Systematic Name: Potassium perfluorooctane-2-sulfonate.

Certified By: _____ **Date:** 10/15/2015
B.G. Chittim (mm/dd/yyyy)

Figure 1: **br-PFOSK; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 12 min and hold for 2 min.
Return to initial conditions over 0.5 min.
Time: 16 min

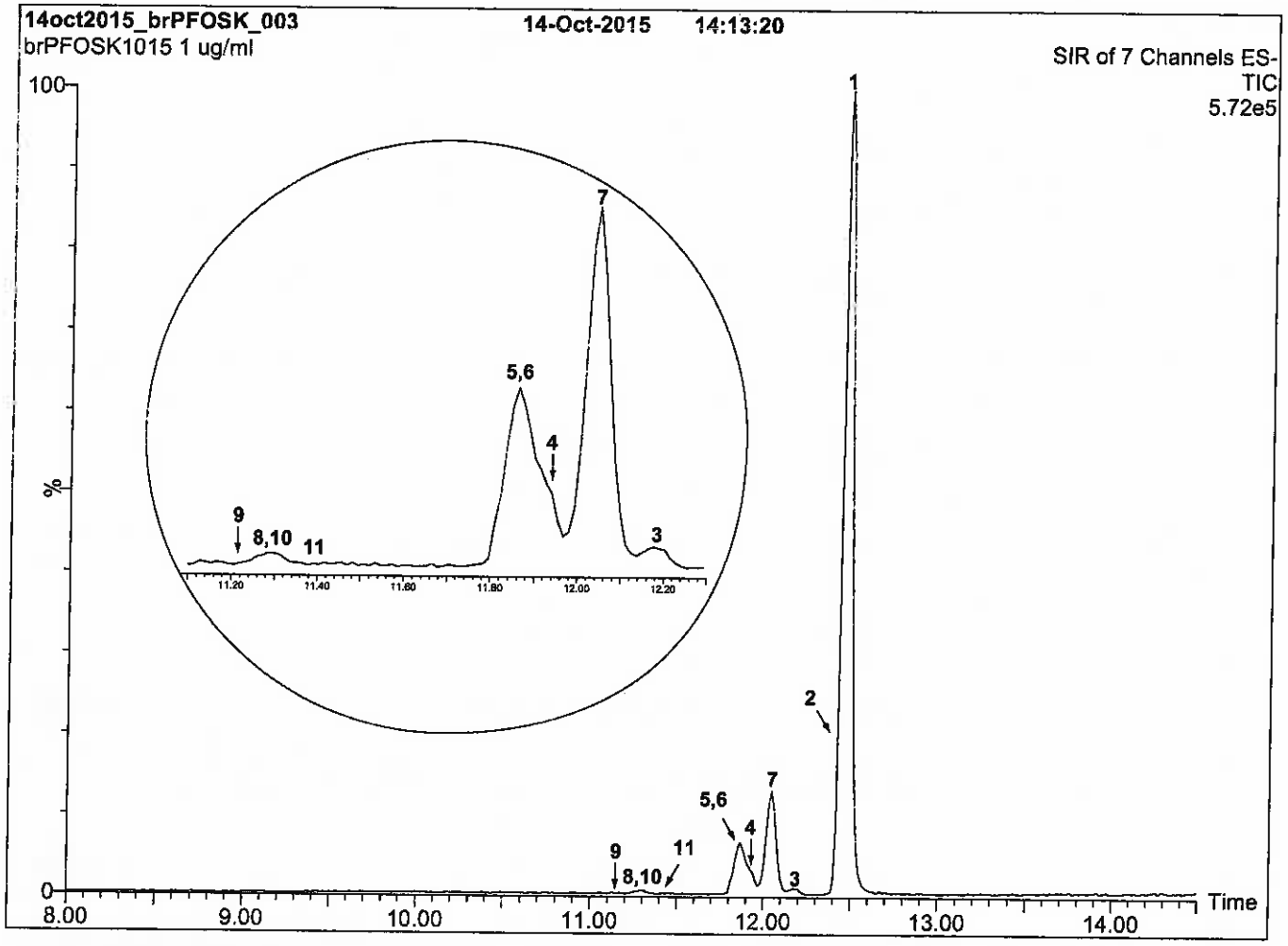
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **br-PFOSK; LC/MS Data (SIR)**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP_{18} (1.7 µm, 2.1 x 100 mm)

Injection: 1.0 µg/ml of br-PFOSK

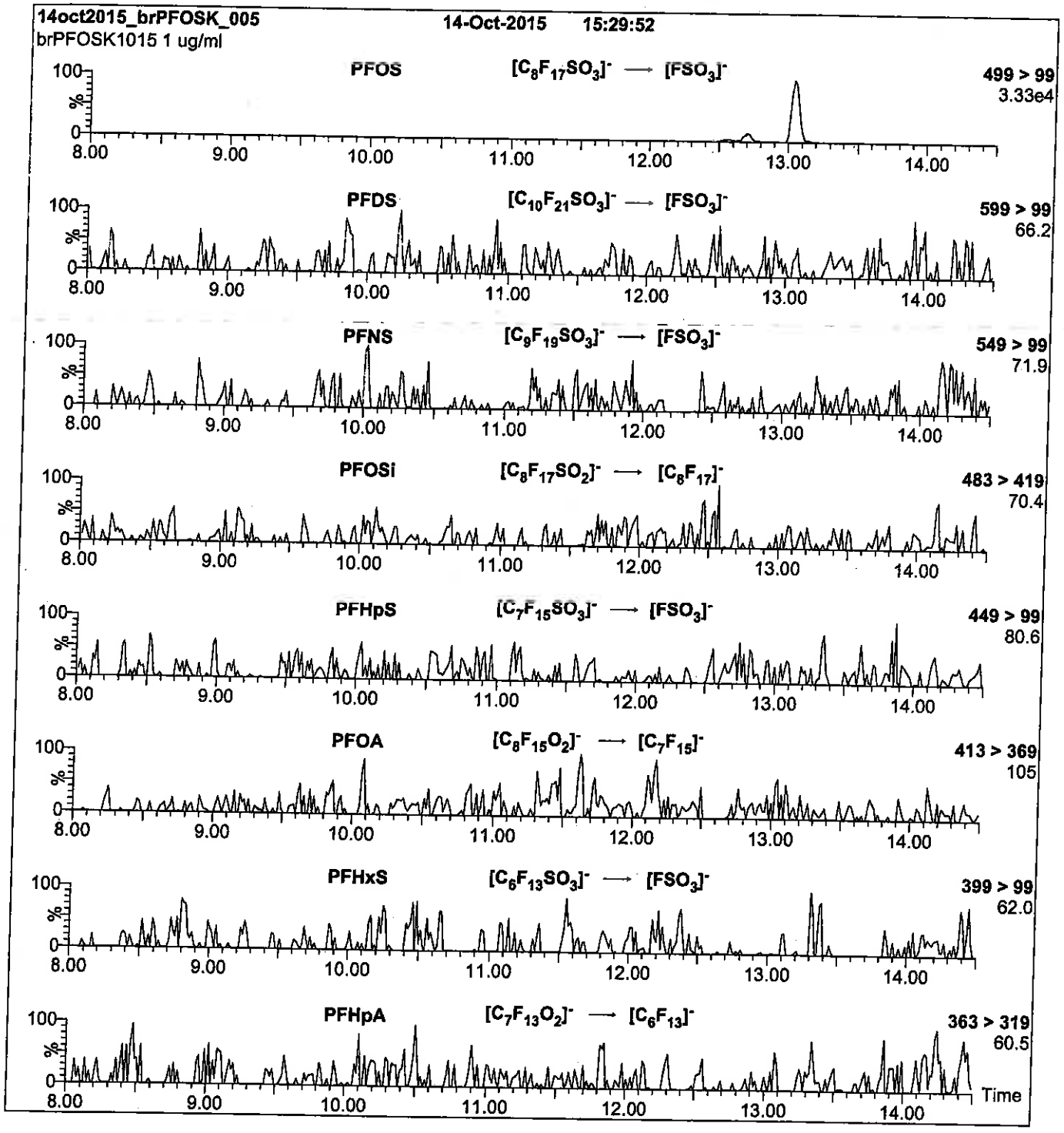
Mobile Phase: Gradient
45% (80:20 MeOH:ACN) / 55% H_2O (both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 15 min and hold for 3 min.
Return to initial conditions over 1 min.
Time: 20 min

Flow: 300 µl/min

MS Conditions:

SIR (ES^-)
Source = 110 °C
Desolvation = 325 °C
Cone Voltage = 60V

Figure 3: **br-PFOSK; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.06e-3
Collision Energy (eV) = 11-50 (variable)

Reagent

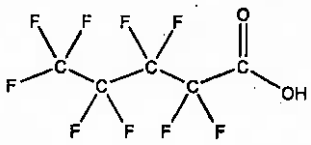
LCPFPeA_00006

r: 12/29/16 SH
s: 1/6/17 SH

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	PFPeA	**LOT NUMBER:**	PFPeA0516
COMPOUND:	Perfluoro-n-pentanoic acid		
STRUCTURE:		**CAS #:**	2706-90-3



MOLECULAR FORMULA:	$C_5HF_8O_2$	**MOLECULAR WEIGHT:**	264.05
CONCENTRATION:	50 ± 2.5 µg/ml	**SOLVENT(S):**	Methanol Water (<1%)
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	05/31/2016		
EXPIRY DATE: (mm/dd/yyyy)	05/31/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of Perfluoro-n-heptanoic acid (PFHpA) and ~ 0.2% of $C_5H_2F_8O_2$ (hydrido - derivative) as measured by ^{19}F NMR.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 06/02/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2,...x_n$ on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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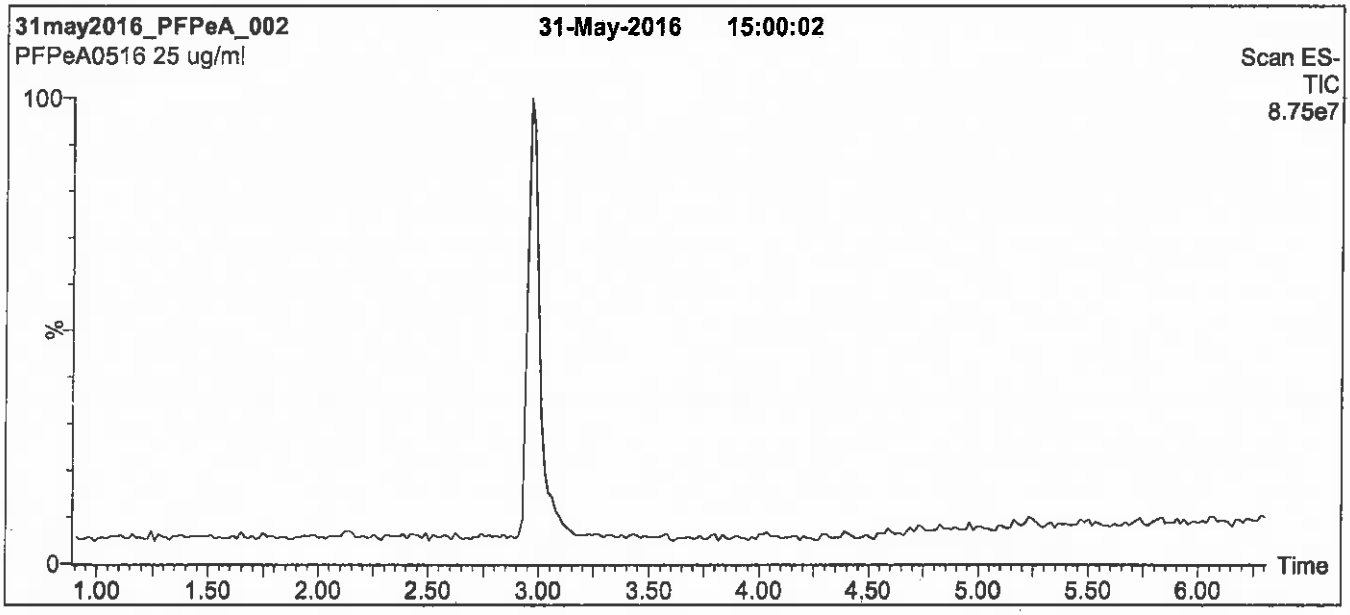
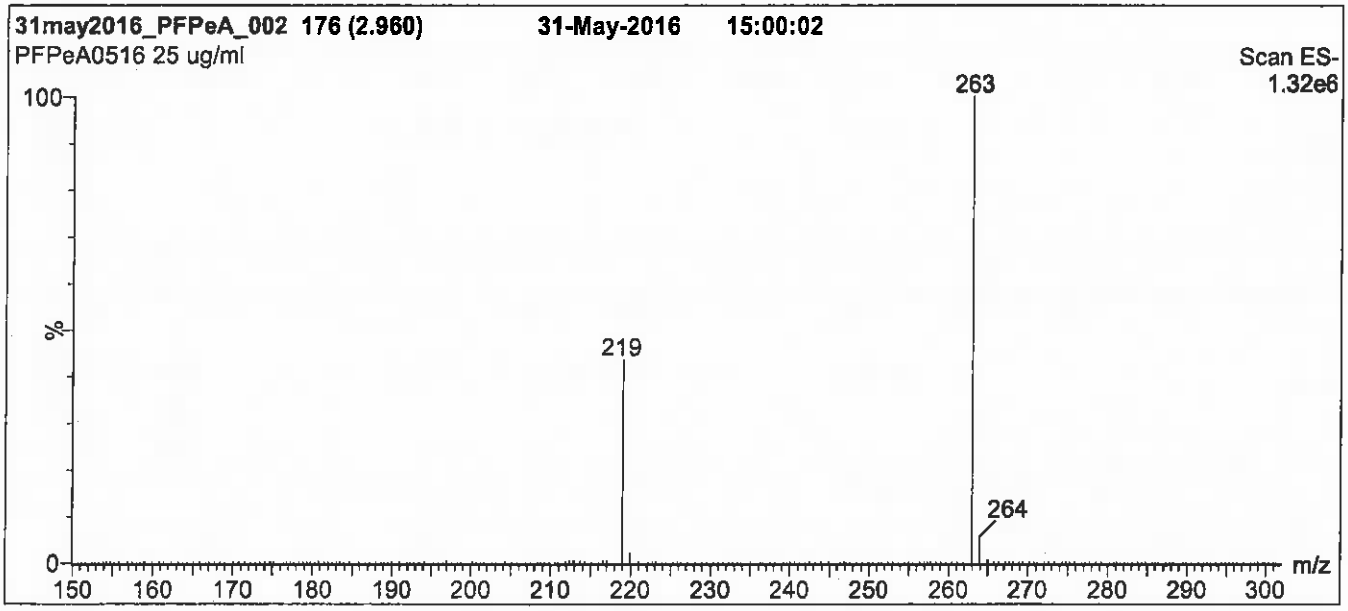
Figure 1: **PFPeA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

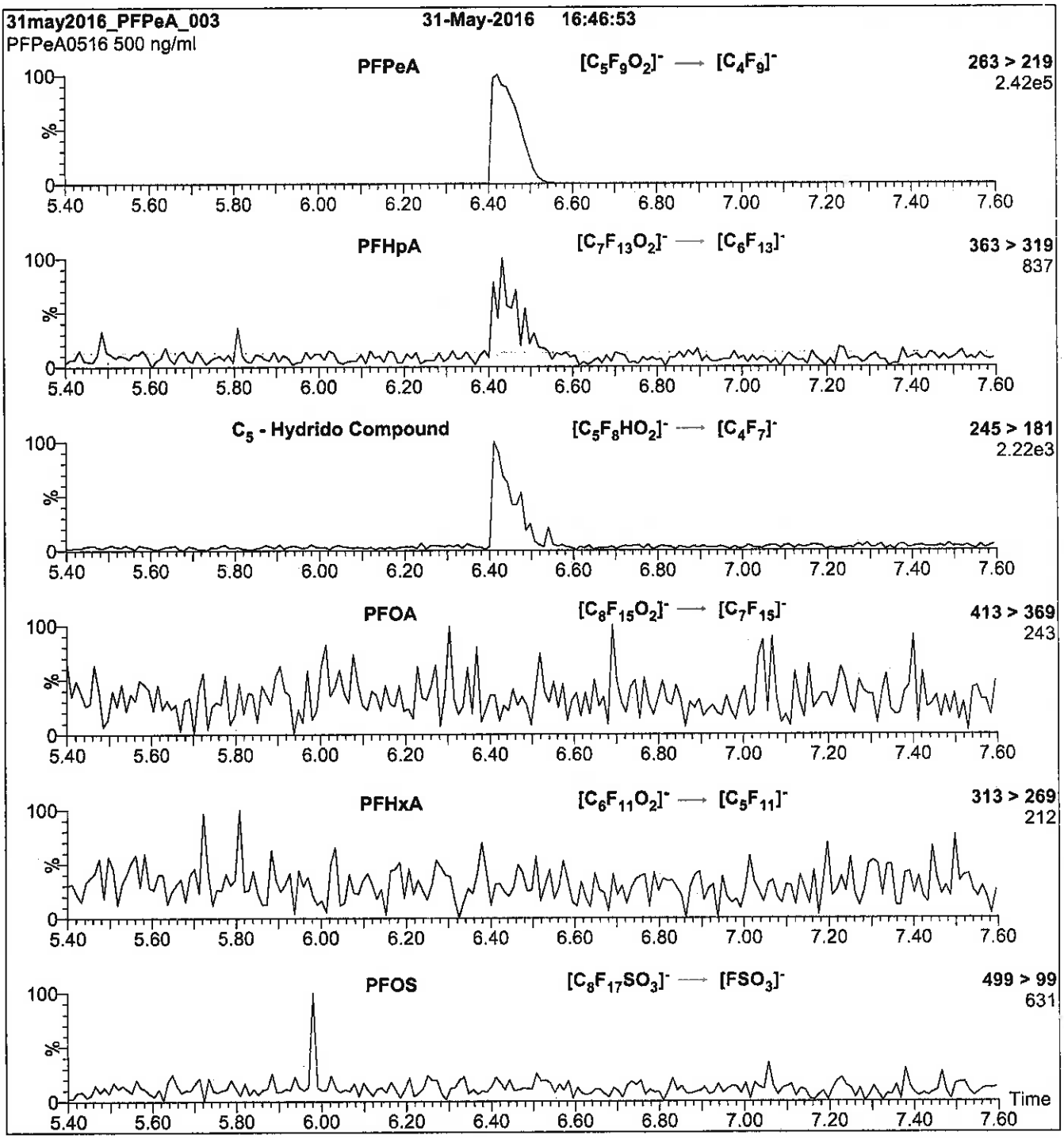
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFPeA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFPeA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 9

Reagent

LCPFTeDA_00005

R: SBG 9/13/16

730645
ID: LCPFTeDA_00005
Exp: 12/09/20 Prpd: SBC
PF-n-tetradecanoic acid

730659
ID: LCPFTeDA_00006
Exp: 12/09/20 Prpd: SBC
PF-n-tetradecanoic acid

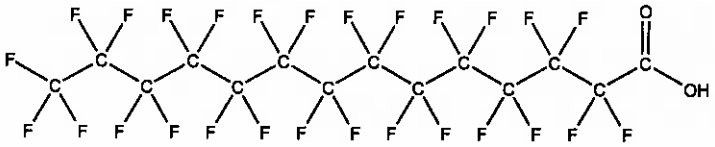
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: PFTeDA
LOT NUMBER: PFTeDA1215
COMPOUND: Perfluoro-n-tetradecanoic acid

STRUCTURE:

CAS #: 376-06-7



MOLECULAR FORMULA: $C_{14}HF_{27}O_2$
MOLECULAR WEIGHT: 714.11
CONCENTRATION: 50 ± 2.5 µg/ml
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 12/09/2015
EXPIRY DATE: (mm/dd/yyyy) 12/09/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.2% of PFDoA ($C_{12}HF_{23}O_2$) and ~ 0.2% of PFPeDA ($C_{15}HF_{29}O_2$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/09/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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where x is expressed as a relative standard uncertainty of the individual parameter.

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CALA

ANAB ACCREDITED

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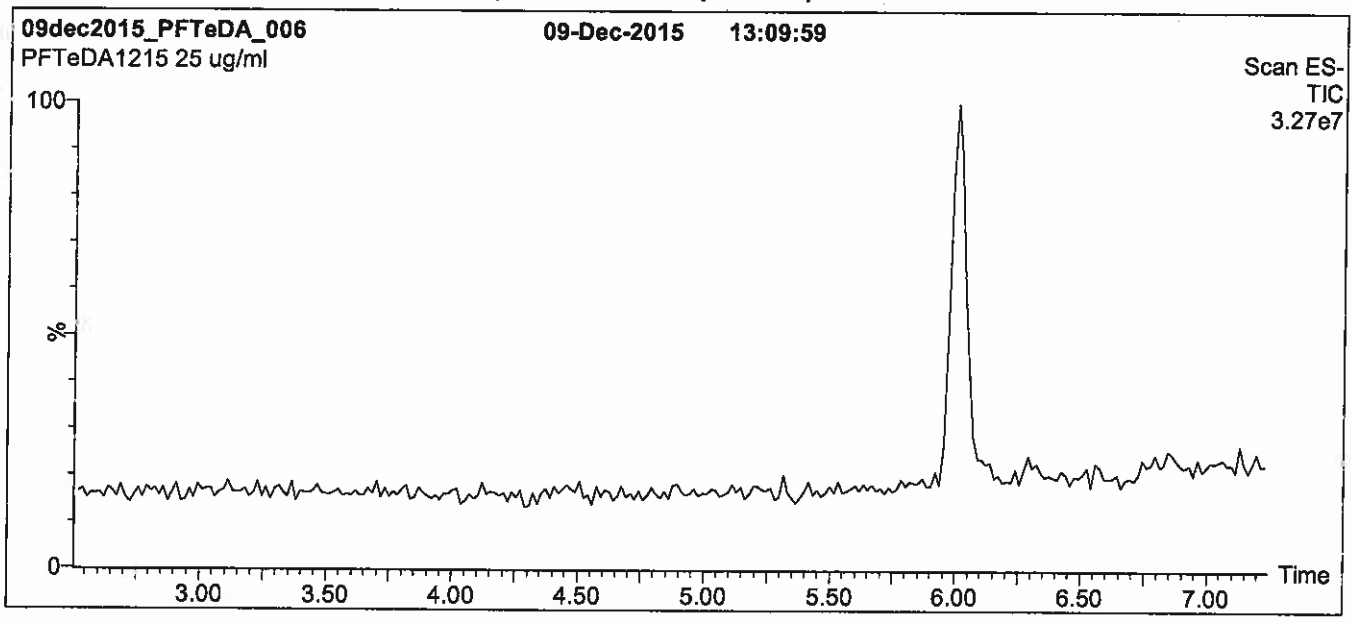
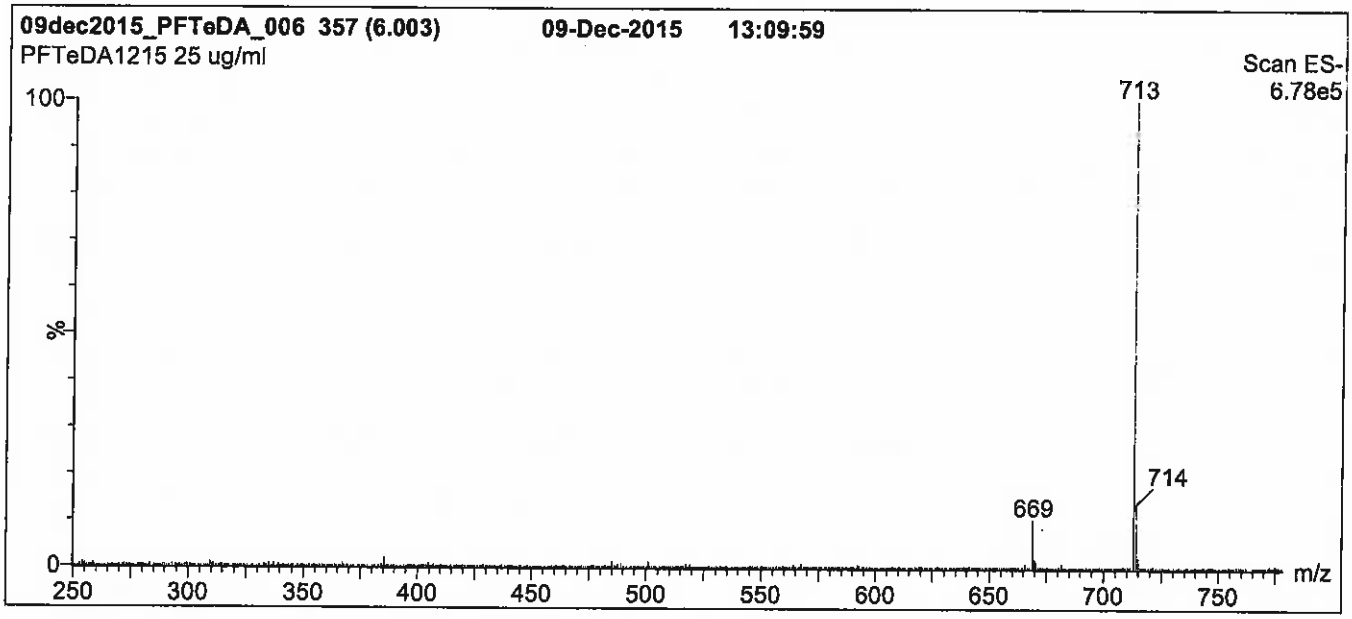
Figure 1: **PFTeDA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 65% (80:20 MeOH:ACN) / 35% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

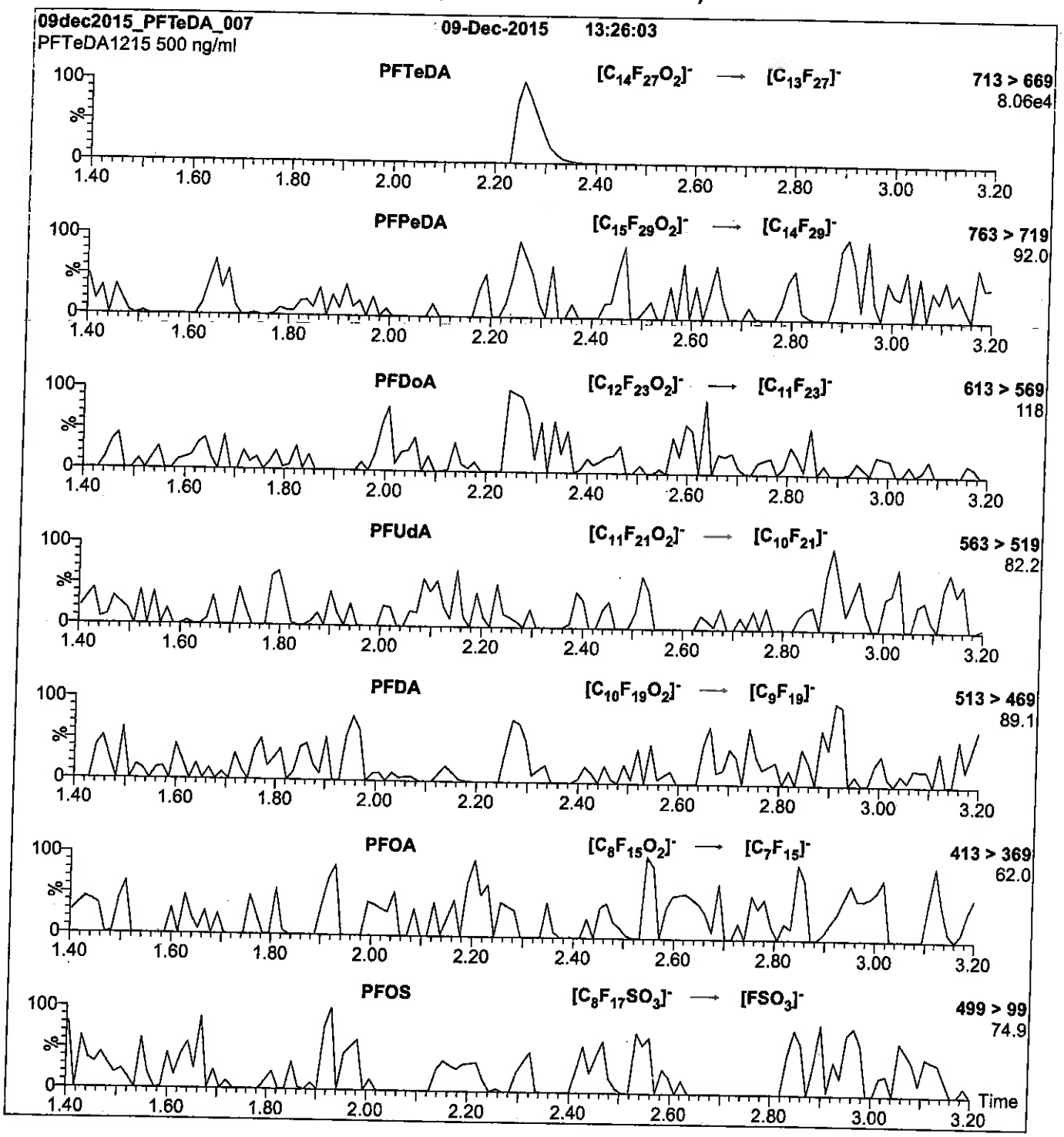
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (250 - 1250 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFTeDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFTeDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 14

Reagent

LCPFTrDA_00005

R: SBC 9/13/16

730665
ID: LCPFTrDA_00005
Exp: 02/12/21 Prpd: SBC
PF-n-tridecanoic acid

730666
ID: LCPFTrDA_00006
Exp: 02/12/21 Prpd: SBC
PF-n-tridecanoic acid

WELLINGTON LABORATORIES

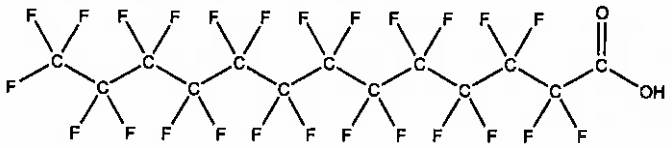
CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: PFTrDA
COMPOUND: Perfluoro-*n*-tridecanoic acid

LOT NUMBER: PFTrDA0216

STRUCTURE:

CAS #: 72629-94-8



MOLECULAR FORMULA: $C_{13}HF_{25}O_2$
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 664.11
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 02/12/2016
EXPIRY DATE: (mm/dd/yyyy) 02/12/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of PFUdA ($C_{11}HF_{21}O_2$), ~ 0.4% of PFDoA ($C_{12}HF_{23}O_2$), and ~ 0.1% of PFTeDA ($C_{14}HF_{27}O_2$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 02/16/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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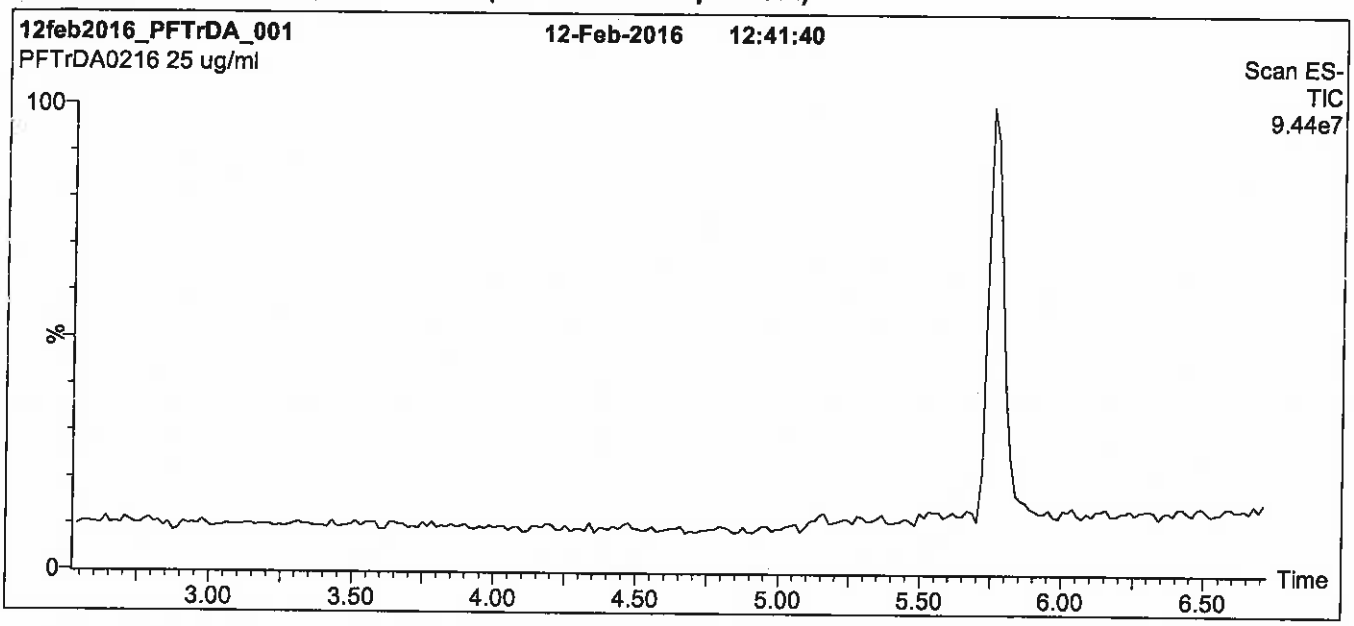
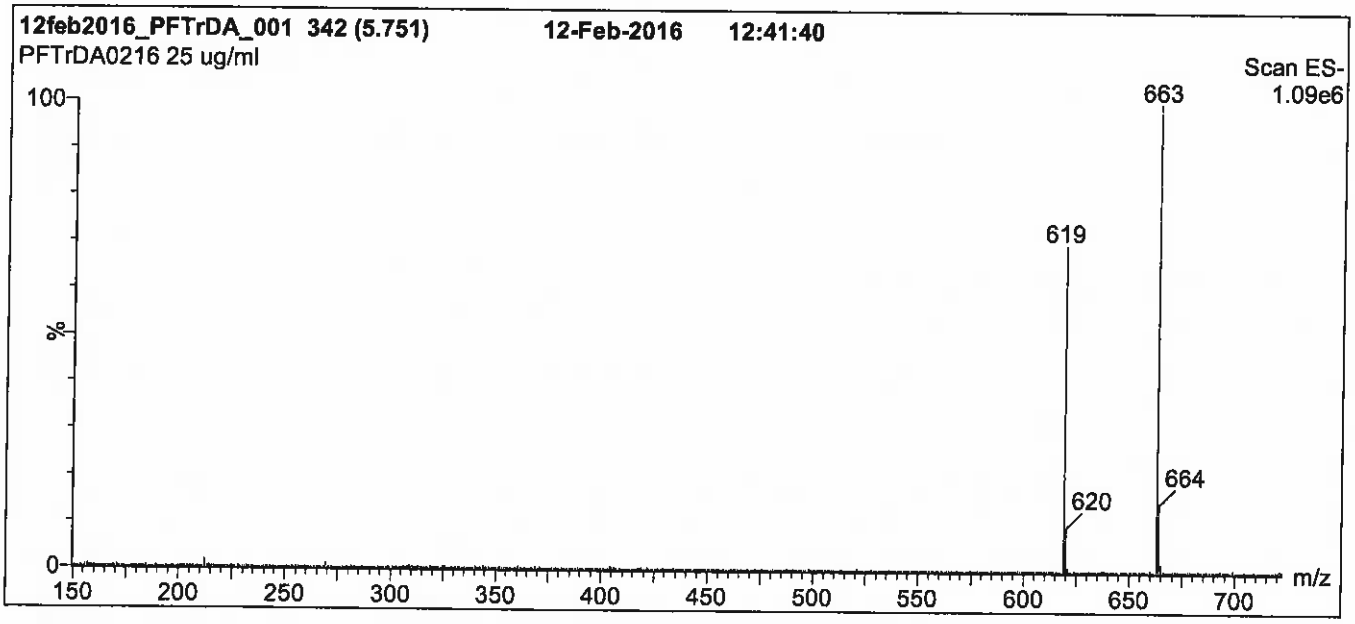
Figure 1: **PFTrDA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

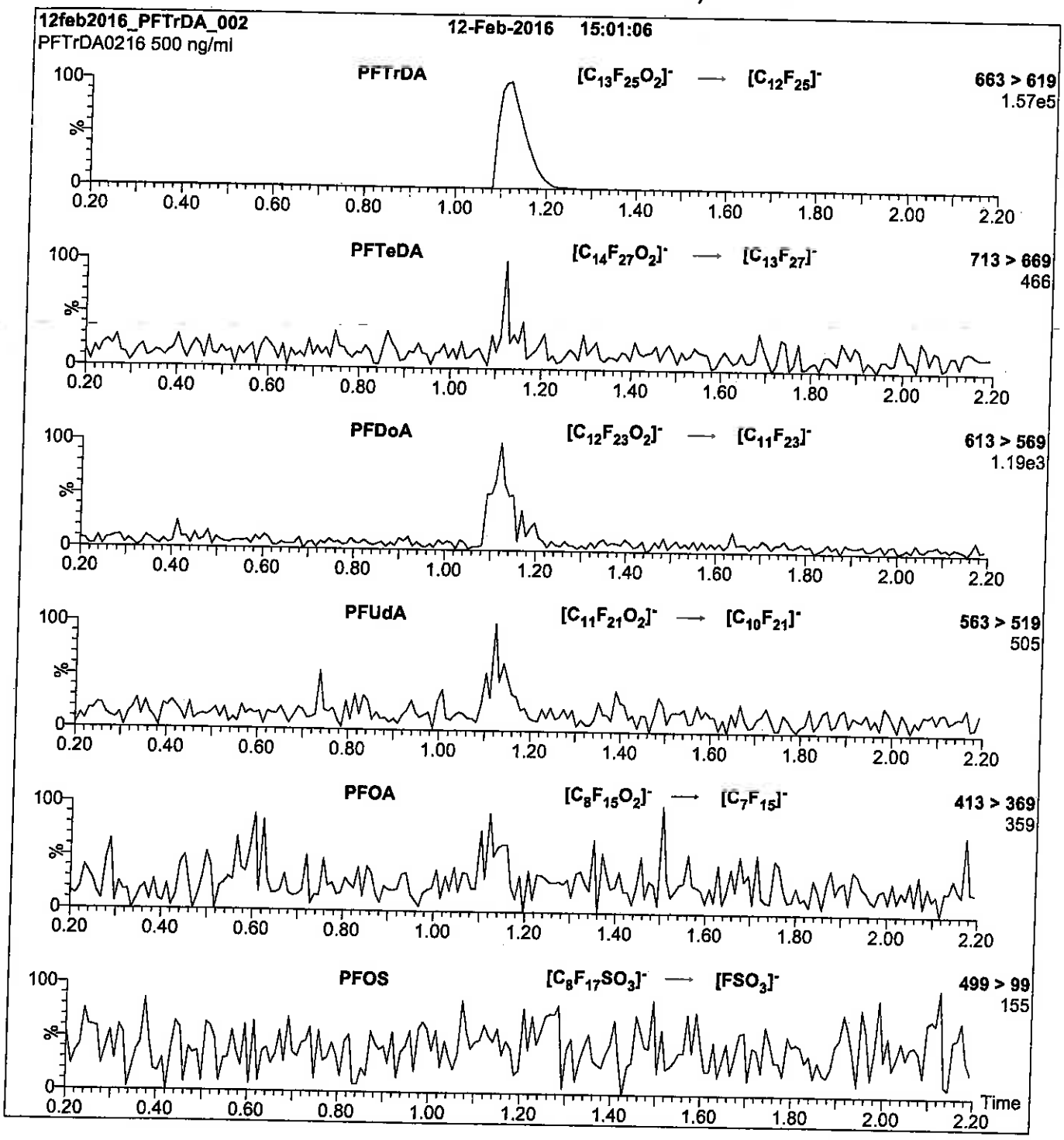
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 22.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 650

Figure 2: **PFTrDA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFTrDA)

Mobile phase: Isocratic 80% MeOH / 20% H_2O

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 15

Reagent

LCPFUdA_00005

Scanned 10/14/16 R: SBC 9/13/16

730535
ID: LCPFUdA_00005
Exp: 08/19/20 Prpd: SBC
PF-n-undecanoic acid

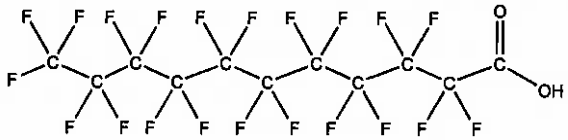
730536
ID: LCPFUdA_00006
Exp: 08/19/20 Prpd: SBC
PF-n-undecanoic acid

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: PFUdA
LOT NUMBER: PFUdA0815
COMPOUND: Perfluoro-n-undecanoic acid

STRUCTURE:
CAS #: 2058-94-8



MOLECULAR FORMULA: $C_{11}HF_{21}O_2$
MOLECULAR WEIGHT: 564.09
CONCENTRATION: 50 ± 2.5 µg/ml
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 08/19/2015
EXPIRY DATE: (mm/dd/yyyy) 08/19/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 08/21/2015 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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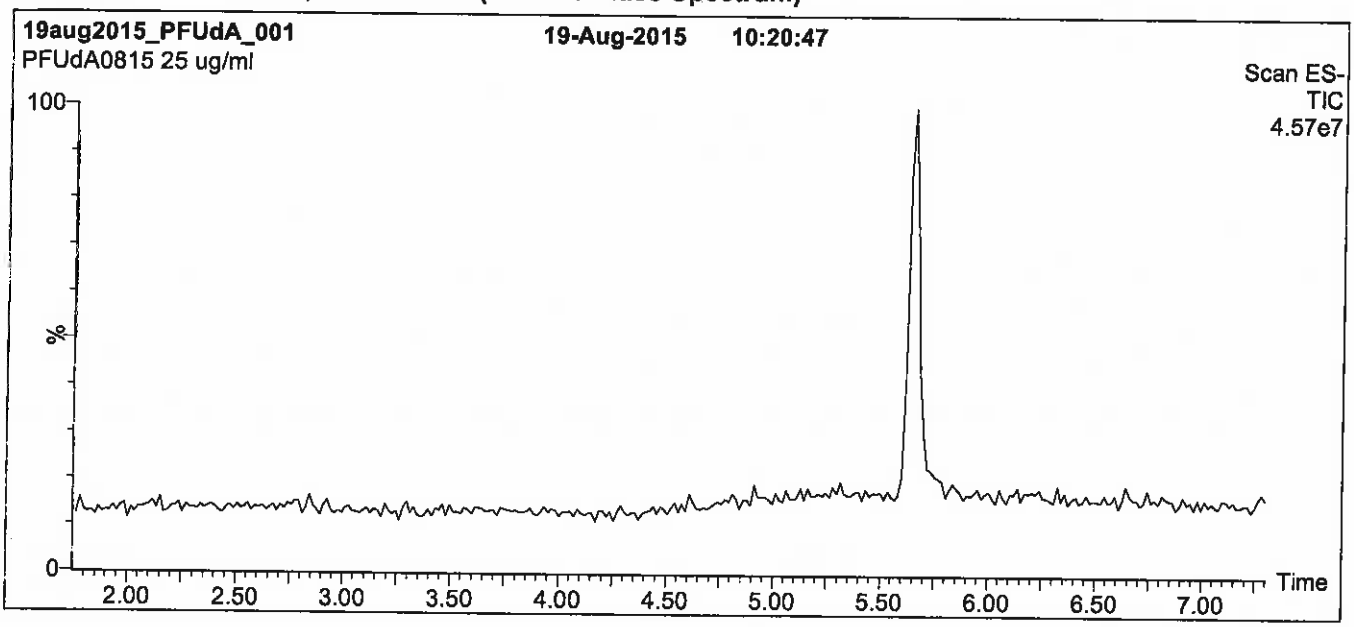
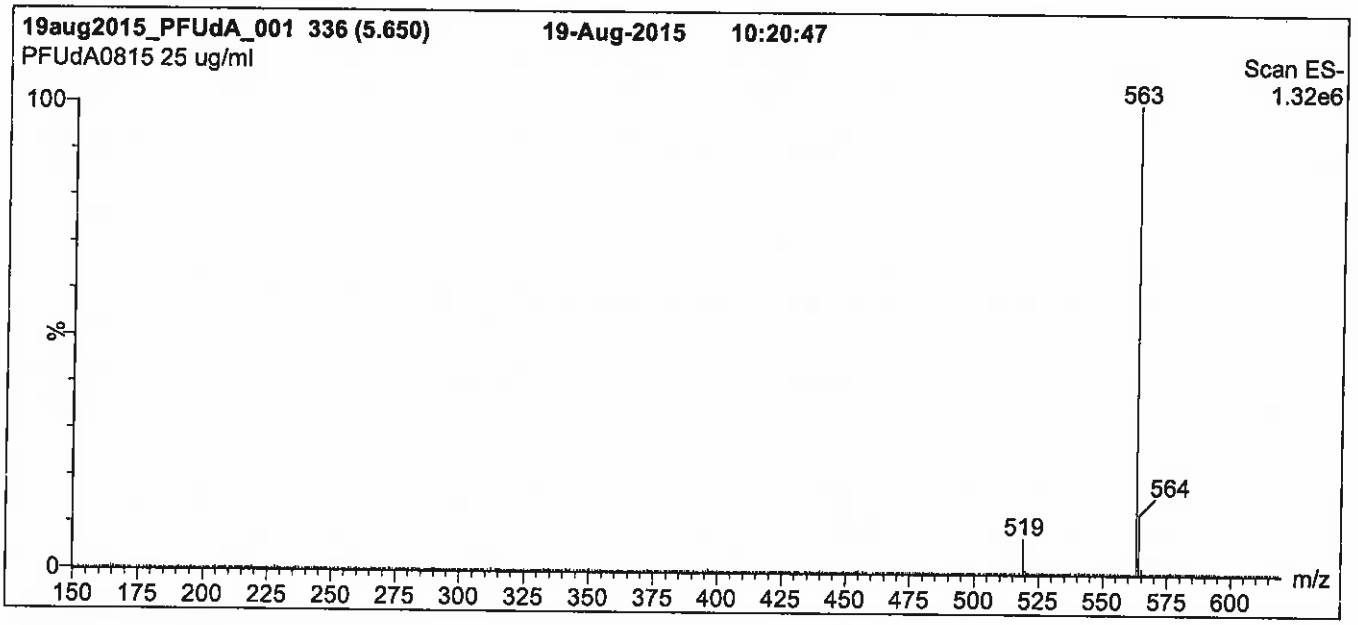
Figure 1: **PFUdA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min before returning to initial conditions in 0.5 min.
Time: 10 min

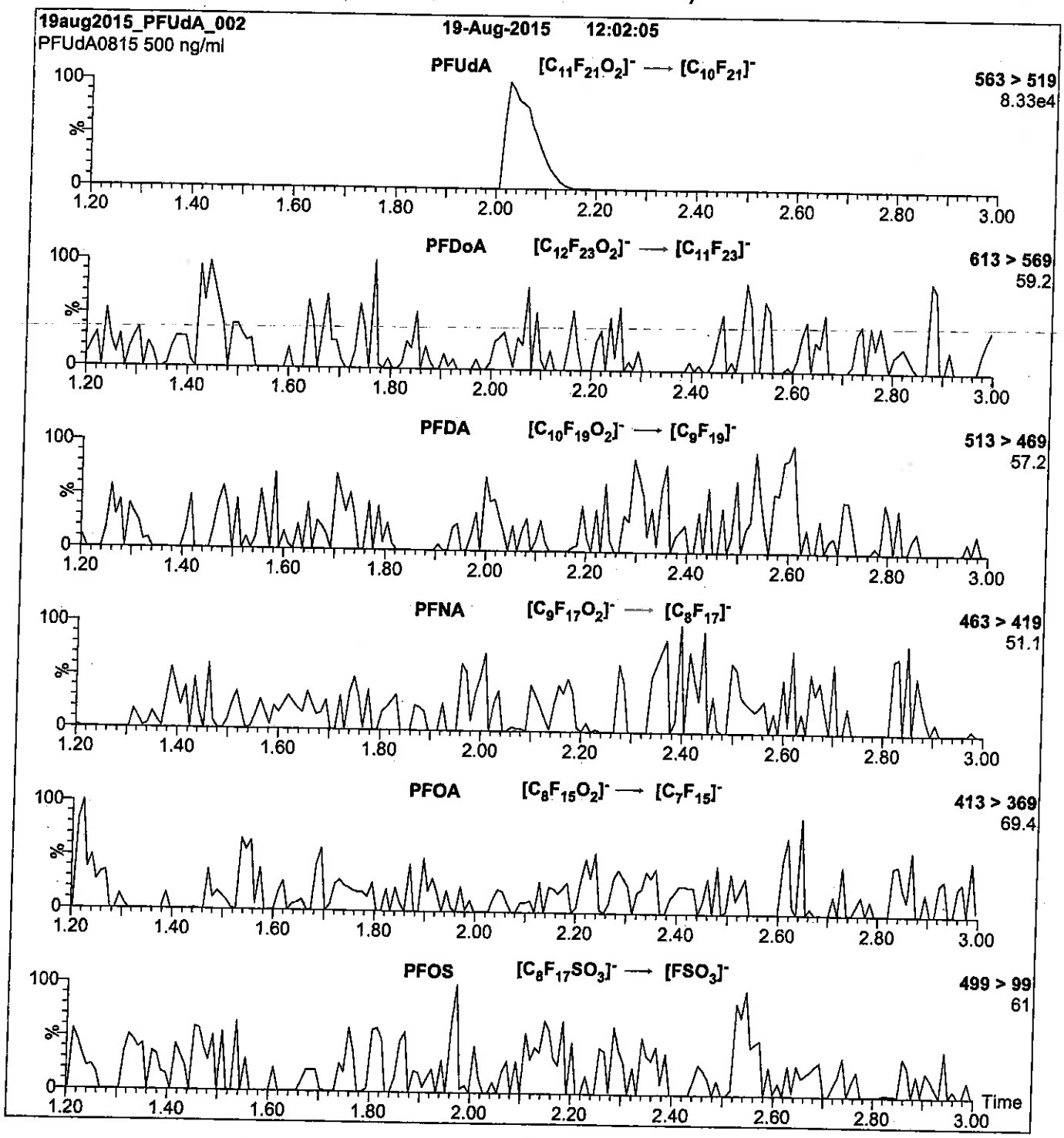
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFUdA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFUdA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 11

Reagent

LCPFUdA_00006

Scanned 10/14/16 R: SBC 9/13/16

730535
ID: LCPFUdA_00005
Exp: 08/19/20 Prpd: SBC
PF-n-undecanoic acid

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Exp: 08/19/20 Prpd: SBC
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WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

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COMPOUND: Perfluoro-n-undecanoic acid
LOT NUMBER: PFUdA0815

STRUCTURE:

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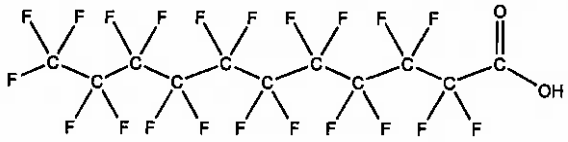

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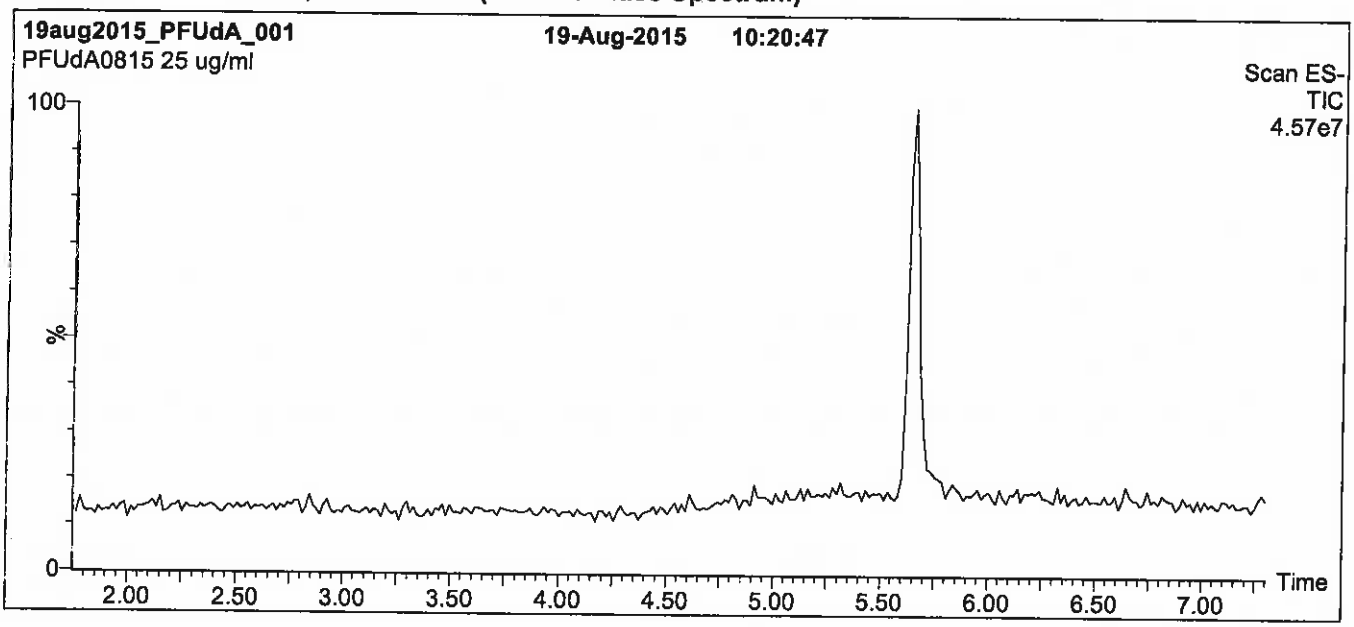

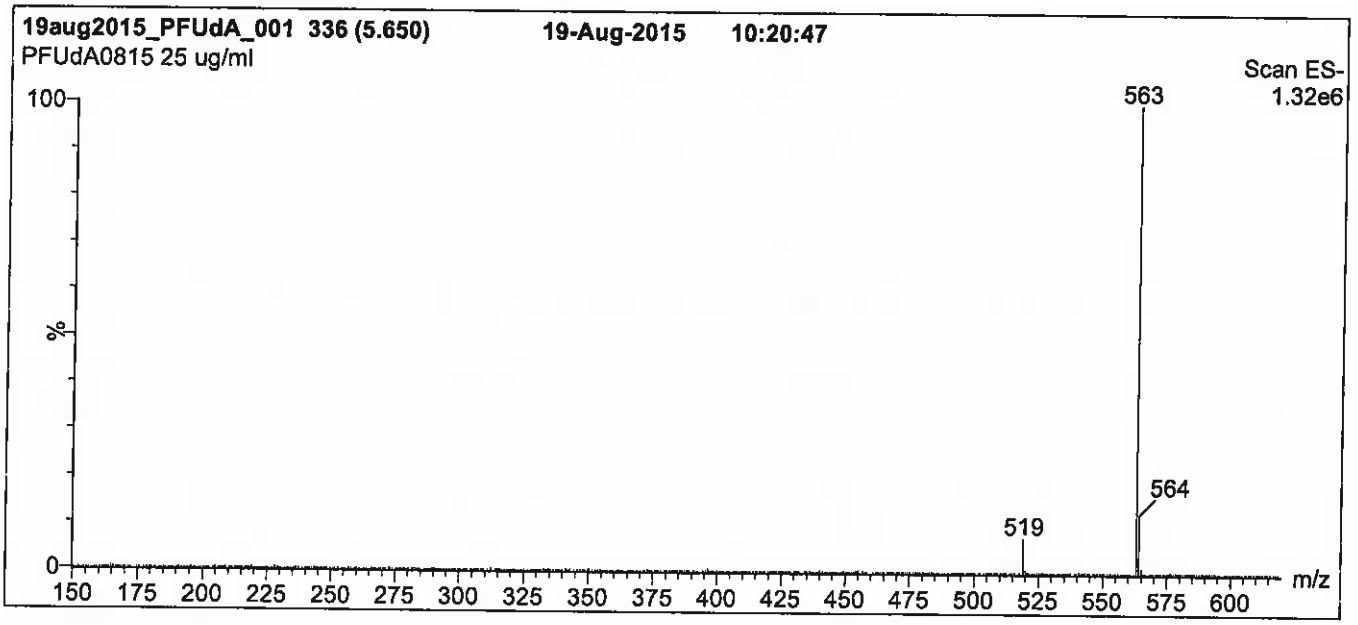

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Time: 10 min

Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
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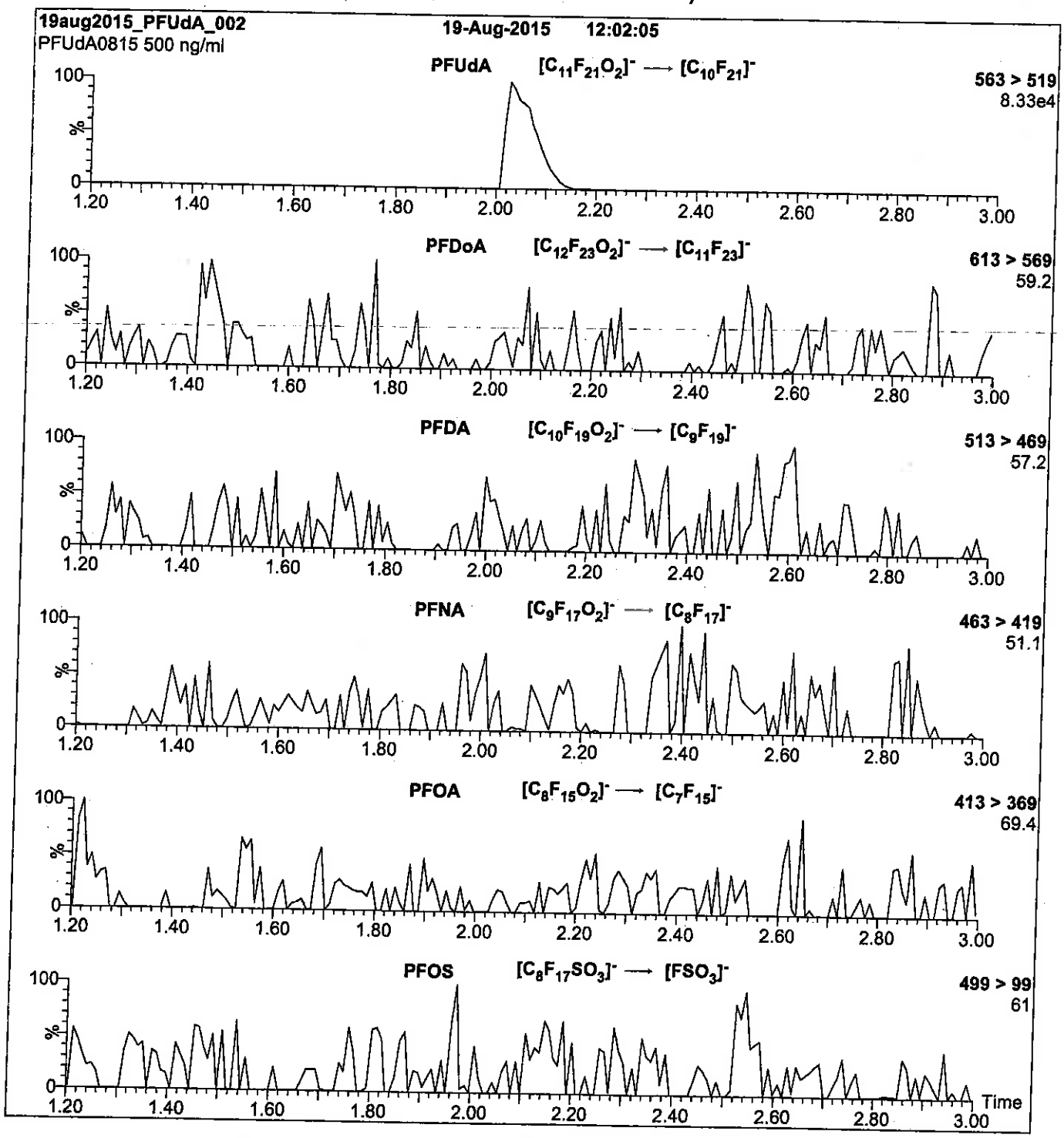
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: **PFUdA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml PFUdA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 11

Method PFC DOD

Perfluronated Hydrocarbons (LC/MS) by Method PFC_DOD

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFHxS #	PFOA #	PFOS #
Rig1_Blank	320-28427-1	111	80	99
Rig2_Blank	320-28427-2	101	79	86
Grout Truck_Blank	320-28427-3	112	77	102
	MB 320-166258/1-A	102	126	93
	LCS 320-166258/2-A	99	130	89
	LCSD 320-166258/3-A	101	123	87

	QC LIMITS
PFHxS = 18O2 PFHxS	25-150
PFOA = 13C4 PFOA	25-150
PFOS = 13C4 PFOS	25-150

Column to be used to flag recovery values

FORM II 537 (Modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2017.06.08D_003.d

Lab ID: LCS 320-166258/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorooctanoic acid (PFOA)	40.0	39.1	98	60-140	
Perfluorooctanesulfonic acid (PFOS)	37.1	39.7	107	60-140	
13C4 PFOA	100	130	130	25-150	
13C4 PFOS	95.6	85.0	89	25-150	
Perfluorobutanesulfonic acid (PFBS)	35.4	40.6	115	50-150	
18O2 PFHxS	94.6	93.4	99	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (Modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2017.06.08D_004.d

Lab ID: LCSD 320-166258/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorooctanoic acid (PFOA)	40.0	41.0	102	5	30	60-140	
Perfluorooctanesulfonic acid (PFOS)	37.1	39.8	107	0	30	60-140	
13C4 PFOA	100	123	123			25-150	
13C4 PFOS	95.6	83.6	87			25-150	
Perfluorobutanesulfonic acid (PFBS)	35.4	40.2	114	1	30	50-150	
18O2 PFHxS	94.6	95.1	101			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (Modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab File ID: 2017.06.08D_002.d Lab Sample ID: MB 320-166258/1-A

Matrix: Water Date Extracted: 05/25/2017 15:37

Instrument ID: A8_N Date Analyzed: 06/09/2017 00:53

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-166258/2-A	2017.06.08D_003.d	06/09/2017 01:01
	LCSD 320-166258/3-A	2017.06.08D_004.d	06/09/2017 01:09
Rig1_Blank	320-28427-1	2017.06.08D_008.d	06/09/2017 01:40
Rig2_Blank	320-28427-2	2017.06.08D_009.d	06/09/2017 01:47
Grout Truck_Blank	320-28427-3	2017.06.08D_010.d	06/09/2017 01:55

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Client Sample ID: Rig1_Blank Lab Sample ID: 320-28427-1

Matrix: Water Lab File ID: 2017.06.08D_008.d

Analysis Method: 537 (Modified) Date Collected: 05/18/2017 17:11

Extraction Method: 3535 Date Extracted: 05/25/2017 15:37

Sample wt/vol: 255.3(mL) Date Analyzed: 06/09/2017 01:40

Con. Extract Vol.: 0.5(mL) Dilution Factor: 1

Injection Volume: 2(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	2.0	U	2.4	2.0	0.73
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.9	U	3.9	2.9	1.2
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.0	U M	2.4	2.0	0.90

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	80		25-150
STL00991	13C4 PFOS	99		25-150
STL00994	18O2 PFHxS	111		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_008.d
Lims ID: 320-28427-A-1-A
Client ID: Rig1_Blank
Sample Type: Client
Inject. Date: 09-Jun-2017 01:40:11 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-28427-a-1-a
Misc. Info.: Plate: 1 Rack: 4
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 09-Jun-2017 13:55:01 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: raineys Date: 09-Jun-2017 13:55:01

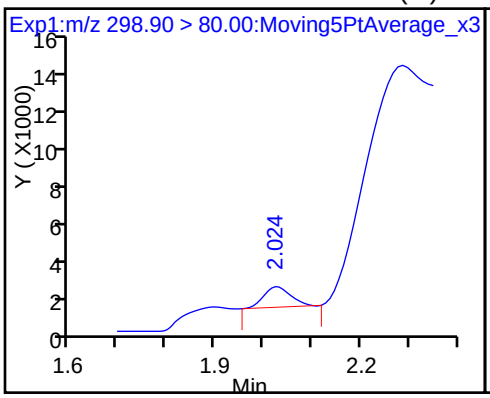
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.024	2.027	-0.003	1.000	4144	0.0099				M
298.90 > 99.00	2.024	2.027	-0.003	1.000	1997		2.08(0.00-0.00)			M
D 11 18O2 PFHxS										
403.00 > 84.00	2.700	2.701	-0.001		12079784	52.4		111	16834	
* 62 13C2-PFOA										
415.00 > 370.00	3.065	3.064	0.001		4371	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.065	3.064	0.001		7252632	40.2		80.4	23506	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.072	3.072	0.0	1.000	13302	0.0858			5.3	
413.00 > 169.00	3.065	3.072	-0.007	0.997	7839		1.70(0.90-1.10)		12.8	
D 18 13C4 PFOS										
503.00 > 80.00	3.439	3.439	0.0		8421972	47.3		98.9	11971	

QC Flag Legend

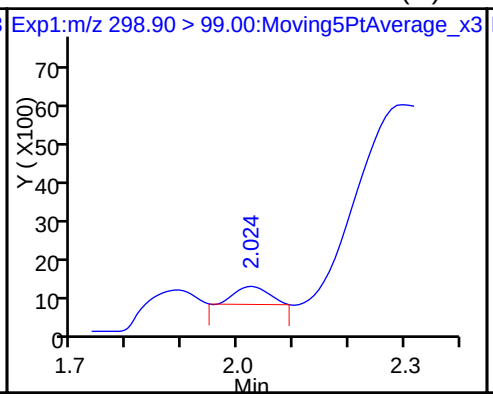
Review Flags
M - Manually Integrated

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_008.d
Injection Date: 09-Jun-2017 01:40:11 Instrument ID: A8_N
Lims ID: 320-28427-A-1-A Lab Sample ID: 320-28427-1
Client ID: Rig1_Blank
Operator ID: SACINSTLCMS01 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC_DOD ICAL

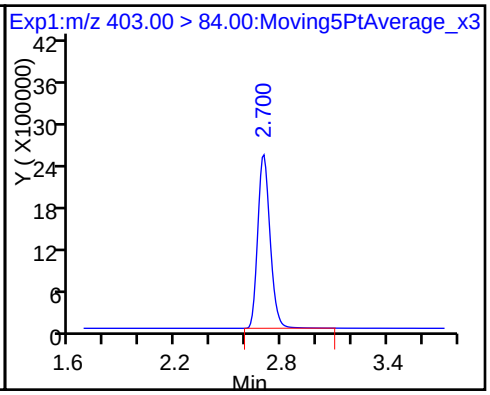
5 Perfluorobutanesulfonic acid (M)



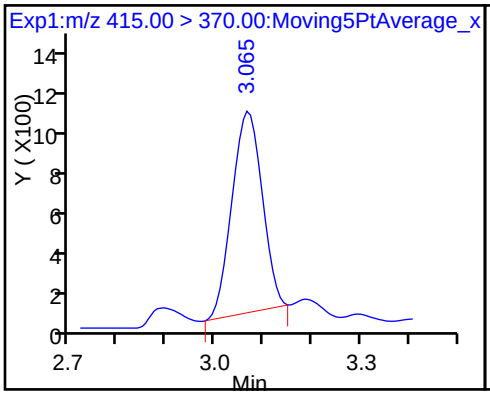
5 Perfluorobutanesulfonic acid (M)



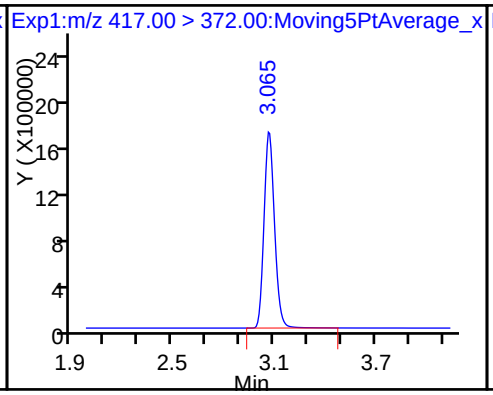
D 11 18O2 PFHxS



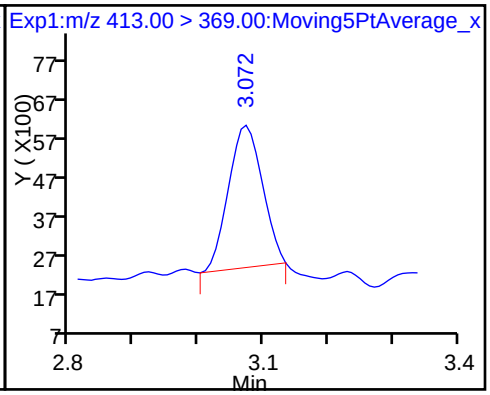
* 62 13C2-PFOA



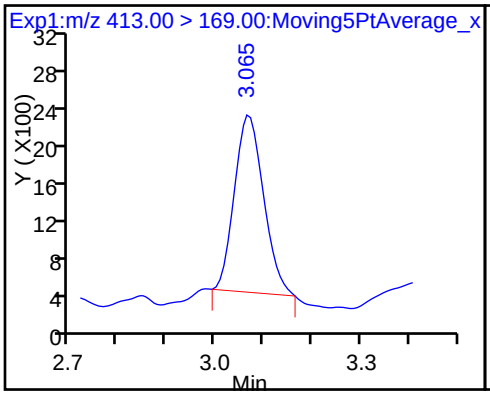
D 14 13C4 PFOA



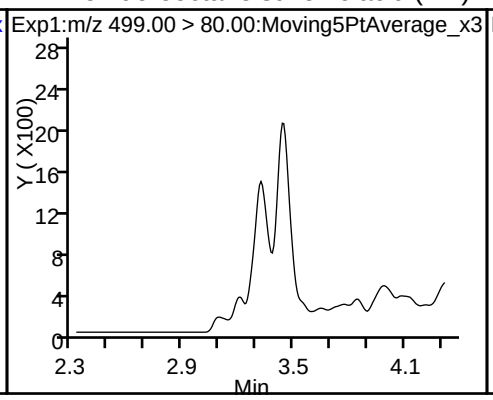
15 Perfluorooctanoic acid



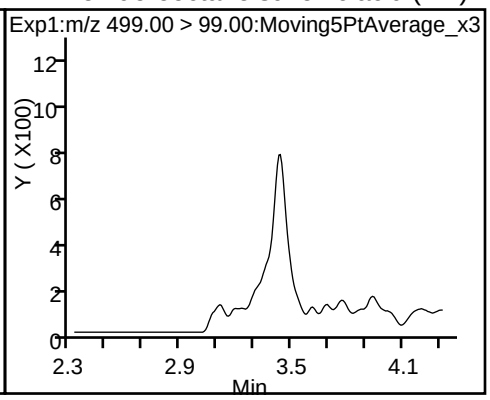
15 Perfluorooctanoic acid



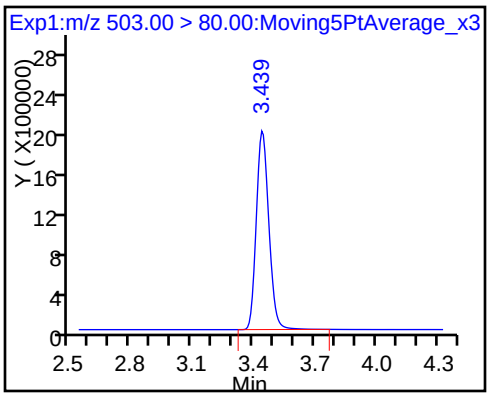
17 Perfluorooctane sulfonic acid (ND)



17 Perfluorooctane sulfonic acid (ND)



D 18 13C4 PFOS



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

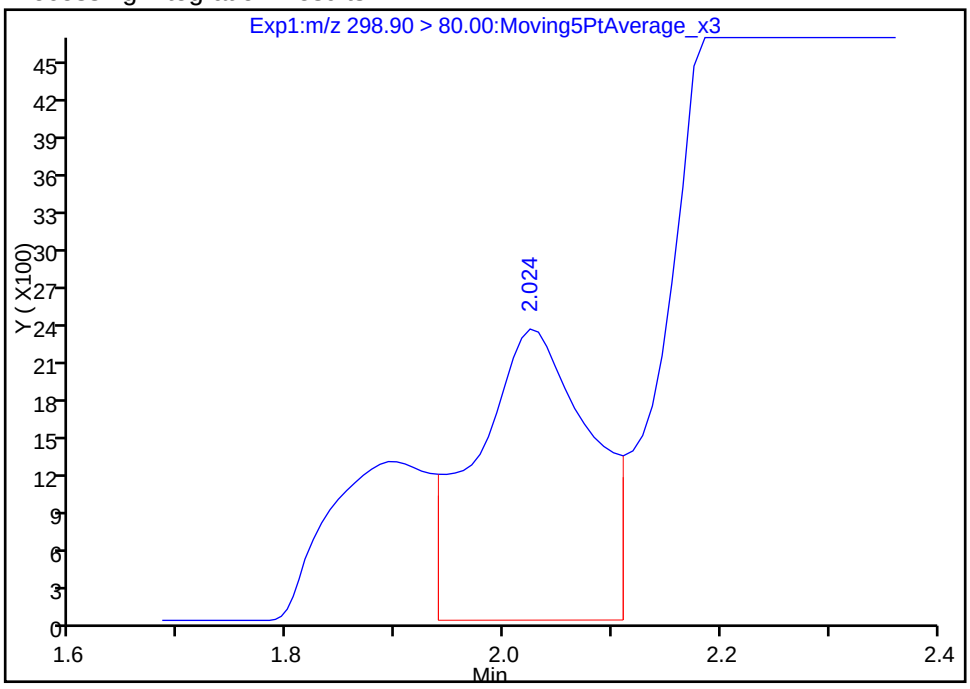
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_008.d				
Injection Date:	09-Jun-2017 01:40:11	Instrument ID:	A8_N		
Lims ID:	320-28427-A-1-A	Lab Sample ID:	320-28427-1		
Client ID:	Rig1_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

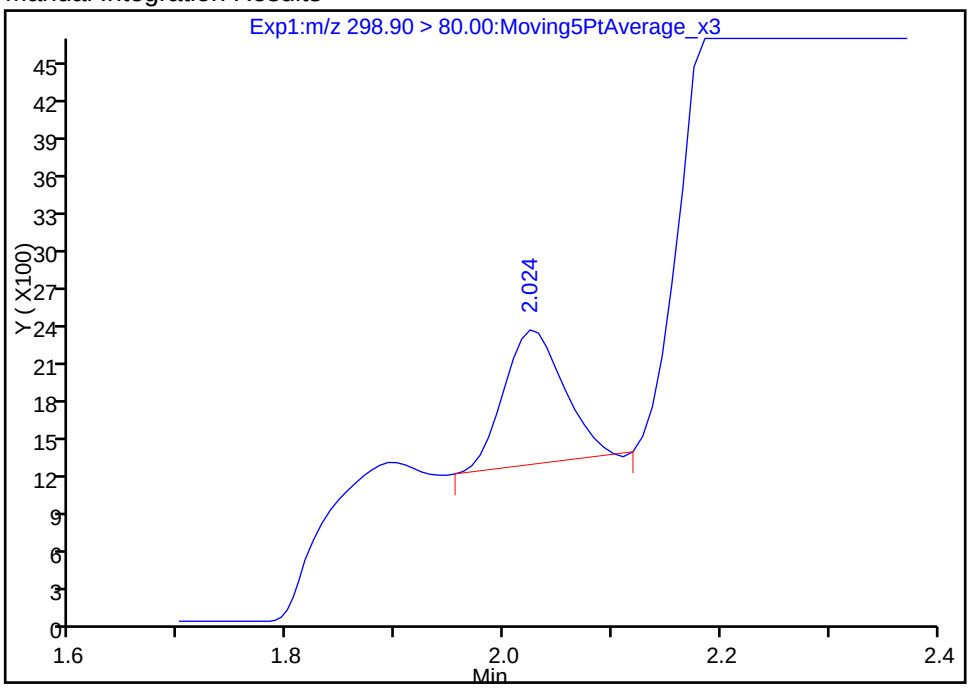
Processing Integration Results

RT: 2.02
Area: 17036
Amount: 0.040861
Amount Units: ng/ml



Manual Integration Results

RT: 2.02
Area: 4144
Amount: 0.009940
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:54:47

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

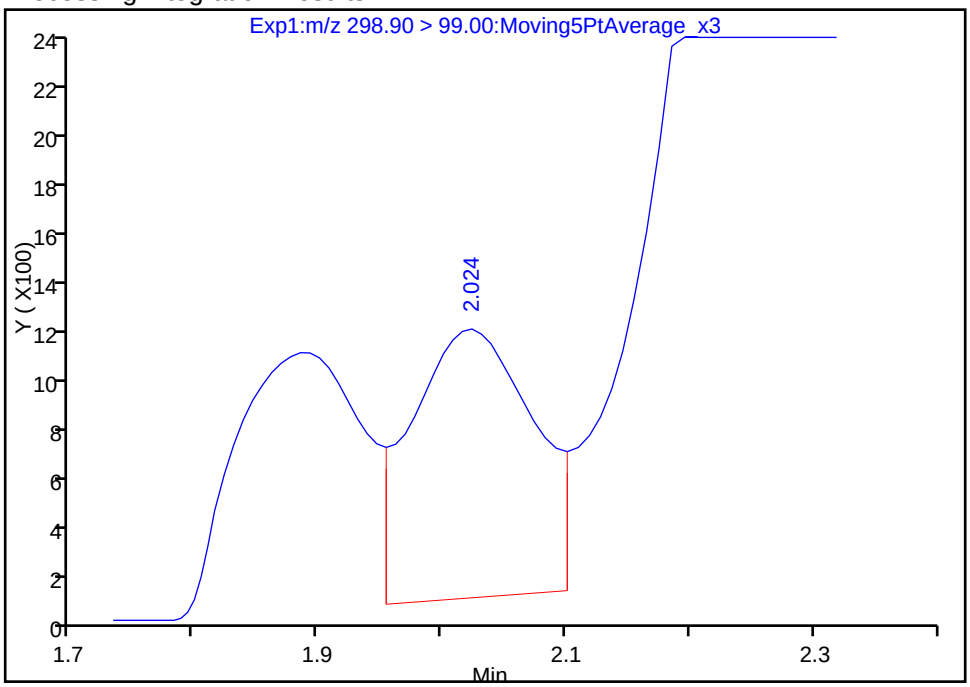
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_008.d				
Injection Date:	09-Jun-2017 01:40:11	Instrument ID:	A8_N		
Lims ID:	320-28427-A-1-A	Lab Sample ID:	320-28427-1		
Client ID:	Rig1_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

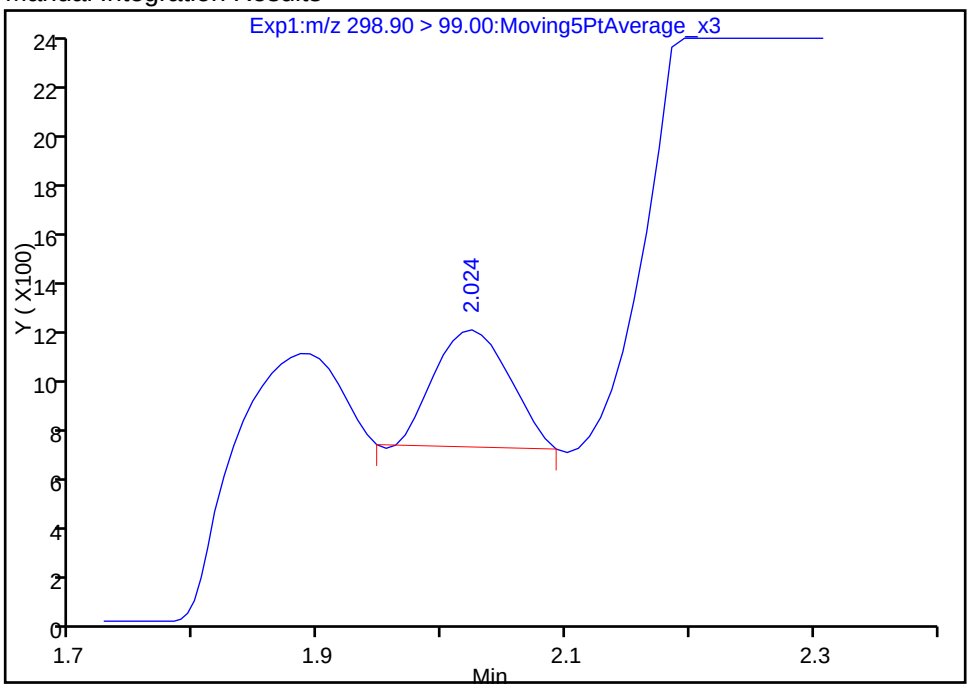
Processing Integration Results

RT: 2.02
Area: 7365
Amount: 0.040861
Amount Units: ng/ml



Manual Integration Results

RT: 2.02
Area: 1997
Amount: 0.009940
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:54:53
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-28427-1

SDG No.:

Client Sample ID: Rig2_Blank | Lab Sample ID: 320-28427-2

Matrix: Water | Lab File ID: 2017.06.08D_009.d

Analysis Method: 537 (Modified) | Date Collected: 05/18/2017 17:25

Extraction Method: 3535 | Date Extracted: 05/25/2017 15:37

Sample wt/vol: 255.9(mL) | Date Analyzed: 06/09/2017 01:47

Con. Extract Vol.: 0.5(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	3.4	M	2.4	2.0	0.73
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.8	J	3.9	2.9	1.2
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.0	U M	2.4	2.0	0.90

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	79		25-150
STL00991	13C4 PFOS	86		25-150
STL00994	18O2 PFHxS	101		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_009.d
Lims ID: 320-28427-A-2-A
Client ID: Rig2_Blank
Sample Type: Client
Inject. Date: 09-Jun-2017 01:47:53 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-28427-a-2-a
Misc. Info.: Plate: 1 Rack: 4
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 09-Jun-2017 13:56:05 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: raineys Date: 09-Jun-2017 13:56:05

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.027	2.027	0.0	1.000	40527	0.1066				M
298.90 > 99.00	2.027	2.027	0.0	1.000	17476		2.32(0.00-0.00)			M
D 11 18O2 PFHxS										
403.00 > 84.00	2.701	2.701	0.0		11010540	47.8		101	21705	
* 62 13C2-PFOA										
415.00 > 370.00	3.064	3.064	0.0		4527	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.064	3.064	0.0		7165472	39.7		79.5	16200	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.064	3.072	-0.008	1.000	266252	1.74			96.8	M
413.00 > 169.00	3.064	3.072	-0.008	1.000	159459		1.67(0.90-1.10)		230	M
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.315	3.323	-0.008	1.000	316476	1.96			295	
499.00 > 99.00	3.431	3.323	0.108	1.035	63536		4.98(0.90-1.10)		384	
D 18 13C4 PFOS										
503.00 > 80.00	3.439	3.439	0.0		7303933	41.0		85.8	9860	

QC Flag Legend

Review Flags
M - Manually Integrated

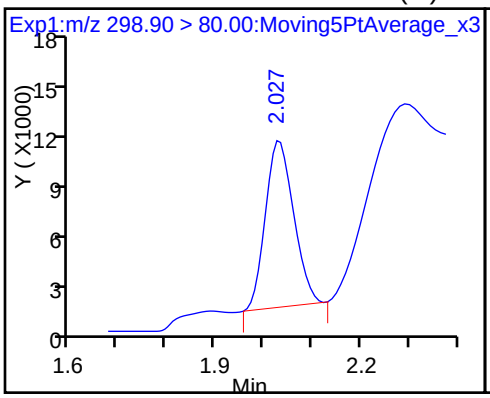
Report Date: 09-Jun-2017 13:56:05 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

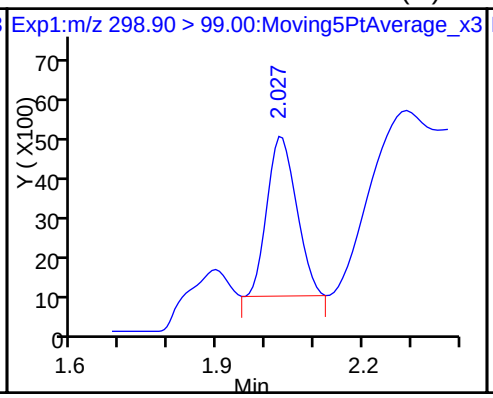
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_009.d

Injection Date:	09-Jun-2017 01:47:53	Instrument ID:	A8_N		
Lims ID:	320-28427-A-2-A	Lab Sample ID:	320-28427-2		
Client ID:	Rig2_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		

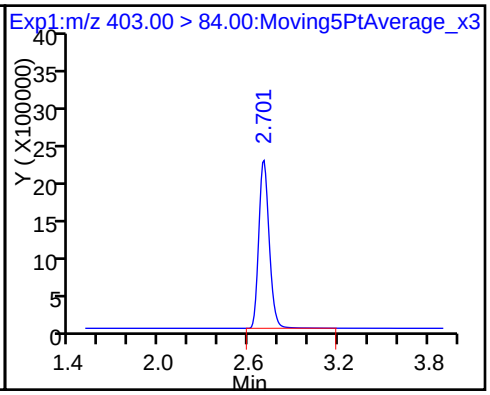
5 Perfluorobutanesulfonic acid (M)



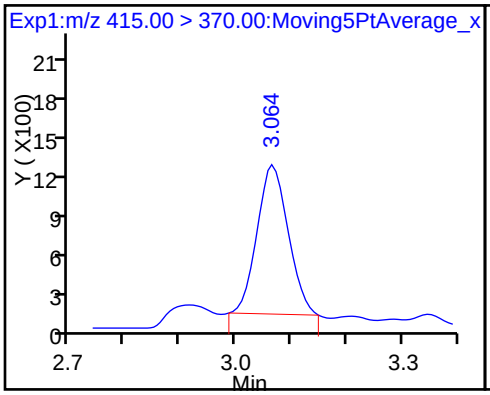
5 Perfluorobutanesulfonic acid (M)



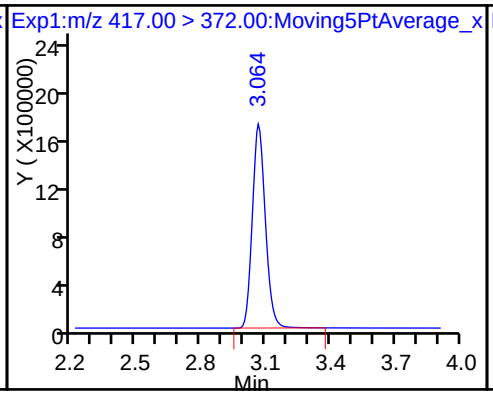
D 11 18O2 PFHxS



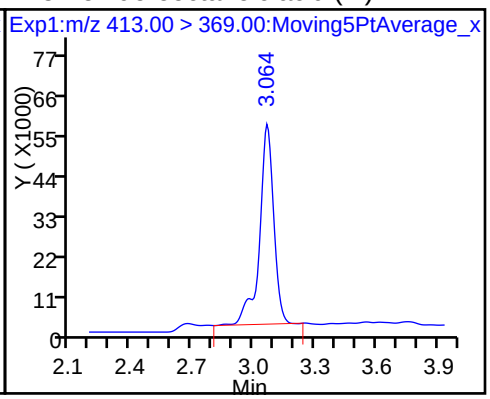
* 62 13C2-PFOA



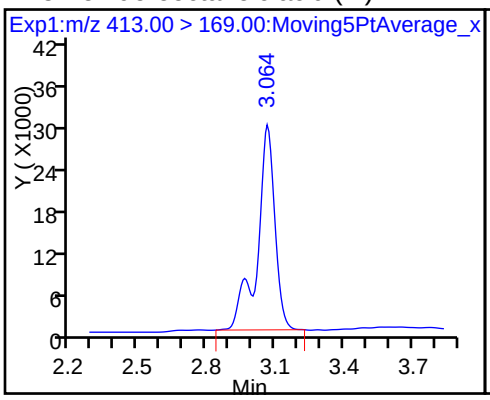
D 14 13C4 PFOA



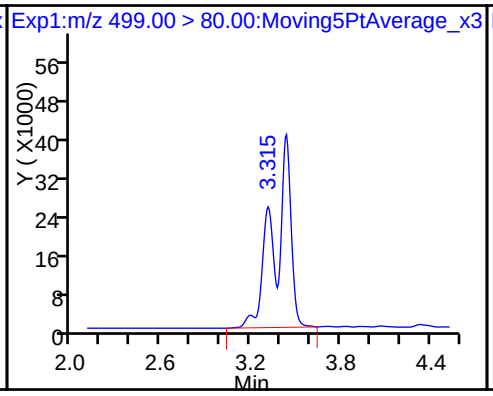
15 Perfluorooctanoic acid (M)



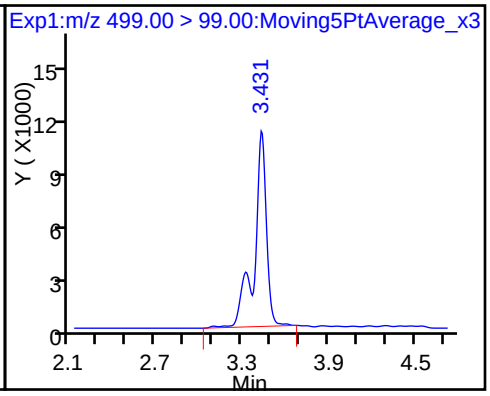
15 Perfluorooctanoic acid (M)



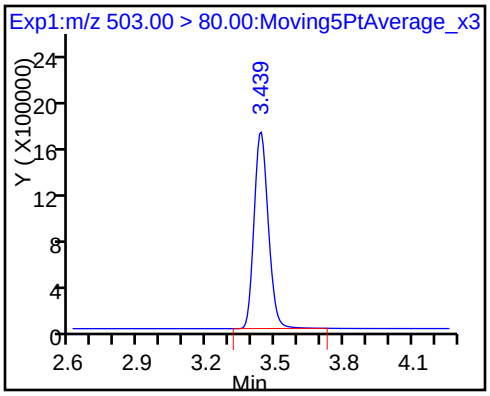
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



D 18 13C4 PFOS



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

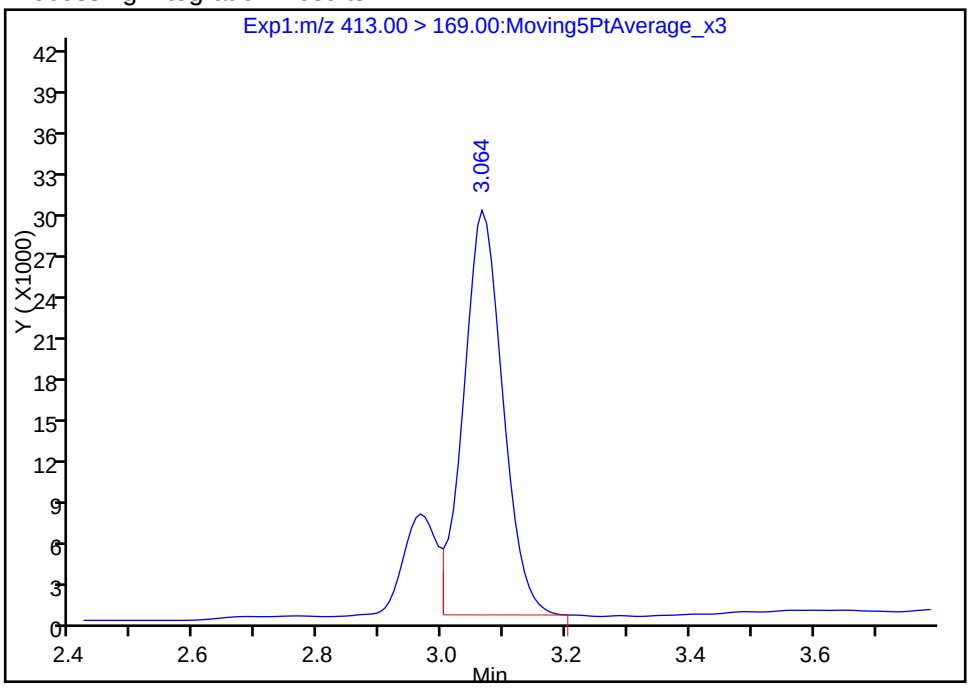
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_009.d				
Injection Date:	09-Jun-2017 01:47:53	Instrument ID:	A8_N		
Lims ID:	320-28427-A-2-A	Lab Sample ID:	320-28427-2		
Client ID:	Rig2_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

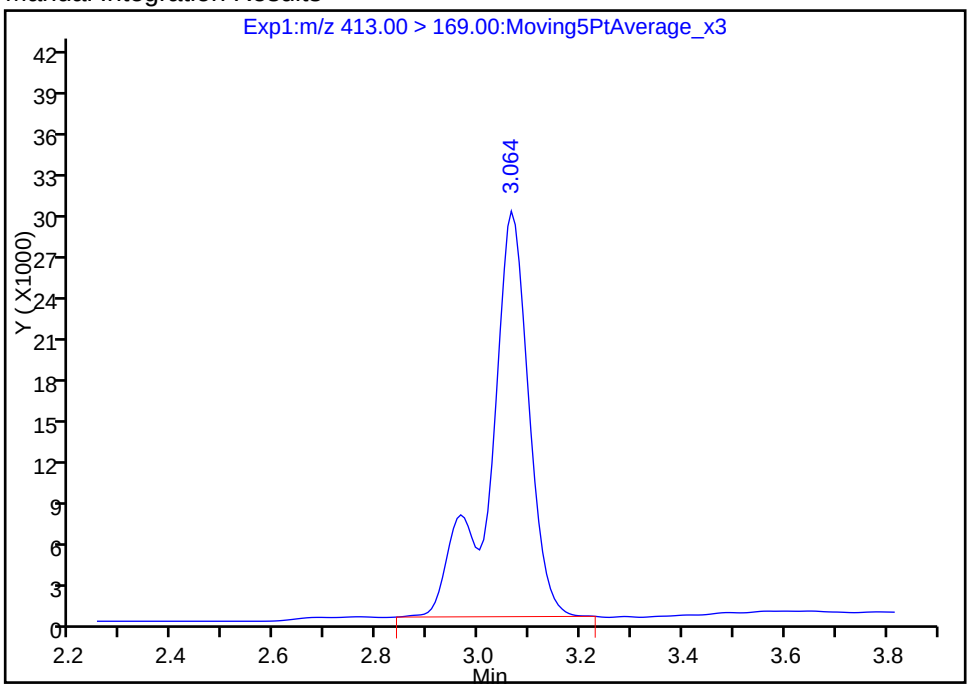
Processing Integration Results

RT: 3.06
Area: 130260
Amount: 1.568844
Amount Units: ng/ml



Manual Integration Results

RT: 3.06
Area: 159459
Amount: 1.738862
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:55:53

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

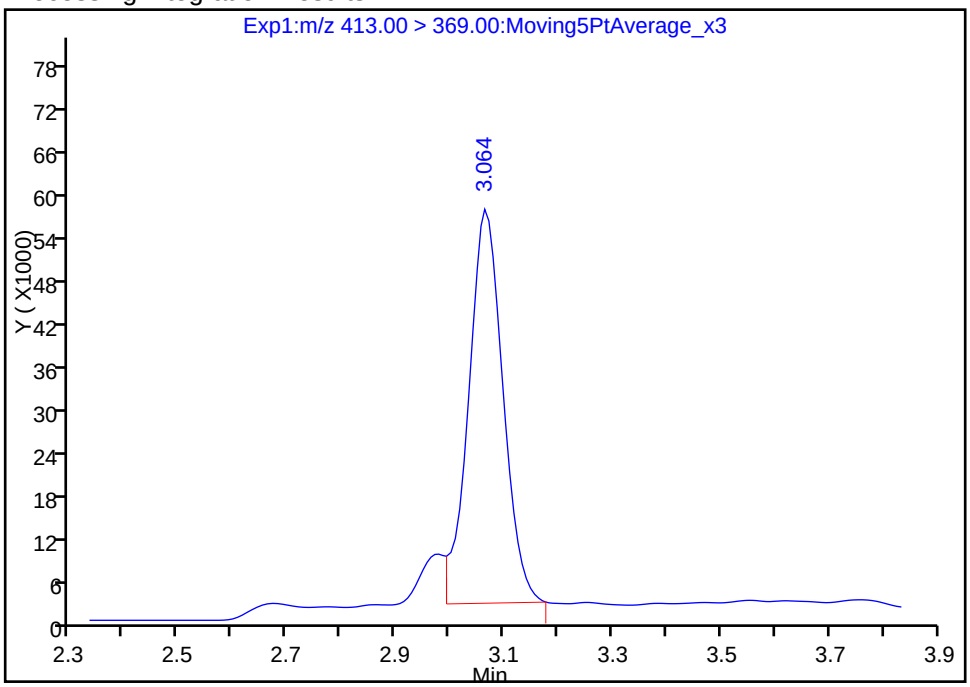
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_009.d				
Injection Date:	09-Jun-2017 01:47:53	Instrument ID:	A8_N		
Lims ID:	320-28427-A-2-A	Lab Sample ID:	320-28427-2		
Client ID:	Rig2_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

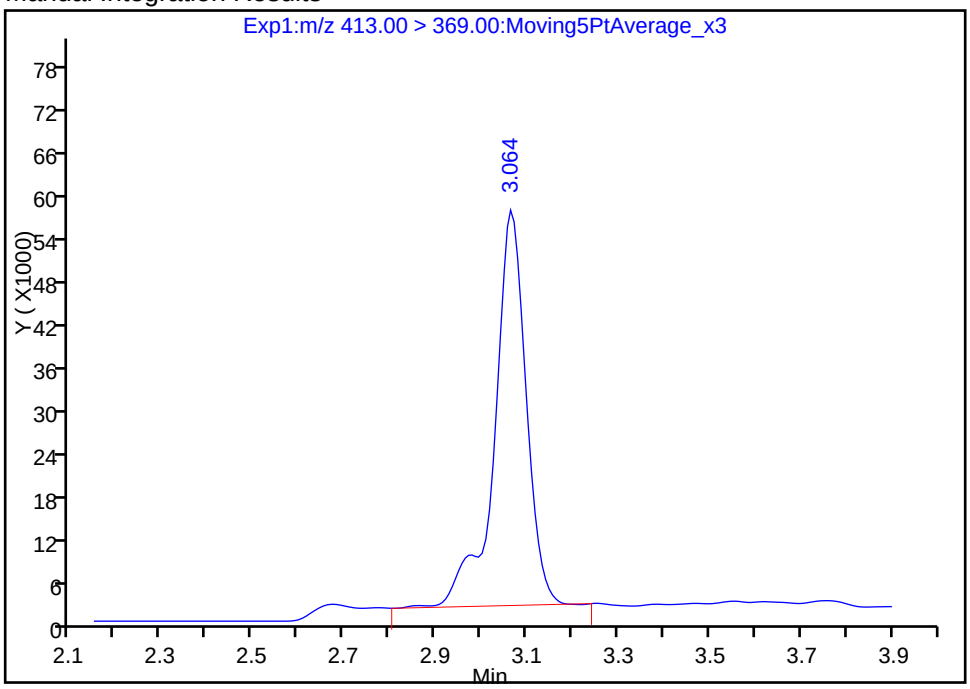
Processing Integration Results

RT: 3.06
Area: 240219
Amount: 1.568844
Amount Units: ng/ml



Manual Integration Results

RT: 3.06
Area: 266252
Amount: 1.738862
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:55:56

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

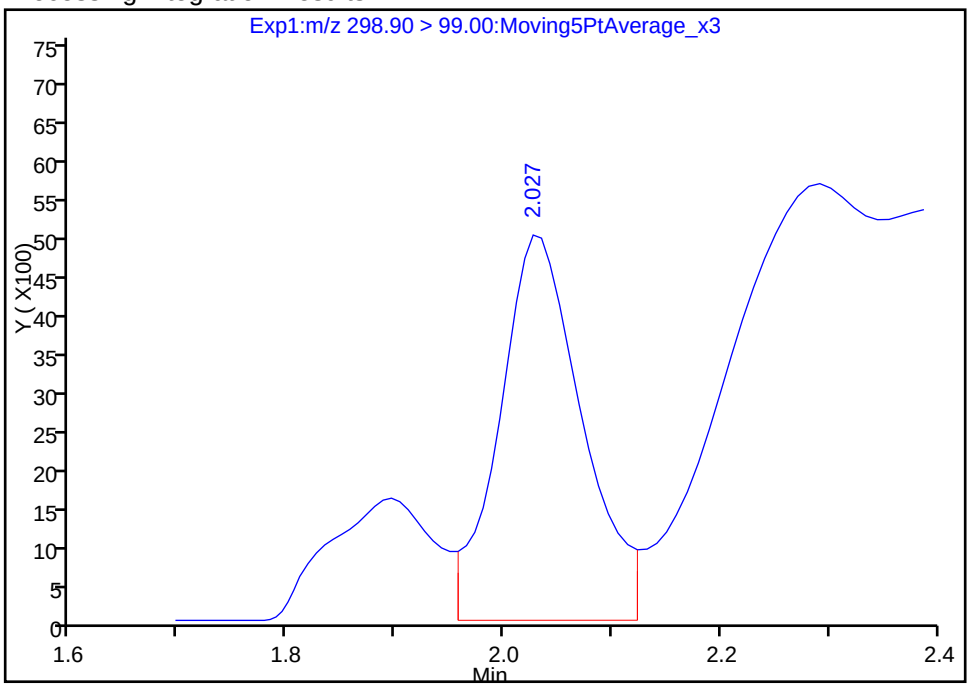
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_009.d				
Injection Date:	09-Jun-2017 01:47:53	Instrument ID:	A8_N		
Lims ID:	320-28427-A-2-A	Lab Sample ID:	320-28427-2		
Client ID:	Rig2_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

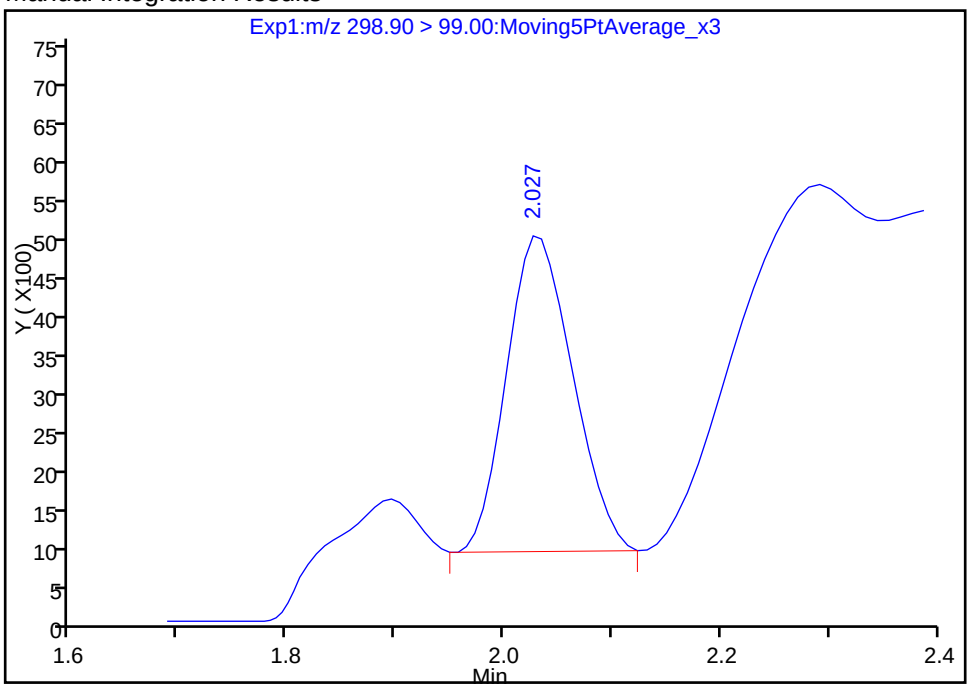
Processing Integration Results

RT: 2.03
Area: 26497
Amount: 0.149175
Amount Units: ng/ml



Manual Integration Results

RT: 2.03
Area: 17476
Amount: 0.106645
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:55:38

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

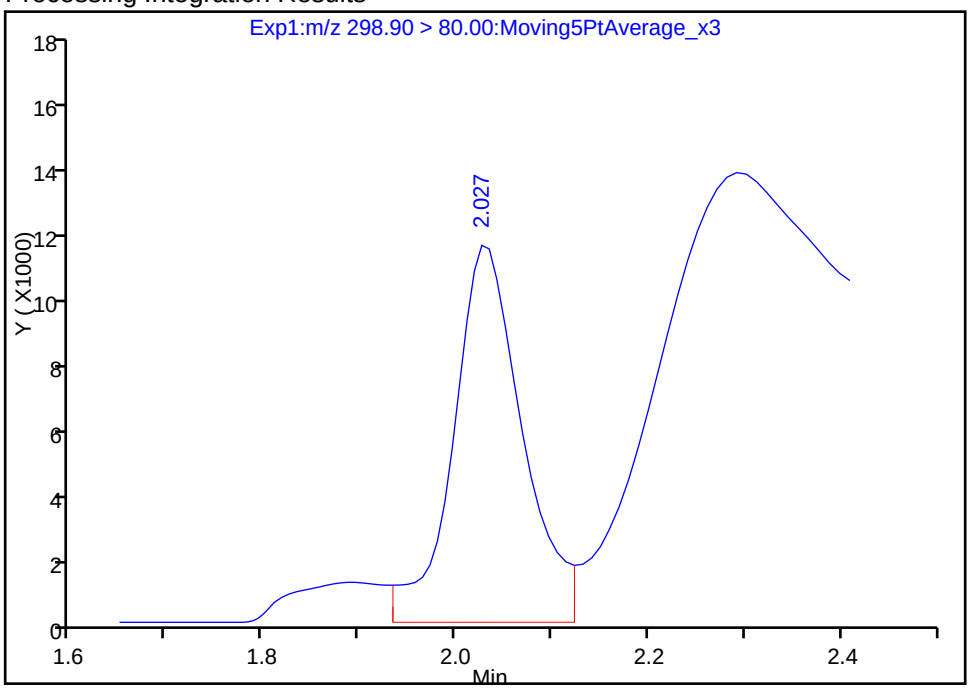
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_009.d				
Injection Date:	09-Jun-2017 01:47:53	Instrument ID:	A8_N		
Lims ID:	320-28427-A-2-A	Lab Sample ID:	320-28427-2		
Client ID:	Rig2_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

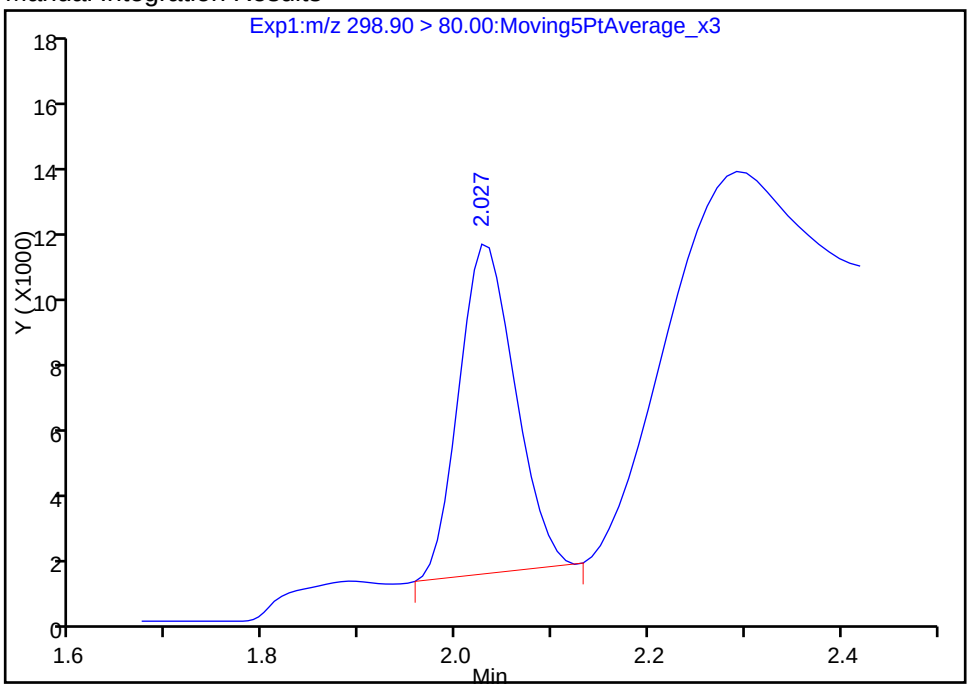
Processing Integration Results

RT: 2.03
Area: 56689
Amount: 0.149175
Amount Units: ng/ml



Manual Integration Results

RT: 2.03
Area: 40527
Amount: 0.106645
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:55:45
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Client Sample ID: Grout Truck_Blank Lab Sample ID: 320-28427-3

Matrix: Water Lab File ID: 2017.06.08D_010.d

Analysis Method: 537 (Modified) Date Collected: 05/18/2017 17:35

Extraction Method: 3535 Date Extracted: 05/25/2017 15:37

Sample wt/vol: 281.4(mL) Date Analyzed: 06/09/2017 01:55

Con. Extract Vol.: 0.5(mL) Dilution Factor: 1

Injection Volume: 2(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	1.8	U	2.2	1.8	0.66
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.1	J M	3.6	2.7	1.1
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.8	U M	2.2	1.8	0.82

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	77		25-150
STL00991	13C4 PFOS	102		25-150
STL00994	18O2 PFHxS	112		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_010.d
Lims ID: 320-28427-A-3-A
Client ID: Grout Truck_Blank
Sample Type: Client
Inject. Date: 09-Jun-2017 01:55:35 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-28427-a-3-a
Misc. Info.: Plate: 1 Rack: 4
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 09-Jun-2017 13:57:11 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: raineys Date: 09-Jun-2017 13:57:11

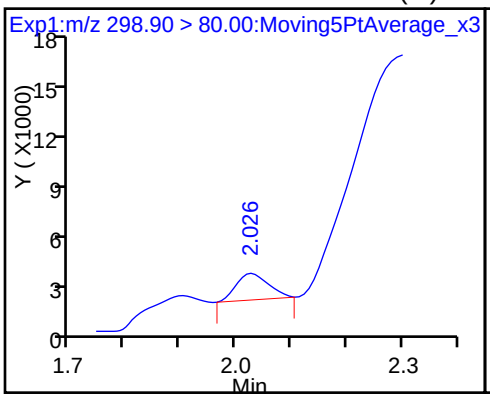
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.026	2.027	-0.001	1.000	6227	0.0148				M
298.90 > 99.00	2.026	2.027	-0.001	1.000	2404		2.59(0.00-0.00)			M
D 11 18O2 PFHxS										
403.00 > 84.00	2.691	2.701	-0.010		12161042	52.8		112	24782	
* 62 13C2-PFOA										
415.00 > 370.00	3.057	3.064	-0.007		4436	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.064	3.064	0.0		6904783	38.3		76.6	16843	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.064	3.072	-0.008	1.000	13074	0.0886			4.7	
413.00 > 169.00	3.064	3.072	-0.008	1.000	8459		1.55(0.90-1.10)		13.4	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.307	3.323	-0.016	1.000	115392	0.6009			86.2	M
499.00 > 99.00	3.431	3.323	0.108	1.037	19080		6.05(0.90-1.10)		54.3	M
D 18 13C4 PFOS										
503.00 > 80.00	3.431	3.439	-0.008		8697295	48.8		102	17920	

QC Flag Legend

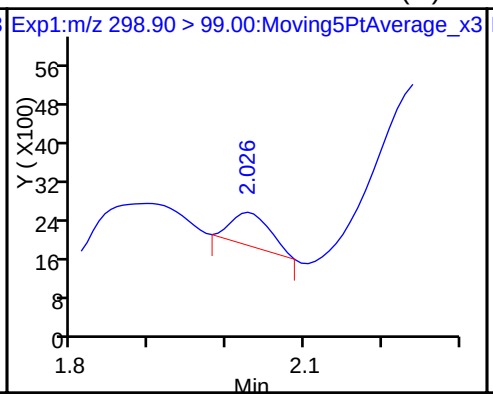
Review Flags
M - Manually Integrated

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_010.d
Injection Date: 09-Jun-2017 01:55:35 Instrument ID: A8_N
Lims ID: 320-28427-A-3-A Lab Sample ID: 320-28427-3
Client ID: Grout Truck_Blank
Operator ID: SACINSTLCMS01 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC_DOD ICAL

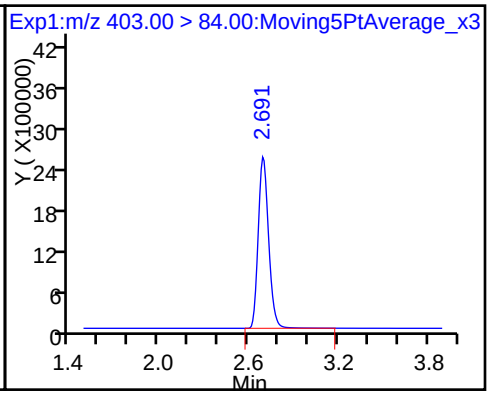
5 Perfluorobutanesulfonic acid (M)



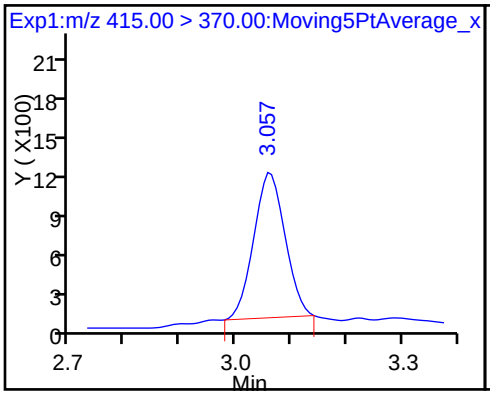
5 Perfluorobutanesulfonic acid (M)



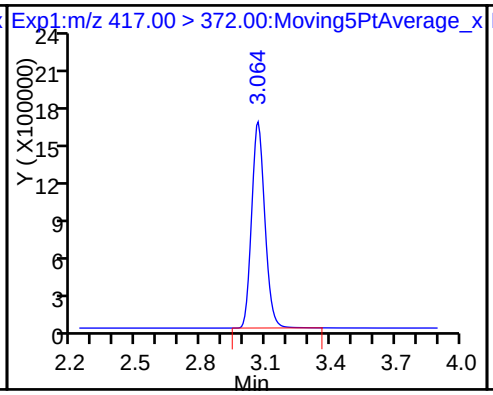
D 11 18O2 PFHxS



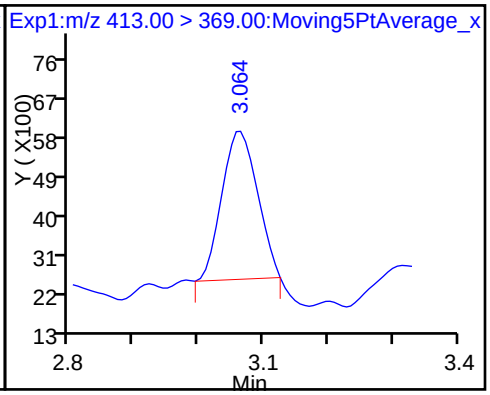
* 62 13C2-PFOA



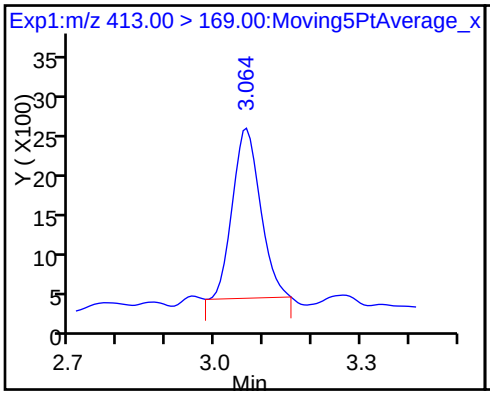
D 14 13C4 PFOA



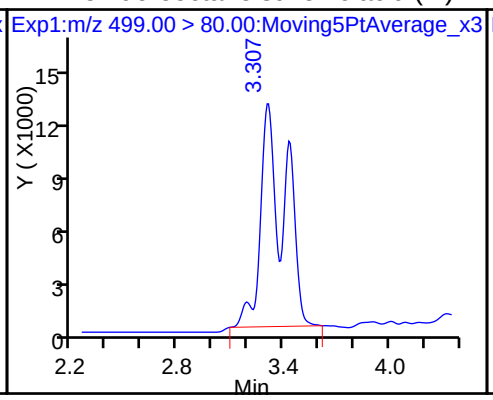
15 Perfluorooctanoic acid



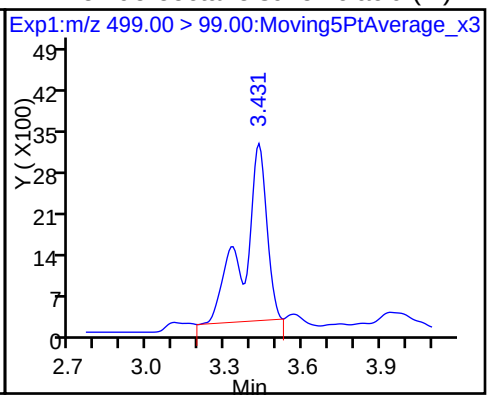
15 Perfluorooctanoic acid



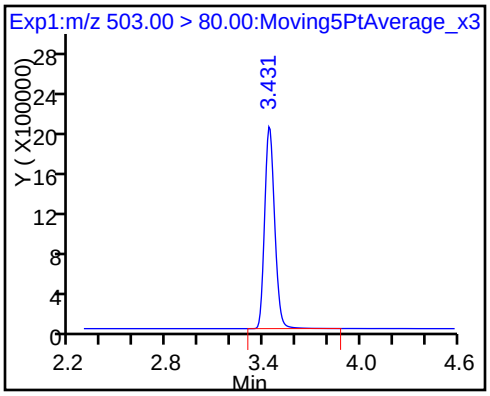
17 Perfluorooctane sulfonic acid (M)



17 Perfluorooctane sulfonic acid (M)



D 18 13C4 PFOS



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

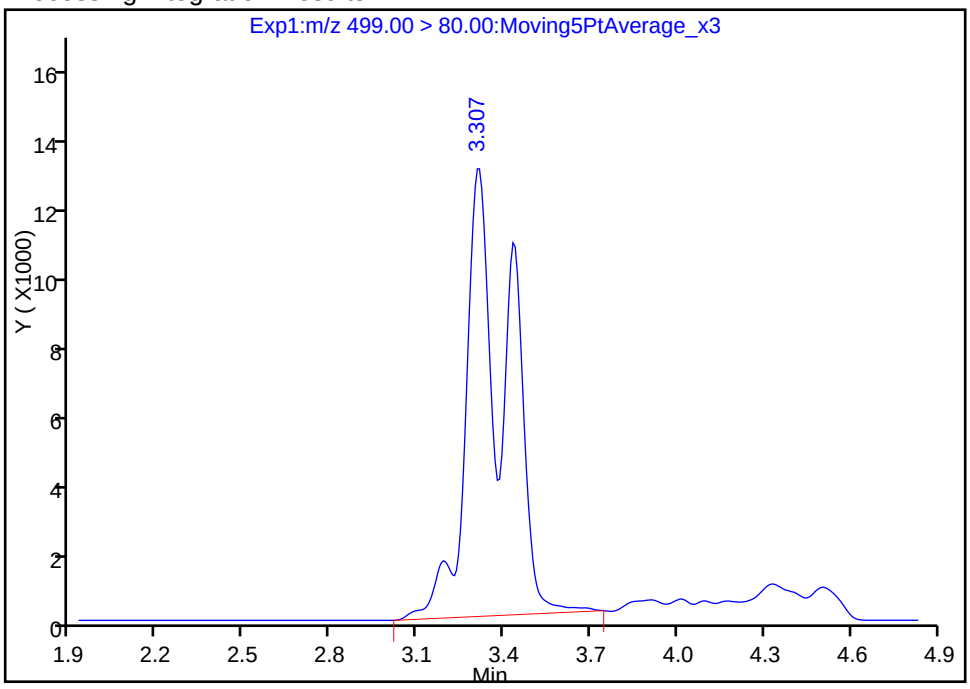
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_010.d				
Injection Date:	09-Jun-2017 01:55:35	Instrument ID:	A8_N		
Lims ID:	320-28427-A-3-A	Lab Sample ID:	320-28427-3		
Client ID:	Grout Truck_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

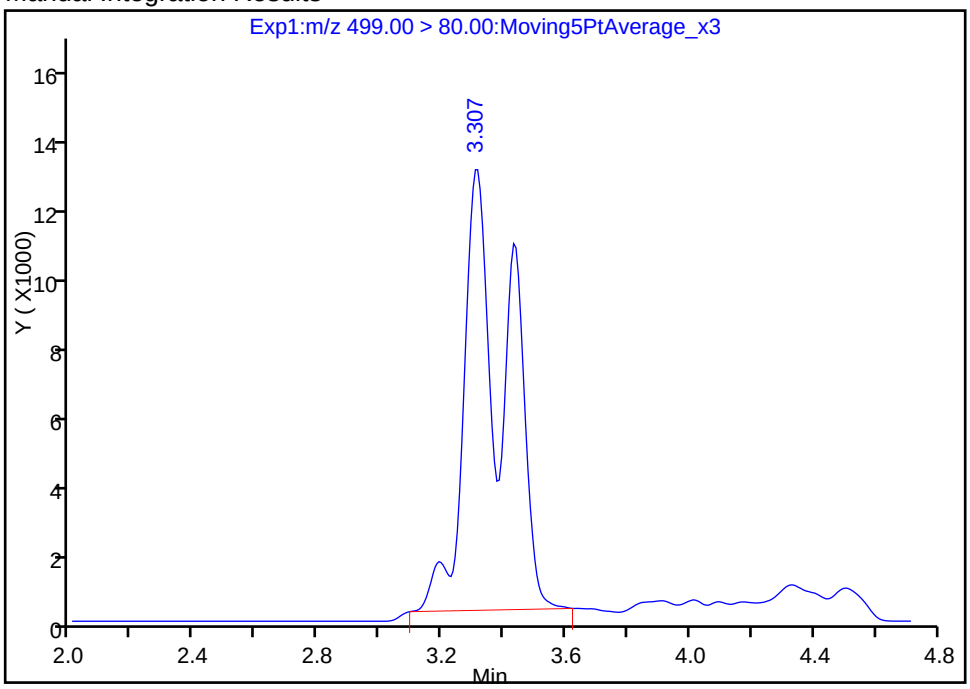
Processing Integration Results

RT: 3.31
Area: 122201
Amount: 0.636360
Amount Units: ng/ml



Manual Integration Results

RT: 3.31
Area: 115392
Amount: 0.600902
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:57:04

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

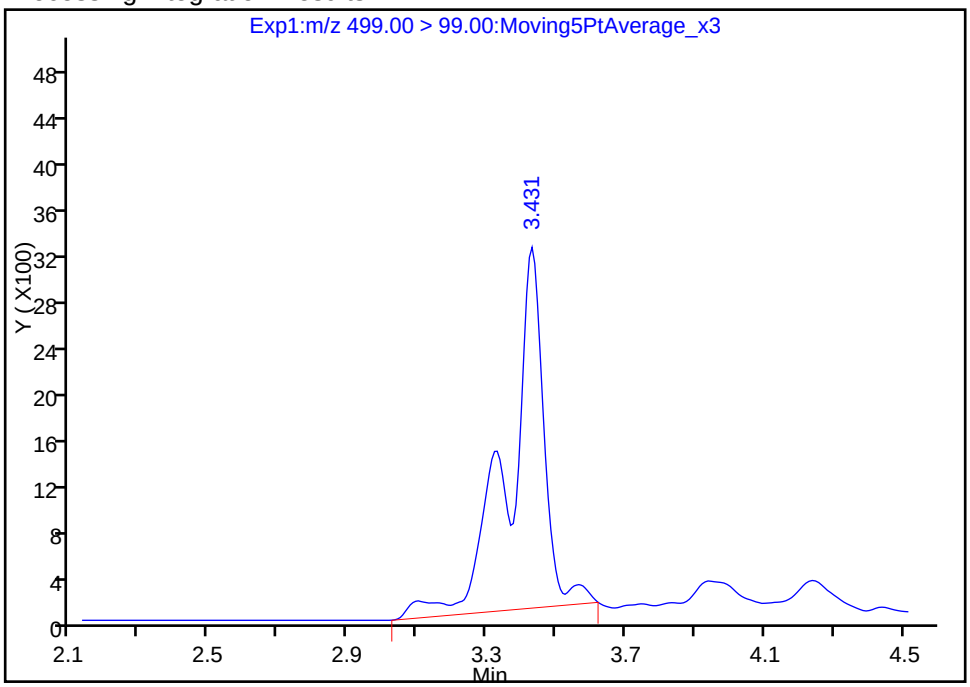
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_010.d				
Injection Date:	09-Jun-2017 01:55:35	Instrument ID:	A8_N		
Lims ID:	320-28427-A-3-A	Lab Sample ID:	320-28427-3		
Client ID:	Grout Truck_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

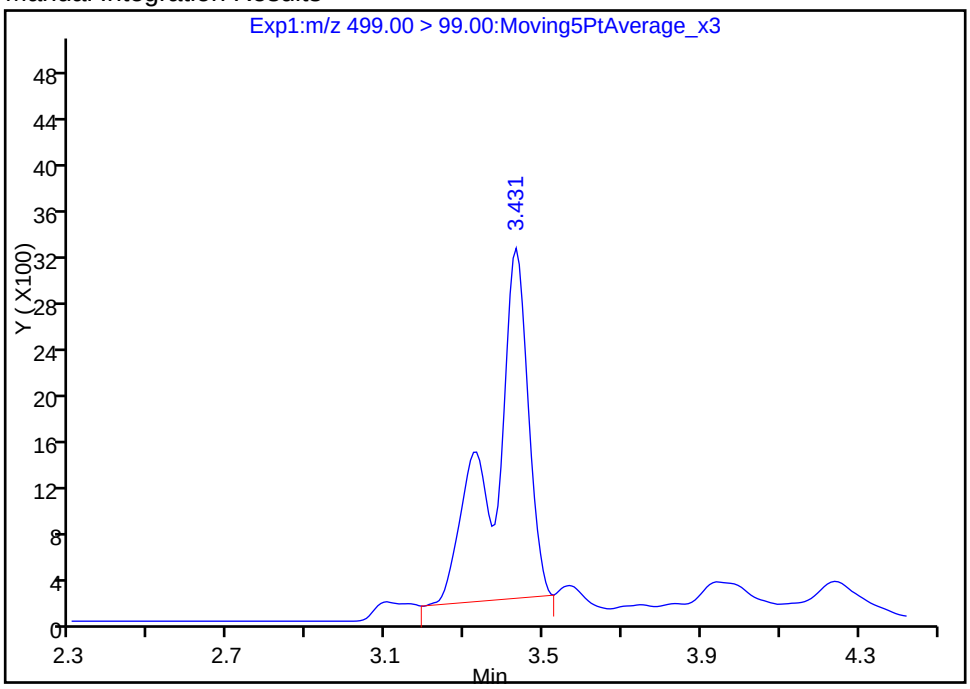
Processing Integration Results

RT: 3.43
Area: 22520
Amount: 0.636360
Amount Units: ng/ml



Manual Integration Results

RT: 3.43
Area: 19080
Amount: 0.600902
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:57:07
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

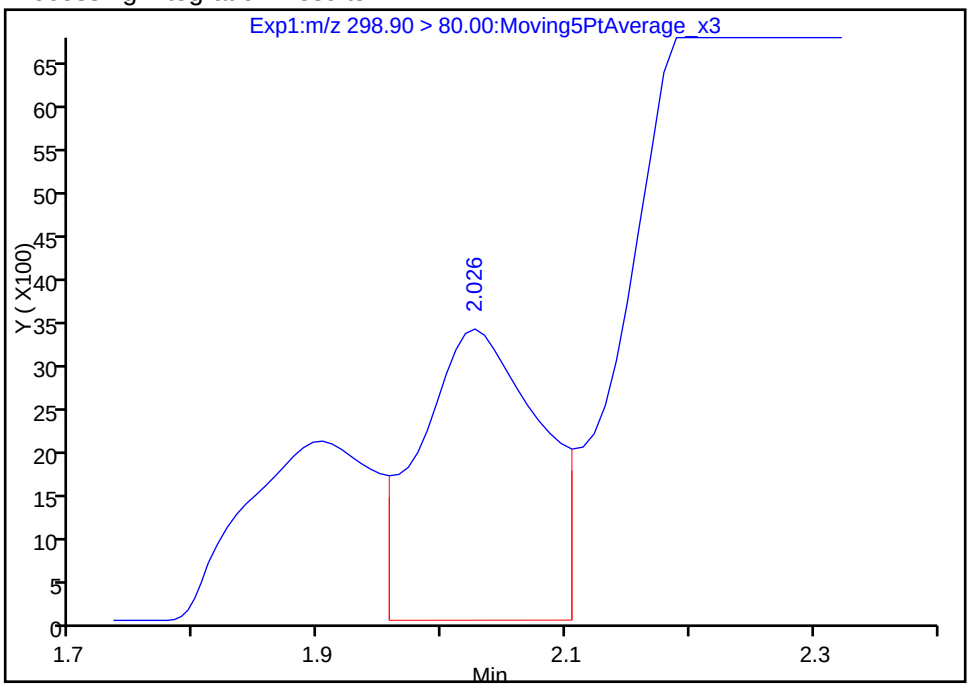
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_010.d				
Injection Date:	09-Jun-2017 01:55:35	Instrument ID:	A8_N		
Lims ID:	320-28427-A-3-A	Lab Sample ID:	320-28427-3		
Client ID:	Grout Truck_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

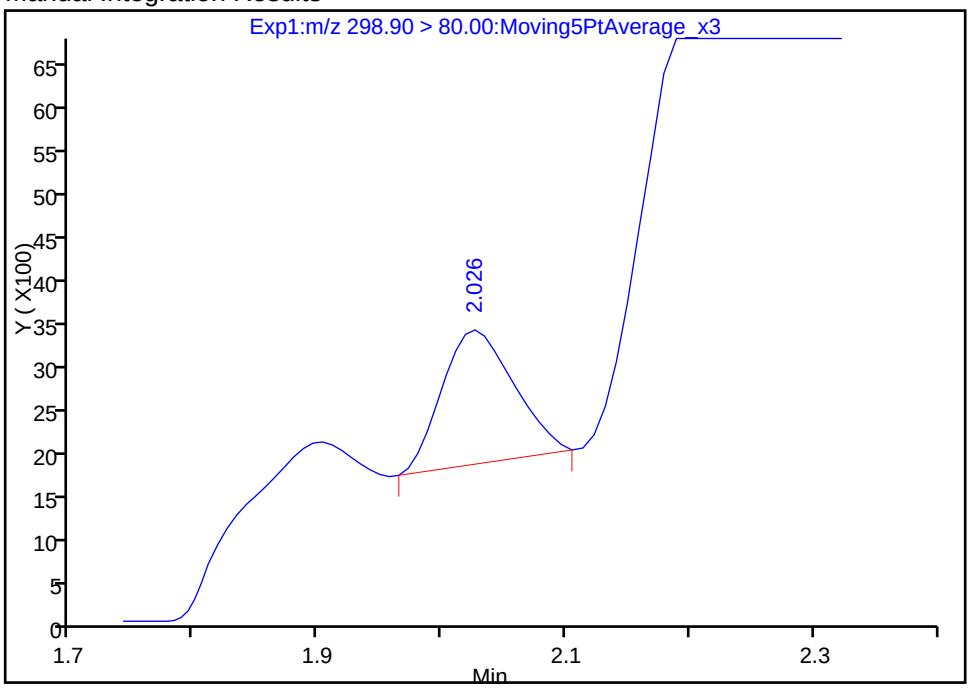
Processing Integration Results

RT: 2.03
Area: 22320
Amount: 0.053178
Amount Units: ng/ml



Manual Integration Results

RT: 2.03
Area: 6227
Amount: 0.014836
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:56:40
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

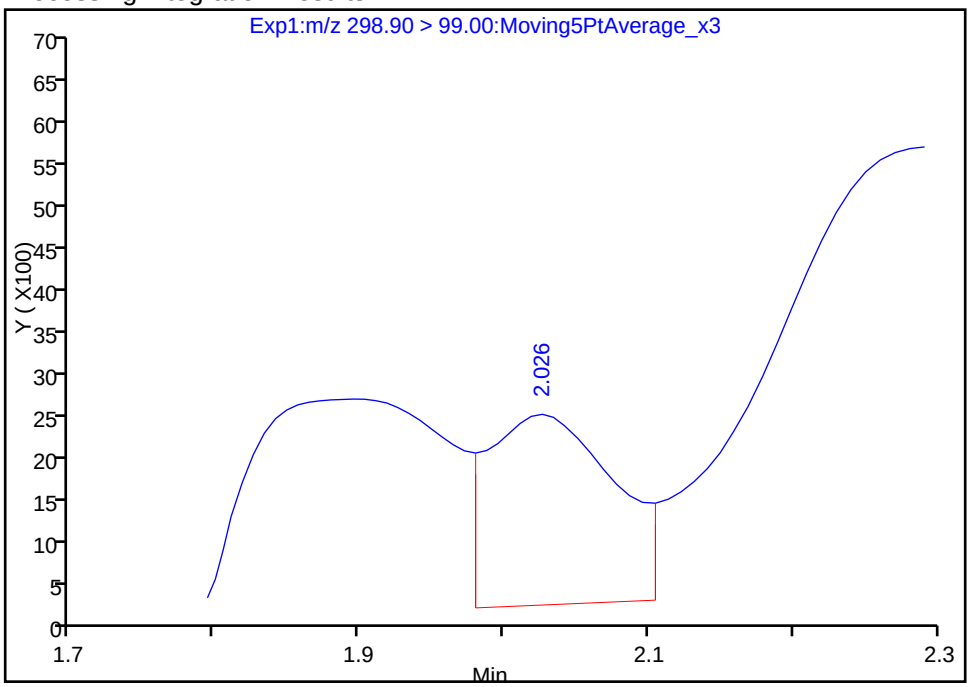
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_010.d				
Injection Date:	09-Jun-2017 01:55:35	Instrument ID:	A8_N		
Lims ID:	320-28427-A-3-A	Lab Sample ID:	320-28427-3		
Client ID:	Grout Truck_Blank				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

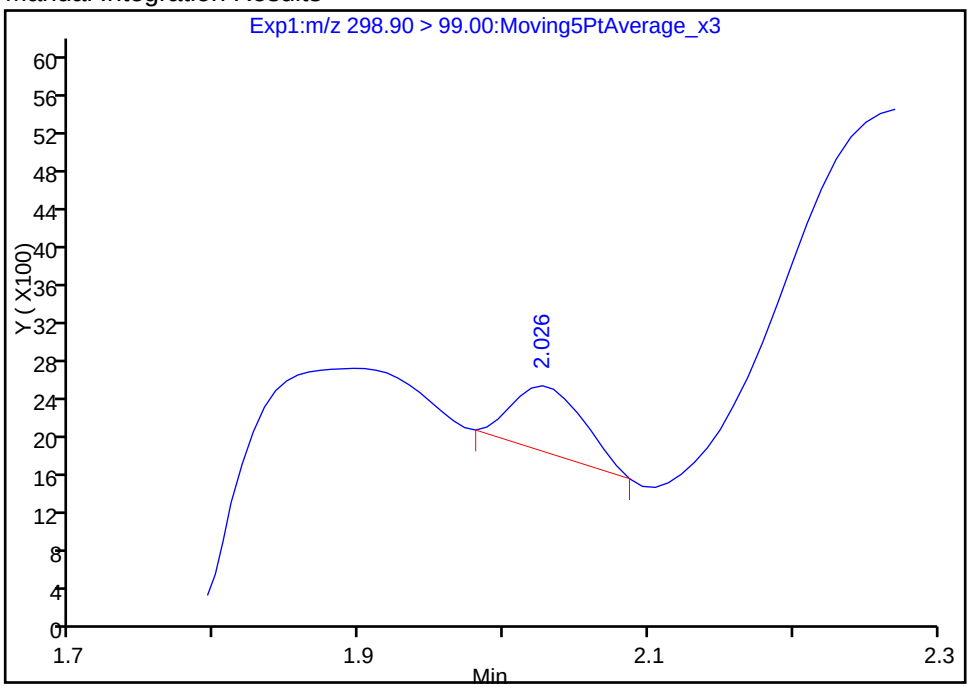
Processing Integration Results

RT: 2.03
Area: 13693
Amount: 0.053178
Amount Units: ng/ml



Manual Integration Results

RT: 2.03
Area: 2404
Amount: 0.014836
Amount Units: ng/ml



Reviewer: raineys, 09-Jun-2017 13:56:44
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-167755/2	2017.06.06CURVE_003.d
Level 2	IC 320-167755/3	2017.06.06CURVE_004.d
Level 3	IC 320-167755/4	2017.06.06CURVE_005.d
Level 4	IC 320-167755/5	2017.06.06CURVE_006.d
Level 5	IC 320-167755/6	2017.06.06CURVE_007.d
Level 6	IC 320-167755/7	2017.06.06CURVE_008.d
Level 7	IC 320-167755/8	2017.06.06CURVE_009.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Perfluorobutanoic acid (PFBA)	1.757	1.754	1.754	1.757	1.757	1.719	1.742				1.499 - 1.999	1.749
Perfluoropentanoic acid (PFPeA)	2.087	2.078	2.083	2.083	2.074	2.042	2.069				1.824 - 2.324	2.074
Perfluorobutanesulfonic acid (PFBS)	2.123	2.114	2.119	2.119	2.110	2.087	2.105				1.931 - 2.291	2.111
4:2 FTS	2.387	2.377	2.383	2.383	2.362	2.355	2.366				2.123 - 2.623	2.373
Perfluorohexanoic acid (PFHxA)	2.430	2.420	2.426	2.426	2.394	2.398	2.409				2.165 - 2.665	2.415
Perfluoroheptanoic acid (PFHpA)	2.811	2.796	2.803	2.802	2.767	2.787	2.787				2.543 - 3.043	2.793
Perfluorohexanesulfonic acid (PFHxS)	2.819	2.812	2.811	2.810	2.777	2.795	2.795				2.553 - 3.053	2.803
6:2FTS	3.170	3.159	3.165	3.164	3.118	3.148	3.149				2.903 - 3.403	3.153
Perfluorooctanoic acid (PFOA)	3.196	3.186	3.184	3.190	3.141	3.177	3.170				2.928 - 3.428	3.178
Perfluoroheptanesulfonic Acid (PFHpS)	3.196	3.186	3.184	3.190	3.141	3.177	3.177				2.929 - 3.429	3.179
Perfluorooctanesulfonic acid (PFOS)	3.566	3.441	3.439	3.439	3.507	3.431	3.546				3.231 - 3.731	3.481
Perfluorononanoic acid (PFNA)	3.572	3.562	3.567	3.566	3.520	3.559	3.552				3.307 - 3.807	3.557
Perfluorooctane Sulfonamide (FOSA)	3.906	3.895	3.893	3.901	3.851	3.892	3.885				3.639 - 4.139	3.889
8:2FTS	3.921	3.910	3.908	3.915	3.860	3.907	3.900				3.662 - 4.162	3.903
Perfluorodecanoic acid (PFDA)	3.921	3.917	3.915	3.923	3.868	3.914	3.907				3.659 - 4.159	3.909
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	4.084	4.072	4.079	4.078	4.029	4.069	4.061				3.817 - 4.317	4.067
Perfluorodecanesulfonic acid (PFDS)	4.221	4.208	4.206	4.214	4.165	4.204	4.196				3.952 - 4.452	4.202
Perfluoroundecanoic acid (PFUnA)	4.238	4.234	4.232	4.241	4.190	4.229	4.221				3.976 - 4.476	4.226
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	4.248	4.243	4.241	4.241	4.190	4.238	4.230				3.983 - 4.483	4.233
MeFOSA	4.384	4.379	4.377	4.377	4.331	4.375	4.367				4.120 - 4.620	4.370
Perfluorododecanoic acid (PFDoA)	4.516	4.519	4.518	4.517	4.469	4.516	4.507				4.259 - 4.759	4.509
N-EtFOSA-M	4.565	4.559	4.557	4.557	4.508	4.555	4.547				4.300 - 4.800	4.550
Perfluorotridecanoic Acid (PFTriA)	4.772	4.775	4.774	4.773	4.716	4.772	4.754				4.512 - 5.012	4.762
Perfluorotetradecanoic acid (PFTeA)	4.994	4.996	4.995	5.002	4.947	4.994	4.987				4.738 - 5.238	4.988
Perfluoro-n-hexadecanoic acid (PFHxDA)	+++++	5.403	5.402	5.409	5.355	5.401	5.393				5.145 - 5.645	5.394
Perfluoro-n-octadecanoic acid (PFODA)	5.751	5.757	5.752	5.760	5.701	5.751	5.744				5.495 - 5.995	5.745
13C4 PFBA	1.754	1.750	1.754	1.753	1.757	1.715	1.739				1.496 - 1.996	1.746
13C5-PFPeA	2.087	2.078	2.074	2.083	2.074	2.042	2.069				1.823 - 2.323	2.072
13C2 PFHxA	2.430	2.420	2.416	2.426	2.394	2.398	2.409				2.163 - 2.663	2.413
13C4-PFHpA	2.811	2.796	2.803	2.802	2.767	2.778	2.787				2.542 - 3.042	2.792
18O2 PFHxS	2.819	2.812	2.811	2.810	2.777	2.795	2.795				2.553 - 3.053	2.803
M2-6:2FTS	3.170	3.159	3.157	3.164	3.118	3.148	3.141				2.901 - 3.401	3.151

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
13C4 PFOA	3.190	3.186	3.184	3.190	3.141	3.170	3.170				2.926 - 3.426	3.176
13C4 PFOS	3.566	3.555	3.553	3.560	3.507	3.546	3.539				3.296 - 3.796	3.547
13C5 PFNA	3.572	3.562	3.560	3.566	3.513	3.559	3.552				3.305 - 3.805	3.555
13C8 FOSA	3.906	3.895	3.893	3.901	3.843	3.892	3.885				3.638 - 4.138	3.888
M2-8:2FTS	3.921	3.910	3.908	3.915	3.860	3.907	3.900				3.653 - 4.153	3.903
13C2 PFDA	3.921	3.917	3.915	3.915	3.868	3.914	3.907				3.658 - 4.158	3.908
d3-NMeFOSAA	4.076	4.072	4.070	4.078	4.021	4.069	4.061				3.814 - 4.314	4.064
d5-NEtFOSAA	4.238	4.234	4.232	4.241	4.181	4.229	4.221				3.975 - 4.475	4.225
13C2 PFUnA	4.238	4.234	4.232	4.241	4.190	4.229	4.221				3.976 - 4.476	4.226
d-N-MeFOSA-M	4.375	4.370	4.368	4.377	4.331	4.366	4.358				4.114 - 4.614	4.364
13C2 PFDoA	4.516	4.519	4.518	4.517	4.469	4.516	4.507				4.259 - 4.759	4.509
d-N-EtFOSA-M	4.555	4.549	4.547	4.547	4.498	4.545	4.537				4.290 - 4.790	4.540
13C2-PFTeDA	4.994	4.996	4.995	5.002	4.947	4.994	4.987				4.738 - 5.238	4.988
13C2-PFHxDA	5.401	5.403	5.402	5.402	5.348	5.401	5.386				5.141 - 5.641	5.392

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-167755/2	2017.06.06CURVE_003.d
Level 2	IC 320-167755/3	2017.06.06CURVE_004.d
Level 3	IC 320-167755/4	2017.06.06CURVE_005.d
Level 4	IC 320-167755/5	2017.06.06CURVE_006.d
Level 5	IC 320-167755/6	2017.06.06CURVE_007.d
Level 6	IC 320-167755/7	2017.06.06CURVE_008.d
Level 7	IC 320-167755/8	2017.06.06CURVE_009.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
13C4 PFBA	346103 331961	345092 308736	349075 293409	333719	Ave		329727.797				6.4		50.0			
13C5-PFPeA	230569 216709	237670 209567	228725 187056	229545	Ave		219977.191				7.9		50.0			
13C2 PFHxA	207312 184845	204374 180009	203453 166161	203769	Ave		192846.077				8.2		50.0			
13C4-PFHpA	189604 173031	195593 162363	190795 149905	183891	Ave		177882.943				9.5		50.0			
18O2 PFHxS	244451 225323	251401 212419	246944 193508	239734	Ave		230540.136				9.2		50.0			
M2-6:2FTS	90705 84443	105680 82480	89684 86534	82339	Ave		88837.8135				9.1		50.0			
13C4 PFOA	188243 171300	207512 165673	195181 147060	187285	Ave		180322.043				11.3		50.0			
13C4 PFOS	187471 169346	192642 167496	188814 155849	185294	Ave		178130.093				7.8		50.0			
13C5 PFNA	165366 143197	167523 143103	164629 124172	160679	Ave		152666.940				10.6		50.0			
13C8 FOSA	323370 287307	322088 278867	328734 247881	313184	Ave		300204.537				10.0		50.0			
M2-8:2FTS	77292 74843	85710 85674	82977 78846	87673	Ave		81859.2514				6.0		50.0			
13C2 PFDA	159276 137602	167045 142263	165413 122807	161074	Ave		150782.906				11.1		50.0			
d3-NMeFOSAA	91609 89388	89456 83333	89889 83137	89622	Ave		88061.8371				3.8		50.0			
d5-NEtFOSAA	96959 86228	94999 76630	93034 68748	94453	Ave		87292.9371				12.3		50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
13C2 PFUnA	128933 118203	134031 106582	131416 92233	127462	Ave		119837.151				12.8		50.0			
d-N-MeFOSA-M	87350 87518	90180 89491	91151 85721	88740	Ave		88592.9429				2.1		50.0			
13C2 PFDoA	125746 124443	127394 126074	133266 111396	123080	Ave		124485.494				5.3		50.0			
d-N-EtFOSA-M	83617 82956	84499 82487	85530 78260	81972	Ave		82760.1971				2.8		50.0			
13C2-PFTeDA	267141 261332	271193 247209	270333 219411	262981	Ave		257085.743				7.2		50.0			
13C2-PFHxDA	141412 133156	146497 130975	145589 121543	138804	Ave		136853.586				6.5		50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.9437 0.8904	0.9206 0.7754	0.9816	0.9729	0.9453	AveID		0.9186				7.6		35.0			
Perfluoropentanoic acid (PFPeA)	1.1183 1.0258	1.0155 0.9126	1.0947	1.0468	1.0714	AveID		1.0407				6.5		35.0			
Perfluorobutanesulfonic acid (PFBS)	1.5986 1.6307	1.5479 1.3961	1.6810	1.7760	1.7972	AveID		1.6325				8.5		50.0			
4:2 FTS	0.8229 0.8838	0.7147 0.7976	0.8943	1.0299	0.8832	AveID		0.8609				11.4		35.0			
Perfluorohexanoic acid (PFHxA)	1.0175 1.0338	1.0069 0.9144	1.0358	1.0177	1.0603	AveID		1.0123				4.6		35.0			
Perfluoroheptanoic acid (PFHpA)	1.0646 1.0707	1.0257 0.9660	1.0794	1.0531	1.0754	AveID		1.0478				3.9		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.3201 1.0784	1.0975 1.0315	1.0786	1.0185	1.0459	AveID		1.0958				9.4		35.0			
6:2FTS	1.0299 1.0067	1.0250 0.8378	1.0031	1.0278	0.9851	AveID		0.9879				6.9		35.0			
Perfluorooctanoic acid (PFOA)	1.1722 1.0523	1.0449 0.9854	1.0617	1.0720	1.0908	AveID		1.0684				5.3		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.0961 1.1669	1.1108 1.0255	1.2252	1.1681	1.1915	AveID		1.1406				5.9		50.0			
Perfluorooctanesulfonic acid (PFOS)	0.9812 1.1008	1.0077 1.0703	1.0673	1.0458	1.1148	AveID		1.0554				4.5		35.0			
Perfluorononanoic acid (PFNA)	0.9993 1.0045	0.9618 0.9673	1.0359	0.9996	1.0481	AveID		1.0024				3.2		35.0			
Perfluorooctane Sulfonamide (FOSA)	0.9790 0.9581	1.0046 0.8204	1.0151	1.0204	0.9873	AveID		0.9693				7.1		35.0			
8:2FTS	1.0052 0.9369	0.9799 0.8784	1.0008	1.0465	0.9532	AveID		0.9716				5.6		35.0			
Perfluorodecanoic acid (PFDA)	0.9373 0.9707	0.8970 0.9503	0.9766	0.9398	0.9938	AveID		0.9522				3.3		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.9477 1.0788	0.9681 1.0608	0.9864	1.1032	1.0539	AveID		1.0284				5.9		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.6160 0.6988	0.6137 0.6271	0.6678	0.6502	0.7356	AveID		0.6584				6.9		50.0			
Perfluoroundecanoic acid (PFUnA)	1.2452 1.0282	1.1127 1.0056	1.0408	1.0087	1.0154	AveID		1.0652				8.2		35.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.8343 0.9716	0.9335 0.9951	0.9490	0.9531	0.9709	AveID		0.9439				5.5		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
MeFOSA	0.8878 0.9996	0.8955 0.9878	0.9433	1.0038	1.0253	AveID		0.9633				5.7		35.0			
Perfluorododecanoic acid (PFDoA)	0.9800 0.9698	0.9538 0.8916	0.9717	0.9898	0.9368	AveID		0.9562				3.5		35.0			
N-EtFOSA-M	0.9164 1.0694	0.9263 1.0280	0.9730	1.0468	1.0427	AveID		1.0004				6.2		35.0			
Perfluorotridecanoic Acid (PFTriA)	1.0201 0.9327	1.0014 0.8929	1.0008	1.0809	1.0691	AveID		0.9997				6.8		50.0			
Perfluorotetradecanoic acid (PFTeA)	2.2158 1.9502	2.2153 1.7677	2.1711	2.2507	2.2303	L2ID	0.0916	2.0715							0.9920		0.9900
Perfluoro-n-hexadecanoic acid (PFHxDA)	+++++ 0.9205	1.6871 0.8982	1.1031	1.0175	0.9612	L2ID	0.7562	0.9360							0.9990		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	0.8363 0.8550	0.9351 0.8405	0.9571	0.9342	0.8375	AveID		0.8851				6.1		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-167755/2	2017.06.06CURVE_003.d
Level 2	IC 320-167755/3	2017.06.06CURVE_004.d
Level 3	IC 320-167755/4	2017.06.06CURVE_005.d
Level 4	IC 320-167755/5	2017.06.06CURVE_006.d
Level 5	IC 320-167755/6	2017.06.06CURVE_007.d
Level 6	IC 320-167755/7	2017.06.06CURVE_008.d
Level 7	IC 320-167755/8	2017.06.06CURVE_009.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C4 PFBA	Ave	17305149 15436785	17254592 14670457	17453757	16685960	16598029	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C5-PFPeA	Ave	11528458 10478326	11883512 9352823	11436238	11477234	10835426	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFHxA	Ave	10365586 9000471	10218685 8308032	10172648	10188431	9242274	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C4-PFHpA	Ave	9480183 8118133	9779640 7495237	9539730	9194541	8651566	50.0 50.0	50.0 50.0	50.0	50.0	50.0
18O2 PFHxS	Ave	11562555 10047436	11891249 9152921	11680454	11339438	10657786	47.3 47.3	47.3 47.3	47.3	47.3	47.3
M2-6:2FTS	Ave	4308473 3917803	5019816 4110352	4259968	3911109	4011052	47.5 47.5	47.5 47.5	47.5	47.5	47.5
13C4 PFOA	Ave	9412163 8283659	10375611 7352976	9759048	9364253	8565005	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C4 PFOS	Ave	8961127 8006290	9208275 7449567	9025287	8857038	8094745	47.8 47.8	47.8 47.8	47.8	47.8	47.8
13C5 PFNA	Ave	8268279 7155137	8376141 6208617	8231460	8033929	7159866	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C8 FOSA	Ave	16168522 13943325	16104401 12394073	16436681	15659216	14365370	50.0 50.0	50.0 50.0	50.0	50.0	50.0
M2-8:2FTS	Ave	3702308 4103773	4105522 3776708	3974583	4199515	3584998	47.9 47.9	47.9 47.9	47.9	47.9	47.9
13C2 PFDA	Ave	7963788 7113155	8352262 6140363	8270641	8053713	6880095	50.0 50.0	50.0 50.0	50.0	50.0	50.0
d3-NMeFOSAA	Ave	4580441 4166659	4472776 4156833	4494472	4481079	4469383	50.0 50.0	50.0 50.0	50.0	50.0	50.0
d5-NEtFOSAA	Ave	4847930 3831476	4749964 3437412	4651680	4722646	4311420	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFUnA	Ave	6446658 5329123	6701532 4611652	6570792	6373111	5910135	50.0 50.0	50.0 50.0	50.0	50.0	50.0

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
d-N-MeFOSA-M	Ave	4367482 4474532	4508975 4286058	4557564	4437019	4375900	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFDoA	Ave	6287318 6303717	6369681 5569779	6663278	6153979	6222171	50.0 50.0	50.0 50.0	50.0	50.0	50.0
d-N-EtFOSA-M	Ave	4180858 4124361	4224964 3912999	4276499	4098578	4147810	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2-PFTeDA	Ave	13357074 12360442	13559654 10970549	13516644	13149033	13066614	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2-PFHxDA	Ave	7070589 6548753	7324836 6077148	7279427	6940209	6657793	50.0 50.0	50.0 50.0	50.0	50.0	50.0

Curve Type Legend:
Ave = Average

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-167755/2	2017.06.06CURVE_003.d
Level 2	IC 320-167755/3	2017.06.06CURVE_004.d
Level 3	IC 320-167755/4	2017.06.06CURVE_005.d
Level 4	IC 320-167755/5	2017.06.06CURVE_006.d
Level 5	IC 320-167755/6	2017.06.06CURVE_007.d
Level 6	IC 320-167755/7	2017.06.06CURVE_008.d
Level 7	IC 320-167755/8	2017.06.06CURVE_009.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	163317 27491311	317703 45503740	1713334	6493513	15690403	0.500 100	1.00 200	5.00	20.0	50.0
Perfluoropentanoic acid (PFPeA)		AveID	128926 21498244	241349 34142749	1251931	4805868	11608590	0.500 100	1.00 200	5.00	20.0	50.0
Perfluorobutanesulfonic acid (PFBS)		AveID	172729 30621227	344009 47764002	1834796	7527479	17899004	0.442 88.4	0.884 177	4.42	17.7	44.2
4:2 FTS		AveID	34859 6808579	70543 12892114	374572	1584153	3482714	0.467 93.4	0.934 187	4.67	18.7	46.7
Perfluorohexanoic acid (PFHxA)		AveID	105468 18608789	205783 30388186	1053687	4147414	9799146	0.500 100	1.00 200	5.00	20.0	50.0
Perfluoroheptanoic acid (PFHpA)		AveID	100930 17384856	200613 28962446	1029680	3873044	9303637	0.500 100	1.00 200	5.00	20.0	50.0
Perfluorohexanesulfonic acid (PFHxS)		AveID	146827 20846360	251075 36326380	1211890	4443874	10722835	0.455 91.0	0.910 182	4.55	18.2	45.5
6:2FTS		AveID	44278 7871580	102685 13746035	426423	1604502	3942830	0.474 94.8	0.948 190	4.74	19.0	47.4
Perfluorooctanoic acid (PFOA)		AveID	110327 17433456	216821 28982100	1036095	4015277	9342547	0.500 100	1.00 200	5.00	20.0	50.0
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	97814 18606449	203708 30429275	1101144	4121001	9604345	0.476 95.2	0.952 190	4.76	19.0	47.6
Perfluorooctanesulfonic acid (PFOS)		AveID	85347 17109959	180154 30958564	935018	3596640	8759357	0.464 92.8	0.928 186	4.64	18.6	46.4
Perfluorononanoic acid (PFNA)		AveID	82628 14375092	161116 24022877	852732	3212440	7504157	0.500 100	1.00 200	5.00	20.0	50.0
Perfluorooctane Sulfonamide (FOSA)		AveID	158290 26718233	323576 40674110	1668408	6391277	14183021	0.500 100	1.00 200	5.00	20.0	50.0
8:2FTS		AveID	37217 7689657	80461 13269259	397779	1757951	3417126	0.479 95.8	0.958 192	4.79	19.2	47.9
Perfluorodecanoic acid (PFDA)		AveID	74641 13809842	149846 23341247	807683	3027625	6837691	0.500 100	1.00 200	5.00	20.0	50.0

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1 Analy Batch No.: 167755

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:31 Calibration End Date: 06/06/2017 14:25 Calibration ID: 31092

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	43409 8990148	86601 17638254	443332	1977330	4710158	0.500 100	1.00 200	5.00	20.0	50.0
Perfluorodecanesulfonic acid (PFDS)		AveID	55658 11283031	113968 18842939	607766	2322699	6004418	0.482 96.4	0.964 193	4.82	19.3	48.2
Perfluoroundecanoic acid (PFUnA)		AveID	80271 10958427	149138 18549751	683898	2571433	6001124	0.500 100	1.00 200	5.00	20.0	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	40446 7444963	88680 13681734	441438	1800439	4185883	0.500 100	1.00 200	5.00	20.0	50.0
MeFOSA		AveID	38773 8945690	80752 16935326	429934	1781501	4486631	0.500 100	1.00 200	5.00	20.0	50.0
Perfluorododecanoic acid (PFDoA)		AveID	61616 12226133	121510 19864028	647442	2436486	5829140	0.500 100	1.00 200	5.00	20.0	50.0
N-EtFOSA-M		AveID	38312 8820848	78271 16090825	416107	1716234	4324767	0.500 100	1.00 200	5.00	20.0	50.0
Perfluorotridecanoic Acid (PFTriA)		AveID	64138 11758359	127566 19892555	666888	2660759	6652200	0.500 100	1.00 200	5.00	20.0	50.0
Perfluorotetradecanoic acid (PFTeA)		L2ID	139315 24586938	282213 39382531	1446661	5540367	13877084	0.500 100	1.00 200	5.00	20.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	+++++ 11604953	214925 20012102	735058	2504738	5980612	+++++ 100	1.00 200	5.00	20.0	50.0
Perfluoro-n-octadecanoic acid (PFODA)		AveID	52583 10779764	119125 18725750	637726	2299688	5210924	0.500 100	1.00 200	5.00	20.0	50.0

Curve Type Legend:

AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_003.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 13:31:58 ALS Bottle#: 28 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L1-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub19

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:07 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 14:39:22

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.754	1.746	0.008		17305149	52.5		105	182216	
2 Perfluorobutyric acid										
212.90 > 169.00	1.757	1.749	0.008	1.000	163317	0.5137		103	120	
D 3 13C5-PFPeA										
267.90 > 223.00	2.087	2.073	0.014		11528458	52.4		105	45666	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.087	2.074	0.013	1.000	128926	0.5373		107	41.3	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.123	2.111	0.012	1.000	172729	0.4328		97.9		
298.90 > 99.00	2.123	2.111	0.012	1.000	72290		2.39(0.00-0.00)	97.9		
D 47 13C3-PFBS										
301.90 > 83.00	2.123	2.111	0.012		274776	NC				
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.387	2.373	0.014	1.000	34859	0.4464		95.6		
D 7 13C2 PFHxA										
315.00 > 270.00	2.430	2.413	0.017		10365586	53.8		108	31813	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.430	2.415	0.015	1.000	105468	0.5025		101	261	
D 9 13C4-PFHpA										
367.00 > 322.00	2.811	2.792	0.019		9480183	53.3		107	29935	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.811	2.793	0.018	1.000	100930	0.5080		102	52.4	
D 11 18O2 PFHxS										
403.00 > 84.00	2.819	2.803	0.016		11562555	50.2		106	20803	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.819	2.803	0.016	1.000	146827	0.5481		120		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.170	3.151	0.019		4308473	48.5		102		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.170	3.153	0.017	1.000	44278	0.4941		104		
* 62 13C2-PFOA										
415.00 > 370.00	3.190	3.174	0.016		10163286	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.190	3.176	0.014		9412163	52.2		104	29013	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.196	3.178	0.018	1.000	110327	0.5485		110	42.0	
413.00 > 169.00	3.196	3.178	0.018	1.000	62073		1.78(0.90-1.10)	110	221	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.196	3.179	0.017	1.000	97814	0.4575		96.1		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.566	3.481	0.085	1.000	85347	0.4314		93.0	407	
499.00 > 99.00	3.566	3.481	0.085	1.000	19844		4.30(0.90-1.10)	93.0	211	
D 18 13C4 PFOS										
503.00 > 80.00	3.566	3.546	0.020		8961127	50.3		105	13702	
D 19 13C5 PFNA										
468.00 > 423.00	3.572	3.555	0.017		8268279	54.2		108	20640	
20 Perfluorononanoic acid										
463.00 > 419.00	3.572	3.557	0.015	1.000	82628	0.4985		99.7	115	
D 21 13C8 FOSA										
506.00 > 78.00	3.906	3.888	0.018		16168522	53.9		108	16956	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.906	3.889	0.017	1.000	158290	0.5050		101	1866	
D 26 M2-8:2FTS										
529.00 > 509.00	3.921	3.903	0.018		3702308	45.2		94.4		
D 23 13C2 PFDA										
515.00 > 470.00	3.921	3.908	0.013		7963788	52.8		106	12802	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.921	3.909	0.012	1.000	74641	0.4921		98.4	339	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.921	3.912	0.009	1.000	37217	0.4956		103		
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.076	4.064	0.012		4580441	52.0		104		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.084	4.067	0.017	1.002	43409	0.4608		92.2		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.221	4.202	0.019	1.000	55658	0.4509		93.5		
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.238	4.225	0.013		4847930	55.5		111		
D 30 13C2 PFUnA										
565.00 > 520.00	4.238	4.226	0.012		6446658	53.8		108	12646	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.238	4.226	0.012	1.000	80271	0.5845		117	293	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.248	4.233	0.015	1.002	40446	0.4419		88.4		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.375	4.364	0.011		4367482	49.3		98.6		
35 MeFOSA										
512.00 > 169.00	4.384	4.370	0.014	1.000	38773	0.4608		92.2		
37 Perfluorododecanoic acid										
613.00 > 569.00	4.516	4.509	0.007	1.000	61616	0.5124		102	24.9	
D 36 13C2 PFDoA										
615.00 > 570.00	4.516	4.509	0.007		6287318	50.5		101	6401	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.555	4.540	0.015		4180858	50.5		101		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.565	4.550	0.015	1.000	38312	0.4580		91.6		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.772	4.762	0.010	1.000	64138	0.5102		102	75.8	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.994	4.988	0.006	1.000	139315	0.4906		98.1	143	
713.00 > 169.00	4.994	4.988	0.006	1.000	23417		5.95(0.00-0.00)	98.1	414	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.994	4.988	0.006		13357074	52.0		104	14253	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.401	5.391	0.009		7070589	51.7		103	5929	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.401	5.395	0.005	1.000	153166	0.4934		98.7	115	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.751	5.745	0.006	1.000	52583	0.4724		94.5	80.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L1_00004 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:08 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_003.d

Injection Date: 06-Jun-2017 13:31:58 Instrument ID: A8_N

Lims ID: IC L1 Full

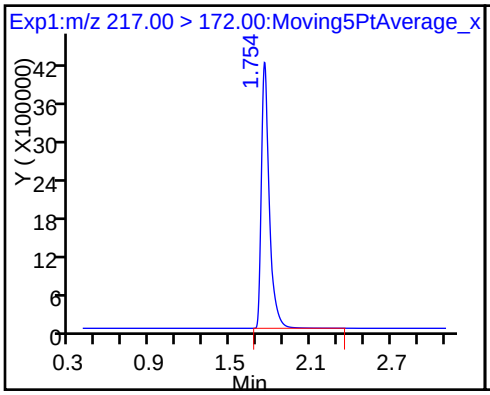
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 28 Worklist Smp#: 2

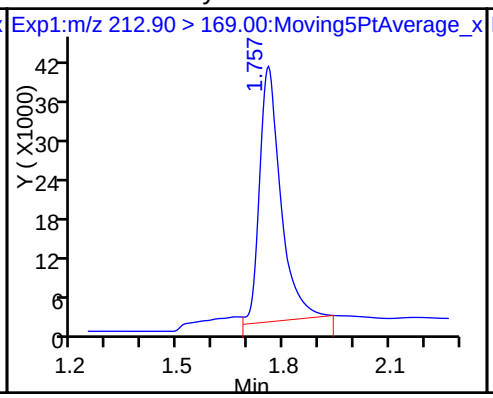
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

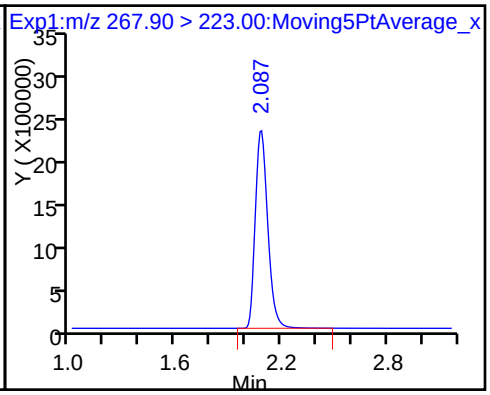
D 1 13C4 PFBA



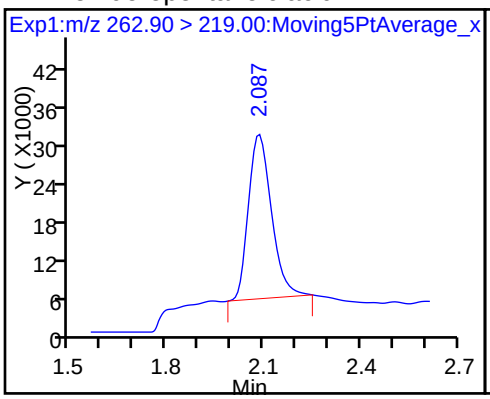
2 Perfluorobutyric acid



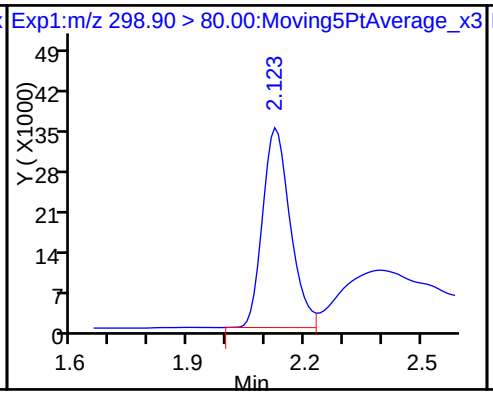
D 3 13C5-PFPeA



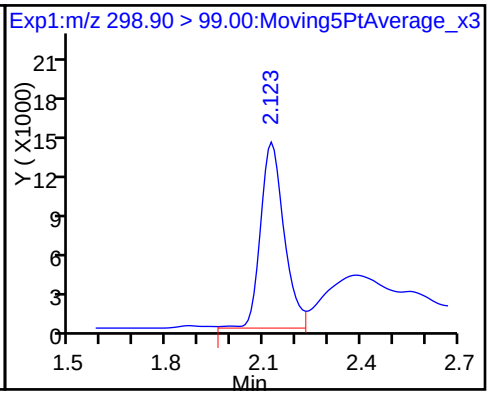
4 Perfluoropentanoic acid



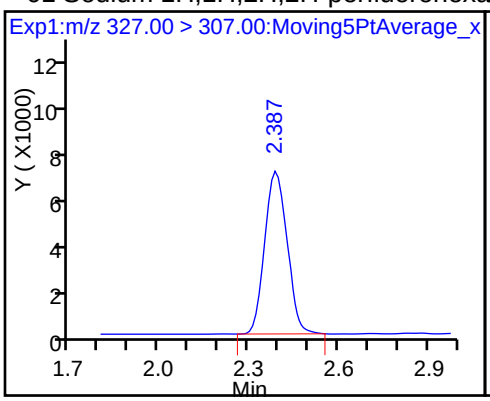
5 Perfluorobutanesulfonic acid



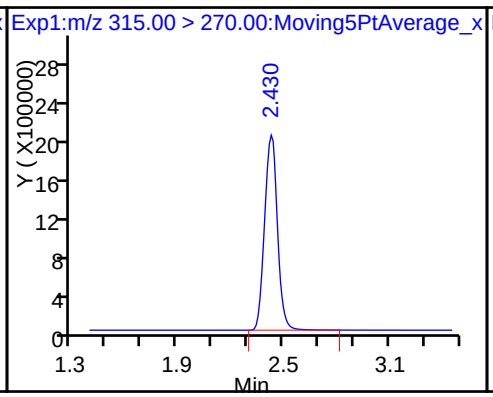
5 Perfluorobutanesulfonic acid



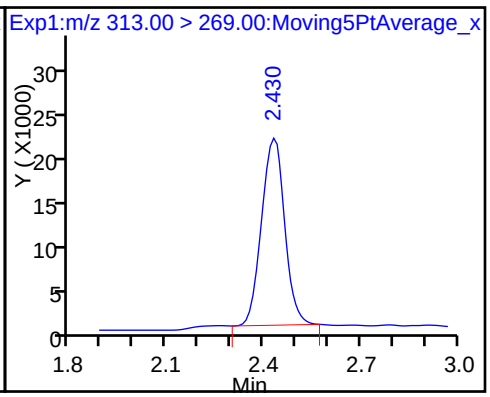
61 Sodium 1H,1H,2H,2H-perfluorohexa



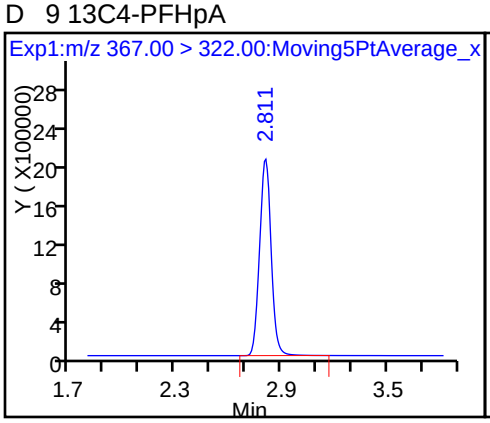
De 7 13C2 PFHxA



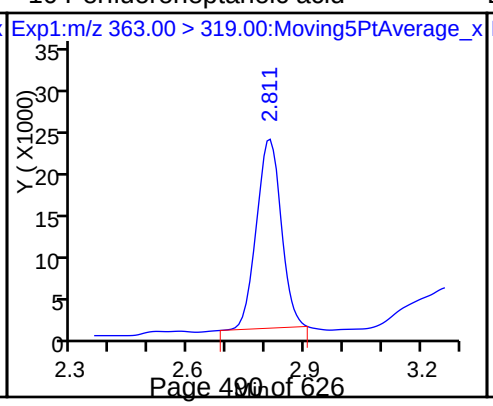
6 Perfluorohexanoic acid



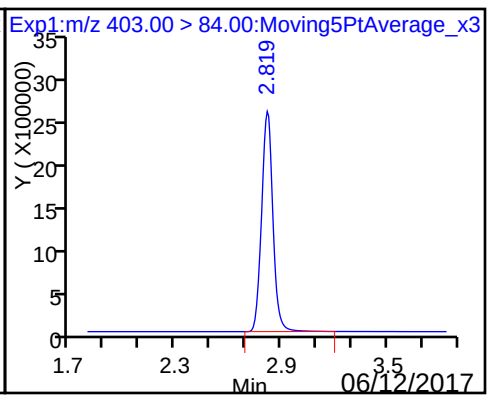
D 9 13C4-PFHpA



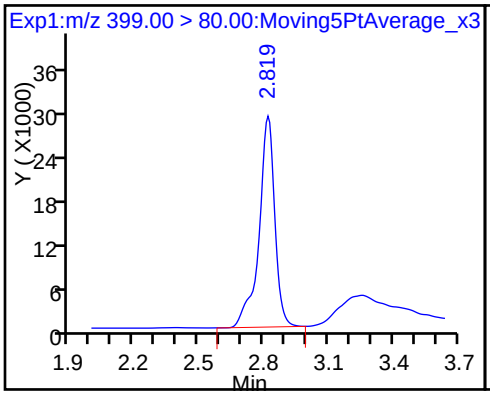
10 Perfluoroheptanoic acid



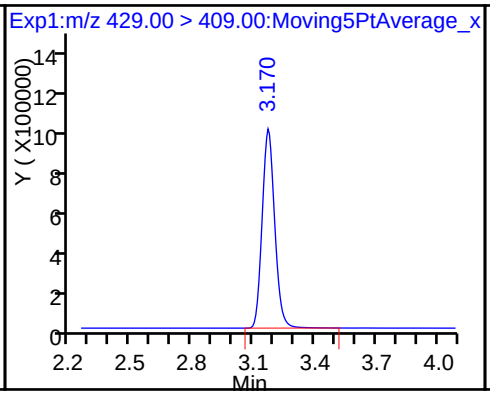
D 11 18O2 PFHxS



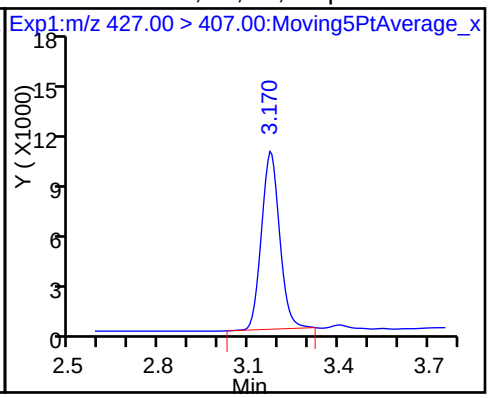
8 Perfluorohexanesulfonic acid



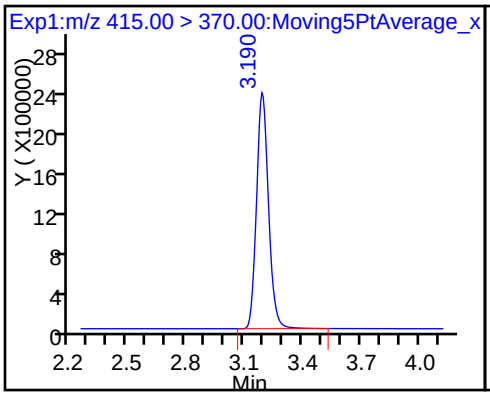
D 12 M2-6:2FTS



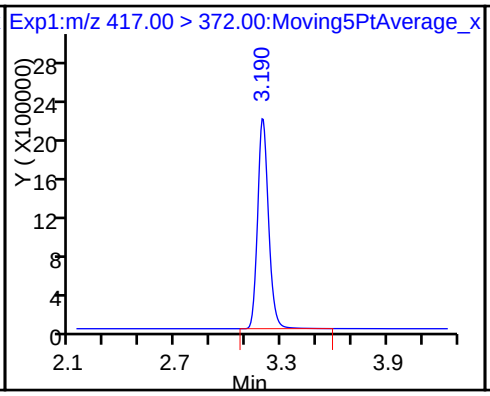
13 Sodium 1H,1H,2H,2H-perfluorooctane



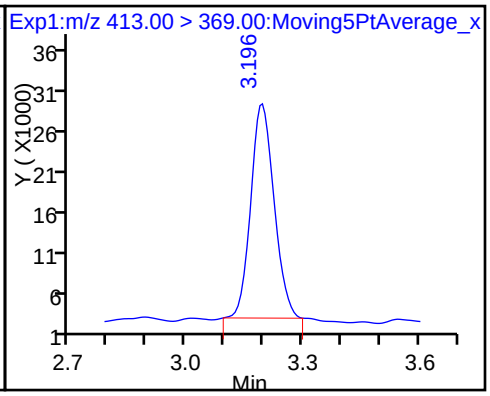
* 62 13C2-PFOA



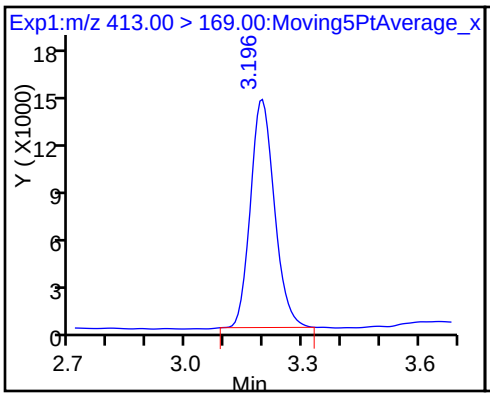
D 14 13C4 PFOA



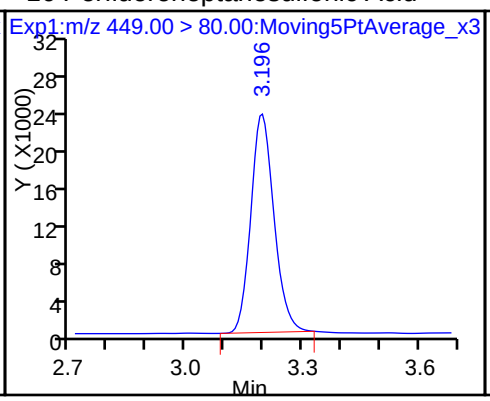
15 Perfluorooctanoic acid



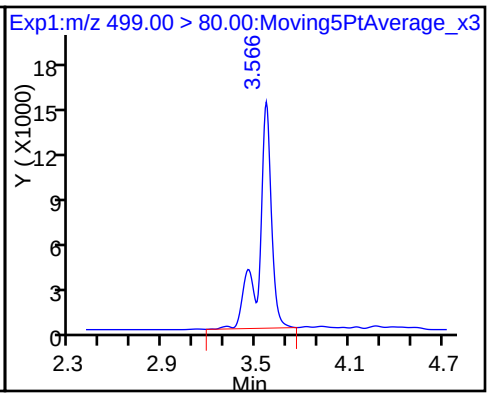
15 Perfluorooctanoic acid



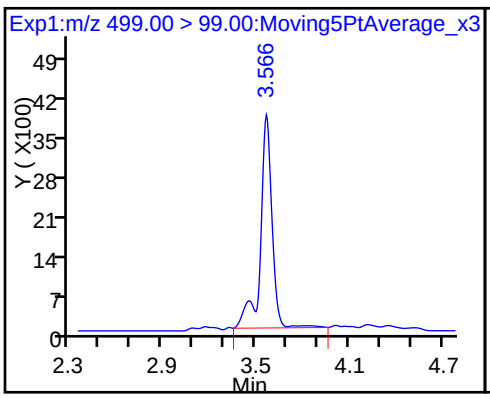
16 Perfluoroheptanesulfonic Acid



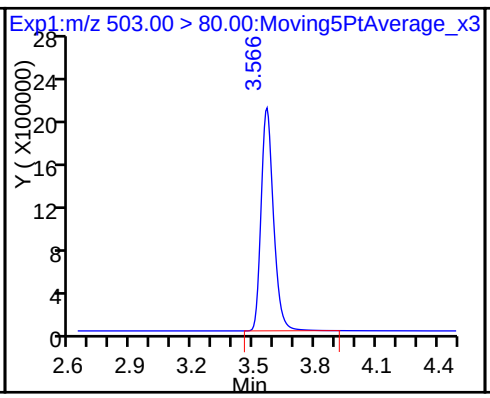
17 Perfluorooctane sulfonic acid



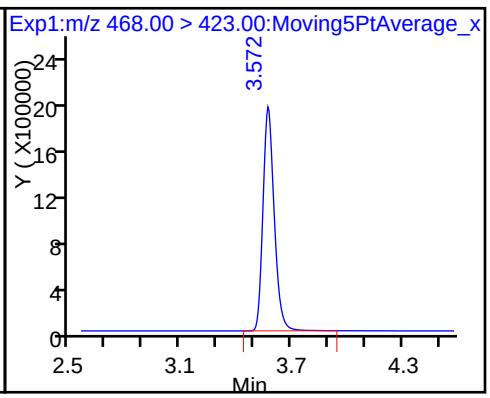
17 Perfluorooctane sulfonic acid



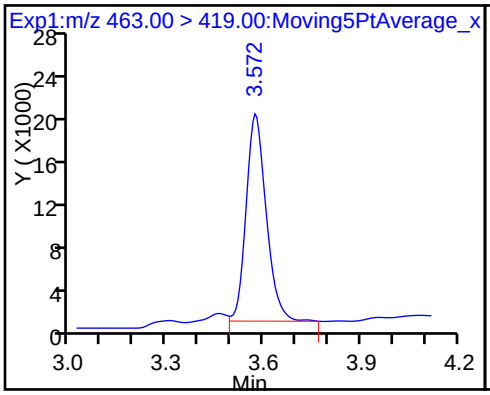
D 18 13C4 PFOS



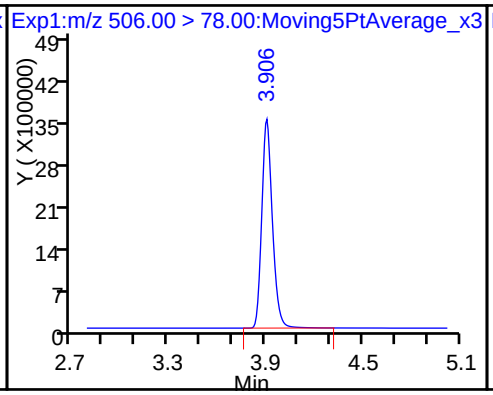
D 19 13C5 PFNA



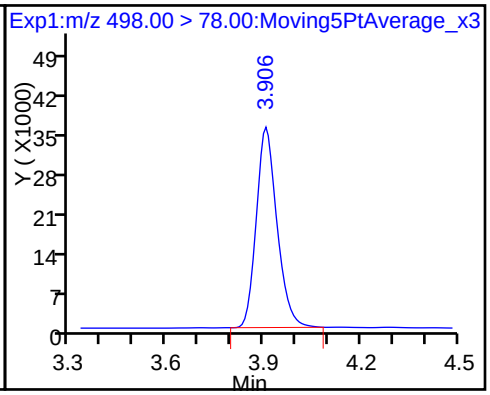
20 Perfluorononanoic acid



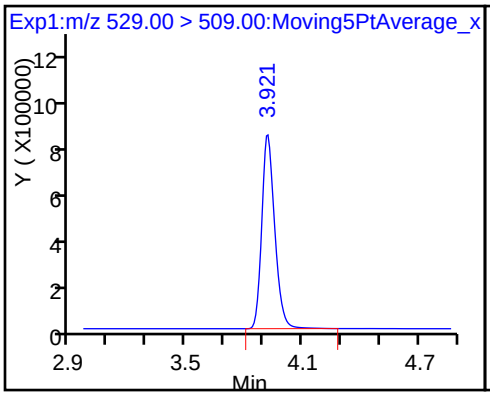
D 21 13C8 FOSA



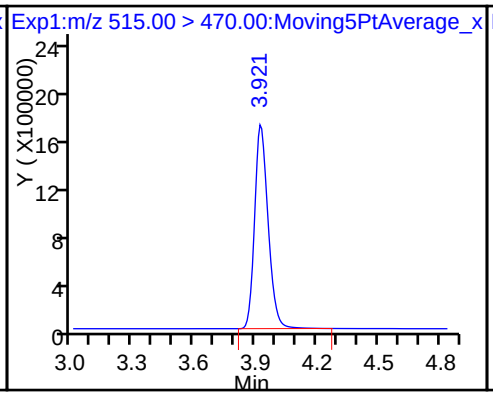
22 Perfluorooctane Sulfonamide



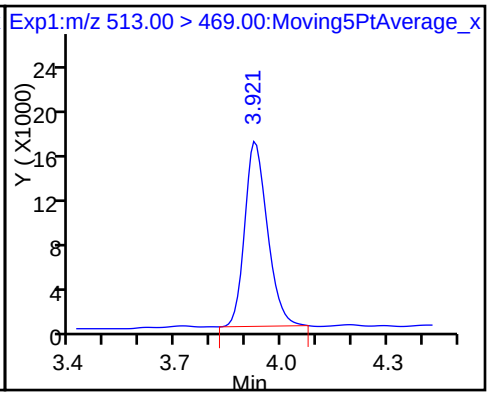
D 26 M2-8:2FTS



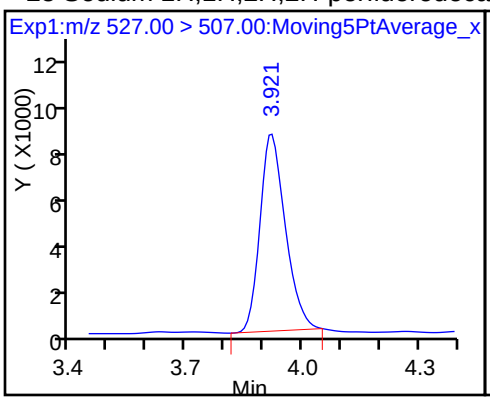
D 23 13C2 PFDA



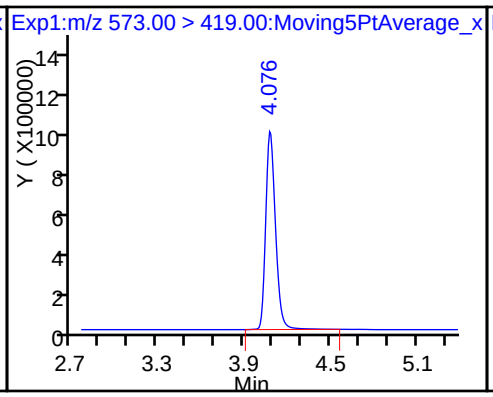
24 Perfluorodecanoic acid



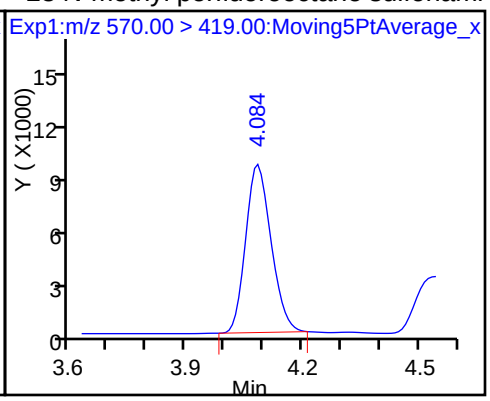
25 Sodium 1H,1H,2H,2H-perfluorodecane



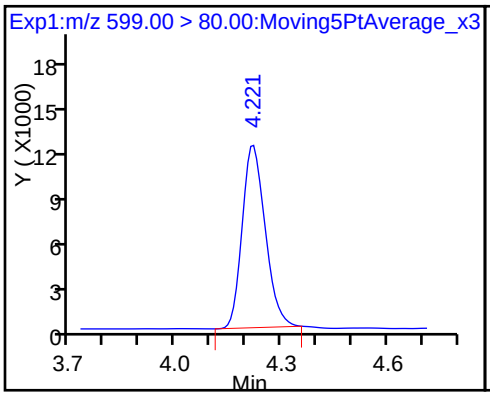
D 27 d3-NMeFOSAA



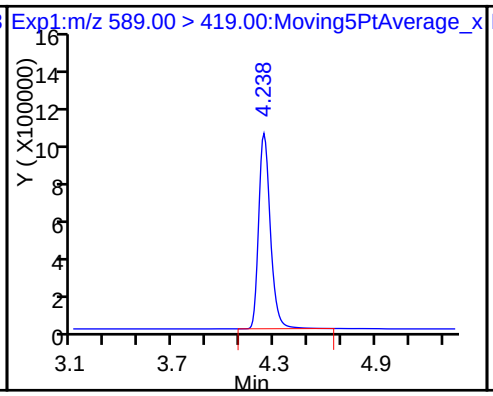
28 N-methyl perfluorooctane sulfonami



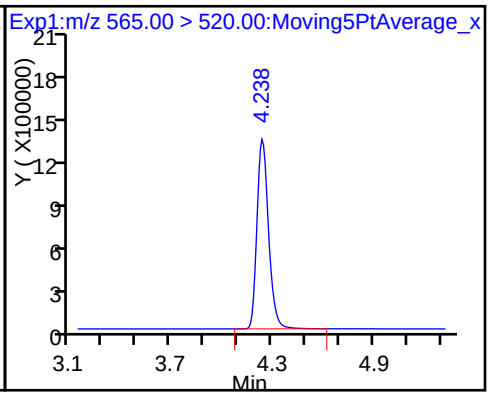
29 Perfluorodecane Sulfonic acid



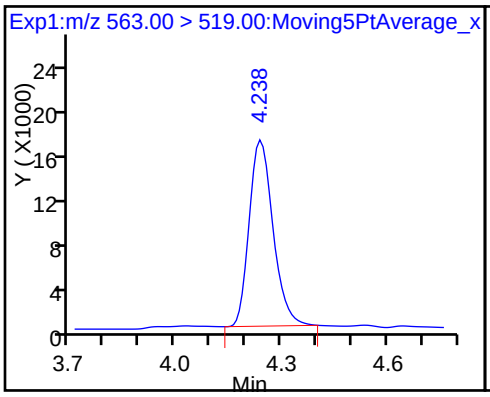
D 32 d5-NEtFOSAA



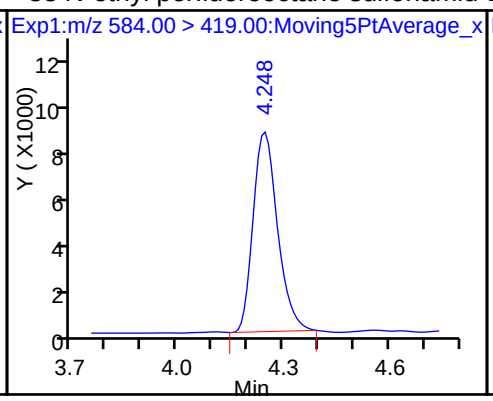
D 30 13C2 PFUnA



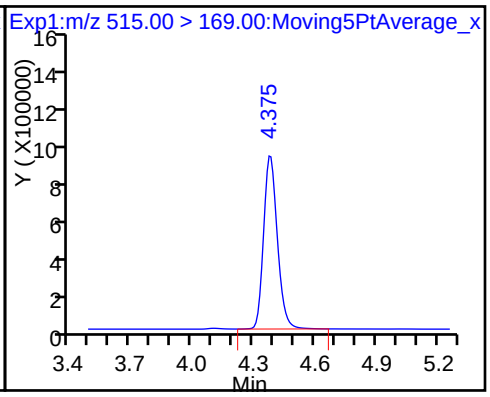
31 Perfluoroundecanoic acid



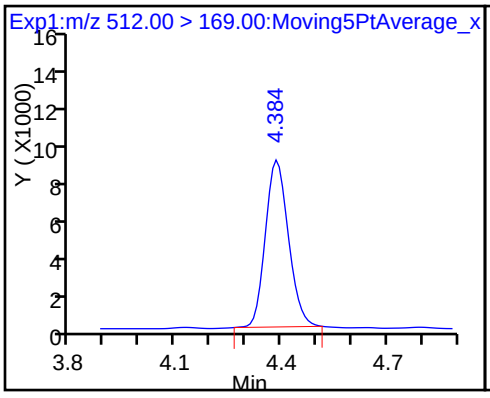
33 N-ethyl perfluorooctane sulfonamid



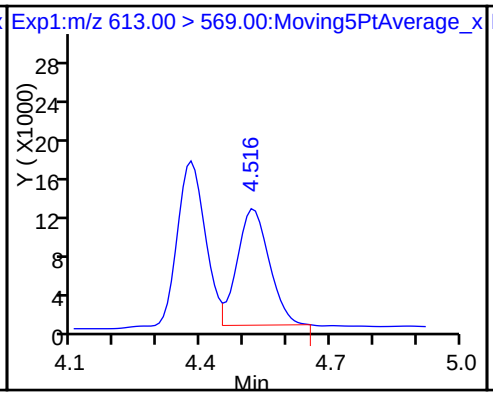
D 34 d-N-MeFOSA-M



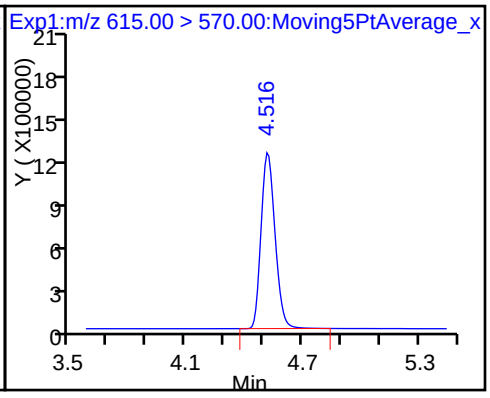
35 MeFOSA



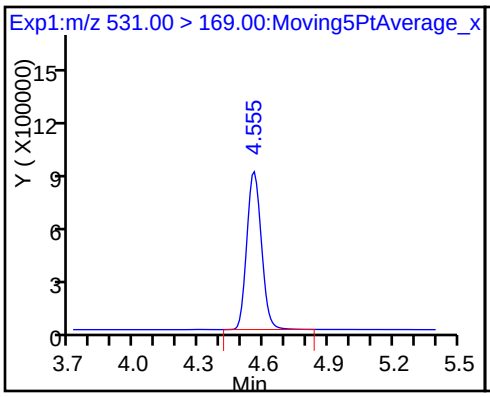
37 Perfluorododecanoic acid



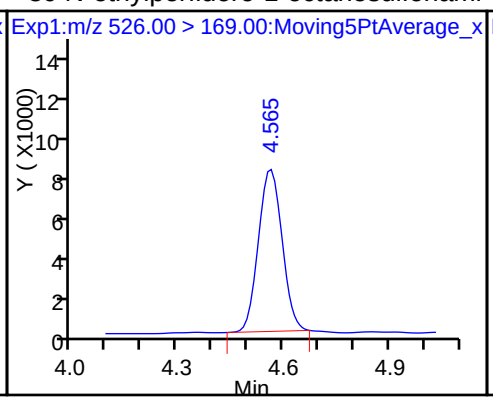
D 36 13C2 PFDoA



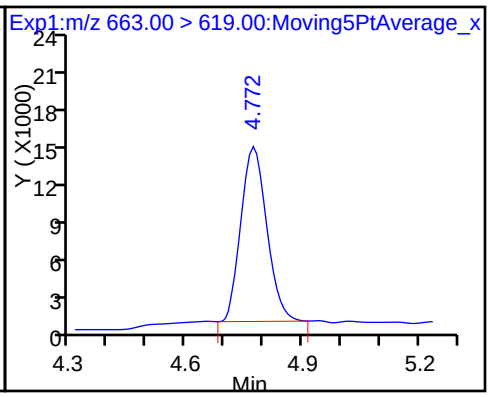
D 38 d-N-EtFOSA-M



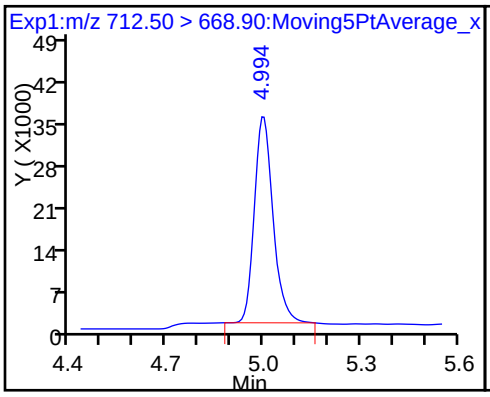
39 N-ethylperfluoro-1-octanesulfonami



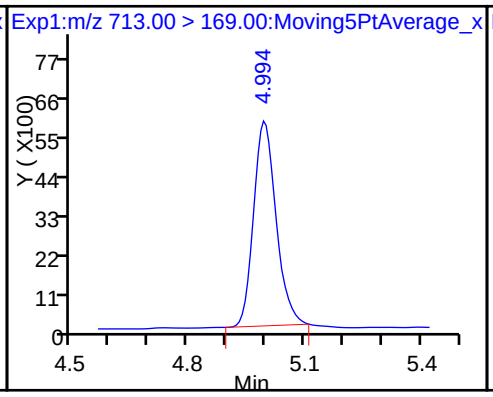
41 Perfluorotridecanoic acid



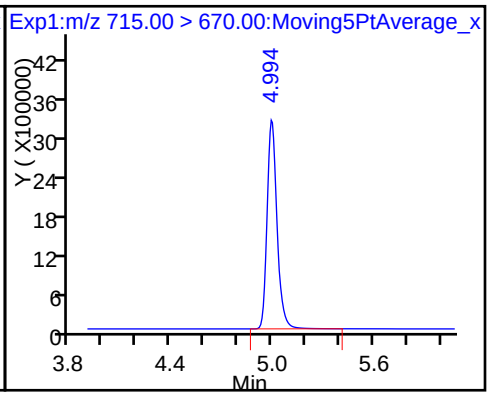
42 Perfluorotetradecanoic acid



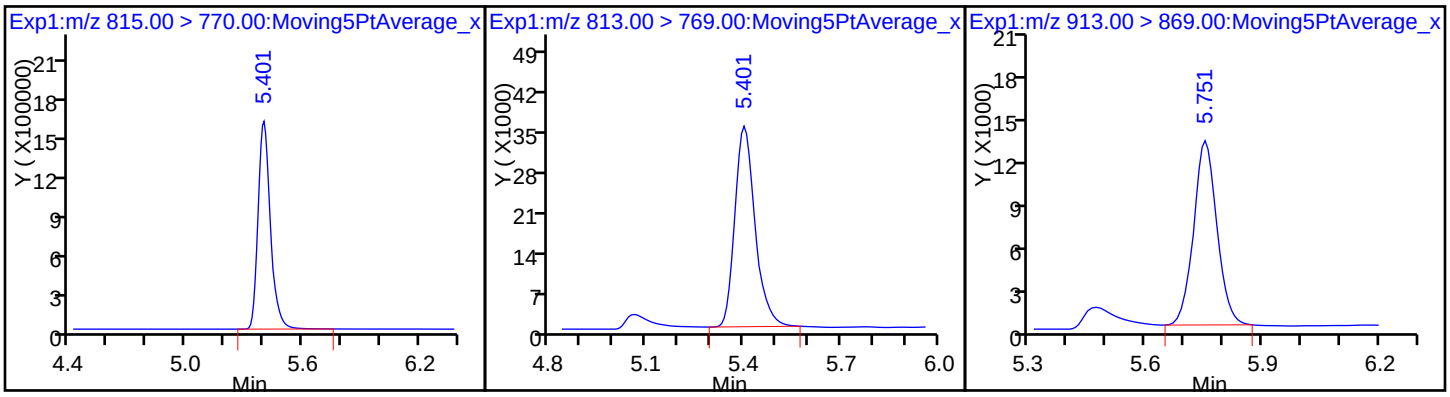
42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



D 44 13C2-PFHxDA 45 Perfluorohexadecanoic acid 46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_004.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 13:39:40 ALS Bottle#: 29 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L2-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub19

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:11 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 14:49:57

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.750	1.746	0.004		17254592	52.3		105	191685	
2 Perfluorobutyric acid										
212.90 > 169.00	1.754	1.749	0.005	1.000	317703	1.00		100	216	
D 3 13C5-PFPeA										
267.90 > 223.00	2.078	2.073	0.005		11883512	54.0		108	37541	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.078	2.074	0.004	1.000	241349	0.9757		97.6	78.9	
D 47 13C3-PFBS										
301.90 > 83.00	2.114	2.111	0.003		276154	NC				
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.114	2.111	0.003	1.000	344009	0.8382		94.8		
298.90 > 99.00	2.114	2.111	0.003	1.000	140489		2.45(0.00-0.00)	94.8		
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.377	2.373	0.004	1.000	70543	0.7753		83.0		
D 7 13C2 PFHxA										
315.00 > 270.00	2.420	2.413	0.007		10218685	53.0		106	31598	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.420	2.415	0.005	1.000	205783	0.99		99.5	513	
D 9 13C4-PFHpA										
367.00 > 322.00	2.796	2.792	0.004		9779640	55.0		110	31517	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.796	2.793	0.003	1.000	200613	0.9788		97.9	92.7	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.812	2.803	0.009	1.000	251075	0.9114		100		
D 11 18O2 PFHxS										
403.00 > 84.00	2.812	2.803	0.009		11891249	51.6		109	17575	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.159	3.151	0.008		5019816	56.5		119		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.159	3.153	0.006	1.000	102685	0.9836		104		
* 62 13C2-PFOA										
415.00 > 370.00	3.180	3.174	0.006		10951161	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.186	3.176	0.010		10375611	57.5		115	25600	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.186	3.178	0.008	1.000	216821	0.9779		97.8	80.9	
413.00 > 169.00	3.186	3.178	0.008	1.000	128447		1.69(0.90-1.10)	97.8	442	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.186	3.179	0.007	1.000	203708	0.9271		97.4		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.441	3.481	-0.040	1.000	180154	0.8861		95.5	253	
499.00 > 99.00	3.555	3.481	0.074	1.033	37658		4.78(0.90-1.10)	95.5	326	
D 18 13C4 PFOS										
503.00 > 80.00	3.555	3.546	0.009		9208275	51.7		108	17255	
D 19 13C5 PFNA										
468.00 > 423.00	3.562	3.555	0.007		8376141	54.9		110	30103	
20 Perfluorononanoic acid										
463.00 > 419.00	3.562	3.557	0.005	1.000	161116	0.9595		95.9	224	
D 21 13C8 FOSA										
506.00 > 78.00	3.895	3.888	0.007		16104401	53.6		107	20166	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.895	3.889	0.006	1.000	323576	1.04		104	3122	
D 26 M2-8:2FTS										
529.00 > 509.00	3.910	3.903	0.007		4105522	50.2		105		
D 23 13C2 PFDA										
515.00 > 470.00	3.917	3.908	0.009		8352262	55.4		111	13503	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.917	3.909	0.008	1.000	149846	0.9420		94.2	620	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.910	3.912	-0.002	1.000	80461	0.9662		101		
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.072	4.064	0.008		4472776	50.8		102		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.072	4.067	0.005	1.000	86601	0.9414		94.1		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.208	4.202	0.006	1.000	113968	0.8985		93.2		
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.234	4.225	0.009		4749964	54.4		109		
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.234	4.226	0.008	1.000	149138	1.04		104	558	
D 30 13C2 PFUnA										
565.00 > 520.00	4.234	4.226	0.008		6701532	55.9		112	11883	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.243	4.233	0.010	1.002	88680	0.9890		98.9		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.370	4.364	0.006		4508975	50.9		102		
35 MeFOSA										
512.00 > 169.00	4.379	4.370	0.009	1.000	80752	0.9296		93.0		
D 36 13C2 PFDoA										
615.00 > 570.00	4.519	4.509	0.010		6369681	51.2		102	7081	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.519	4.509	0.010	1.000	121510	1.00		99.7	47.3	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.549	4.540	0.009		4224964	51.1		102		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.559	4.550	0.009	1.000	78271	0.9260		92.6		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.775	4.762	0.013	1.000	127566	1.00		100	150	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.996	4.988	0.008		13559654	52.7		105	14462	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.996	4.988	0.008	1.000	282213	1.03		103	280	
713.00 > 169.00	4.996	4.988	0.008	1.000	43496		6.49(0.00-0.00)	103	903	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.403	5.391	0.012		7324836	53.5		107	5364	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.403	5.395	0.008	1.000	214925	0.99		99.5	152	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.757	5.745	0.012	1.000	119125	1.06		106	133	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L2_00005 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:11 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_004.d

Injection Date: 06-Jun-2017 13:39:40 Instrument ID: A8_N

Lims ID: IC L2 Full

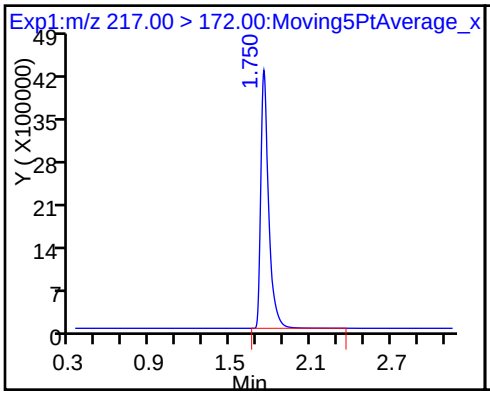
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 3

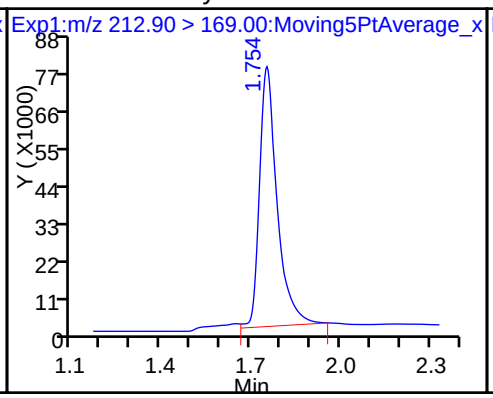
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

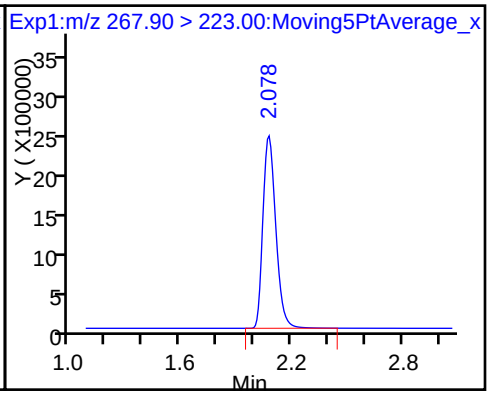
D 1 13C4 PFBA



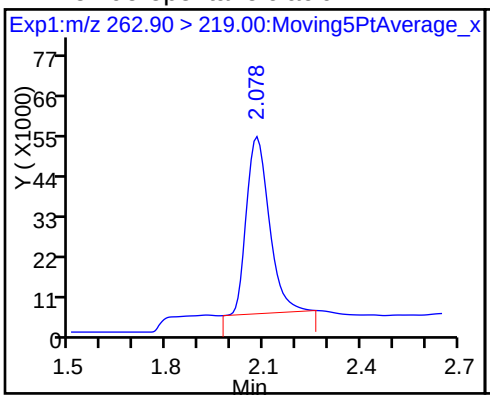
2 Perfluorobutyric acid



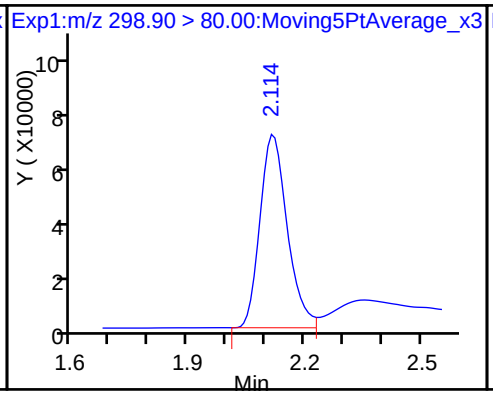
D 3 13C5-PFPeA



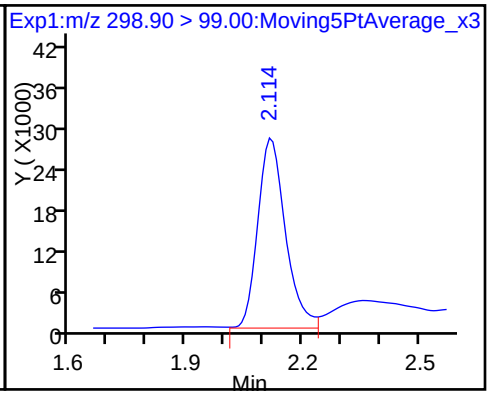
4 Perfluoropentanoic acid



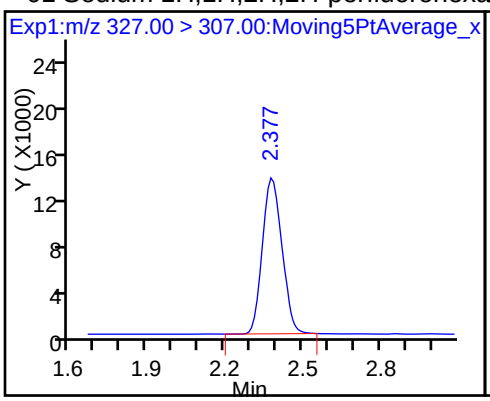
5 Perfluorobutanesulfonic acid



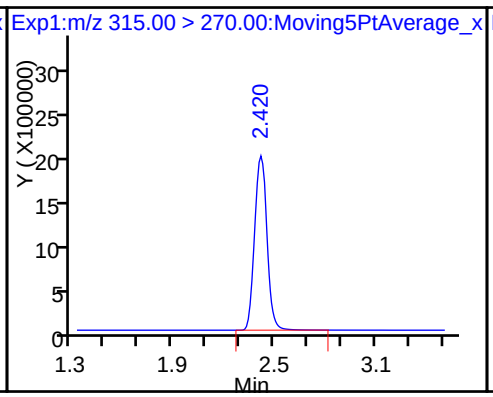
5 Perfluorobutanesulfonic acid



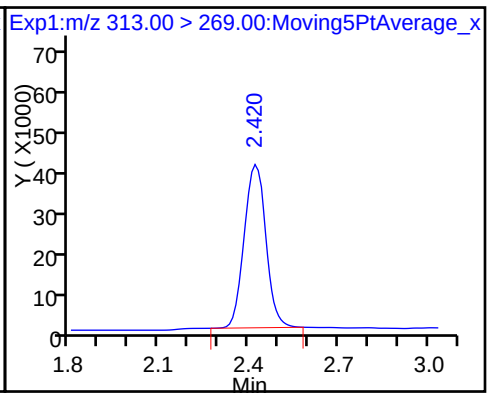
61 Sodium 1H,1H,2H,2H-perfluorohexa



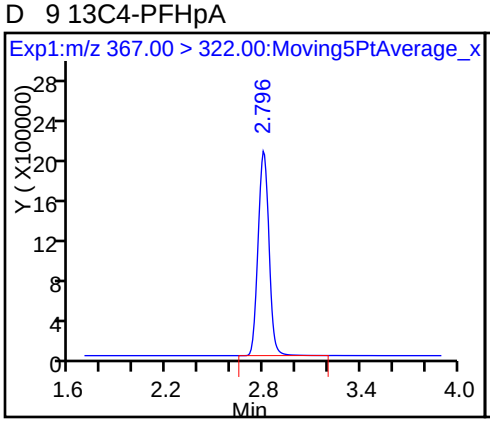
De 7 13C2 PFHxA



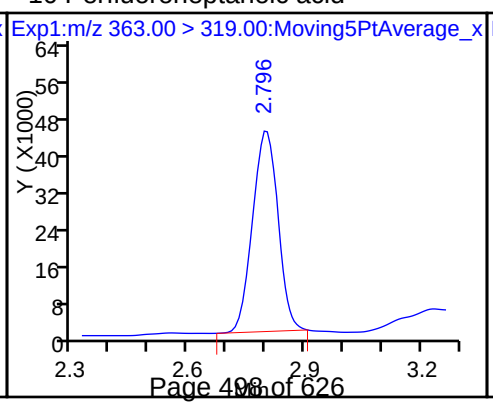
6 Perfluorohexanoic acid



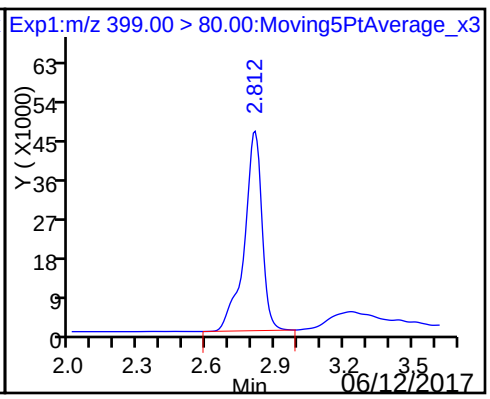
D 9 13C4-PFHpA



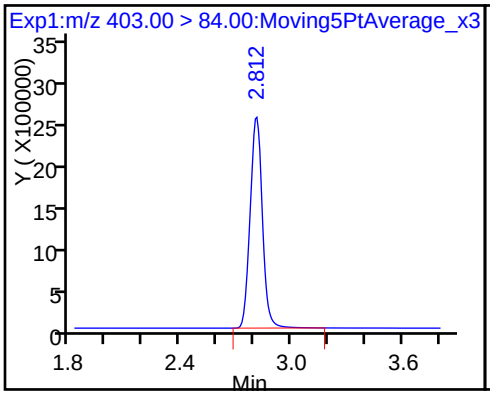
10 Perfluoroheptanoic acid



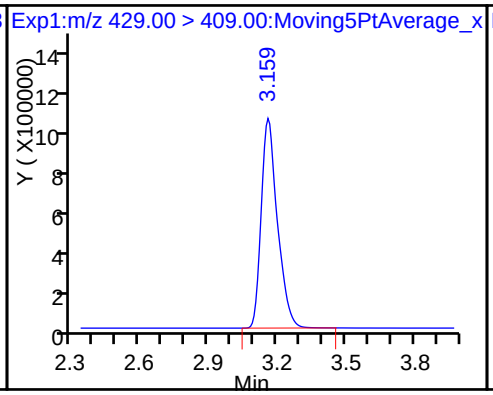
8 Perfluorohexanesulfonic acid



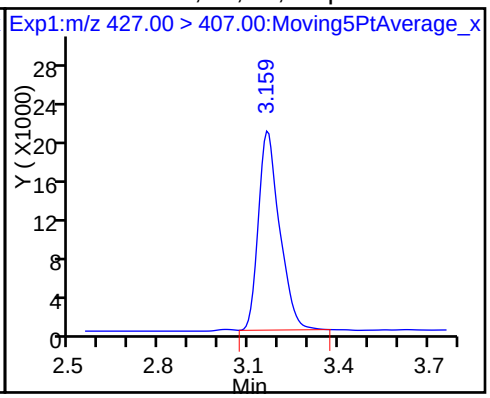
D 11 18O2 PFHxS



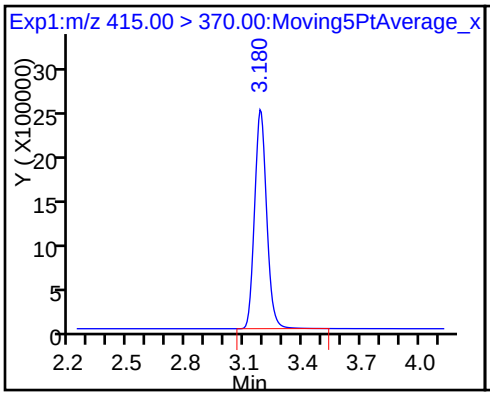
D 12 M2-6:2FTS



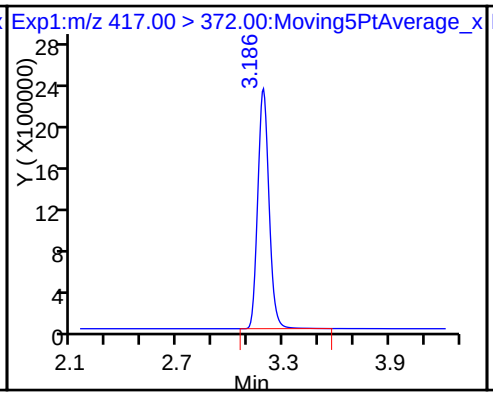
13 Sodium 1H,1H,2H,2H-perfluorooctane



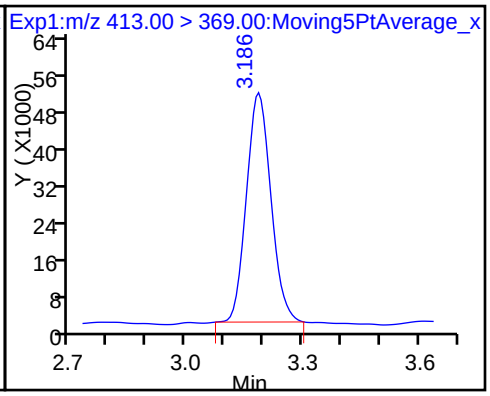
* 62 13C2-PFOA



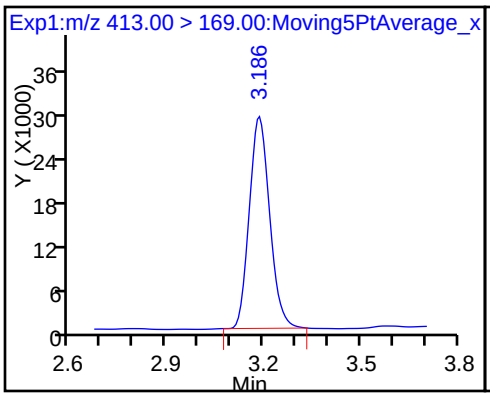
D 14 13C4 PFOA



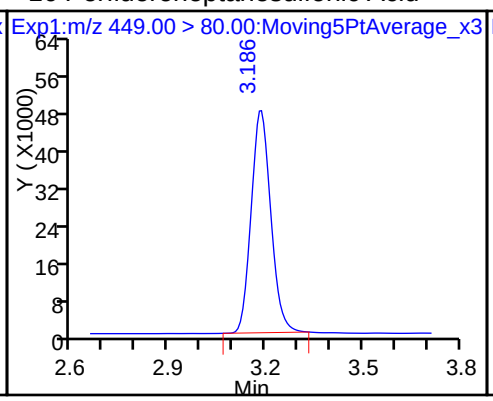
15 Perfluorooctanoic acid



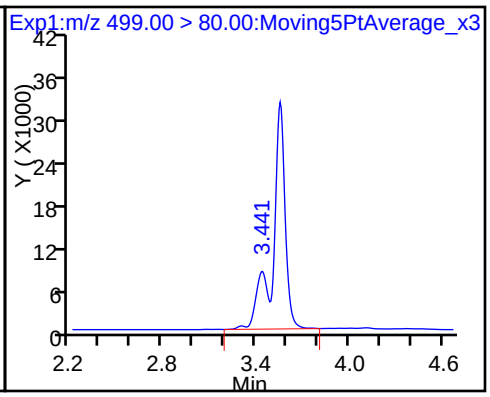
15 Perfluorooctanoic acid



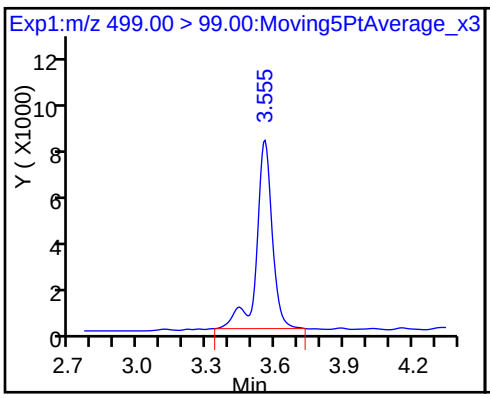
16 Perfluoroheptanesulfonic Acid



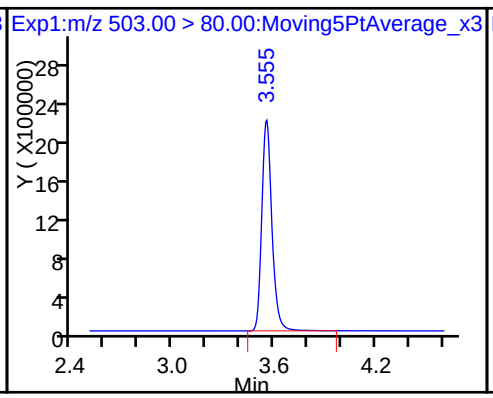
17 Perfluorooctane sulfonic acid



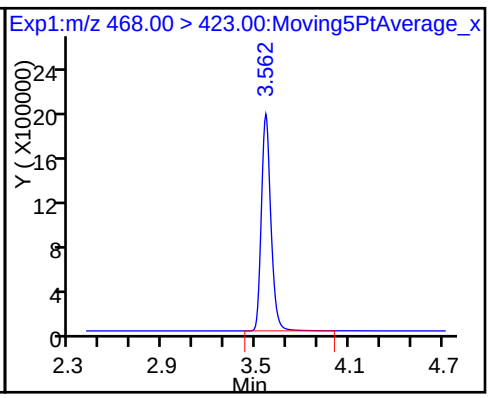
17 Perfluorooctane sulfonic acid



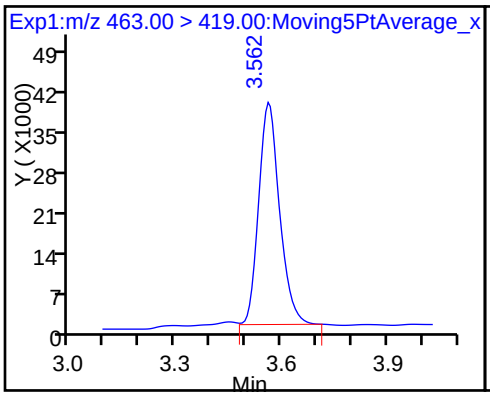
D 18 13C4 PFOS



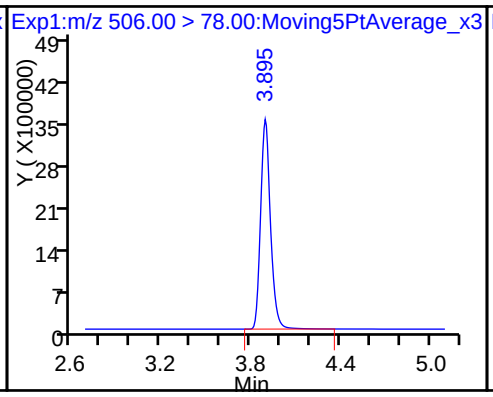
D 19 13C5 PFNA



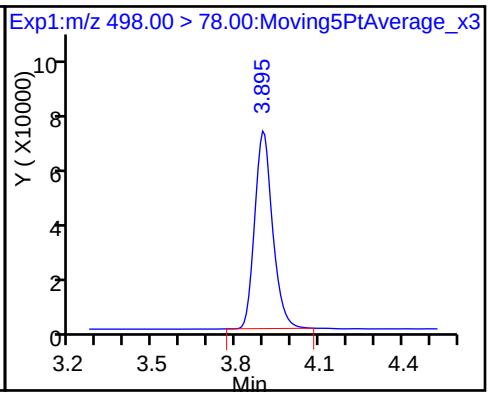
20 Perfluorononanoic acid



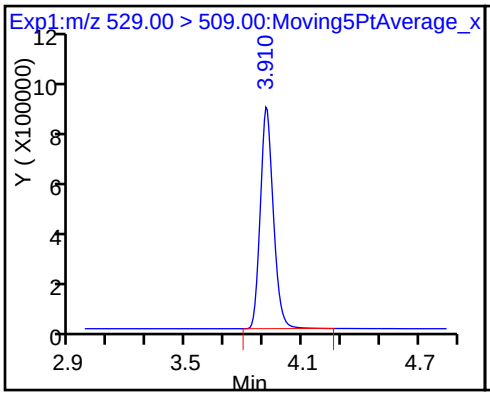
D 21 13C8 FOSA



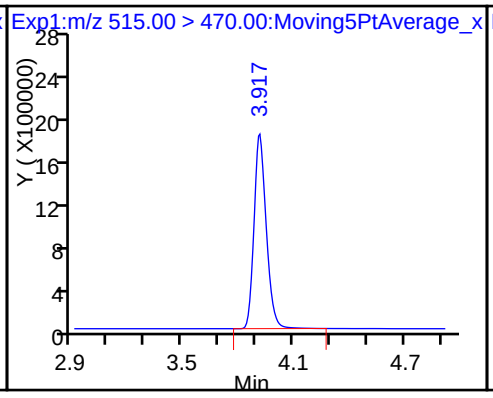
22 Perfluorooctane Sulfonamide



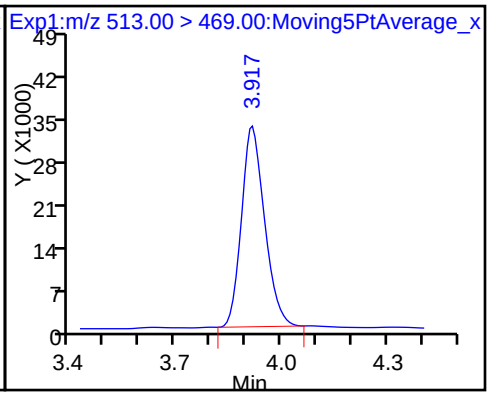
D 26 M2-8:2FTS



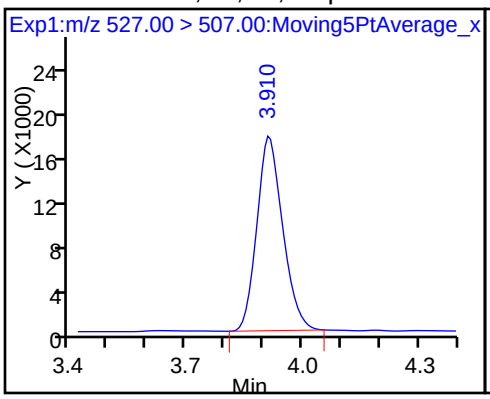
D 23 13C2 PFDA



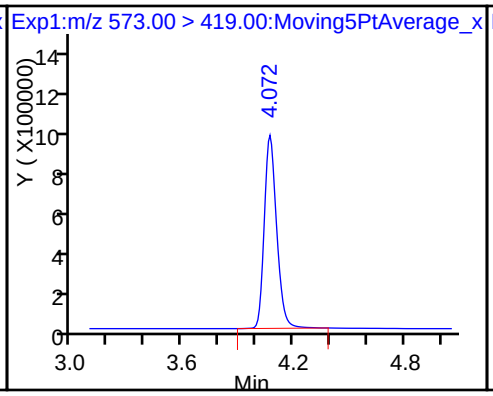
24 Perfluorodecanoic acid



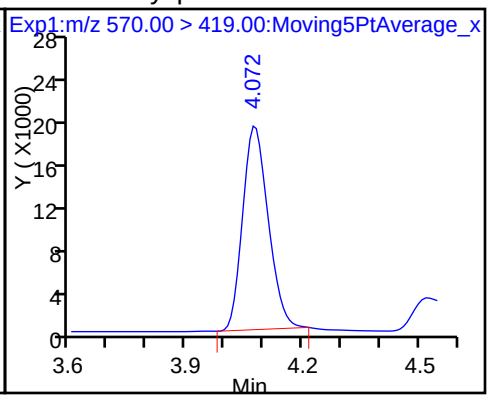
25 Sodium 1H,1H,2H,2H-perfluorodecane



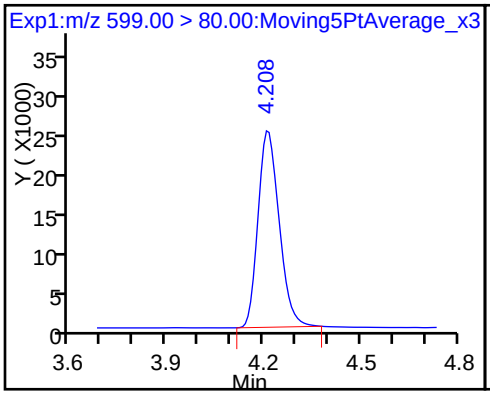
D 27 d3-NMeFOSAA



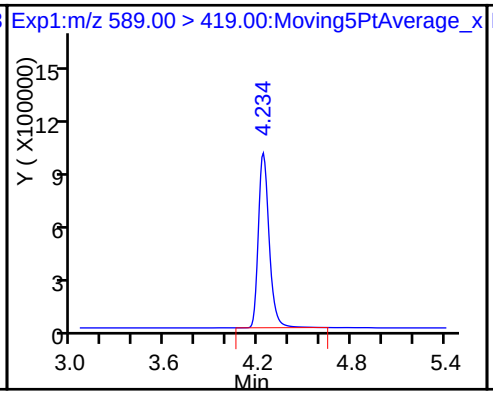
28 N-methyl perfluorooctane sulfonami



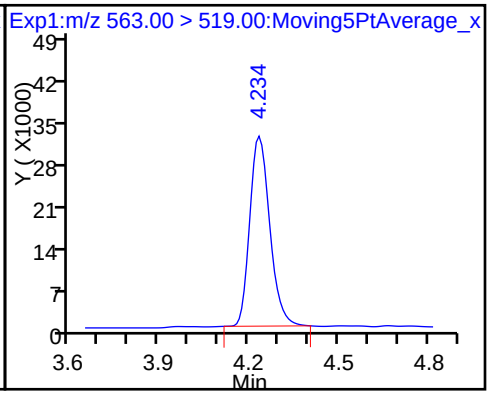
29 Perfluorodecane Sulfonic acid



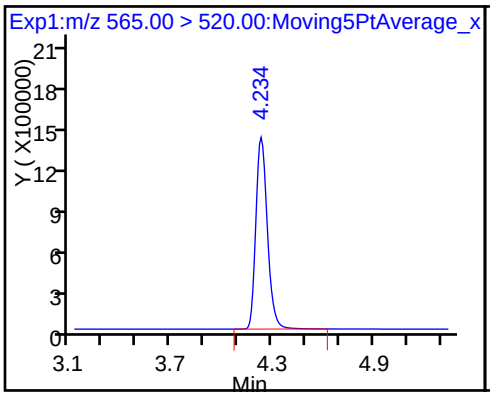
D 32 d5-NEtFOSAA



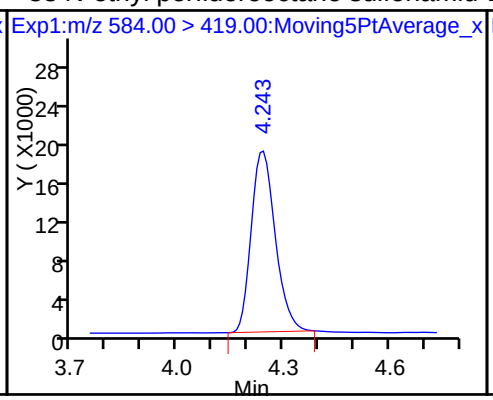
31 Perfluoroundecanoic acid



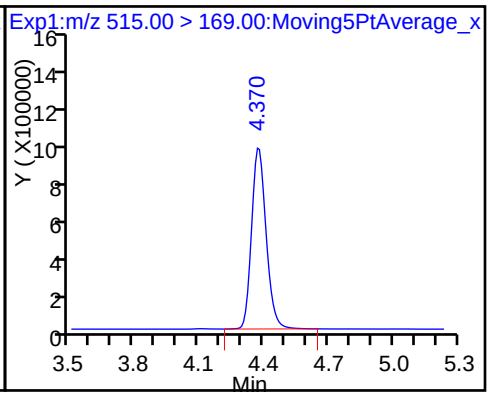
D 30 13C2 PFUnA



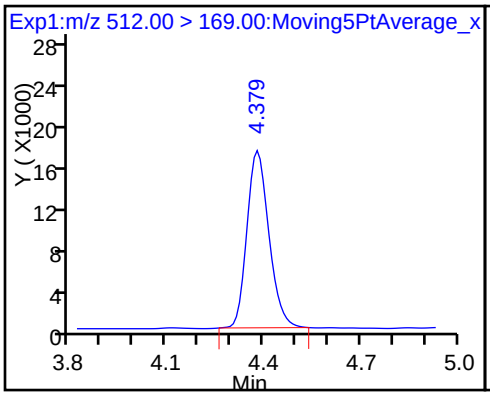
33 N-ethyl perfluorooctane sulfonamid



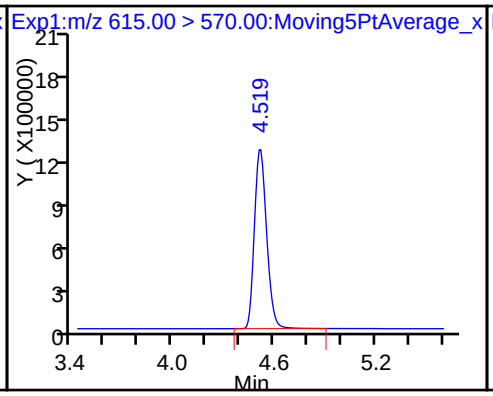
D 34 d-N-MeFOSA-M



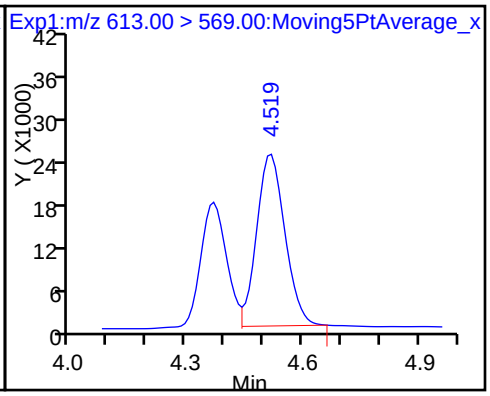
35 MeFOSA



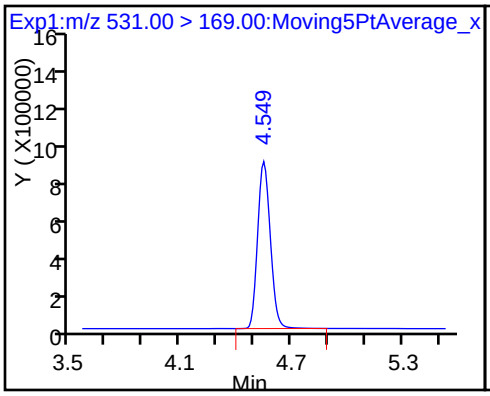
D 36 13C2 PFDoA



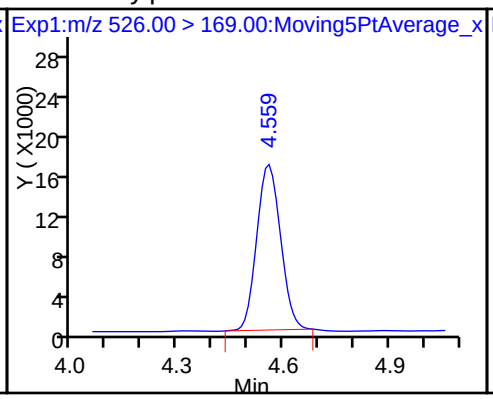
37 Perfluorododecanoic acid



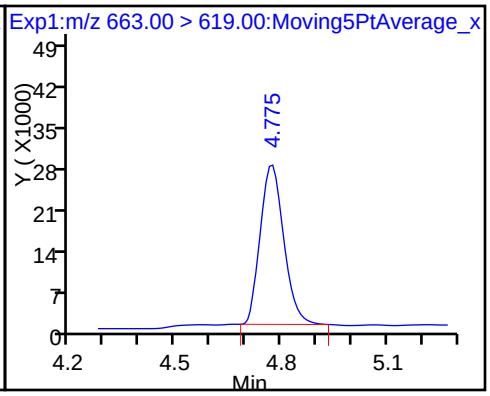
D 38 d-N-EtFOSA-M



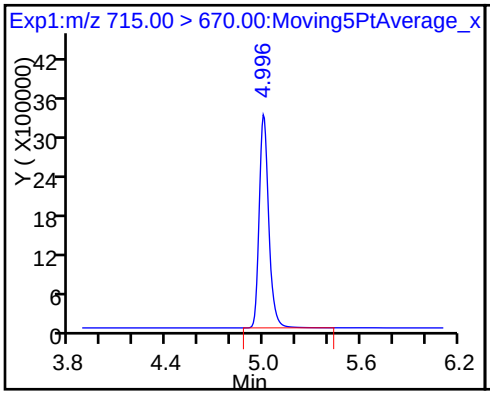
39 N-ethylperfluoro-1-octanesulfonami



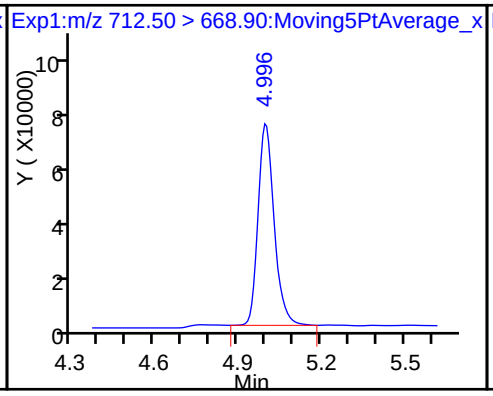
41 Perfluorotridecanoic acid



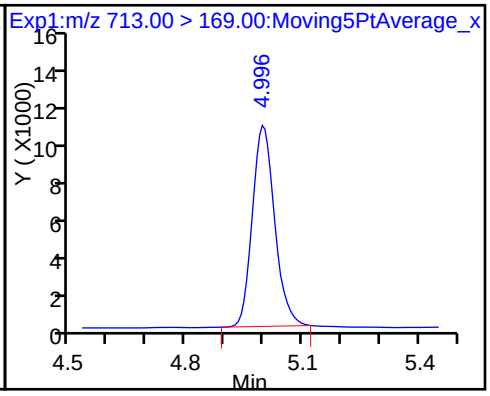
D 43 13C2-PFTeDA



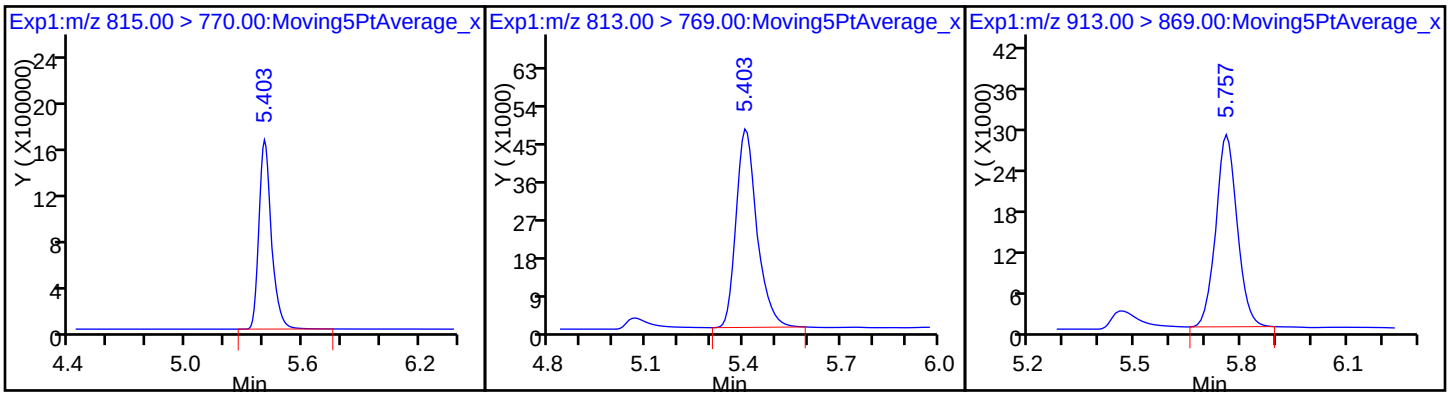
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 44 13C2-PFHxDA | 45 Perfluorohexadecanoic acid | 46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_005.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 13:47:22 ALS Bottle#: 30 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L3-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub19

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:14 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 14:53:07

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.754	1.746	0.008		17453757	52.9		106	211992	
2 Perfluorobutyric acid										
212.90 > 169.00	1.754	1.749	0.005	1.000	1713334	5.34		107	1649	
D 3 13C5-PFPeA										
267.90 > 223.00	2.074	2.073	0.001		11436238	52.0		104	41254	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.083	2.074	0.009	1.000	1251931	5.26		105	466	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.119	2.111	0.008	1.000	1834796	4.55		103		
298.90 > 99.00	2.119	2.111	0.008	1.000	732090		2.51(0.00-0.00)	103		M
D 47 13C3-PFBS										
301.90 > 83.00	2.119	2.111	0.008		259952	NC				
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.383	2.373	0.010	1.000	374572	4.85		104		
D 7 13C2 PFHxA										
315.00 > 270.00	2.416	2.413	0.003		10172648	52.8		106	30939	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.426	2.415	0.011	1.000	1053687	5.12		102	2219	
D 9 13C4-PFHpA										
367.00 > 322.00	2.803	2.792	0.011		9539730	53.6		107	29011	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.803	2.793	0.010	1.000	1029680	5.15		103	493	
D 11 18O2 PFHxS										
403.00 > 84.00	2.811	2.803	0.008		11680454	50.7		107	17273	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.811	2.803	0.008	1.000	1211890	4.48		98.4		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.157	3.151	0.006		4259968	48.0		101		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.165	3.153	0.012	1.000	426423	4.81		102		
* 62 13C2-PFOA										
415.00 > 370.00	3.178	3.174	0.004		10257572	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.184	3.176	0.008		9759048	54.1		108	30642	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.184	3.178	0.006	1.000	1036095	4.97		99.4	403	
413.00 > 169.00	3.184	3.178	0.006	1.000	587899		1.76(0.90-1.10)	99.4	1841	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.184	3.179	0.005	1.000	1101144	5.11		107		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.439	3.481	-0.042	1.000	935018	4.69		101	781	
499.00 > 99.00	3.553	3.481	0.072	1.033	203675		4.59(0.90-1.10)	101	2020	
D 18 13C4 PFOS										
503.00 > 80.00	3.553	3.546	0.007		9025287	50.7		106	14494	
D 19 13C5 PFNA										
468.00 > 423.00	3.560	3.555	0.005		8231460	53.9		108	19823	
20 Perfluorononanoic acid										
463.00 > 419.00	3.567	3.557	0.009	1.000	852732	5.17		103	1117	
D 21 13C8 FOSA										
506.00 > 78.00	3.893	3.888	0.005		16436681	54.8		110	22217	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.893	3.889	0.004	1.000	1668408	5.24		105	7776	
D 26 M2-8:2FTS										
529.00 > 509.00	3.908	3.903	0.005		3974583	48.6		101		
D 23 13C2 PFDA										
515.00 > 470.00	3.915	3.908	0.007		8270641	54.9		110	13892	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.915	3.909	0.006	1.000	807683	5.13		103	3433	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.908	3.914	-0.006	1.000	397779	4.93		103		
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.070	4.064	0.006		4494472	51.0		102		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.079	4.067	0.012	1.002	443332	4.80		95.9		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.206	4.202	0.004	1.000	607766	4.89		101		
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.232	4.225	0.007		4651680	53.3		107		
D 30 13C2 PFUnA										
565.00 > 520.00	4.232	4.226	0.006		6570792	54.8		110	14691	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.232	4.226	0.006	1.000	683898	4.89		97.7	2251	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.241	4.233	0.008	1.002	441438	5.03		101		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.368	4.364	0.004		4557564	51.4		103		
35 MeFOSA										
512.00 > 169.00	4.377	4.370	0.007	1.000	429934	4.90		97.9		
37 Perfluorododecanoic acid										
613.00 > 569.00	4.518	4.509	0.009	1.000	647442	5.08		102	249	
D 36 13C2 PFDoA										
615.00 > 570.00	4.518	4.509	0.009		6663278	53.5		107	7186	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.547	4.540	0.007		4276499	51.7		103		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.557	4.550	0.007	1.000	416107	4.86		97.3		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.774	4.762	0.012	1.000	666888	5.01		100	748	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.995	4.988	0.007	1.000	1446661	5.20		104	1405	
713.00 > 169.00	4.995	4.988	0.007	1.000	196772		7.35(0.00-0.00)	104	1948	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.995	4.988	0.007		13516644	52.6		105	16617	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.402	5.391	0.011		7279427	53.2		106	6305	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.402	5.395	0.007	1.000	735058	5.09		102	520	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.752	5.745	0.007	1.000	637726	5.41		108	765	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_FULL-L3_00004 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:15 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_005.d

Injection Date: 06-Jun-2017 13:47:22 Instrument ID: A8_N

Lims ID: IC L3 Full

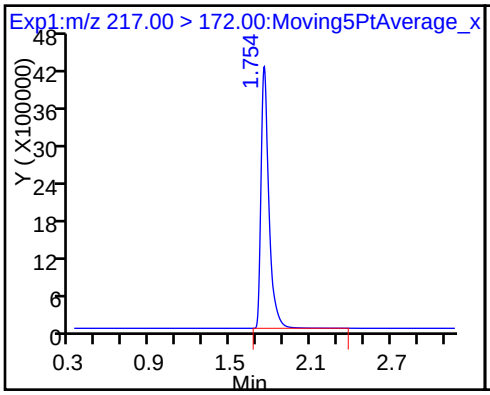
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 30 Worklist Smp#: 4

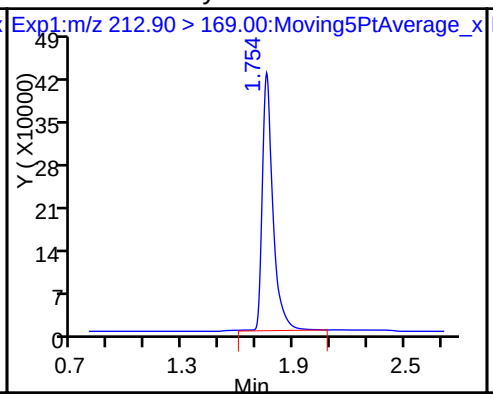
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

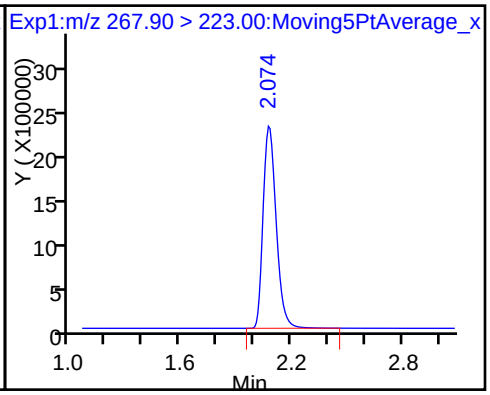
D 1 13C4 PFBA



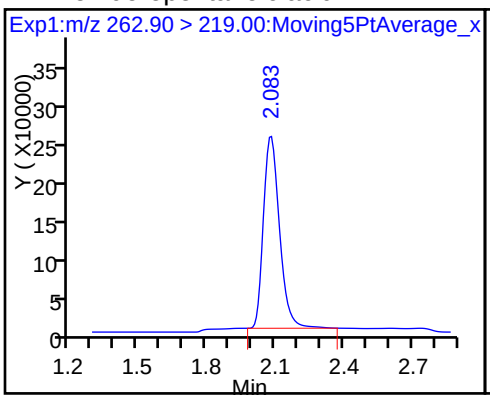
2 Perfluorobutyric acid



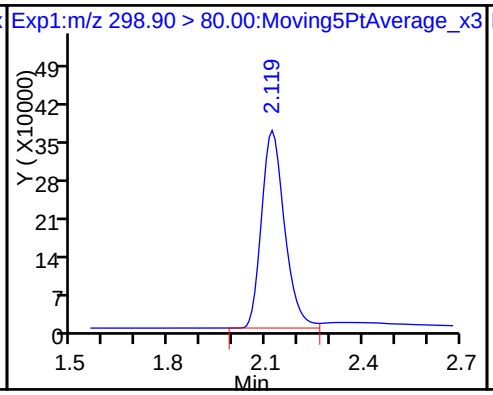
D 3 13C5-PFPeA



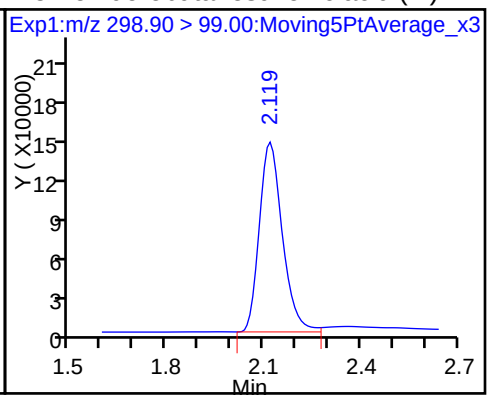
4 Perfluoropentanoic acid



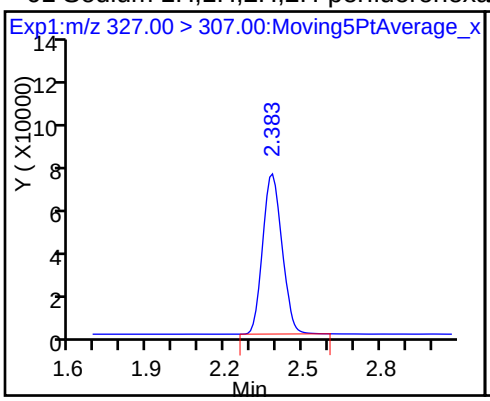
5 Perfluorobutanesulfonic acid



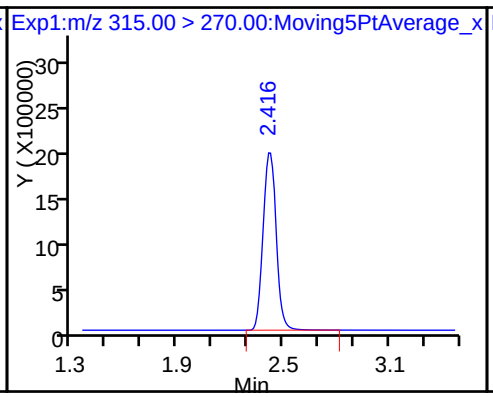
5 Perfluorobutanesulfonic acid (M)



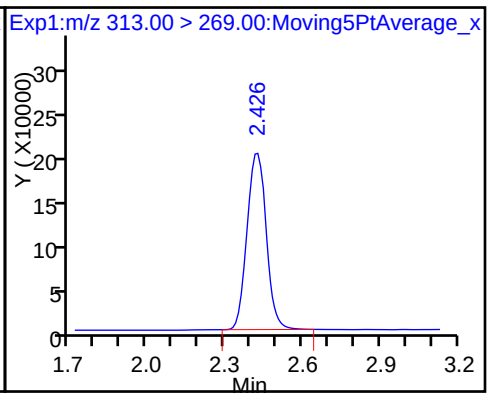
61 Sodium 1H,1H,2H,2H-perfluorohexa



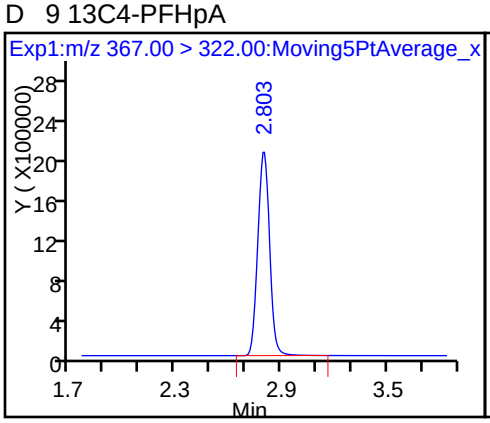
De 7 13C2 PFHxA



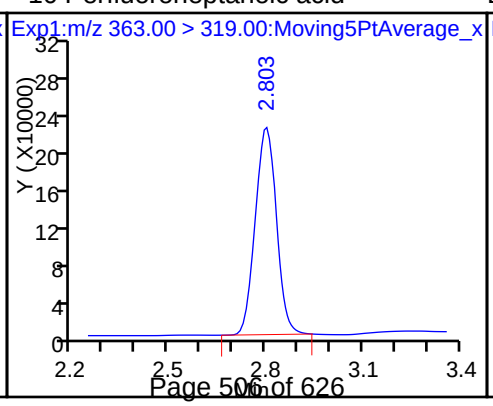
6 Perfluorohexanoic acid



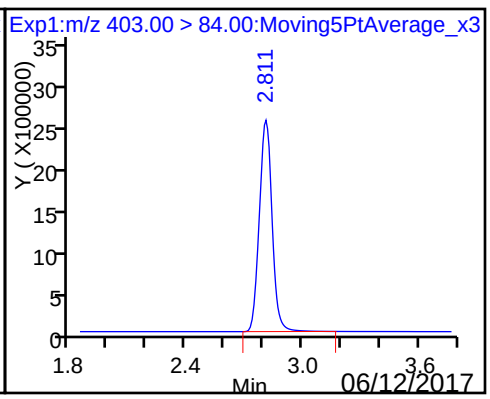
D 9 13C4-PFHpA



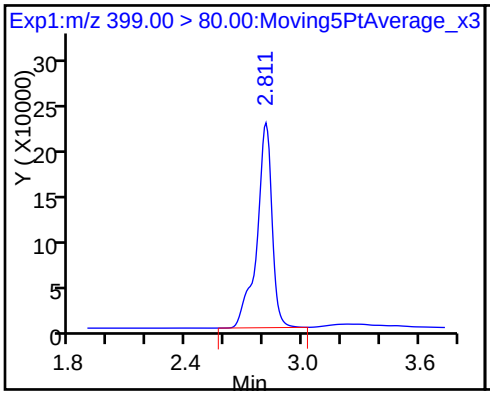
10 Perfluoroheptanoic acid



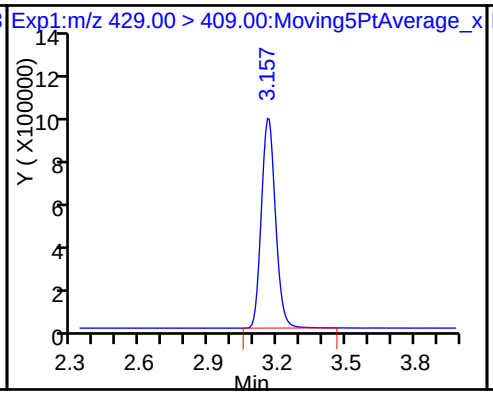
D 11 18O2 PFHxS



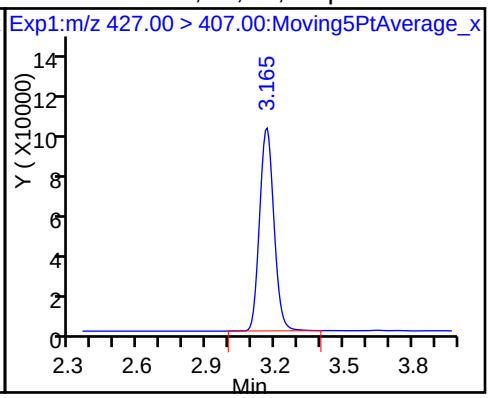
8 Perfluorohexanesulfonic acid



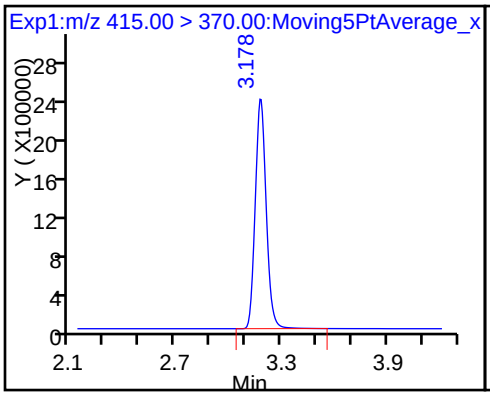
D 12 M2-6:2FTS



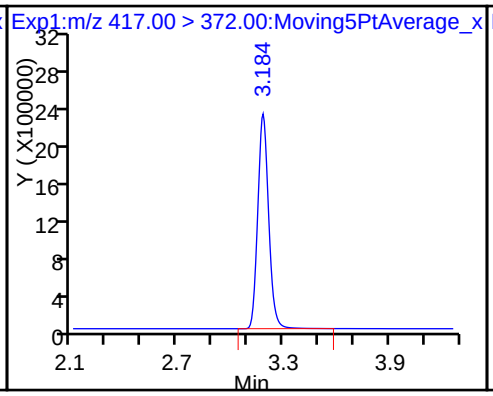
13 Sodium 1H,1H,2H,2H-perfluorooctane



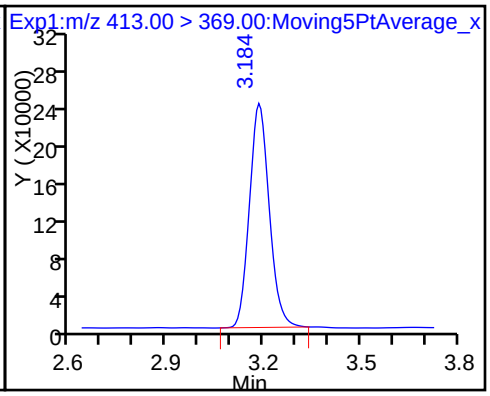
* 62 13C2-PFOA



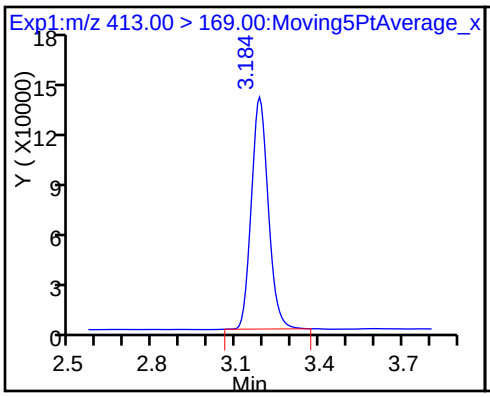
D 14 13C4 PFOA



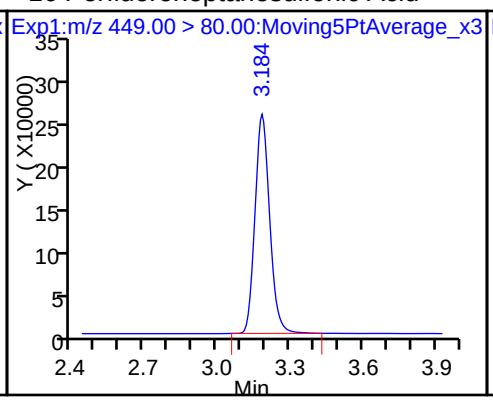
15 Perfluorooctanoic acid



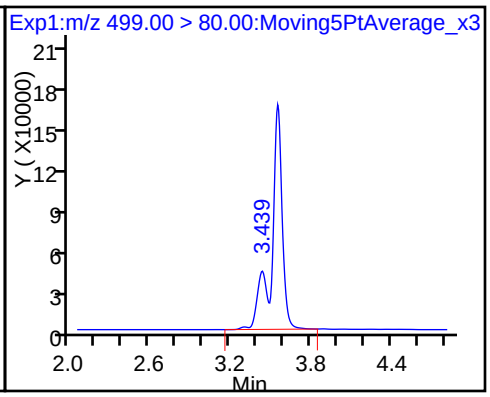
15 Perfluorooctanoic acid



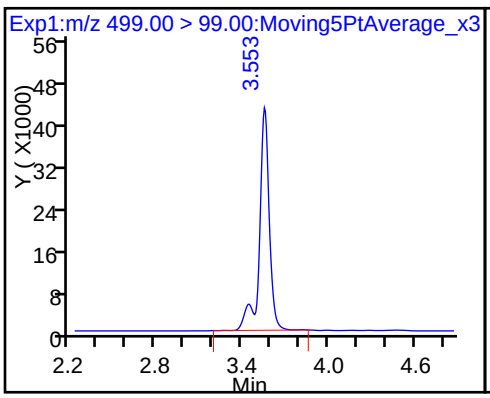
16 Perfluoroheptanesulfonic Acid



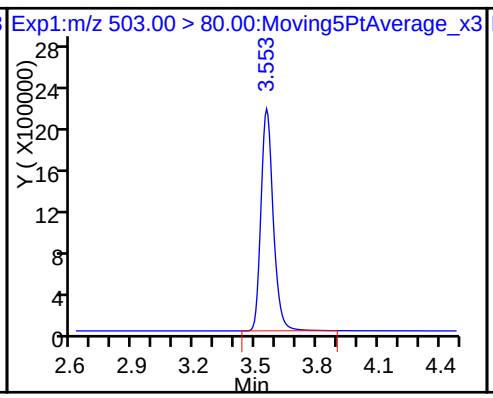
17 Perfluorooctane sulfonic acid



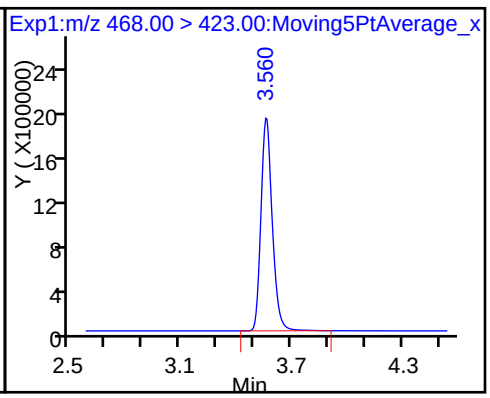
17 Perfluorooctane sulfonic acid



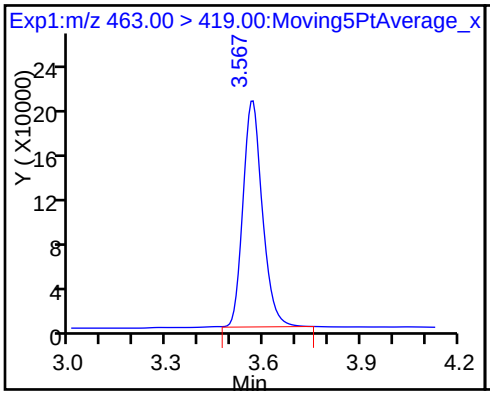
D 18 13C4 PFOS



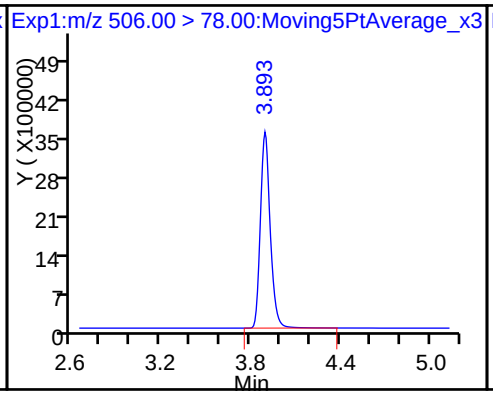
D 19 13C5 PFNA



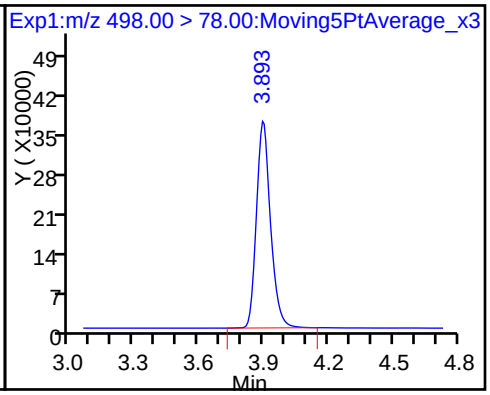
20 Perfluorononanoic acid



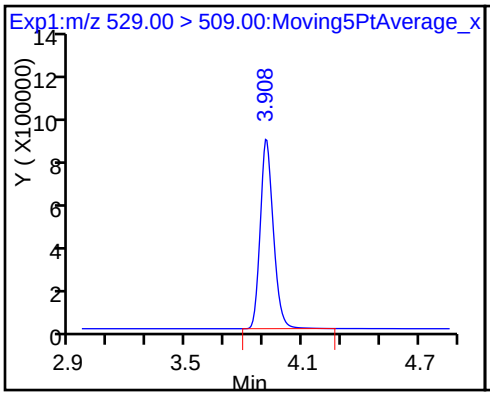
D 21 13C8 FOSA



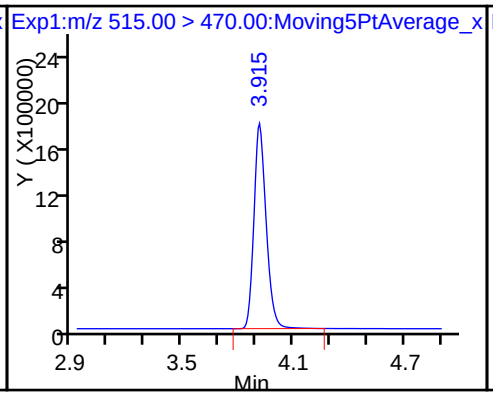
22 Perfluorooctane Sulfonamide



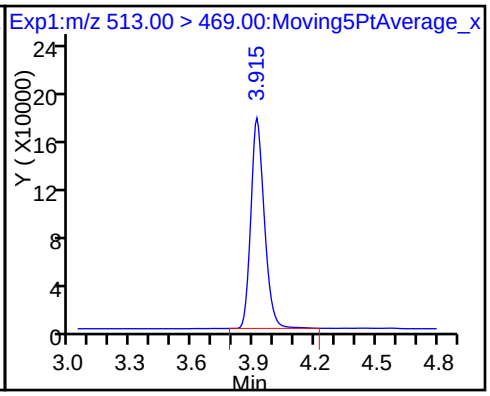
D 26 M2-8:2FTS



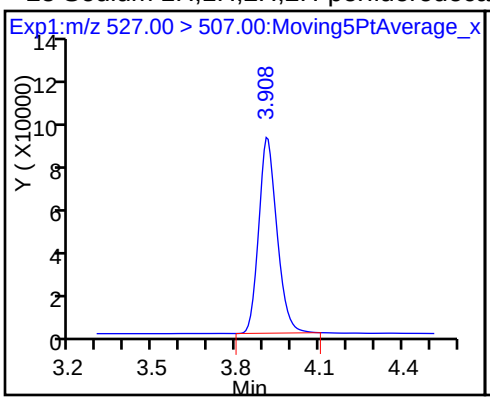
D 23 13C2 PFDA



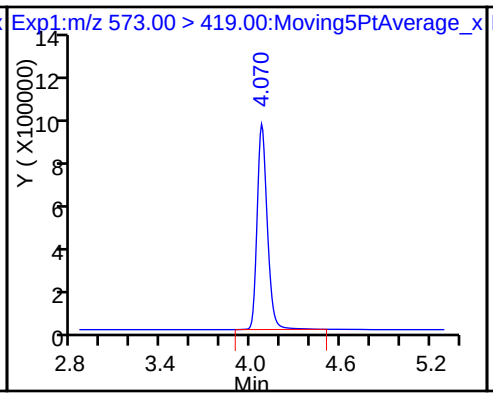
24 Perfluorodecanoic acid



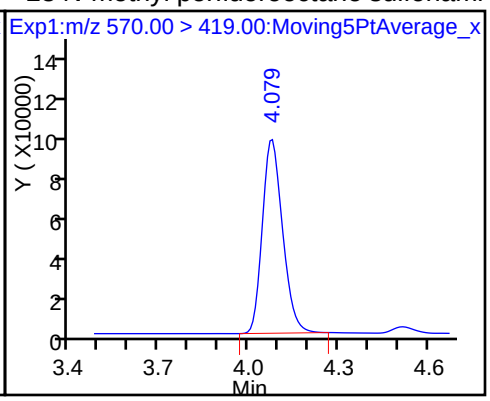
25 Sodium 1H,1H,2H,2H-perfluorodecane



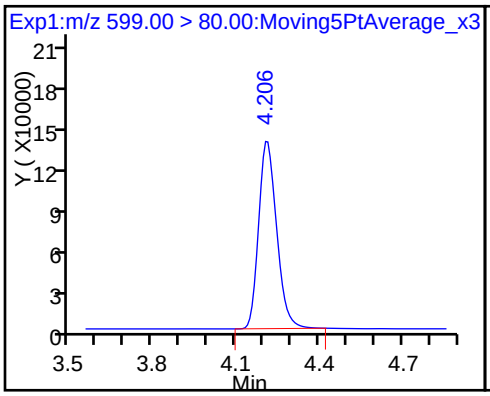
D 27 d3-NMeFOSAA



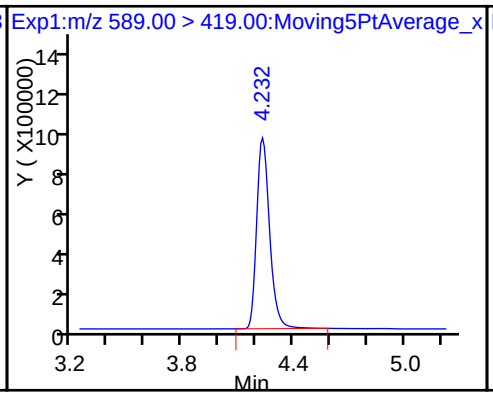
28 N-methyl perfluorooctane sulfonami



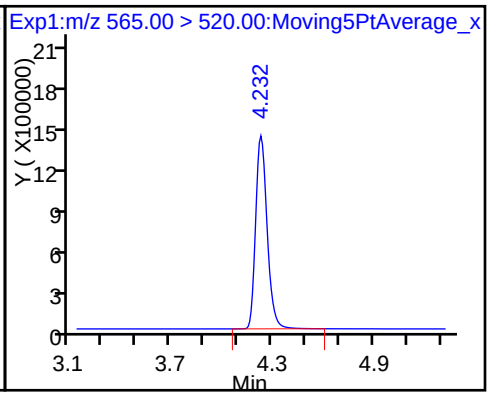
29 Perfluorodecane Sulfonic acid



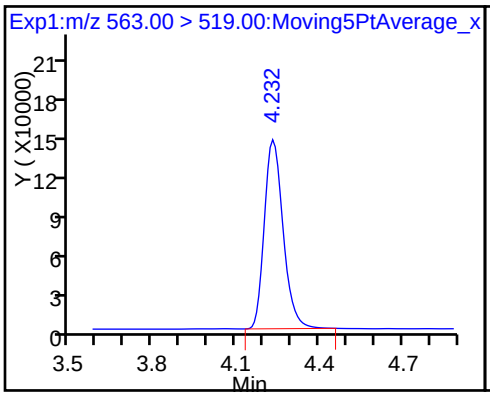
D 32 d5-NEtFOSAA



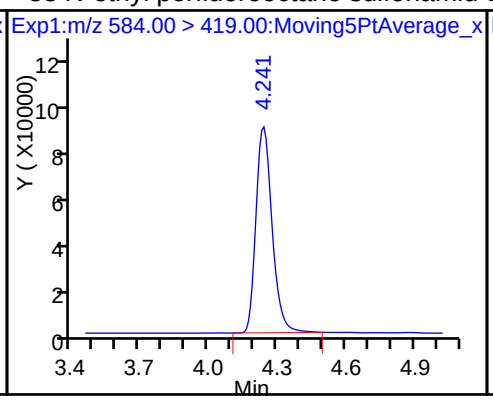
D 30 13C2 PFUnA



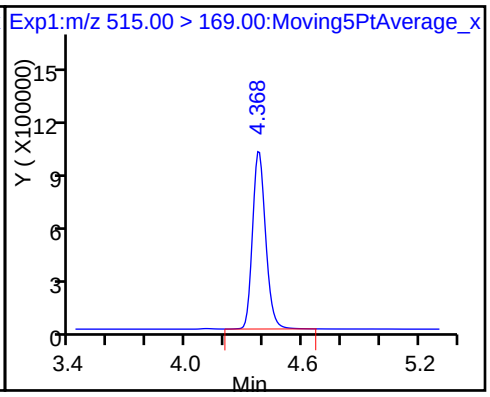
31 Perfluoroundecanoic acid



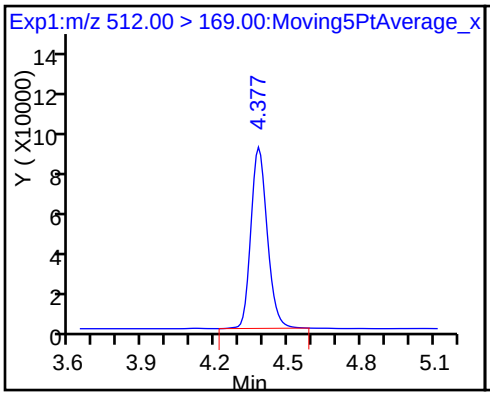
33 N-ethyl perfluorooctane sulfonamid



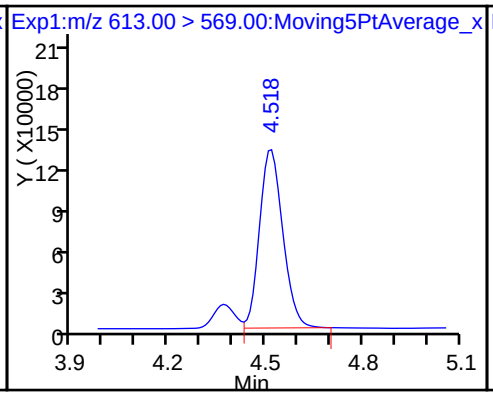
D 34 d-N-MeFOSA-M



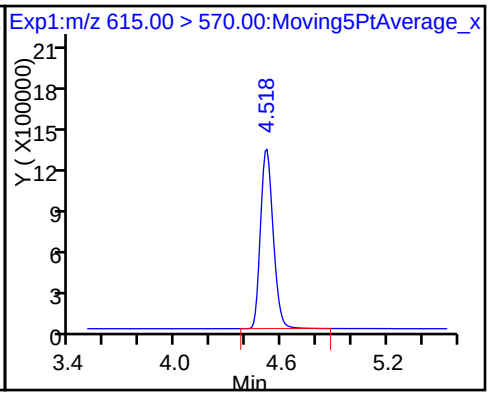
35 MeFOSA



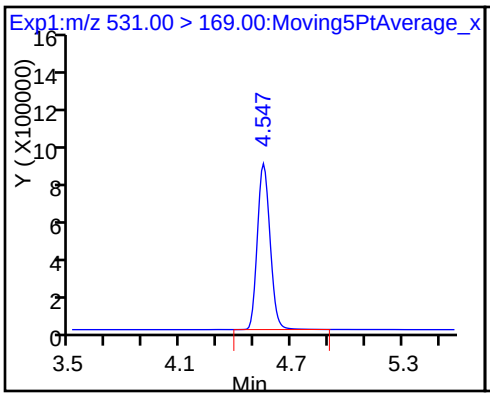
37 Perfluorododecanoic acid



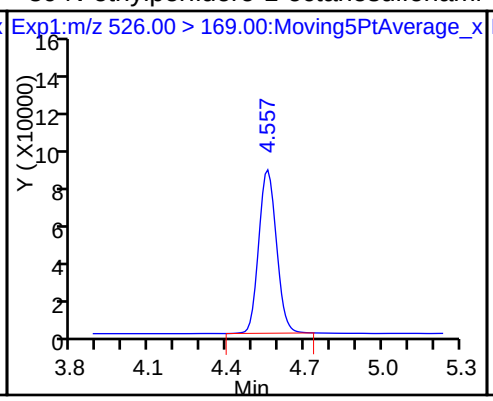
D 36 13C2 PFDoA



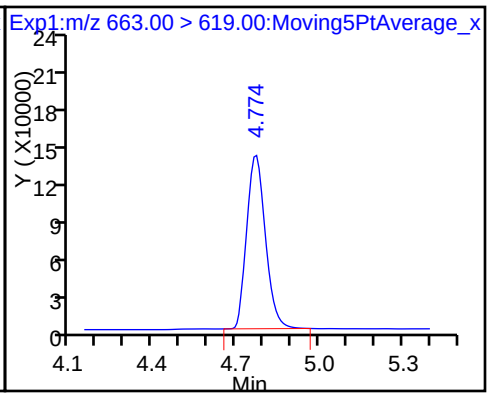
D 38 d-N-EtFOSA-M



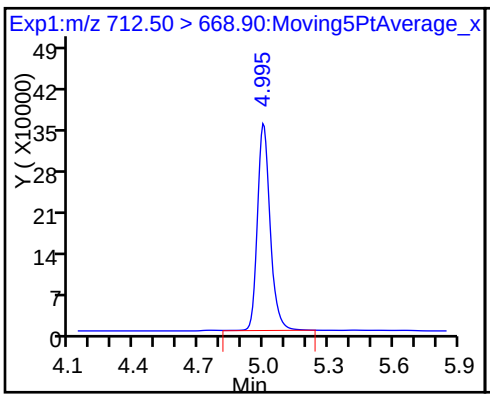
39 N-ethylperfluoro-1-octanesulfonami



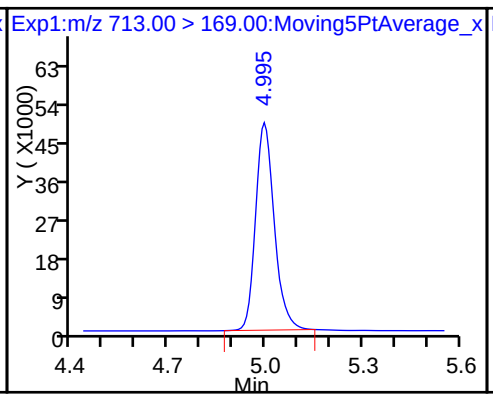
41 Perfluorotridecanoic acid



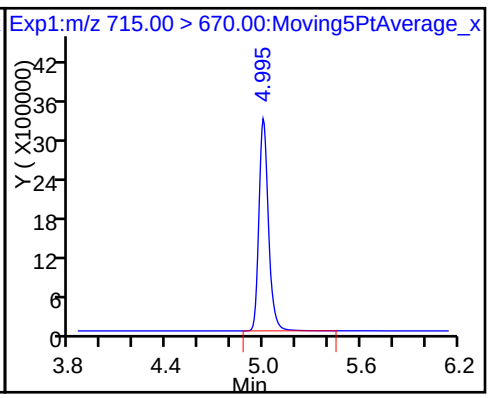
42 Perfluorotetradecanoic acid



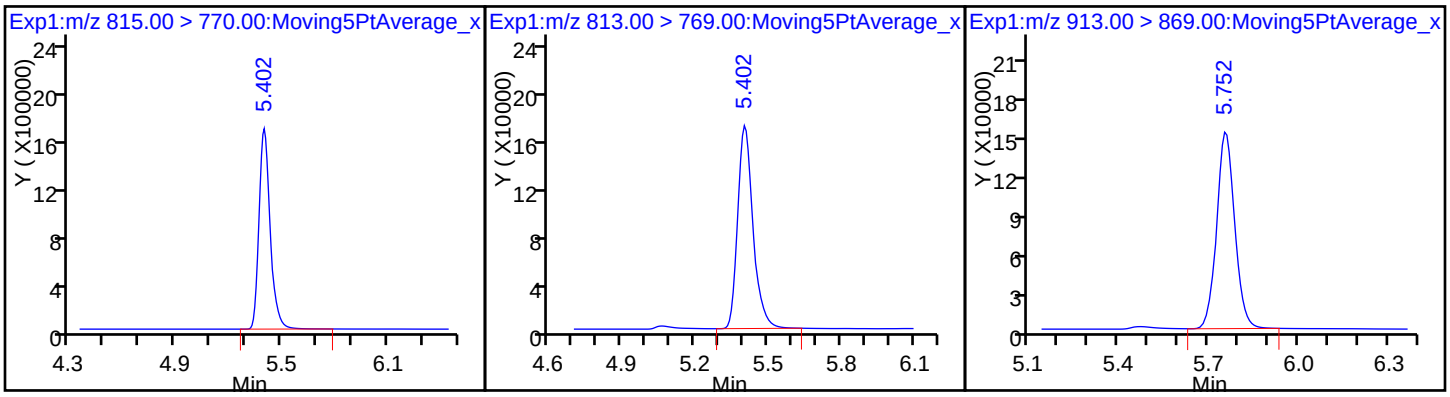
42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



D 44 13C2-PFHxDA 45 Perfluorohexadecanoic acid 46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

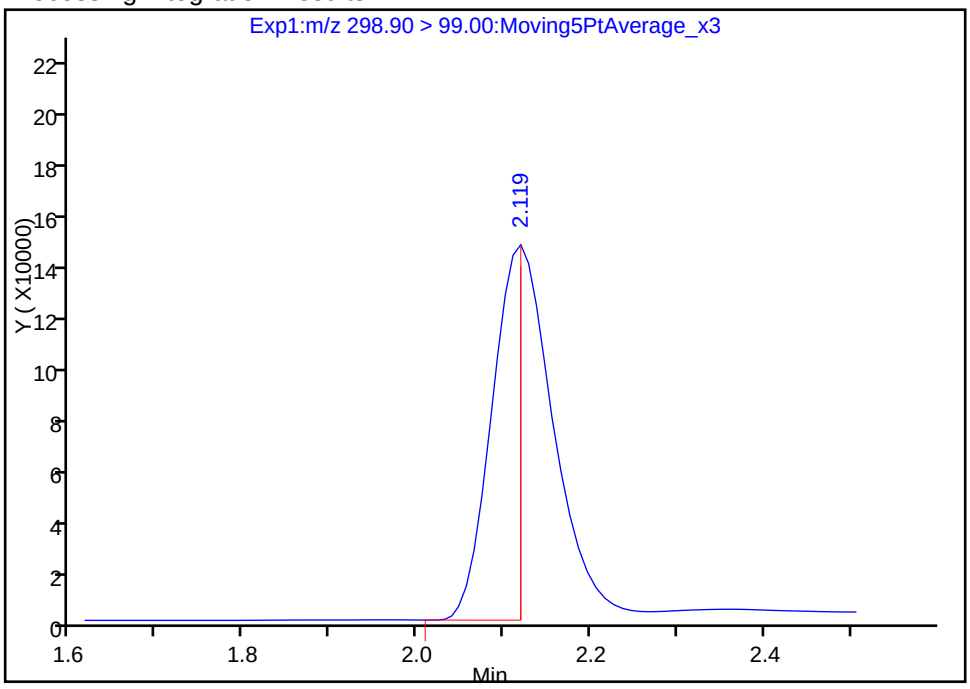
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_005.d				
Injection Date:	06-Jun-2017 13:47:22	Instrument ID:	A8_N		
Lims ID:	IC L3 Full				
Client ID:					
Operator ID:	SACINSTLCMS01	ALS Bottle#:	30	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

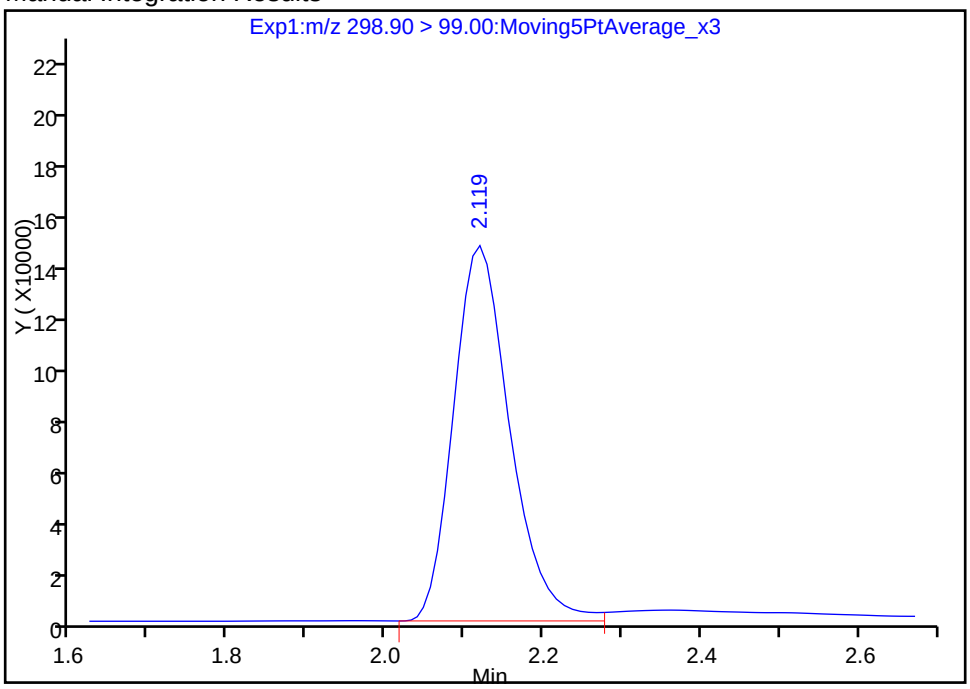
Processing Integration Results

RT: 2.12
Area: 333095
Amount: 4.551275
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 732090
Amount: 4.551275
Amount Units: ng/ml



Reviewer: chandrasenas, 06-Jun-2017 14:52:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_006.d
Lims ID: IC L4 Full
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 13:55:04 ALS Bottle#: 31 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L4-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub19

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:18 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 14:54:05

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.753	1.746	0.007		16685960	50.6		101	442339	
2 Perfluorobutyric acid										
212.90 > 169.00	1.757	1.749	0.008	1.000	6493513	21.2		106	5002	
D 3 13C5-PFPeA										
267.90 > 223.00	2.083	2.073	0.010		11477234	52.2		104	40015	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.083	2.074	0.009	1.000	4805868	20.1		101	1753	
D 47 13C3-PFBS										
301.90 > 83.00	2.119	2.111	0.008		283860	NC				
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.119	2.111	0.008	1.000	7527479	19.2		109		
298.90 > 99.00	2.119	2.111	0.008	1.000	3059630		2.46(0.00-0.00)	109		
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.383	2.373	0.010	1.000	1584153	22.3		120		
D 7 13C2 PFHxA										
315.00 > 270.00	2.426	2.413	0.013		10188431	52.8		106	32304	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.426	2.415	0.011	1.000	4147414	20.1		101	9583	
D 9 13C4-PFHpA										
367.00 > 322.00	2.802	2.792	0.010		9194541	51.7		103	33524	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.802	2.793	0.009	1.000	3873044	20.1		101	1774	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.810	2.803	0.007	1.000	4443874	16.9		92.9		
D 11 18O2 PFHxS										
403.00 > 84.00	2.810	2.803	0.007		11339438	49.2		104	19321	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.164	3.151	0.013		3911109	44.0		92.7		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.164	3.153	0.011	1.000	1604502	19.7		104		
* 62 13C2-PFOA										
415.00 > 370.00	3.184	3.174	0.010		9977237	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.190	3.176	0.014		9364253	51.9		104	27796	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.190	3.178	0.012	1.000	4015277	20.1		100	1372	
413.00 > 169.00	3.190	3.178	0.012	1.000	2262426		1.77(0.90-1.10)	100	5937	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.190	3.179	0.011	1.000	4121001	19.5		102		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.439	3.481	-0.042	1.000	3596640	18.4		99.1	1183	
499.00 > 99.00	3.560	3.481	0.079	1.035	784484		4.58(0.90-1.10)	99.1	5350	
D 18 13C4 PFOS										
503.00 > 80.00	3.560	3.546	0.014		8857038	49.7		104	24285	
D 19 13C5 PFNA										
468.00 > 423.00	3.566	3.555	0.011		8033929	52.6		105	19652	
20 Perfluorononanoic acid										
463.00 > 419.00	3.566	3.557	0.009	1.000	3212440	19.9		99.7	5325	
D 21 13C8 FOSA										
506.00 > 78.00	3.901	3.888	0.013		15659216	52.2		104	21034	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.901	3.889	0.012	1.000	6391277	21.1		105	18445	
D 26 M2-8:2FTS										
529.00 > 509.00	3.915	3.903	0.012		4199515	51.3		107		
D 23 13C2 PFDA										
515.00 > 470.00	3.915	3.908	0.007		8053713	53.4		107	12050	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.923	3.909	0.014	1.000	3027625	19.7		98.7	9278	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.915	3.911	0.004	1.000	1757951	20.6		108		
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.078	4.064	0.014		4481079	50.9		102		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.078	4.067	0.011	1.000	1977330	21.5		107		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.214	4.202	0.012	1.000	2322699	19.0		98.7		
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.241	4.225	0.016		4722646	54.1		108		
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.241	4.226	0.015	1.000	2571433	18.9		94.7	5550	
D 30 13C2 PFUnA										
565.00 > 520.00	4.241	4.226	0.015		6373111	53.2		106	15696	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.241	4.233	0.008	1.000	1800439	20.2		101		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.377	4.364	0.013		4437019	50.1		100		
35 MeFOSA										
512.00 > 169.00	4.377	4.370	0.007	1.000	1781501	20.8		104		
D 36 13C2 PFDoA										
615.00 > 570.00	4.517	4.509	0.008		6153979	49.4		98.9	6043	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.517	4.509	0.008	1.000	2436486	20.7		104	999	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.547	4.540	0.007		4098578	49.5		99.0		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.557	4.550	0.007	1.000	1716234	20.9		105		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.773	4.762	0.011	1.000	2660759	21.6		108	2831	
D 43 13C2-PFTeDA										
715.00 > 670.00	5.002	4.988	0.014		13149033	51.1		102	14246	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	5.002	4.988	0.014	1.000	5540367	21.7		108	4303	
713.00 > 169.00	4.995	4.988	0.007	0.999	756413		7.32(0.00-0.00)	108	4961	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.402	5.391	0.011		6940209	50.7		101	6237	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.409	5.395	0.014	1.000	2504738	20.9		105	1470	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.760	5.745	0.015	1.000	2299688	21.1		106	2445	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L4_00005 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:18 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_006.d

Injection Date: 06-Jun-2017 13:55:04 Instrument ID: A8_N

Lims ID: IC L4 Full

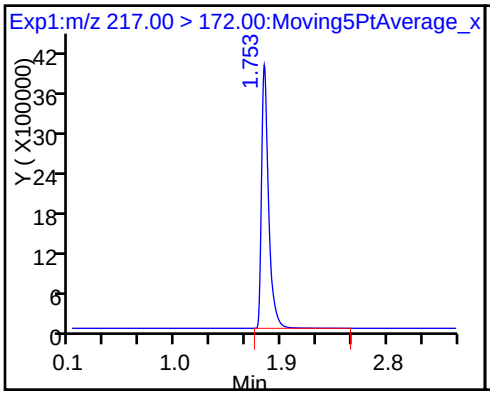
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 31 Worklist Smp#: 5

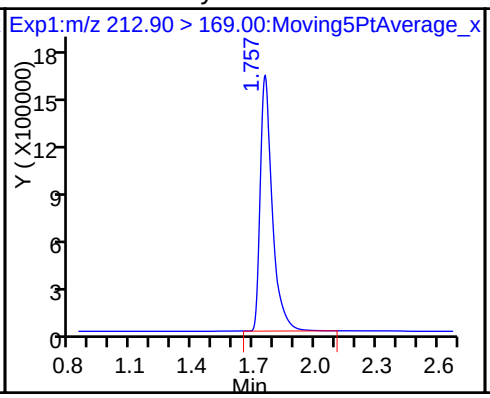
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

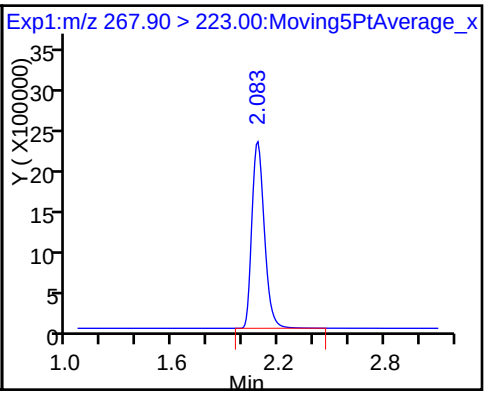
D 1 13C4 PFBA



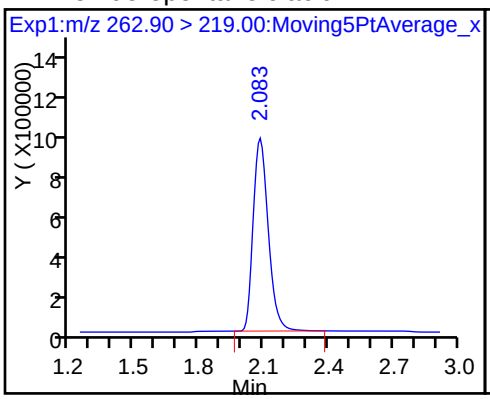
2 Perfluorobutyric acid



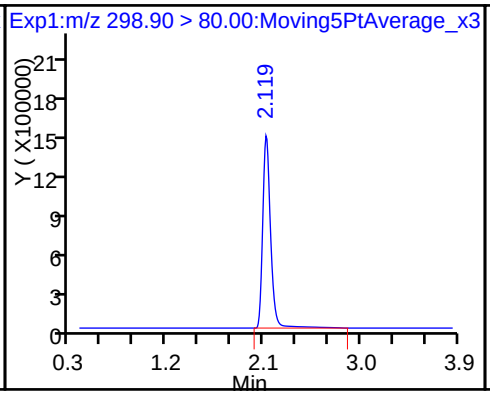
D 3 13C5-PFPeA



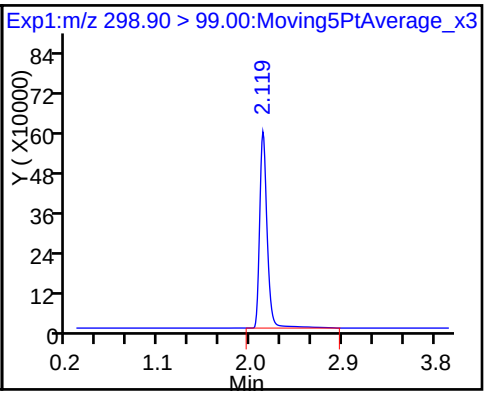
4 Perfluoropentanoic acid



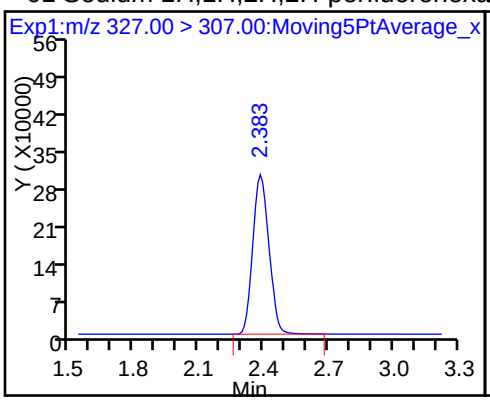
5 Perfluorobutanesulfonic acid



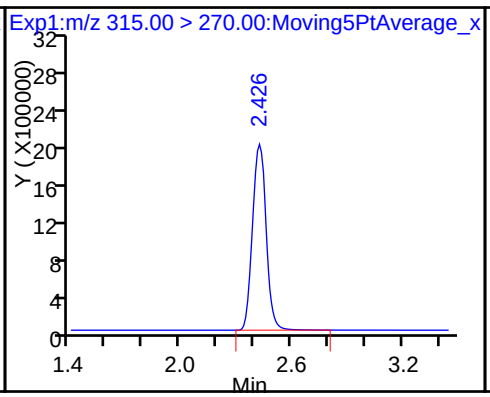
5 Perfluorobutanesulfonic acid



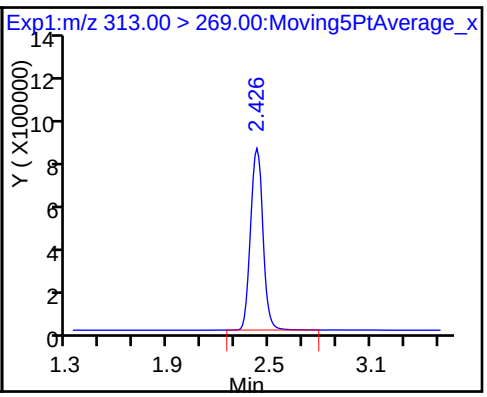
61 Sodium 1H,1H,2H,2H-perfluorohexa



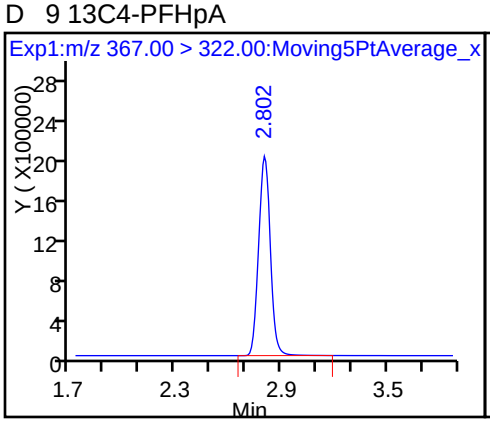
De 7 13C2 PFHxA



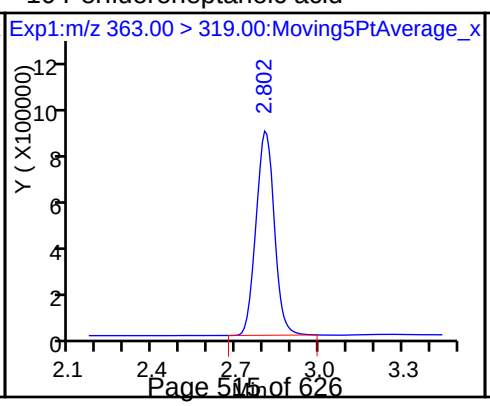
6 Perfluorohexanoic acid



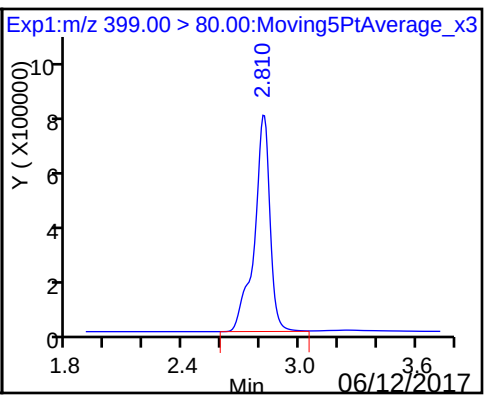
D 9 13C4-PFHpA



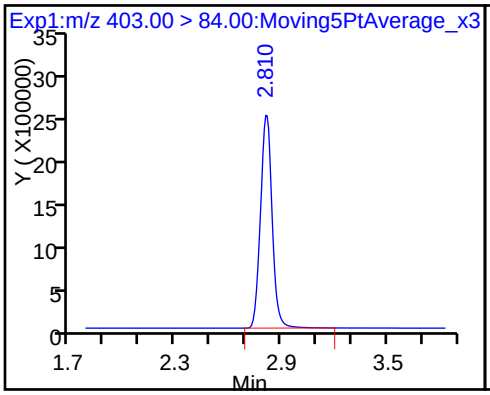
10 Perfluoroheptanoic acid



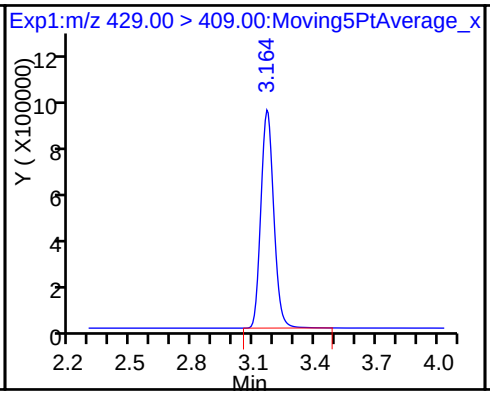
8 Perfluorohexanesulfonic acid



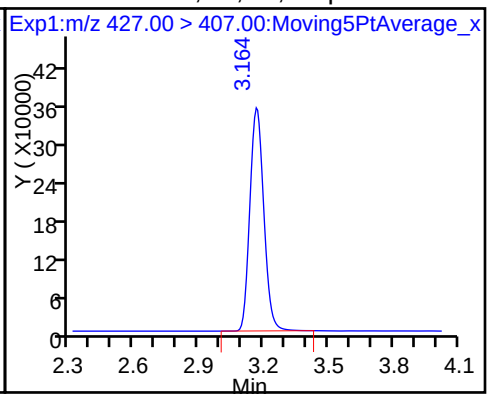
D 11 18O2 PFHxS



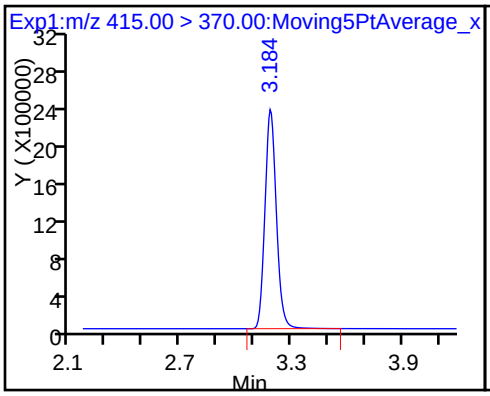
D 12 M2-6:2FTS



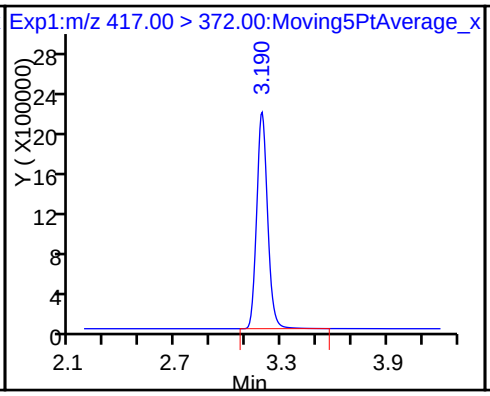
13 Sodium 1H,1H,2H,2H-perfluorooctane



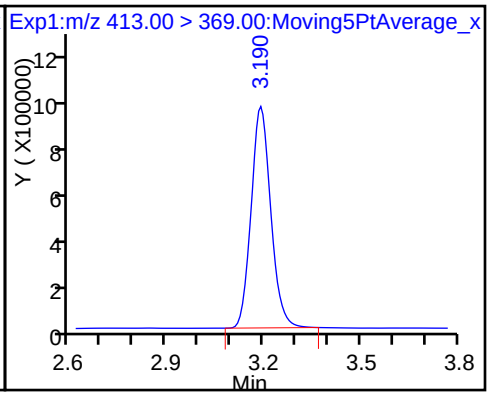
* 62 13C2-PFOA



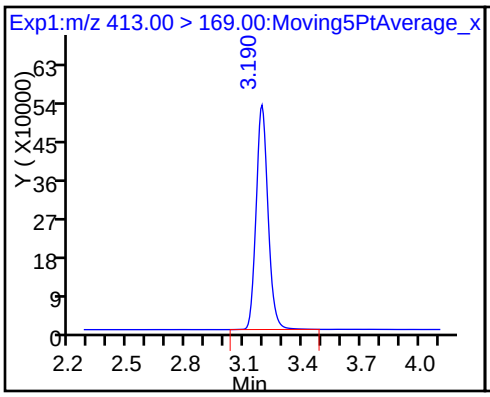
D 14 13C4 PFOA



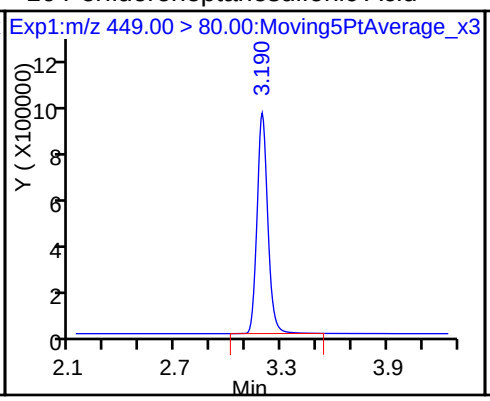
15 Perfluorooctanoic acid



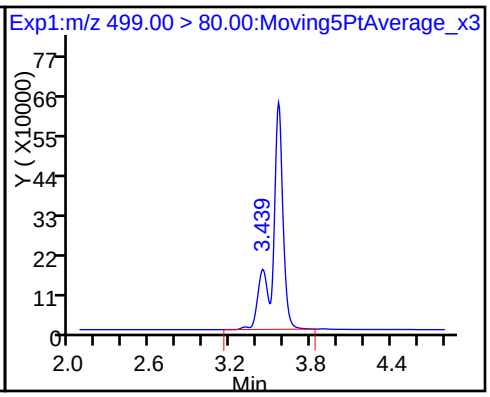
15 Perfluorooctanoic acid



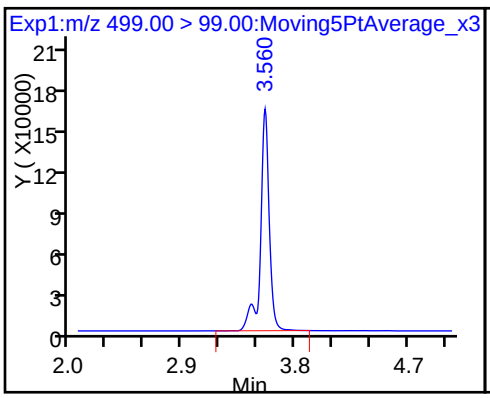
16 Perfluoroheptanesulfonic Acid



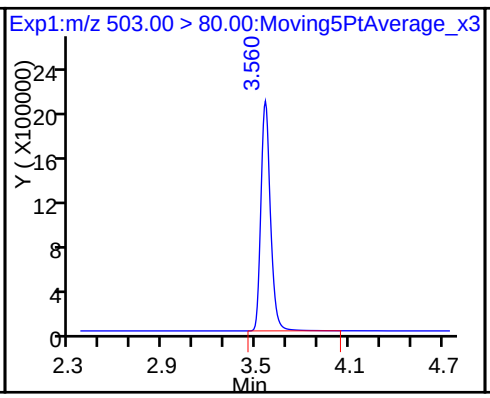
17 Perfluorooctane sulfonic acid



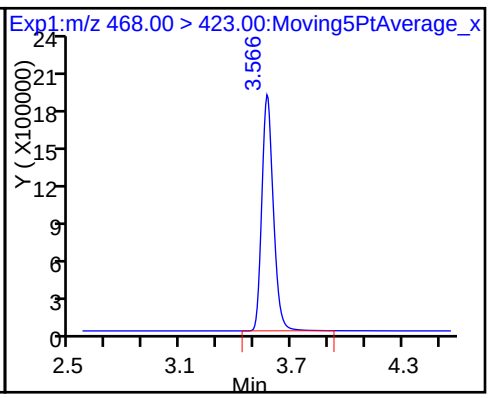
17 Perfluorooctane sulfonic acid



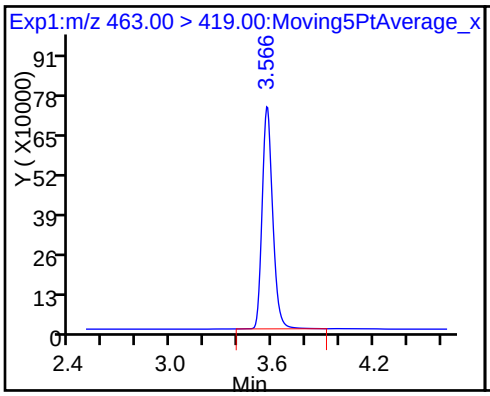
D 18 13C4 PFOS



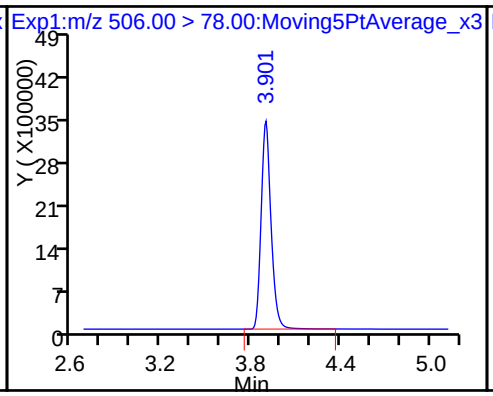
D 19 13C5 PFNA



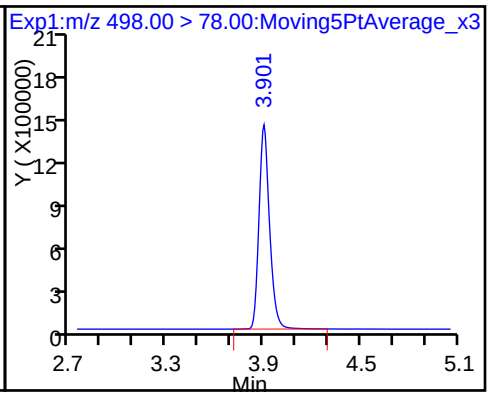
20 Perfluorononanoic acid



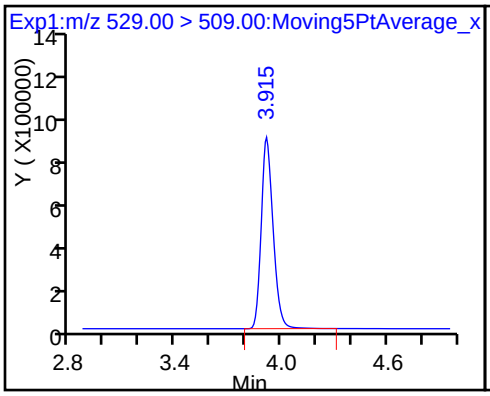
D 21 13C8 FOSA



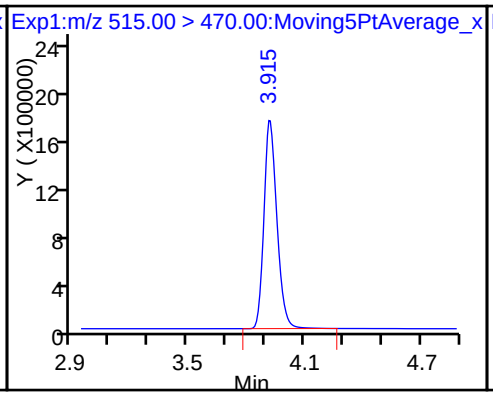
22 Perfluorooctane Sulfonamide



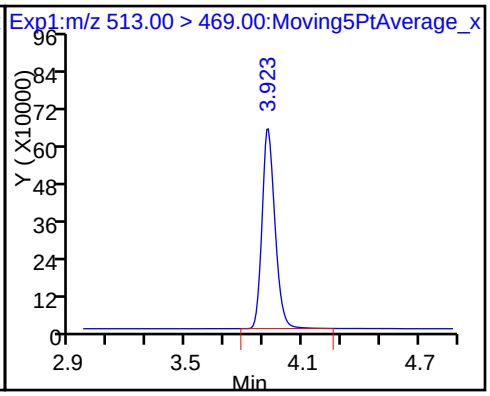
D 26 M2-8:2FTS



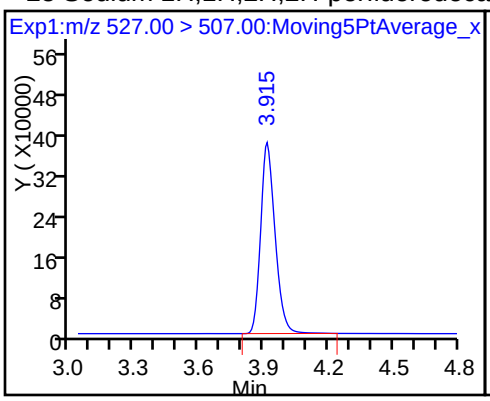
D 23 13C2 PFDA



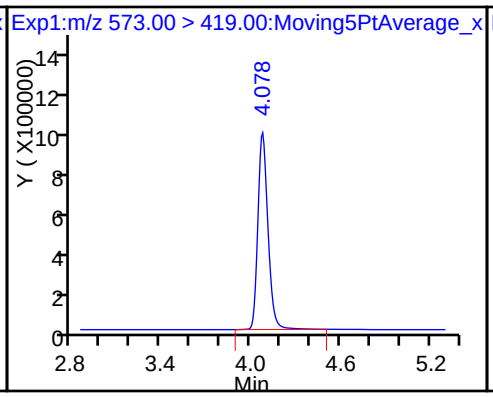
24 Perfluorodecanoic acid



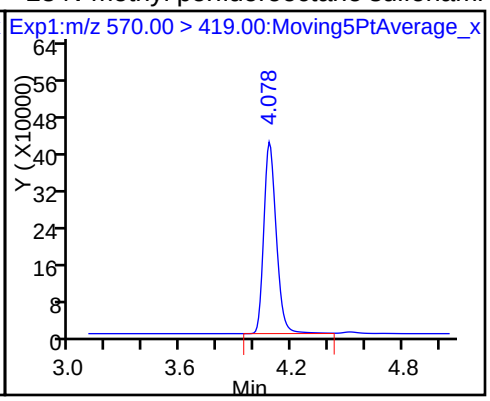
25 Sodium 1H,1H,2H,2H-perfluorodecane



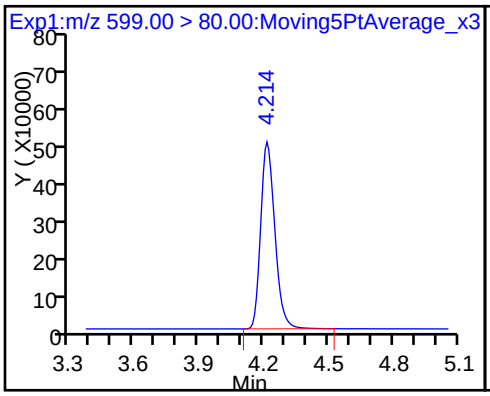
D 27 d3-NMeFOSAA



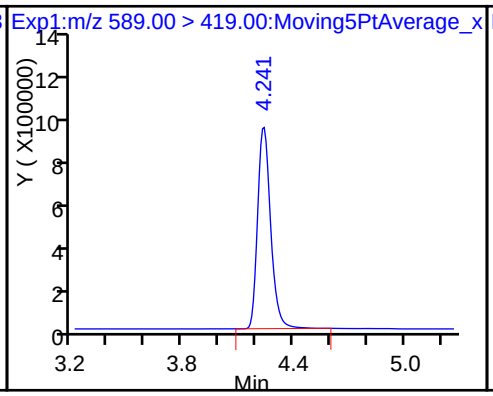
28 N-methyl perfluorooctane sulfonami



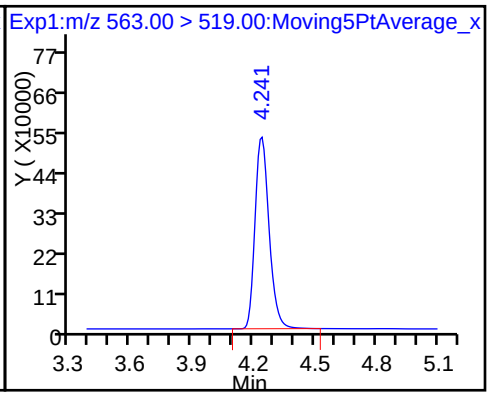
29 Perfluorodecane Sulfonic acid



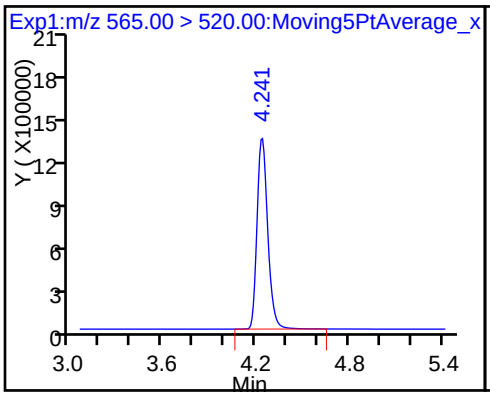
D 32 d5-NEtFOSAA



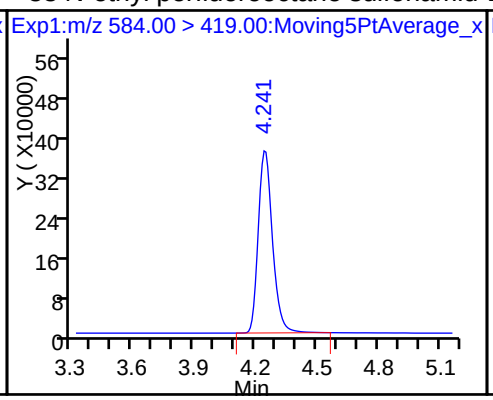
31 Perfluoroundecanoic acid



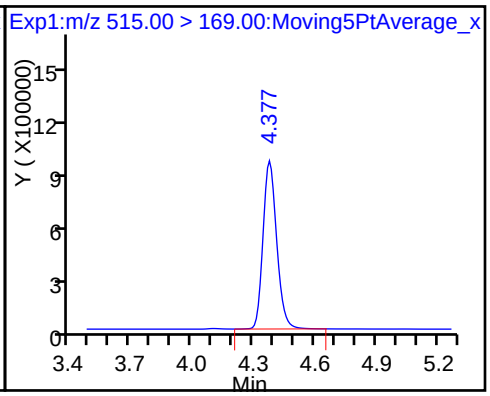
D 30 13C2 PFUnA



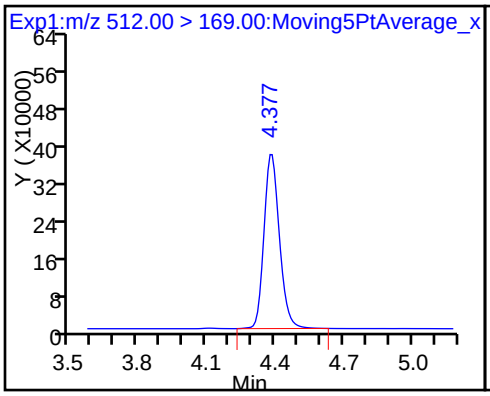
33 N-ethyl perfluorooctane sulfonamid



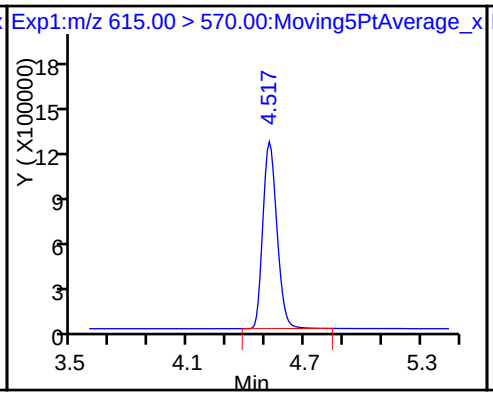
D 34 d-N-MeFOSA-M



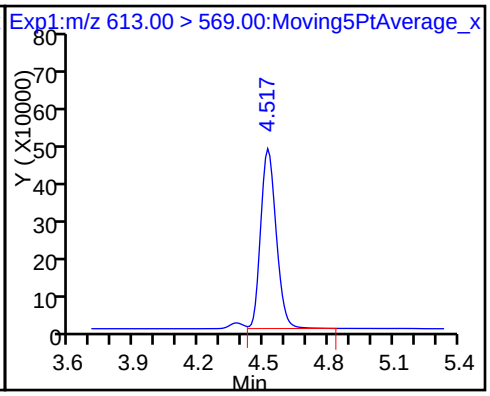
35 MeFOSA



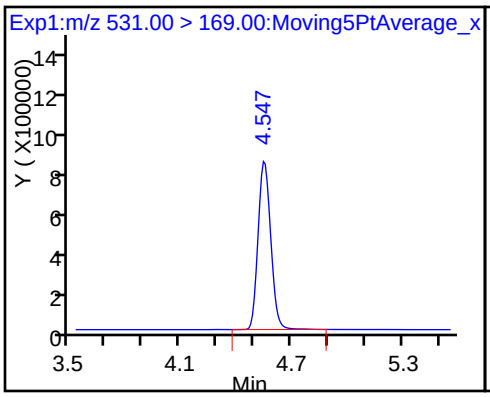
D 36 13C2 PFDoA



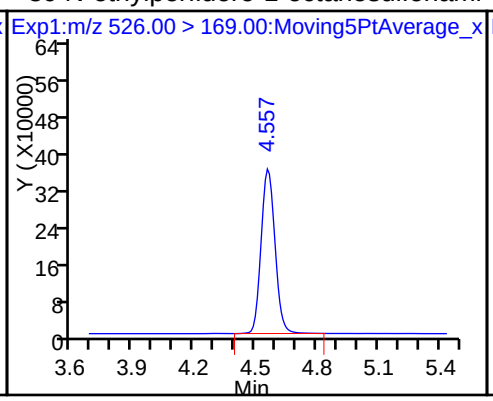
37 Perfluorododecanoic acid



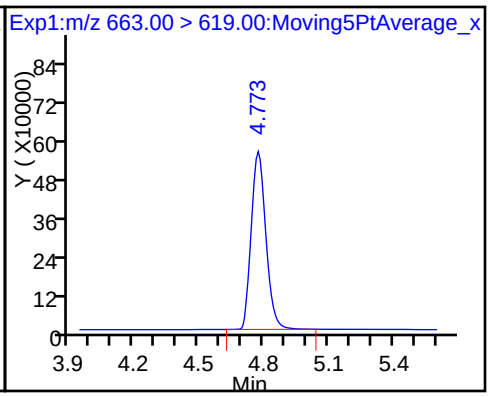
D 38 d-N-EtFOSA-M



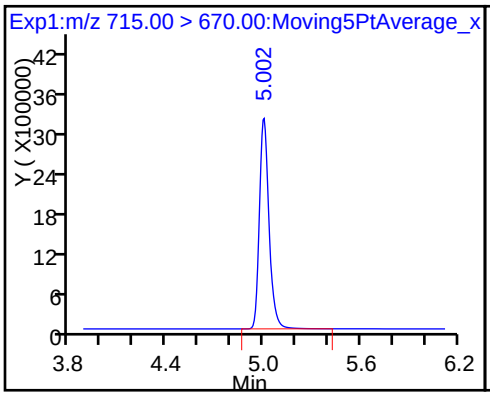
39 N-ethylperfluoro-1-octanesulfonami



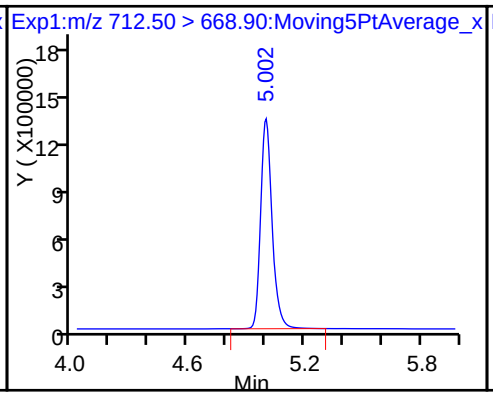
41 Perfluorotridecanoic acid



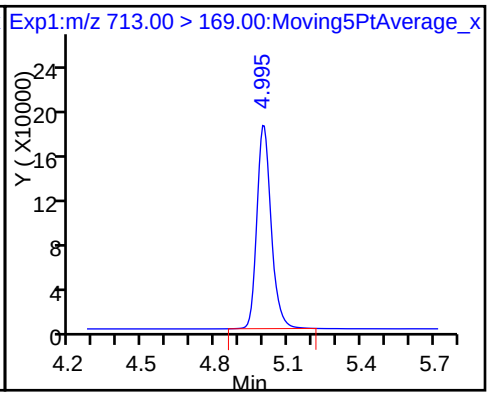
D 43 13C2-PFTeDA



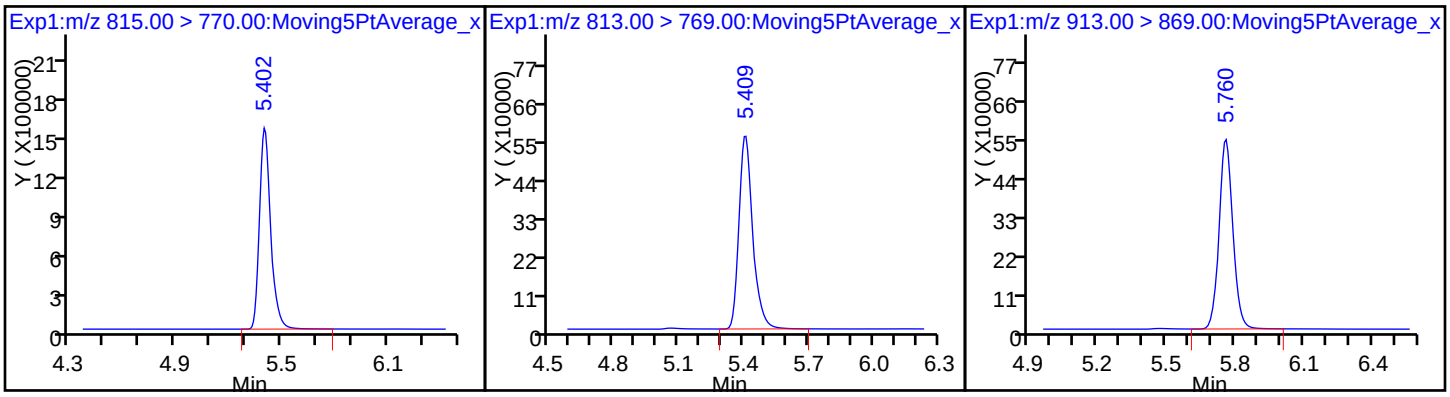
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 44 13C2-PFHxDA | 45 Perfluorohexadecanoic acid | 46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_007.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 14:02:45 ALS Bottle#: 32 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L5-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub19

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:21 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 14:54:28

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.757	1.746	0.011		16598029	50.3		101	178721	
2 Perfluorobutyric acid										
212.90 > 169.00	1.757	1.749	0.008	1.000	15690403	51.5		103	18433	
D 3 13C5-PFPeA										
267.90 > 223.00	2.074	2.073	0.001		10835426	49.3		98.5	42448	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.074	2.074	0.0	1.000	11608590	51.5		103	4354	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.110	2.111	-0.001	1.000	17899004	48.7		110		
298.90 > 99.00	2.110	2.111	-0.001	1.000	7342663		2.44(0.00-0.00)	110		
D 47 13C3-PFBS										
301.90 > 83.00	2.110	2.111	-0.001		271280	NC				
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.362	2.373	-0.011	1.000	3482714	47.9		103		
D 7 13C2 PFHxA										
315.00 > 270.00	2.394	2.413	-0.019		9242274	47.9		95.9	28030	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.394	2.415	-0.021	1.000	9799146	52.4		105	16882	
D 9 13C4-PFHpA										
367.00 > 322.00	2.767	2.792	-0.025		8651566	48.6		97.3	23262	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.767	2.793	-0.026	1.000	9303637	51.3		103	3256	
D 11 18O2 PFHxS										
403.00 > 84.00	2.777	2.803	-0.026		10657786	46.2		97.7	16613	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.777	2.803	-0.026	1.000	10722835	43.4		95.4		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.118	3.151	-0.033		4011052	45.2		95.1		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.118	3.153	-0.035	1.000	3942830	47.3		99.7		
* 62 13C2-PFOA										
415.00 > 370.00	3.141	3.174	-0.033		8752967	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.141	3.176	-0.035		8565005	47.5		95.0	21021	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.141	3.178	-0.037	1.000	9342547	51.0		102	2884	
413.00 > 169.00	3.141	3.178	-0.037	1.000	5234883		1.78(0.90-1.10)	102	9079	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.141	3.179	-0.038	1.000	9604345	49.7		104		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.507	3.481	0.026	1.000	8759357	49.0		106	14172	
499.00 > 99.00	3.507	3.481	0.026	1.000	1881570		4.66(0.90-1.10)	106	7210	
D 18 13C4 PFOS										
503.00 > 80.00	3.507	3.546	-0.039		8094745	45.4		95.1	11925	
D 19 13C5 PFNA										
468.00 > 423.00	3.513	3.555	-0.042		7159866	46.9		93.8	16388	
20 Perfluorononanoic acid										
463.00 > 419.00	3.520	3.557	-0.037	1.000	7504157	52.3		105	11155	
D 21 13C8 FOSA										
506.00 > 78.00	3.843	3.888	-0.045		14365370	47.9		95.7	14663	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.851	3.889	-0.038	1.000	14183021	50.9		102	12501	
D 26 M2-8:2FTS										
529.00 > 509.00	3.860	3.903	-0.043		3584998	43.8		91.4		
D 23 13C2 PFDA										
515.00 > 470.00	3.868	3.908	-0.040		6880095	45.6		91.3	9486	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.868	3.909	-0.041	1.000	6837691	52.2		104	11934	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.860	3.903	-0.043	1.000	3417126	47.0		98.1		
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.021	4.064	-0.043		4469383	50.8		102		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.029	4.067	-0.038	1.002	4710158	51.2		102		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.165	4.202	-0.037	1.000	6004418	53.8		112		
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.181	4.225	-0.044		4311420	49.4		98.8		
D 30 13C2 PFUnA										
565.00 > 520.00	4.190	4.226	-0.036		5910135	49.3		98.6	11505	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.190	4.226	-0.036	1.000	6001124	47.7		95.3	9093	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.190	4.233	-0.043	1.002	4185883	51.4		103		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.331	4.364	-0.033		4375900	49.4		98.8		
35 MeFOSA										
512.00 > 169.00	4.331	4.370	-0.039	1.000	4486631	53.2		106		
37 Perfluorododecanoic acid										
613.00 > 569.00	4.469	4.509	-0.040	1.000	5829140	49.0		98.0	2201	
D 36 13C2 PFDoA										
615.00 > 570.00	4.469	4.509	-0.040		6222171	50.0		100.0	5426	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.498	4.540	-0.042		4147810	50.1		100		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.508	4.550	-0.042	1.000	4324767	52.1		104		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.716	4.762	-0.046	1.000	6652200	53.5		107	4731	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.947	4.988	-0.041	1.000	13877084	53.8		108	7570	
713.00 > 169.00	4.947	4.988	-0.041	1.000	1916664		7.24(0.00-0.00)	108	6121	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.947	4.988	-0.041		13066614	50.8		102	12166	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.348	5.391	-0.043		6657793	48.6		97.3	5621	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.355	5.395	-0.040	1.000	5980612	50.5		101	3813	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.701	5.745	-0.044	1.000	5210924	47.3		94.6	5184	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L5_00005 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:21 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_007.d

Injection Date: 06-Jun-2017 14:02:45 Instrument ID: A8_N

Lims ID: IC L5 Full

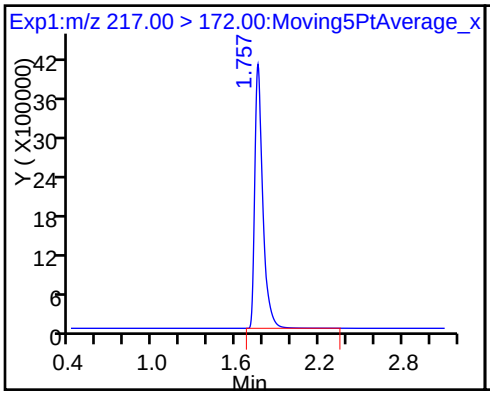
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 32 Worklist Smp#: 6

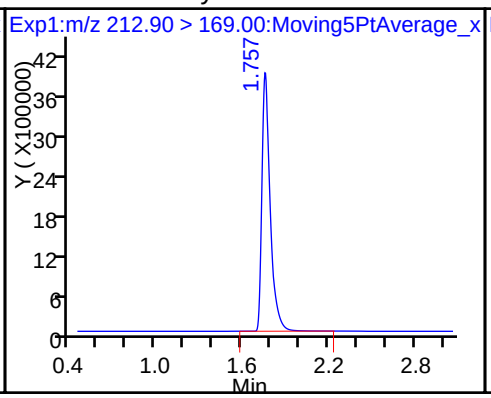
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

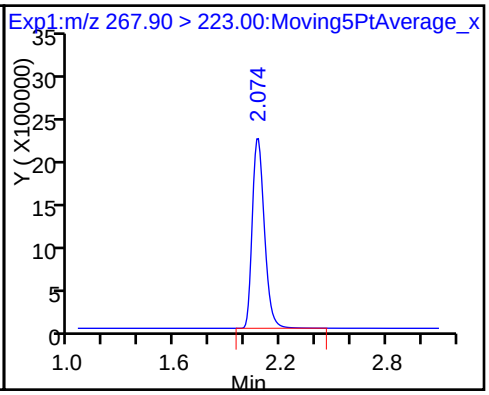
D 1 13C4 PFBA



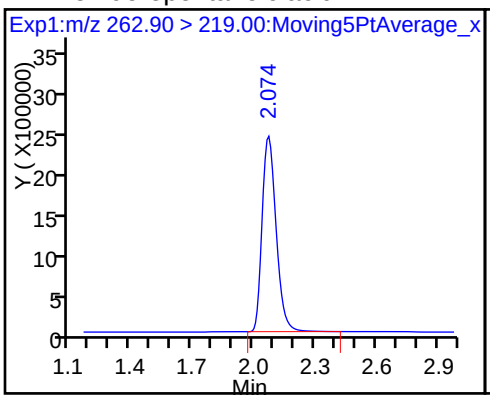
2 Perfluorobutyric acid



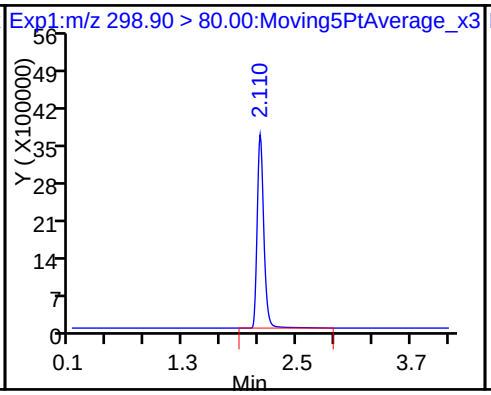
D 3 13C5-PFPeA



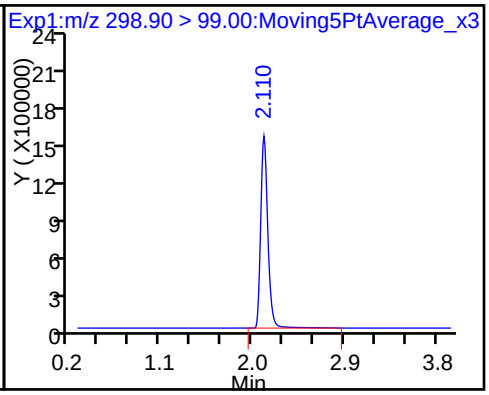
4 Perfluoropentanoic acid



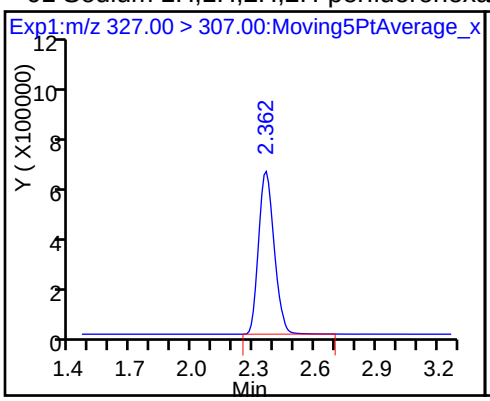
5 Perfluorobutanesulfonic acid



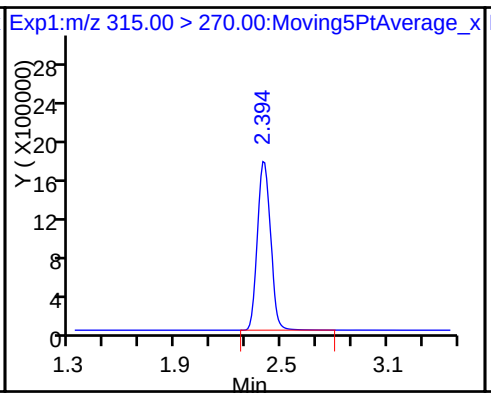
5 Perfluorobutanesulfonic acid



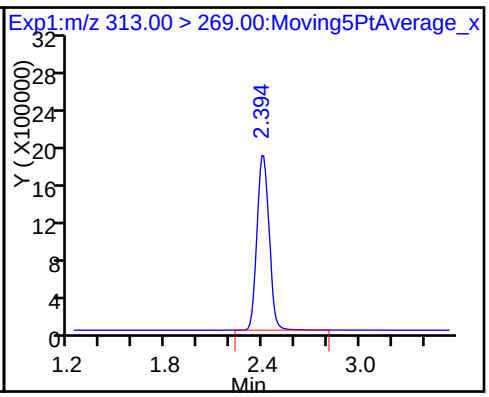
61 Sodium 1H,1H,2H,2H-perfluorohexa



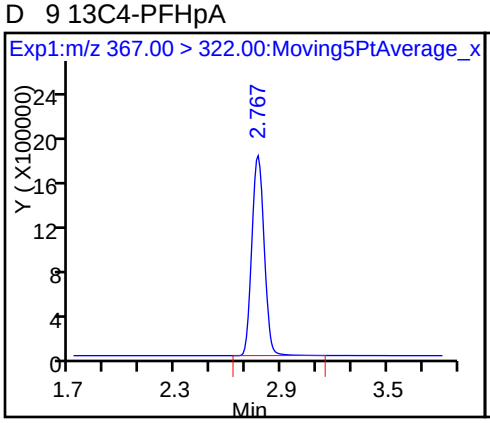
De 7 13C2 PFHxA



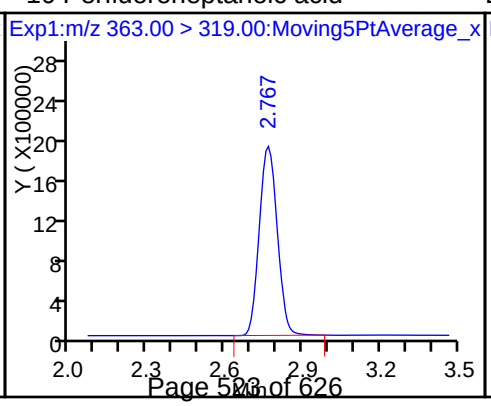
6 Perfluorohexanoic acid



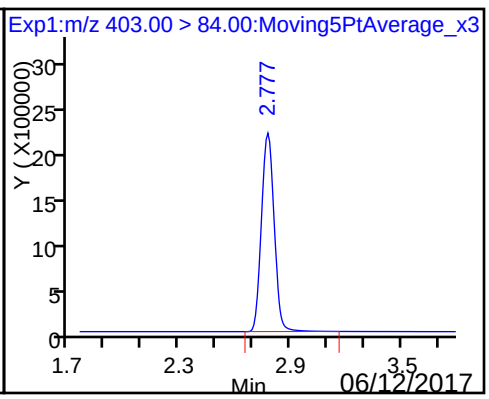
D 9 13C4-PFHpA



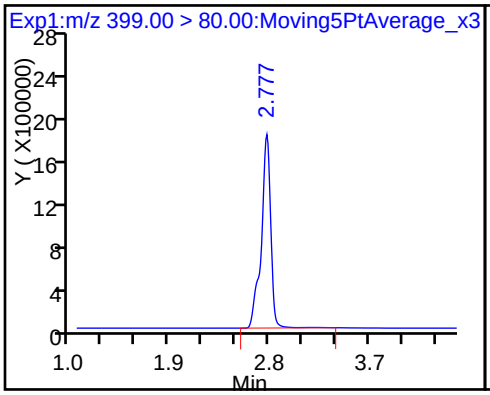
10 Perfluoroheptanoic acid



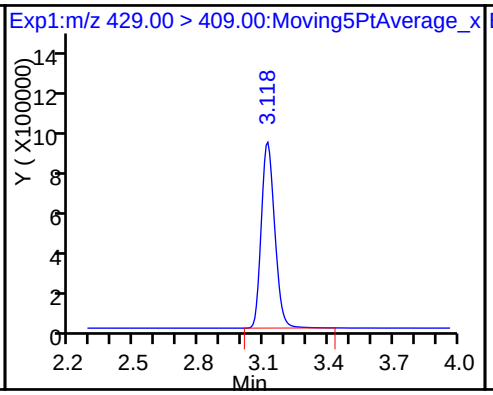
D 11 18O2 PFHxS



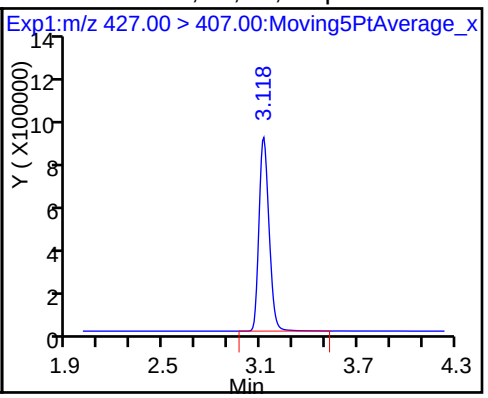
8 Perfluorohexanesulfonic acid



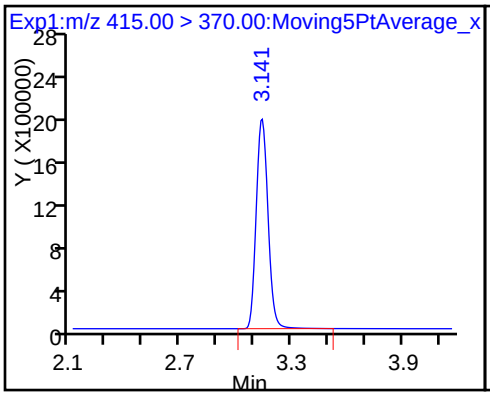
D 12 M2-6:2FTS



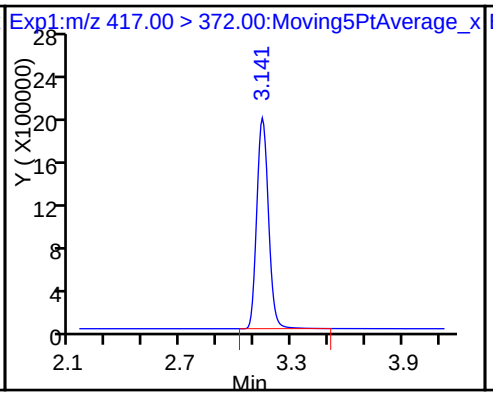
13 Sodium 1H,1H,2H,2H-perfluorooctane



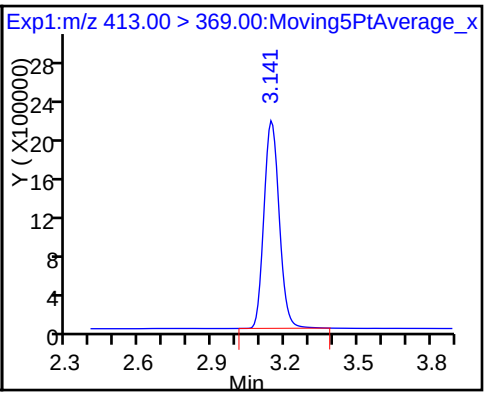
* 62 13C2-PFOA



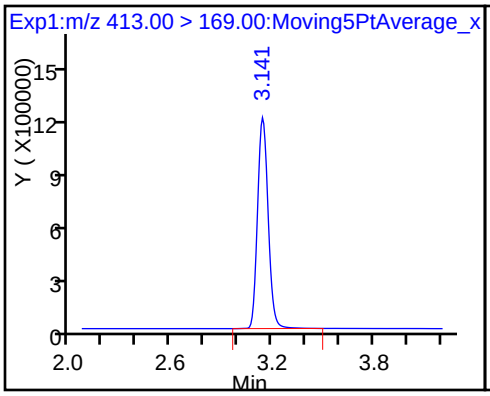
D 14 13C4 PFOA



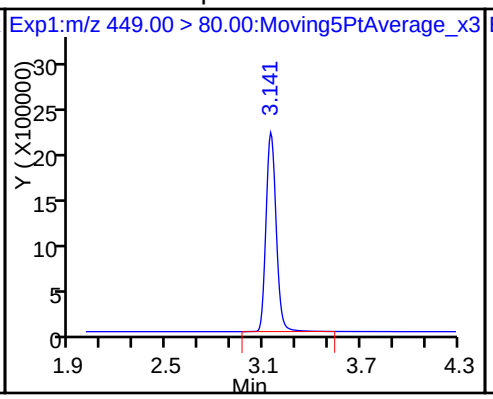
15 Perfluorooctanoic acid



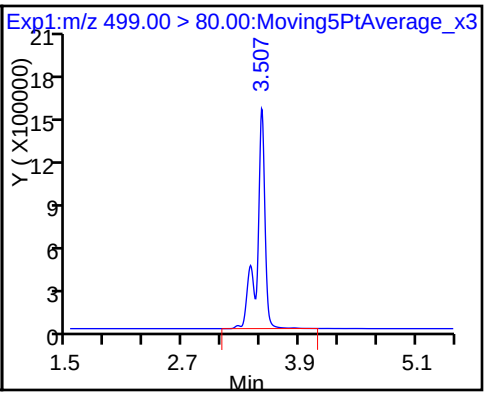
15 Perfluorooctanoic acid



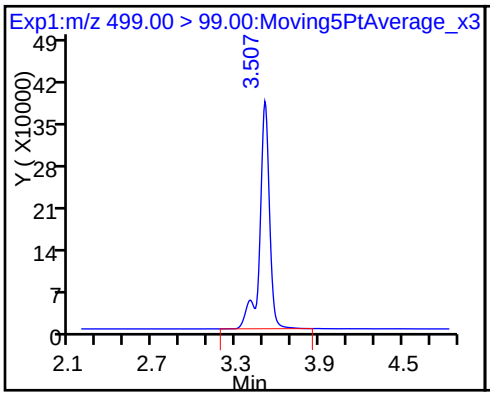
16 Perfluoroheptanesulfonic Acid



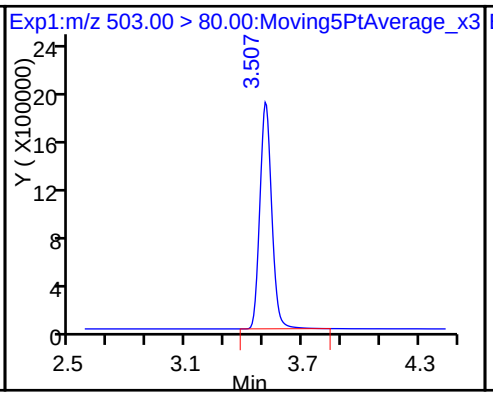
17 Perfluorooctane sulfonic acid



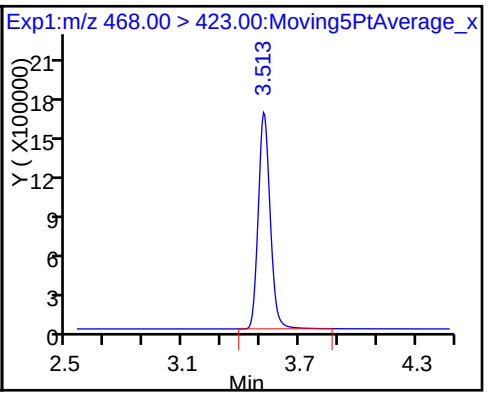
17 Perfluorooctane sulfonic acid



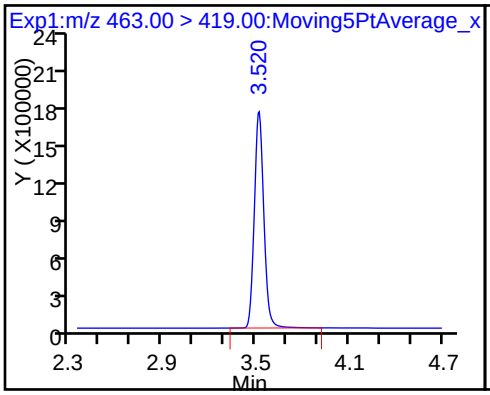
D 18 13C4 PFOS



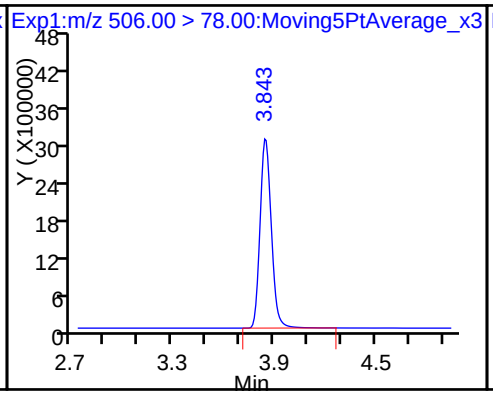
D 19 13C5 PFNA



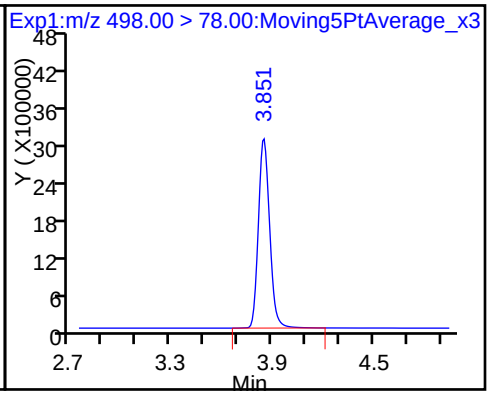
20 Perfluorononanoic acid



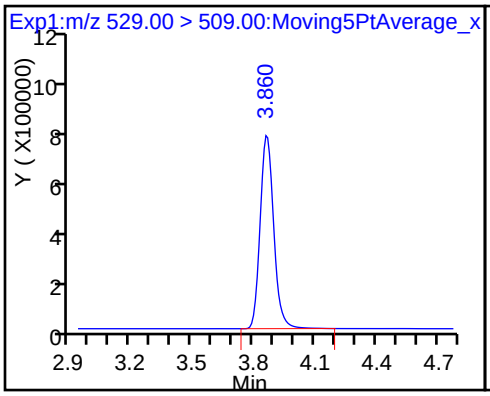
D 21 13C8 FOSA



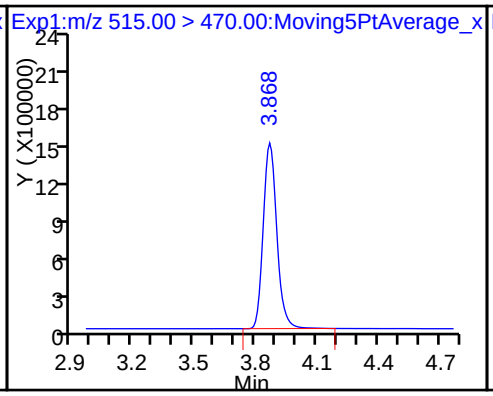
22 Perfluorooctane Sulfonamide



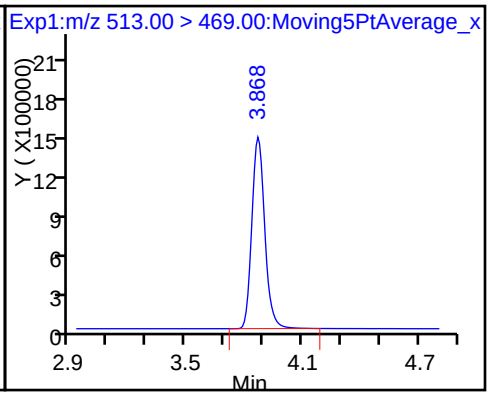
D 26 M2-8:2FTS



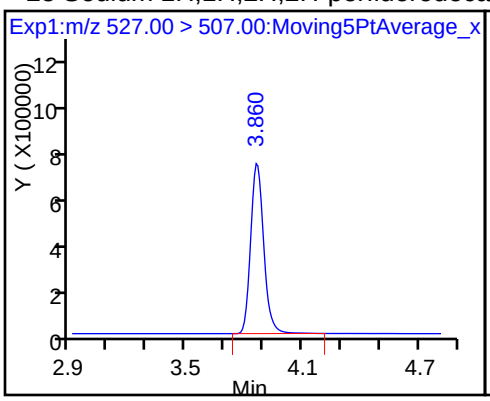
D 23 13C2 PFDA



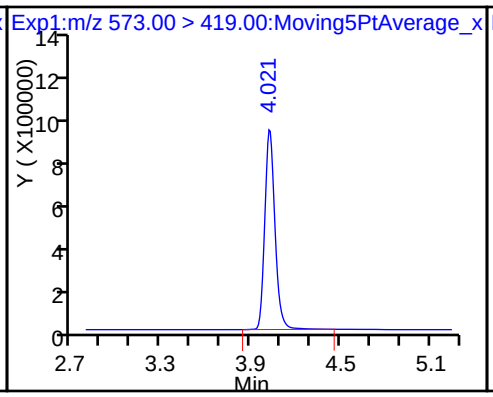
24 Perfluorodecanoic acid



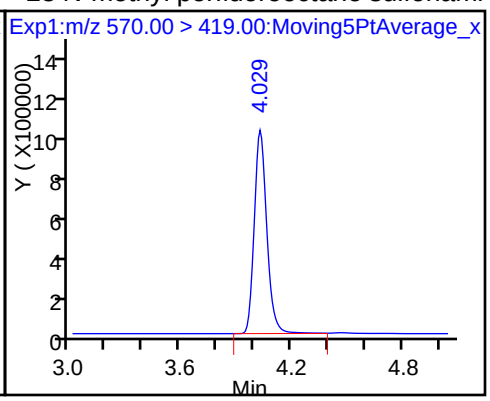
25 Sodium 1H,1H,2H,2H-perfluorodecane



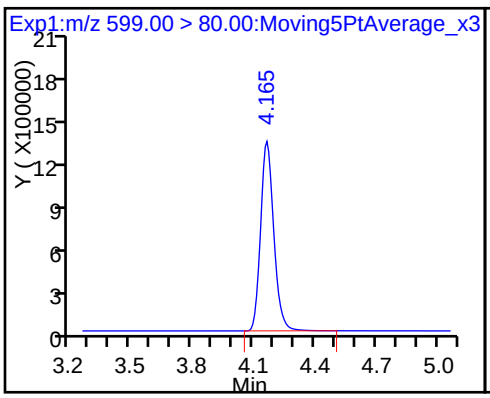
D 27 d3-NMeFOSAA



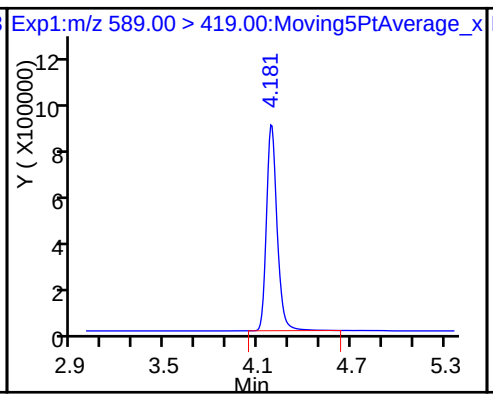
28 N-methyl perfluorooctane sulfonami



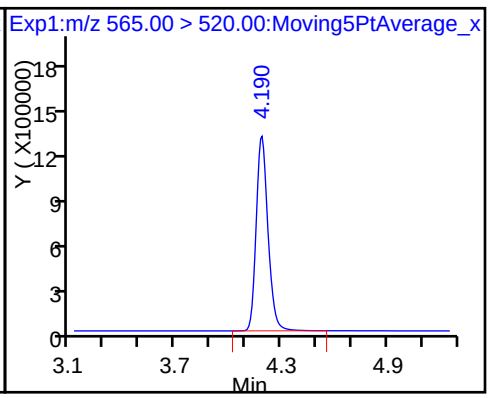
29 Perfluorodecane Sulfonic acid



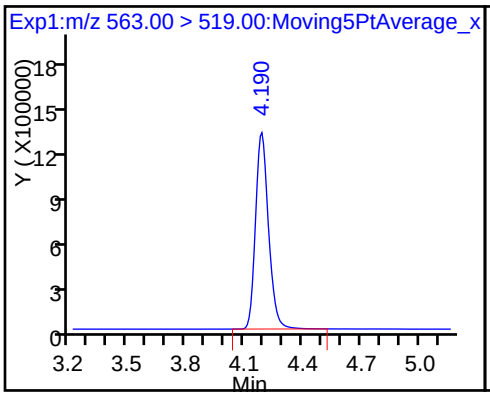
D 32 d5-NEtFOSAA



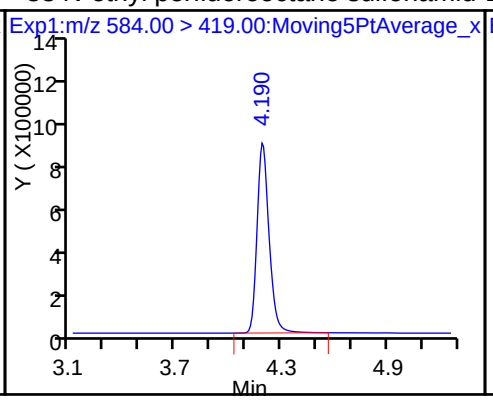
D 30 13C2 PFUnA



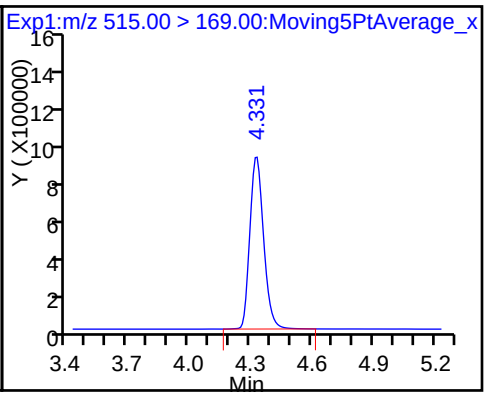
31 Perfluoroundecanoic acid



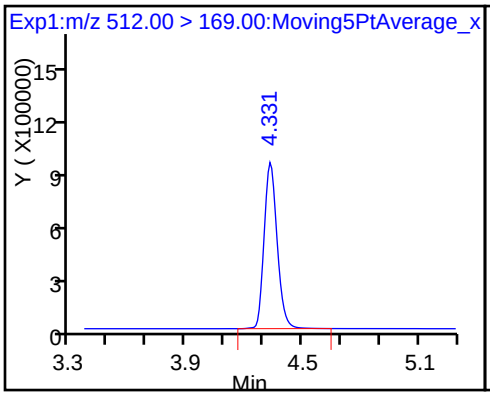
33 N-ethyl perfluorooctane sulfonamid



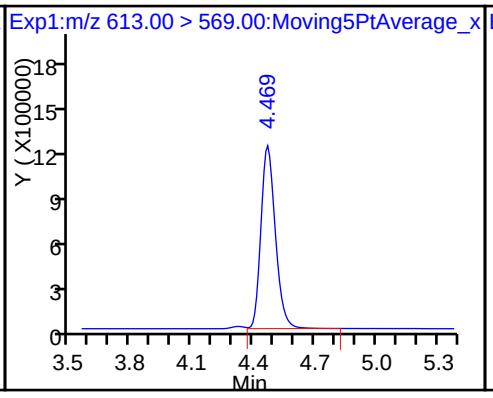
D 34 d-N-MeFOSA-M



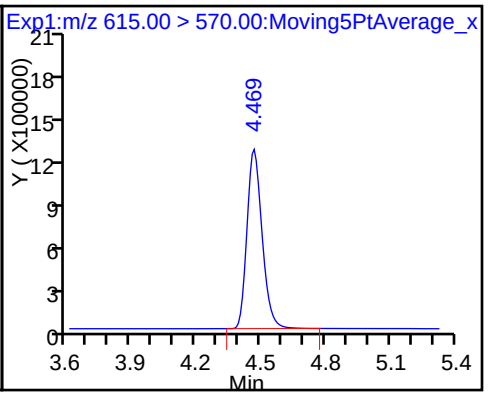
35 MeFOSA



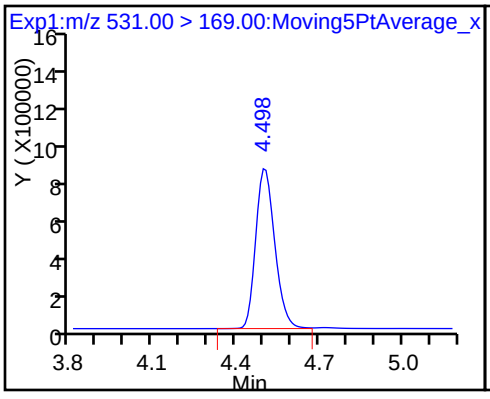
37 Perfluorododecanoic acid



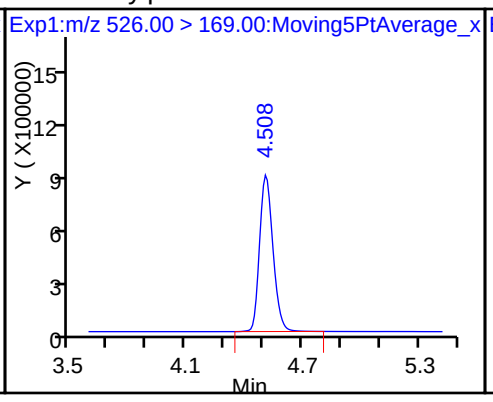
D 36 13C2 PFDoA



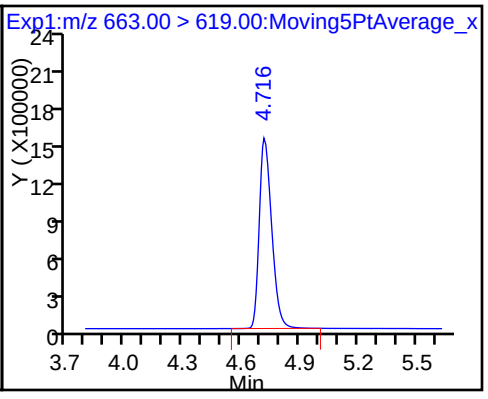
D 38 d-N-EtFOSA-M



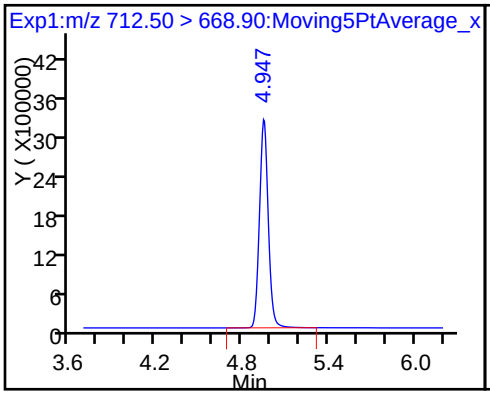
39 N-ethylperfluoro-1-octanesulfonami



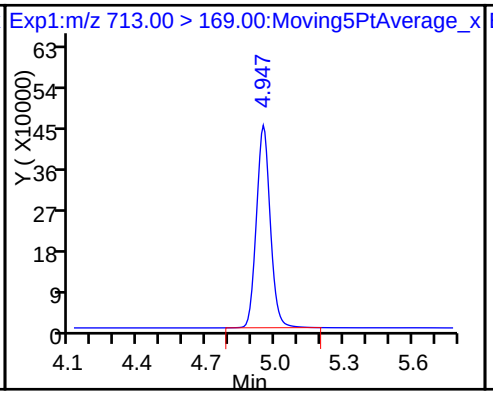
41 Perfluorotridecanoic acid



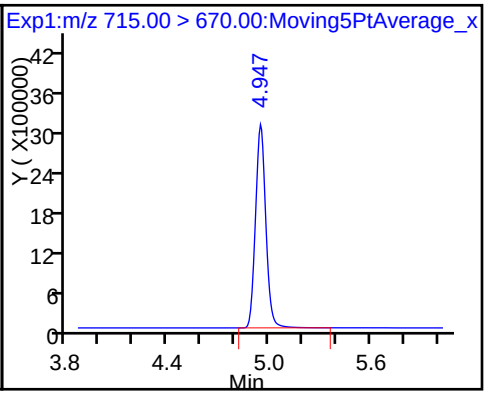
42 Perfluorotetradecanoic acid



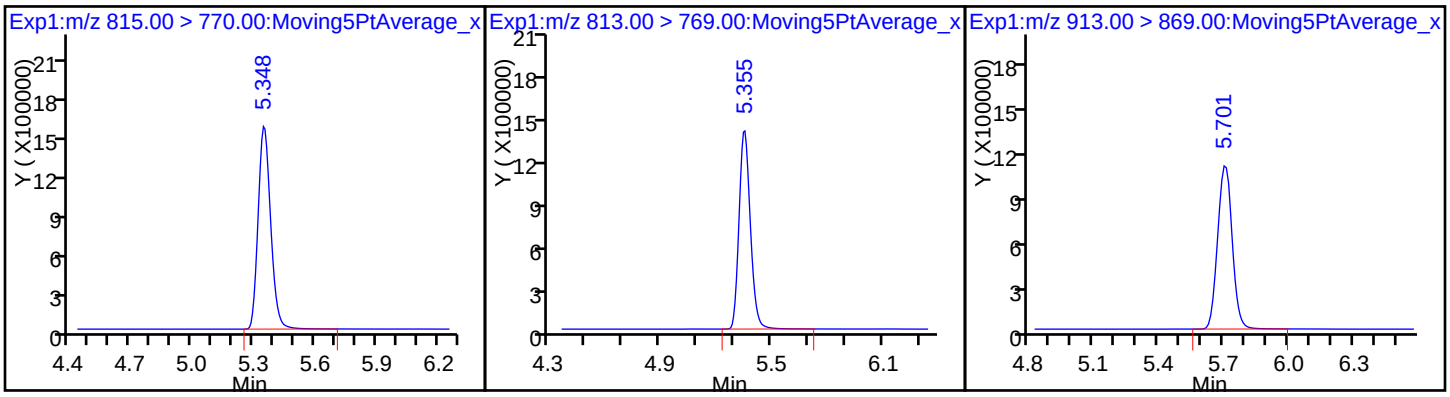
42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



D 44 13C2-PFHxDA | 45 Perfluorohexadecanoic acid | 46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_008.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 14:10:26 ALS Bottle#: 33 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L6-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub19

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:24 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 14:54:46

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.715	1.746	-0.031		15436785	46.8		93.6	46809	
2 Perfluorobutyric acid										
212.90 > 169.00	1.719	1.749	-0.030	1.000	27491311	96.9		96.9	16262	
D 3 13C5-PFPeA										
267.90 > 223.00	2.042	2.073	-0.031		10478326	47.6		95.3	37185	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.042	2.074	-0.032	1.000	21498244	98.6		98.6	7791	
D 47 13C3-PFBS										
301.90 > 83.00	2.087	2.111	-0.024		259832	NC				
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.087	2.111	-0.024	1.000	30621227	88.3		99.9		
298.90 > 99.00	2.087	2.111	-0.024	1.000	13713346		2.23(0.00-0.00)	99.9		
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.355	2.373	-0.018	1.000	6808579	95.9		103		
D 7 13C2 PFHxA										
315.00 > 270.00	2.398	2.413	-0.015		9000471	46.7		93.3	25763	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.398	2.415	-0.017	1.000	18608789	102.1		102	21484	
D 9 13C4-PFHpA										
367.00 > 322.00	2.778	2.792	-0.014		8118133	45.6		91.3	29341	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.787	2.793	-0.006	1.000	17384856	102.2		102	5962	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.795	2.803	-0.008	1.000	20846360	89.6		98.4		
D 11 18O2 PFHxS										
403.00 > 84.00	2.795	2.803	-0.008		10047436	43.6		92.1	19220	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.148	3.151	-0.003		3917803	44.1		92.8		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.148	3.153	-0.005	1.000	7871580	96.6		102		
* 62 13C2-PFOA										
415.00 > 370.00	3.170	3.174	-0.004		8164671	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.170	3.176	-0.006		8283659	45.9		91.9	26857	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.177	3.178	-0.001	1.000	17433456	98.5		98.5	5012	
413.00 > 169.00	3.170	3.178	-0.008	0.998	10332505		1.69(0.90-1.10)	98.5	14786	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.177	3.179	-0.002	1.000	18606449	97.4		102		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.431	3.481	-0.050	1.000	17109959	96.8		104	1463	
499.00 > 99.00	3.546	3.481	0.065	1.034	3717551		4.60(0.90-1.10)	104	8989	
D 18 13C4 PFOS										
503.00 > 80.00	3.546	3.546	0.0		8006290	44.9		94.0	27184	
D 19 13C5 PFNA										
468.00 > 423.00	3.559	3.555	0.004		7155137	46.9		93.7	23746	
20 Perfluorononanoic acid										
463.00 > 419.00	3.559	3.557	0.002	1.000	14375092	100.2		100	20834	
D 21 13C8 FOSA										
506.00 > 78.00	3.892	3.888	0.004		13943325	46.4		92.9	13180	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.892	3.889	0.003	1.000	26718233	98.8		98.8	39002	
D 26 M2-8:2FTS										
529.00 > 509.00	3.907	3.903	0.004		4103773	50.1		105		
D 23 13C2 PFDA										
515.00 > 470.00	3.914	3.908	0.006		7113155	47.2		94.3	12460	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.914	3.909	0.005	1.000	13809842	101.9		102	21720	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.907	3.904	0.003	1.000	7689657	92.4		96.4		
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.069	4.064	0.005		4166659	47.3		94.6		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.069	4.067	0.002	1.000	8990148	104.9		105		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.204	4.202	0.002	1.000	11283031	102.3		106		
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.229	4.225	0.004		3831476	43.9		87.8		
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.229	4.226	0.003	1.000	10958427	96.5		96.5	17817	
D 30 13C2 PFUnA										
565.00 > 520.00	4.229	4.226	0.003		5329123	44.5		88.9	8219	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.238	4.233	0.005	1.002	7444963	102.9		103		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.366	4.364	0.002		4474532	50.5		101		
35 MeFOSA										
512.00 > 169.00	4.375	4.370	0.005	1.000	8945690	103.8		104		
D 36 13C2 PFDoA										
615.00 > 570.00	4.516	4.509	0.007		6303717	50.6		101	6804	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.516	4.509	0.007	1.000	12226133	101.4		101	3870	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.545	4.540	0.005		4124361	49.8		99.7		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.555	4.550	0.005	1.000	8820848	106.9		107		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.772	4.762	0.010	1.000	11758359	93.3		93.3	4980	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.994	4.988	0.006		12360442	48.1		96.2	13822	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.994	4.988	0.006	1.000	24586938	94.1		94.1	11584	
713.00 > 169.00	4.994	4.988	0.006	1.000	3590205		6.85(0.00-0.00)	94.1	10499	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.401	5.391	0.010		6548753	47.9		95.7	6011	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.401	5.395	0.006	1.000	11604953	97.5		97.5	4554	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.751	5.745	0.006	1.000	10779764	96.6		96.6	9450	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L6_00005 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:24 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_008.d

Injection Date: 06-Jun-2017 14:10:26 Instrument ID: A8_N

Lims ID: IC L6 Full

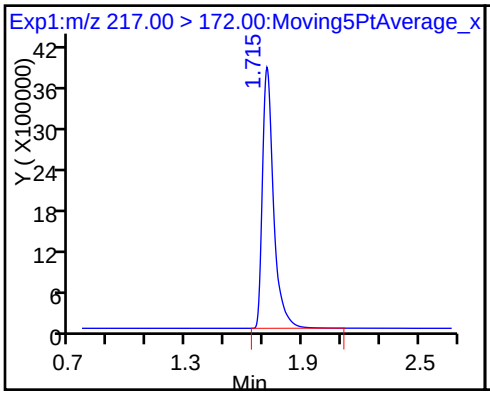
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 33 Worklist Smp#: 7

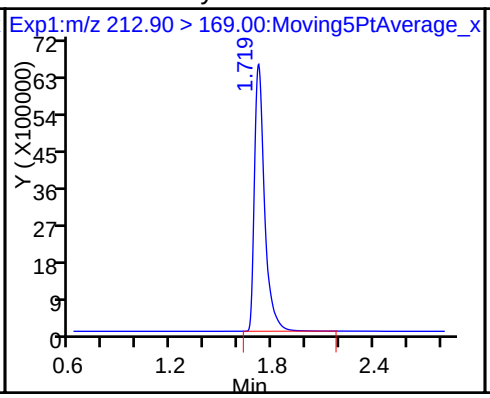
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

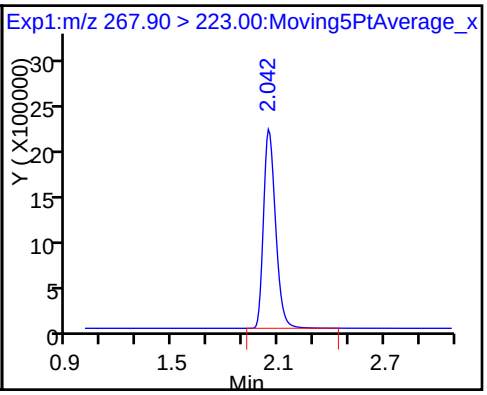
D 1 13C4 PFBA



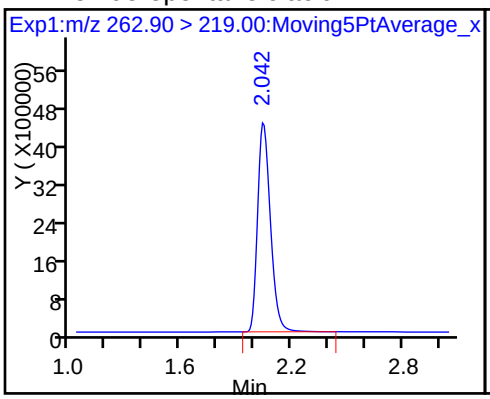
2 Perfluorobutyric acid



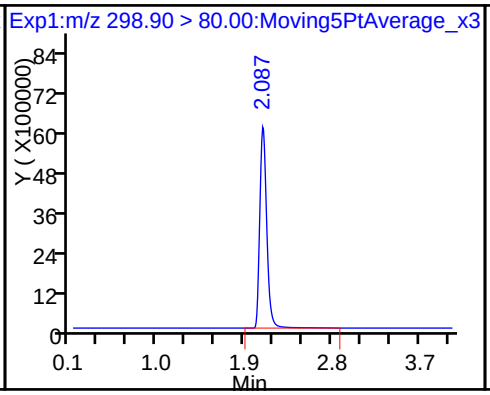
D 3 13C5-PFPeA



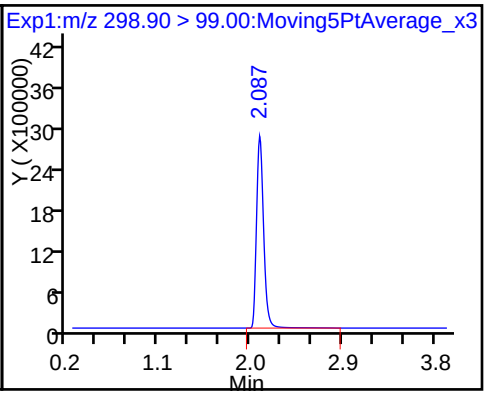
4 Perfluoropentanoic acid



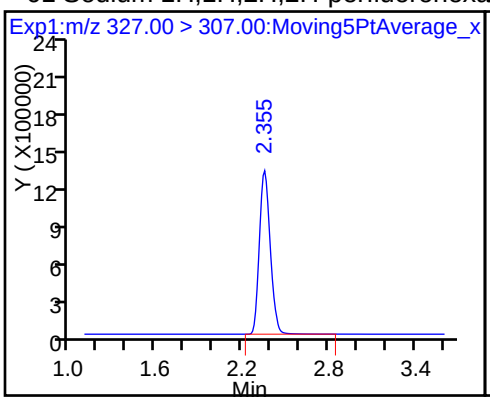
5 Perfluorobutanesulfonic acid



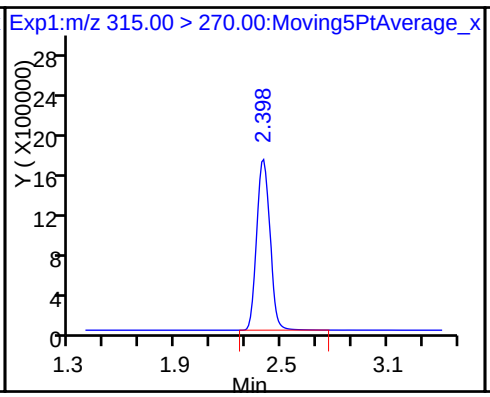
5 Perfluorobutanesulfonic acid



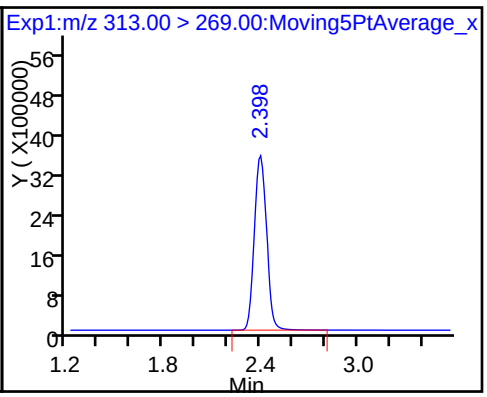
61 Sodium 1H,1H,2H,2H-perfluorohexa



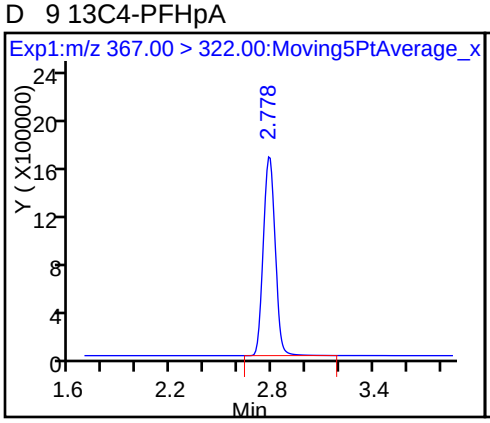
D 7 13C2 PFHxA



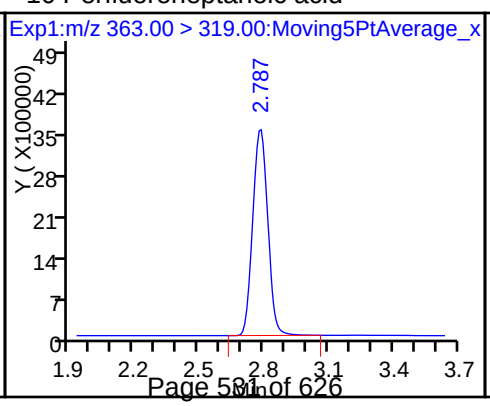
6 Perfluorohexanoic acid



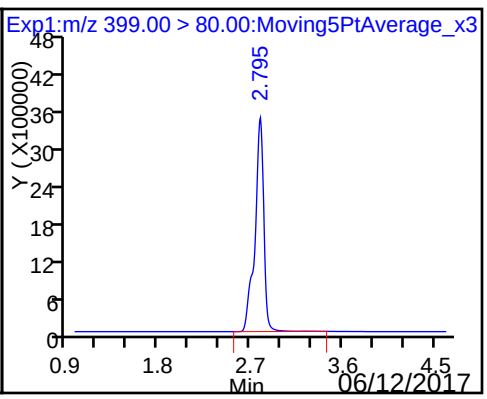
D 9 13C4-PFHpA



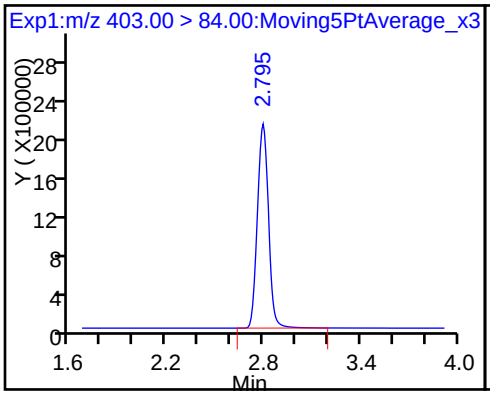
10 Perfluoroheptanoic acid



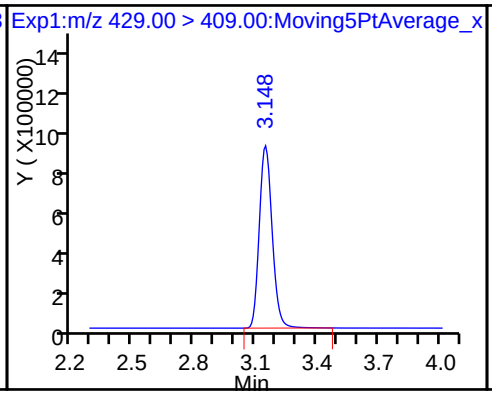
8 Perfluorohexanesulfonic acid



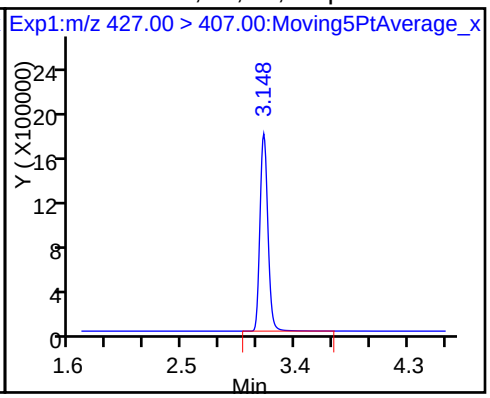
D 11 18O2 PFHxS



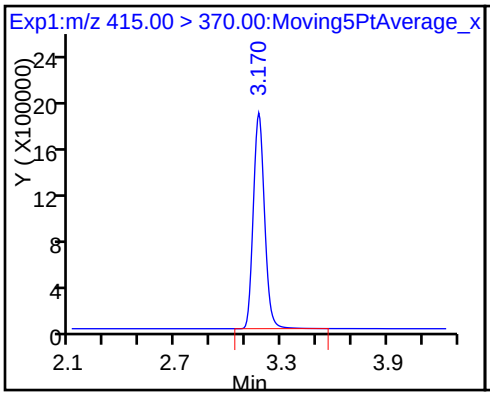
D 12 M2-6:2FTS



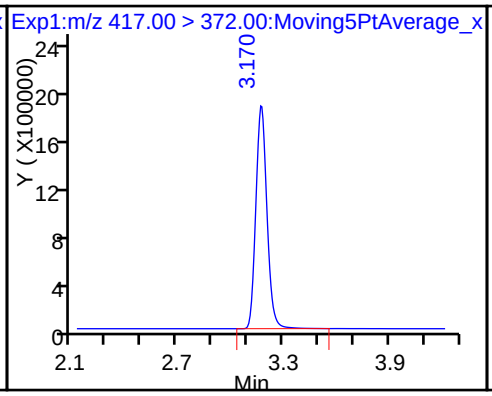
13 Sodium 1H,1H,2H,2H-perfluorooctane



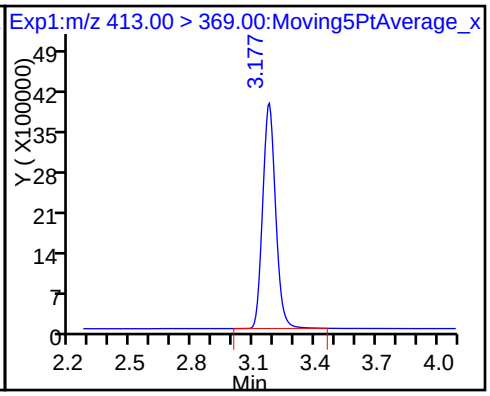
* 62 13C2-PFOA



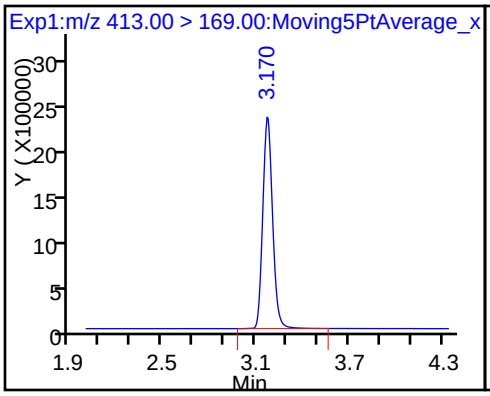
D 14 13C4 PFOA



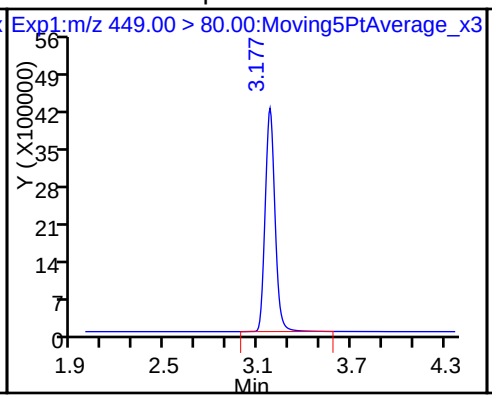
15 Perfluorooctanoic acid



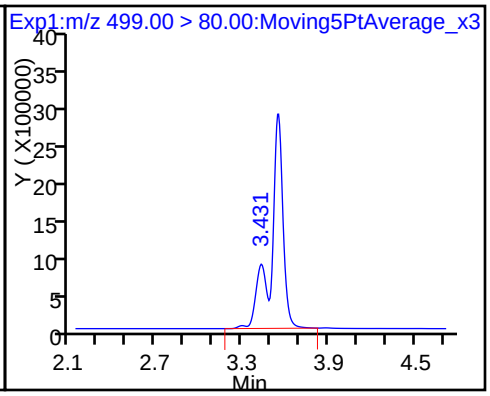
15 Perfluorooctanoic acid



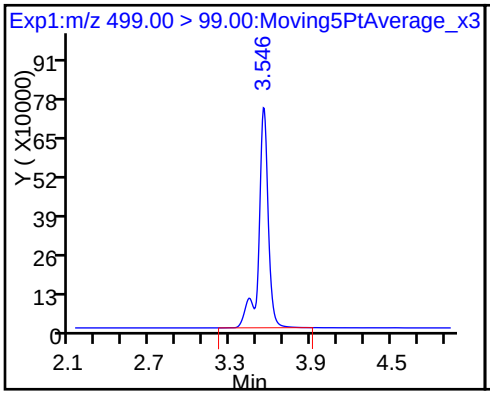
16 Perfluoroheptanesulfonic Acid



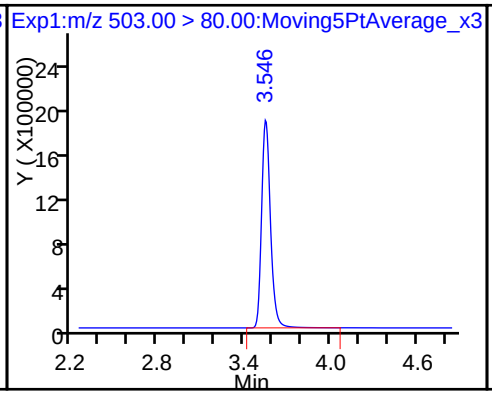
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



D 18 13C4 PFOS



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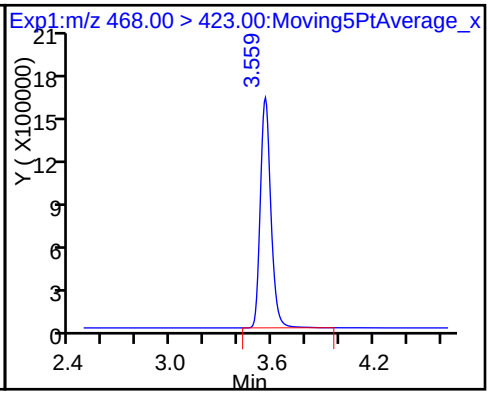
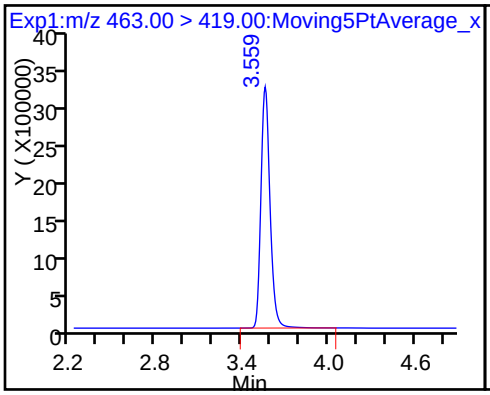
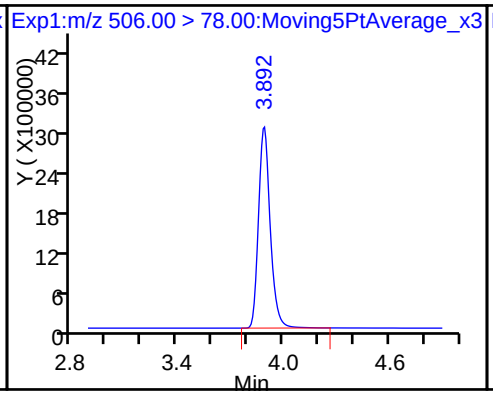


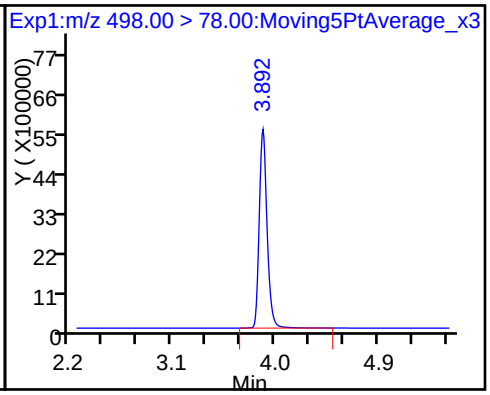
20 Perfluorononanoic acid



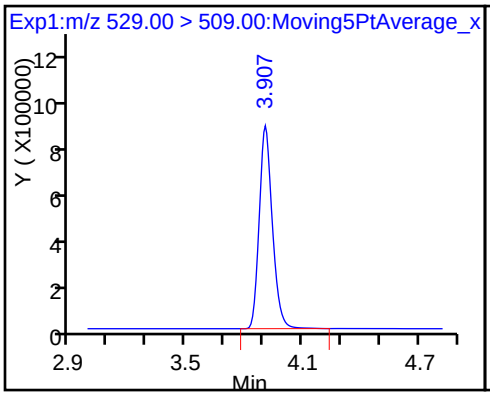
D 21 13C8 FOSA



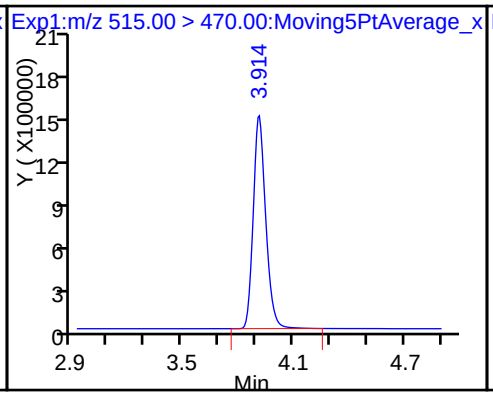
22 Perfluorooctane Sulfonamide



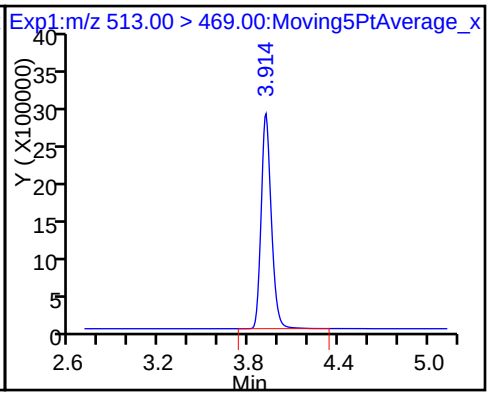
D 26 M2-8:2FTS



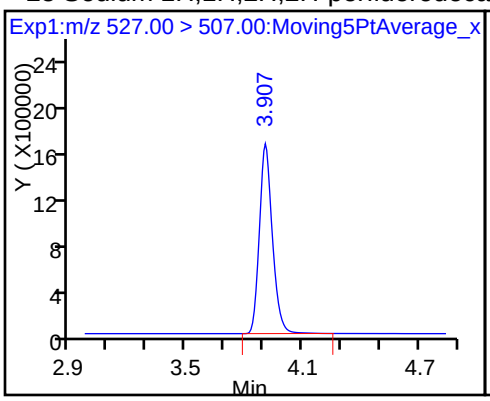
D 23 13C2 PFDA



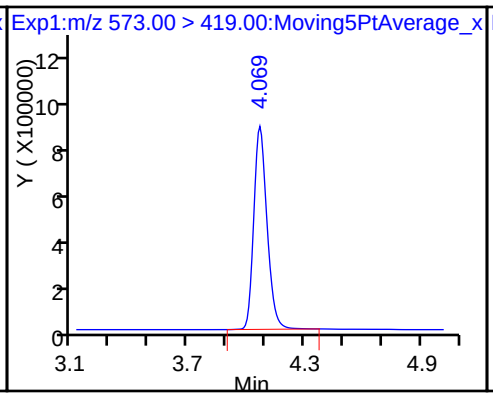
24 Perfluorodecanoic acid



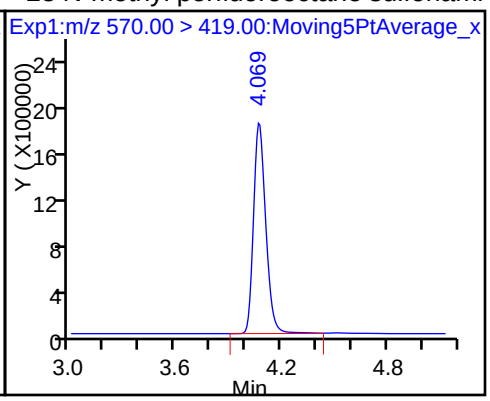
25 Sodium 1H,1H,2H,2H-perfluorodecane



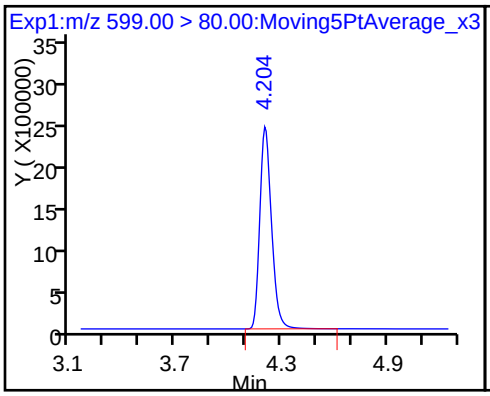
D 27 d3-NMeFOSAA



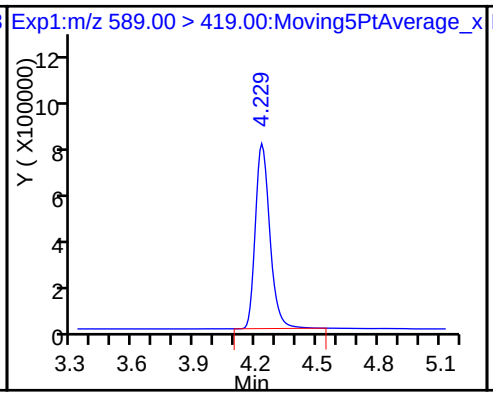
28 N-methyl perfluorooctane sulfonami



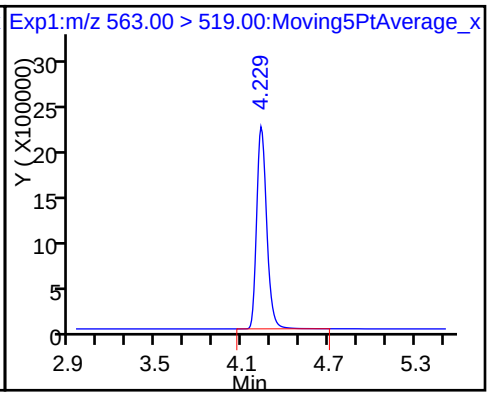
29 Perfluorodecane Sulfonic acid



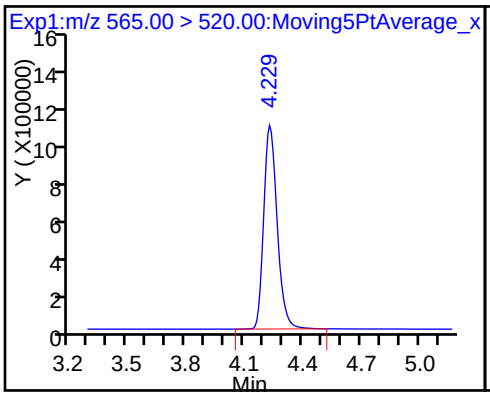
D 32 d5-NEtFOSAA



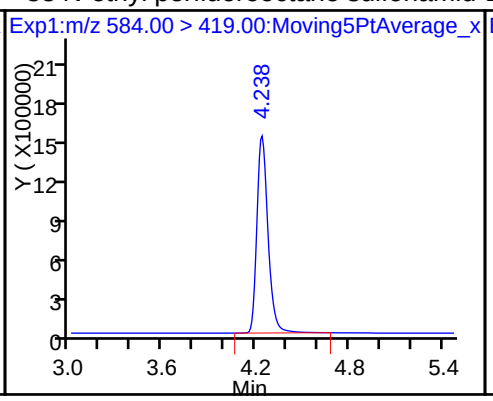
31 Perfluoroundecanoic acid



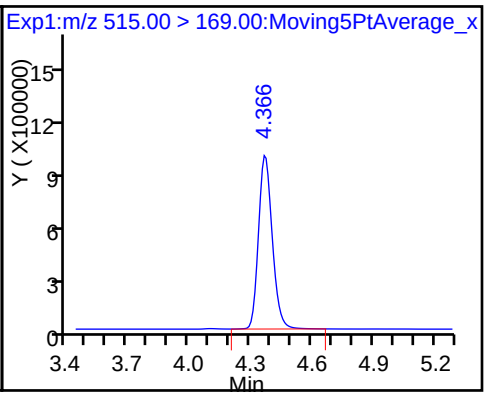
D 30 13C2 PFUnA



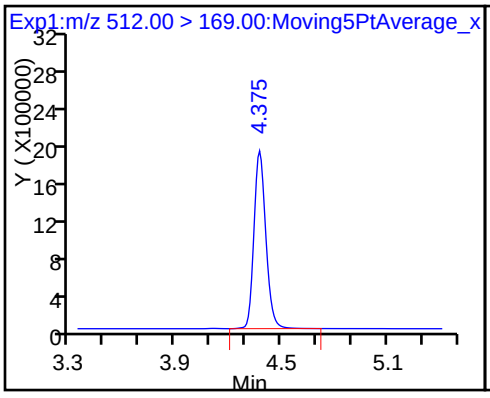
33 N-ethyl perfluorooctane sulfonamid



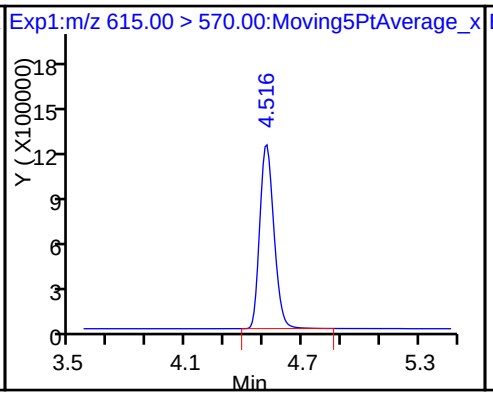
D 34 d-N-MeFOSA-M



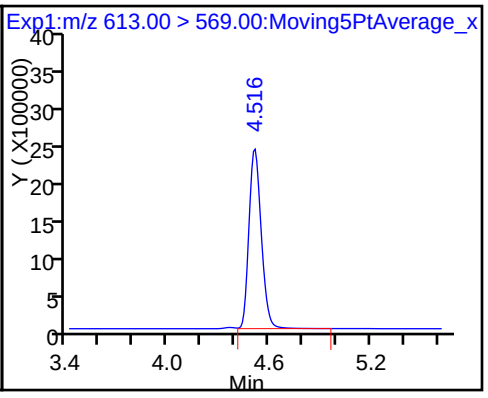
35 MeFOSA



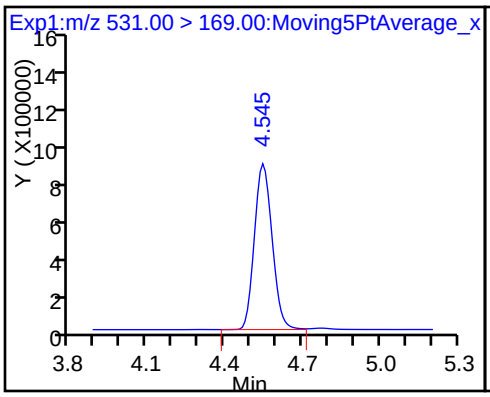
D 36 13C2 PFDoA



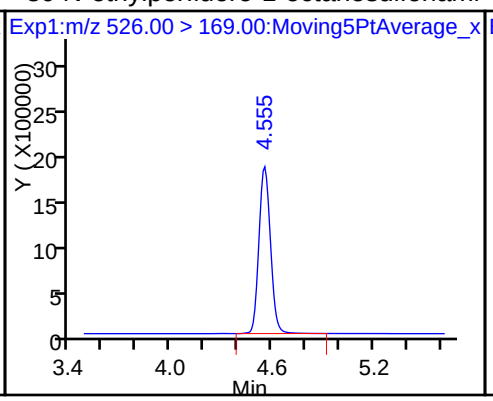
37 Perfluorododecanoic acid



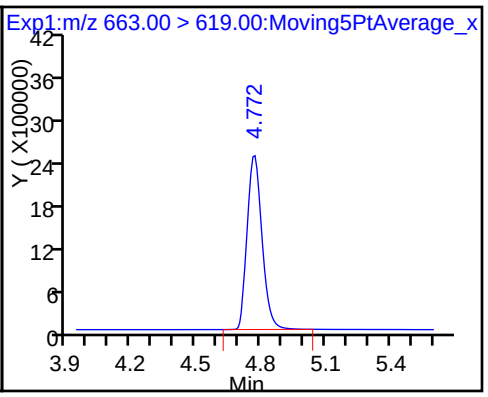
D 38 d-N-EtFOSA-M



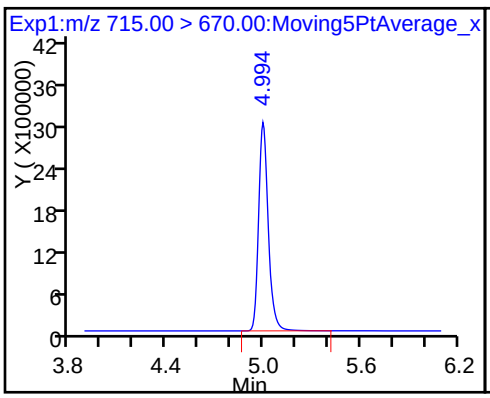
39 N-ethylperfluoro-1-octanesulfonami



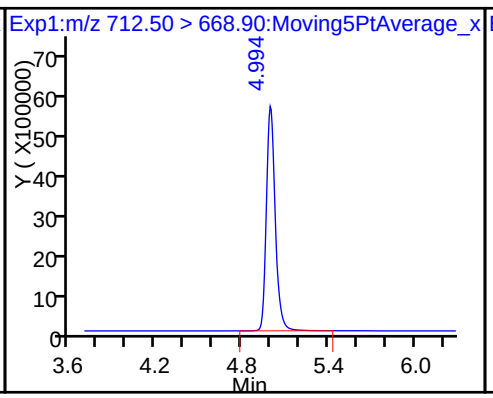
41 Perfluorotridecanoic acid



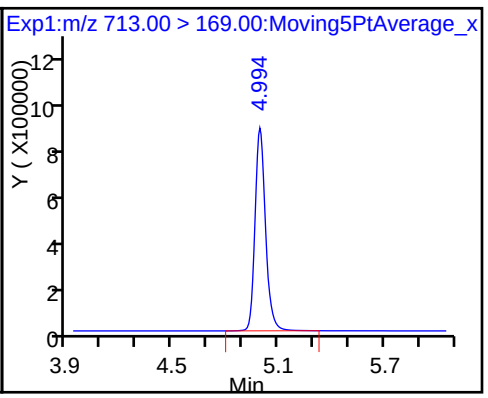
D 43 13C2-PFTeDA



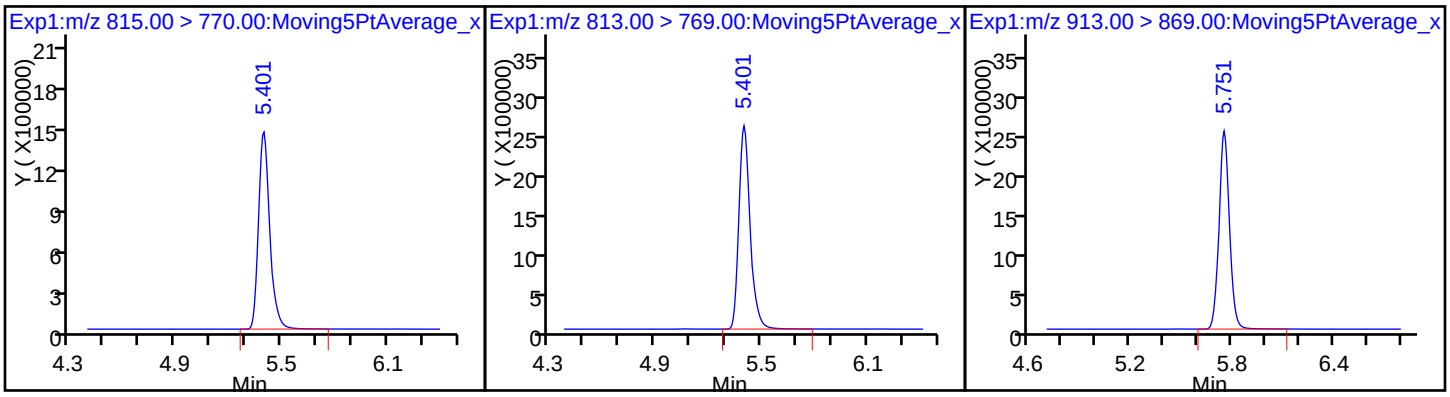
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 44 13C2-PFHxDA 45 Perfluorohexadecanoic acid 46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_009.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 14:18:07 ALS Bottle#: 34 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L7-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub19

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:27 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 14:55:07

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.739	1.746	-0.007		14670457	44.5		89.0	45018	
2 Perfluorobutyric acid										
212.90 > 169.00	1.742	1.749	-0.007	1.000	45503740	168.8		84.4	15510	
D 3 13C5-PFPeA										
267.90 > 223.00	2.069	2.073	-0.004		9352823	42.5		85.0	32880	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.069	2.074	-0.005	1.000	34142749	175.4		87.7	10909	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.105	2.111	-0.006	1.000	47764002	151.2		85.5		
298.90 > 99.00	2.105	2.111	-0.006	1.000	24454335		1.95(0.00-0.00)	85.5		
D 47 13C3-PFBS										
301.90 > 83.00	2.105	2.111	-0.006		246644	NC				
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.366	2.373	-0.007	1.000	12892114	173.1		92.6		
D 7 13C2 PFHxA										
315.00 > 270.00	2.409	2.413	-0.004		8308032	43.1		86.2	26882	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.409	2.415	-0.006	1.000	30388186	180.7		90.3	20803	
D 9 13C4-PFHpA										
367.00 > 322.00	2.787	2.792	-0.005		7495237	42.1		84.3	25914	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.787	2.793	-0.006	1.000	28962446	184.4		92.2	9755	
D 11 18O2 PFHxS										
403.00 > 84.00	2.795	2.803	-0.008		9152921	39.7		83.9	15050	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.795	2.803	-0.008	1.000	36326380	171.3		94.1		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.141	3.151	-0.010		4110352	46.3		97.4		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.149	3.153	-0.004	1.000	13746035	160.8		84.8		
* 62 13C2-PFOA										
415.00 > 370.00	3.170	3.174	-0.004		7333905	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.170	3.176	-0.006		7352976	40.8		81.6	24417	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.170	3.178	-0.008	1.000	28982100	184.5		92.2	7491	
413.00 > 169.00	3.170	3.178	-0.008	1.000	17861227		1.62(0.90-1.10)	92.2	14762	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.177	3.179	-0.002	1.000	30429275	171.2		89.9		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.546	3.481	0.065	1.000	30958564	188.2		101	20617	
499.00 > 99.00	3.539	3.481	0.058	0.998	7005303		4.42(0.90-1.10)	101	12998	
D 18 13C4 PFOS										
503.00 > 80.00	3.539	3.546	-0.007		7449567	41.8		87.5	15738	
D 19 13C5 PFNA										
468.00 > 423.00	3.552	3.555	-0.003		6208617	40.7		81.3	20153	
20 Perfluorononanoic acid										
463.00 > 419.00	3.552	3.557	-0.005	1.000	24022877	193.0		96.5	16868	
D 21 13C8 FOSA										
506.00 > 78.00	3.885	3.888	-0.003		12394073	41.3		82.6	11846	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.885	3.889	-0.004	1.000	40674110	169.3		84.6	10940	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.900	3.903	-0.003	1.000	13269259	173.2		90.4		
D 26 M2-8:2FTS										
529.00 > 509.00	3.900	3.903	-0.003		3776708	46.1		96.3		
D 23 13C2 PFDA										
515.00 > 470.00	3.907	3.908	-0.001		6140363	40.7		81.4	9540	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.907	3.909	-0.002	1.000	23341247	199.6		99.8	14495	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.061	4.064	-0.003		4156833	47.2		94.4		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.061	4.067	-0.006	1.000	17638254	206.3		103		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.196	4.202	-0.006	1.000	18842939	183.6		95.2		
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.221	4.225	-0.004		3437412	39.4		78.8		
D 30 13C2 PFUnA										
565.00 > 520.00	4.221	4.226	-0.005		4611652	38.5		77.0	9620	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.221	4.226	-0.005	1.000	18549751	188.8		94.4	14182	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.230	4.233	-0.003	1.002	13681734	210.8		105		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.358	4.364	-0.006		4286058	48.4		96.8		
35 MeFOSA										
512.00 > 169.00	4.367	4.370	-0.003	1.000	16935326	205.1		103		
37 Perfluorododecanoic acid										
613.00 > 569.00	4.507	4.509	-0.002	1.000	19864028	186.5		93.2	5672	
D 36 13C2 PFDoA										
615.00 > 570.00	4.507	4.509	-0.002		5569779	44.7		89.5	6026	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.537	4.540	-0.003		3912999	47.3		94.6		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.547	4.550	-0.003	1.000	16090825	205.5		103		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.754	4.762	-0.008	1.000	19892555	178.6		89.3	7939	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.987	4.988	-0.001	1.000	39382531	170.6		85.3	14980	
713.00 > 169.00	4.981	4.988	-0.007	0.999	6616037		5.95(0.00-0.00)	85.3	8281	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.987	4.988	-0.001		10970549	42.7		85.3	12199	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.386	5.391	-0.005		6077148	44.4		88.8	5202	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.393	5.395	-0.002	1.000	20012102	191.1		95.6	5408	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.744	5.745	-0.001	1.000	18725750	189.9		95.0	12102	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L7_00003 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:27 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_009.d

Injection Date: 06-Jun-2017 14:18:07 Instrument ID: A8_N

Lims ID: IC L7 Full

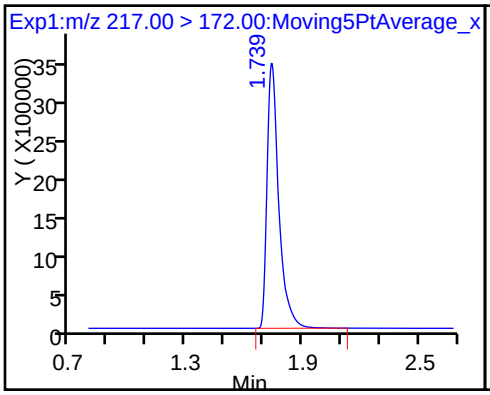
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 34 Worklist Smp#: 8

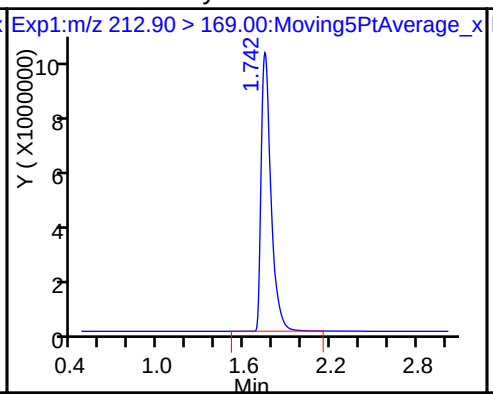
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

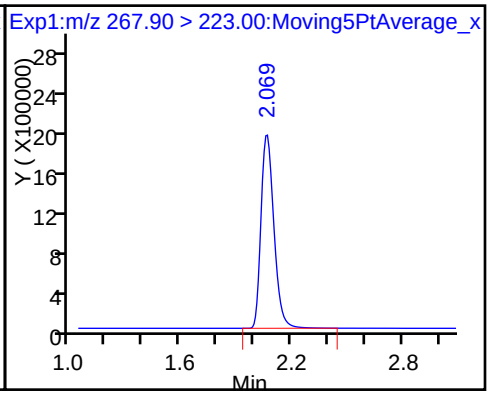
D 1 13C4 PFBA



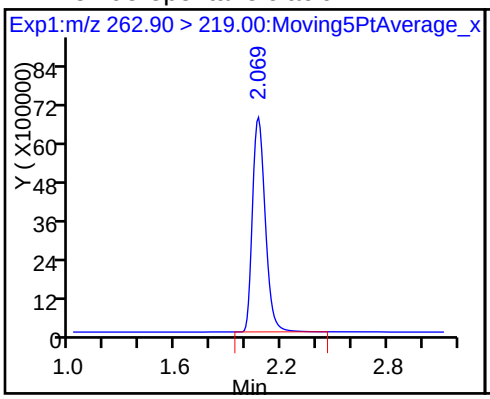
2 Perfluorobutyric acid



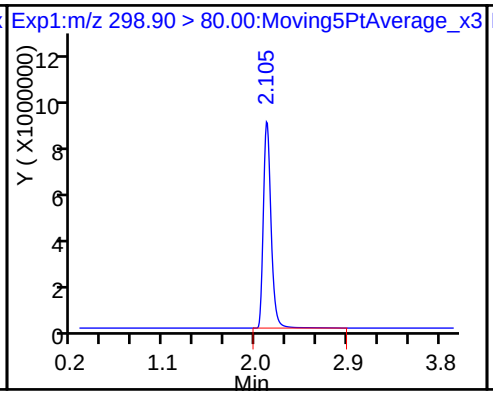
D 3 13C5-PFPeA



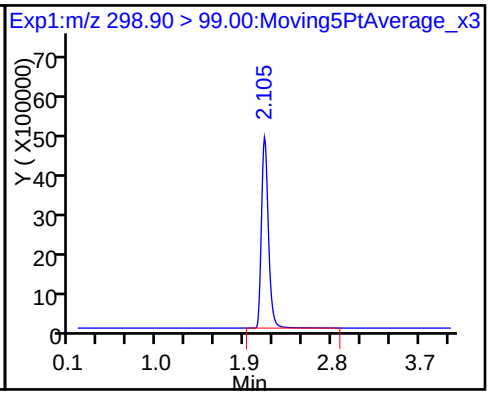
4 Perfluoropentanoic acid



5 Perfluorobutanesulfonic acid

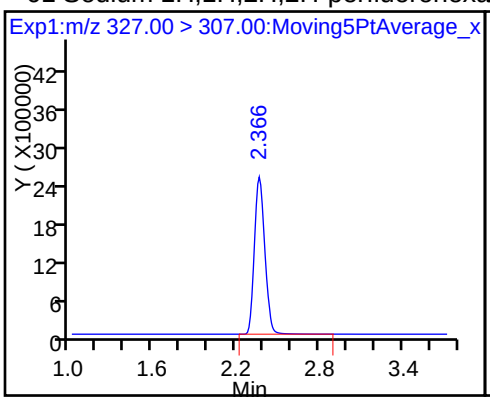


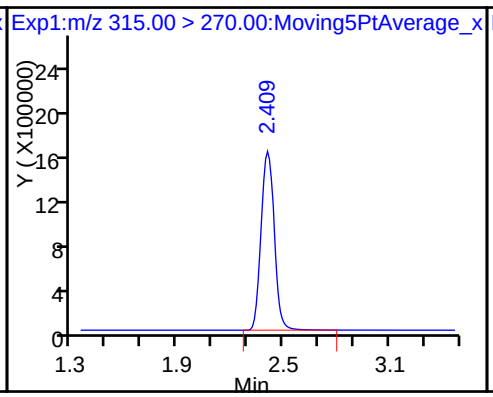
5 Perfluorobutanesulfonic acid



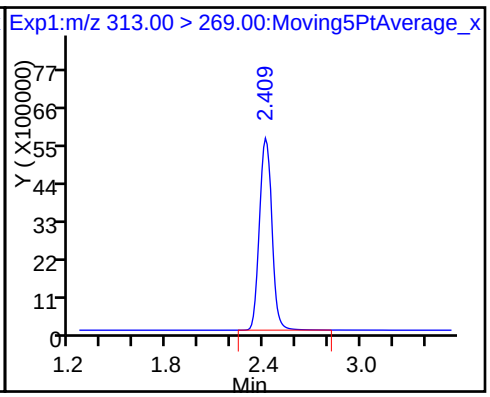
61 Sodium 1H,1H,2H,2H-perfluorohexa

D 7 13C2 PFHxA

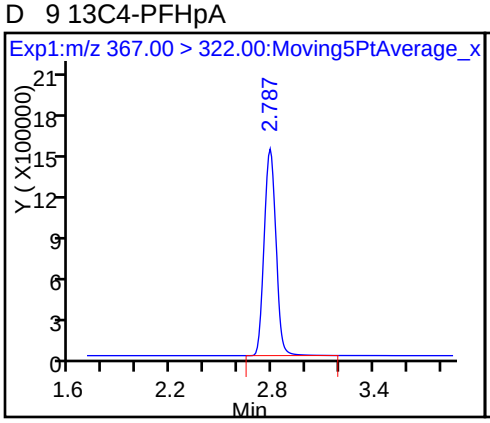




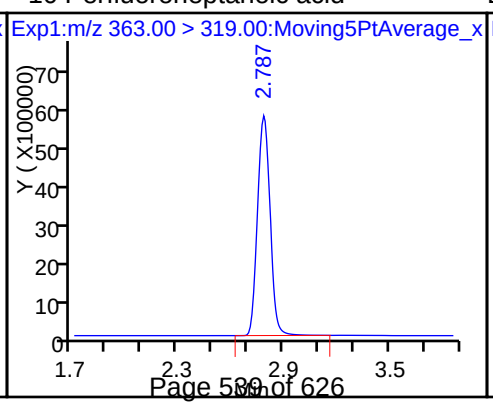
6 Perfluorohexanoic acid



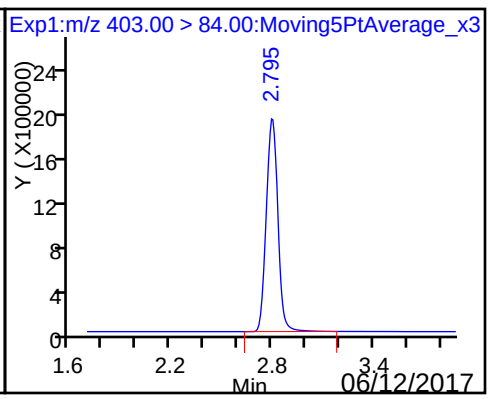
D 9 13C4-PFHpA



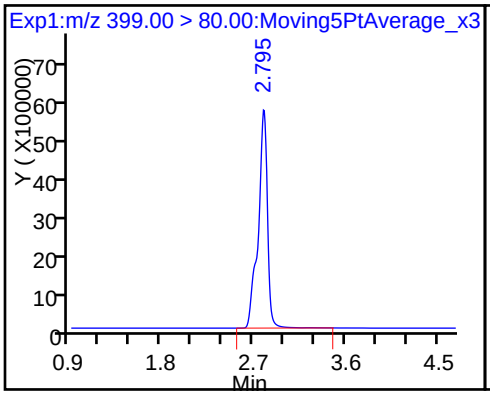
10 Perfluoroheptanoic acid



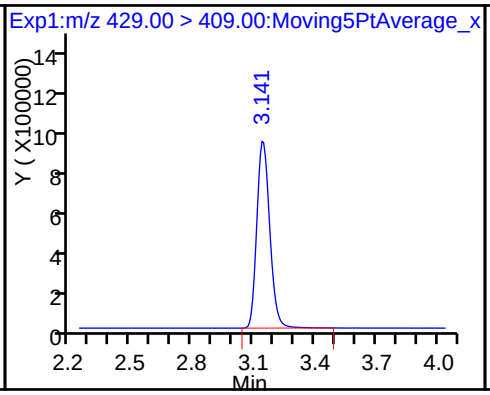
D 11 18O2 PFHxS



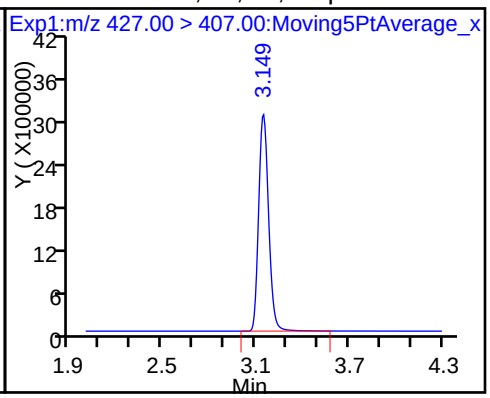
8 Perfluorohexanesulfonic acid



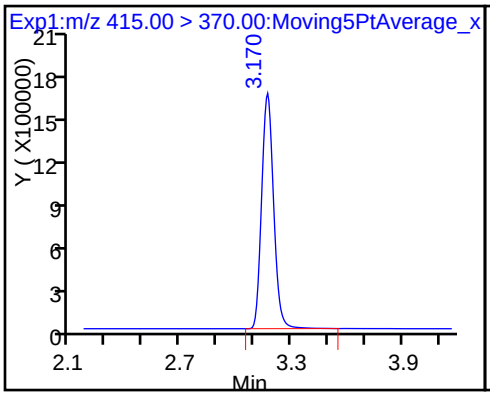
D 12 M2-6:2FTS



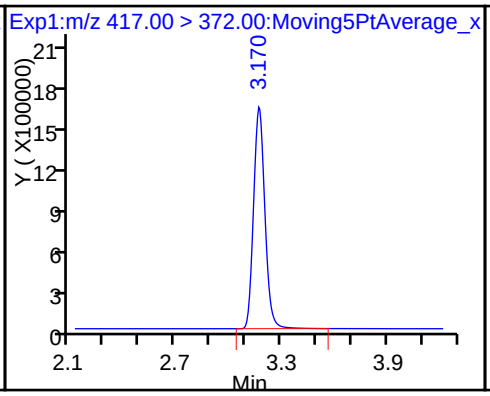
13 Sodium 1H,1H,2H,2H-perfluorooctane



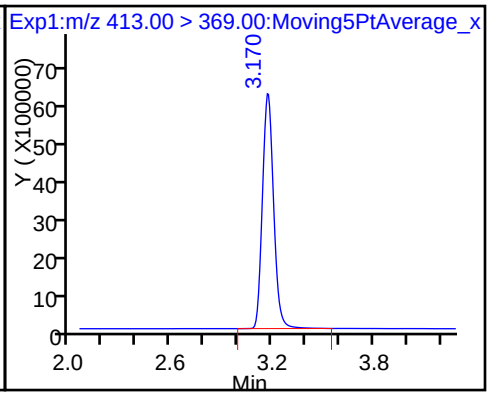
* 62 13C2-PFOA



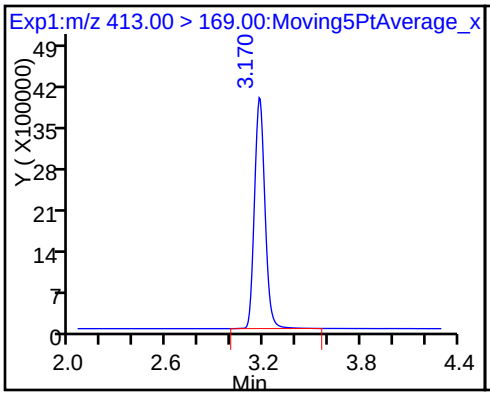
D 14 13C4 PFOA



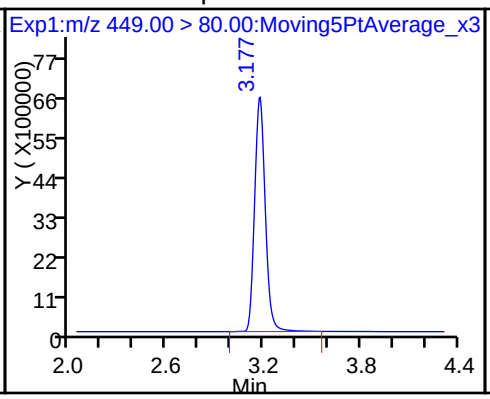
15 Perfluorooctanoic acid



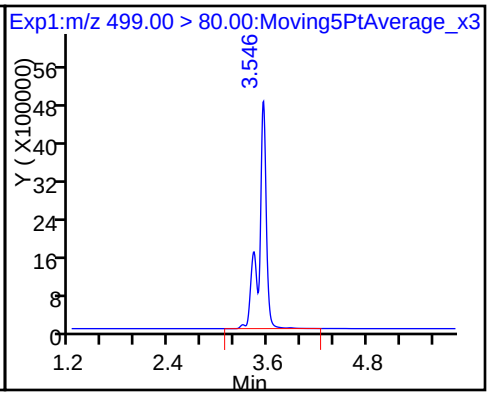
15 Perfluorooctanoic acid



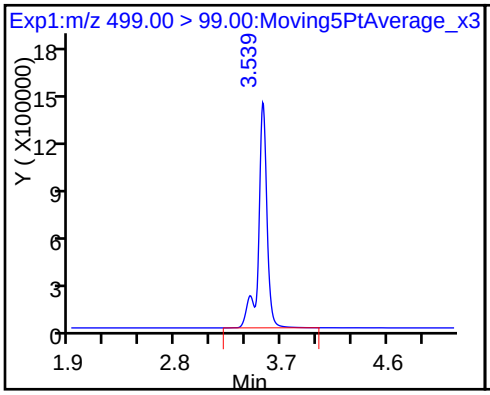
16 Perfluoroheptanesulfonic Acid



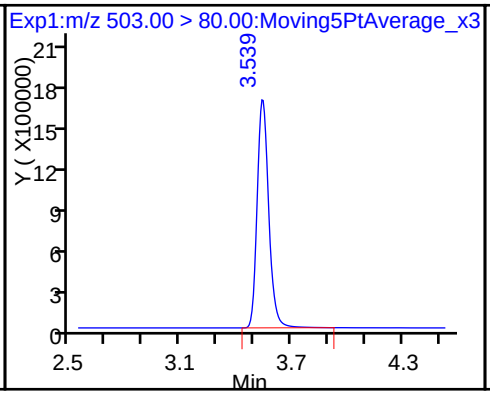
17 Perfluorooctane sulfonic acid



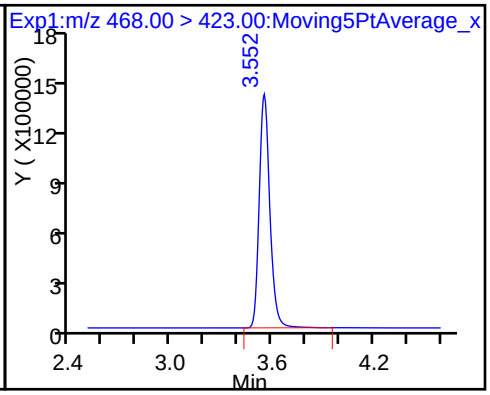
17 Perfluorooctane sulfonic acid



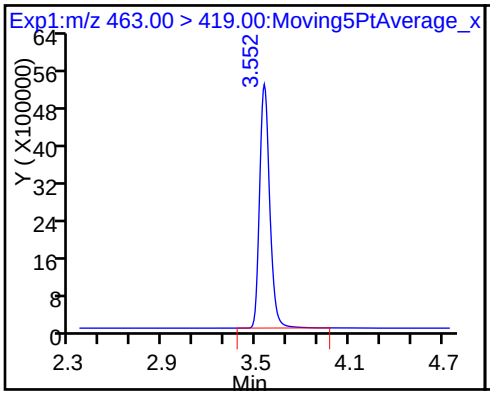
D 18 13C4 PFOS



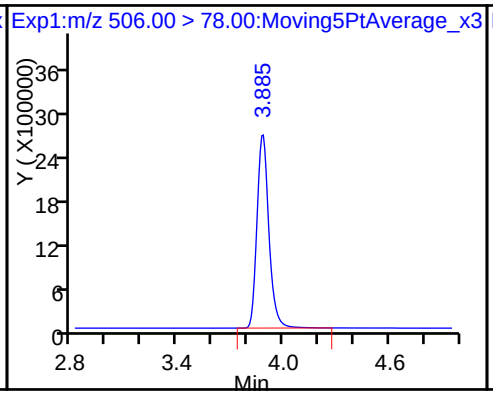
D 19 13C5 PFNA



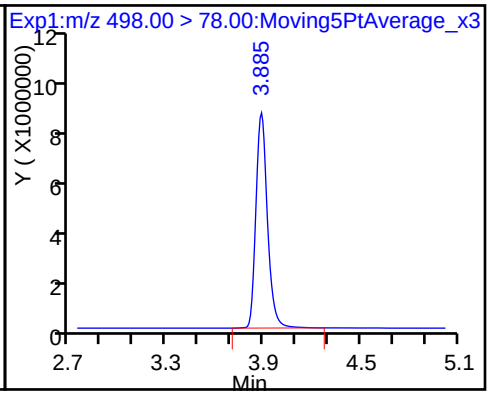
20 Perfluorononanoic acid



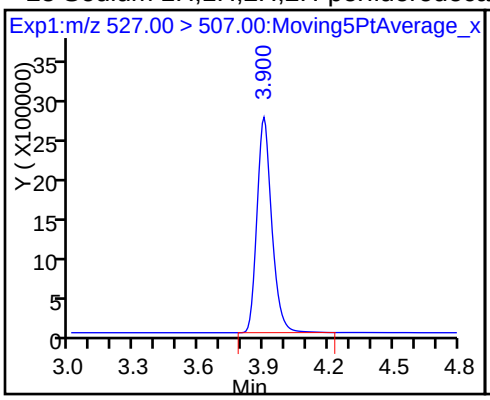
D 21 13C8 FOSA



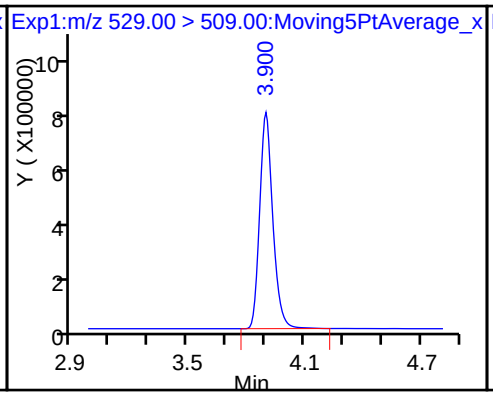
22 Perfluorooctane Sulfonamide



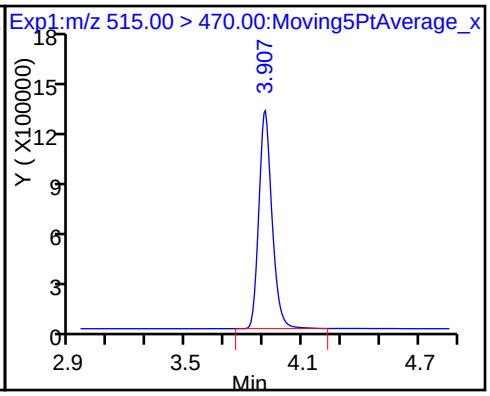
25 Sodium 1H,1H,2H,2H-perfluorodecane



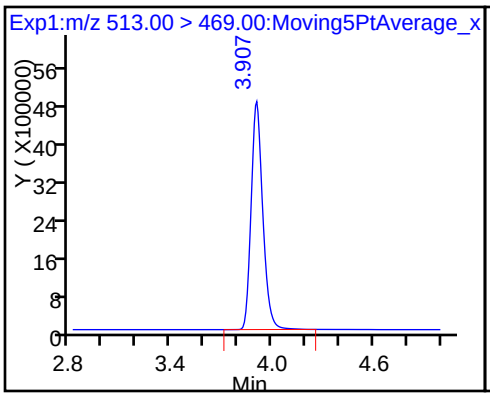
D 26 M2-8:2FTS



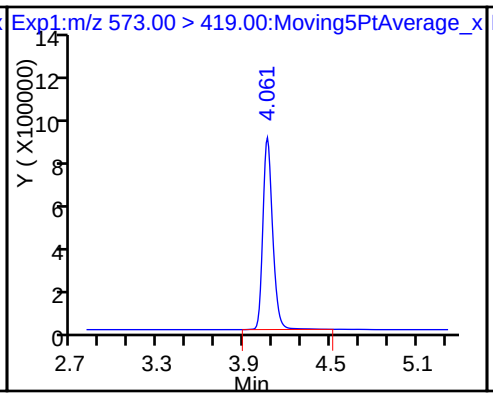
D 23 13C2 PFDA



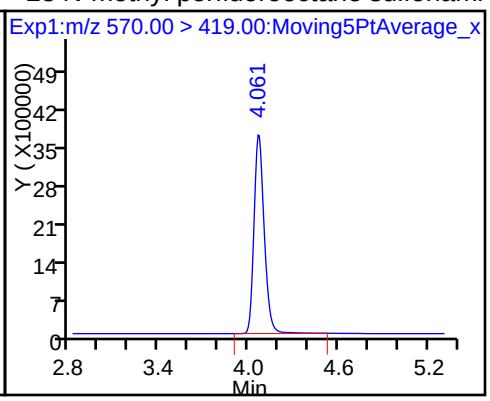
24 Perfluorodecanoic acid



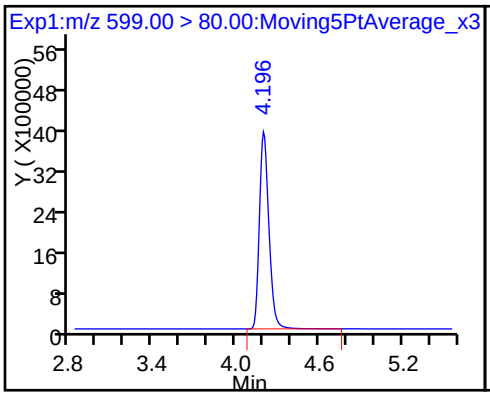
D 27 d3-NMeFOSAA



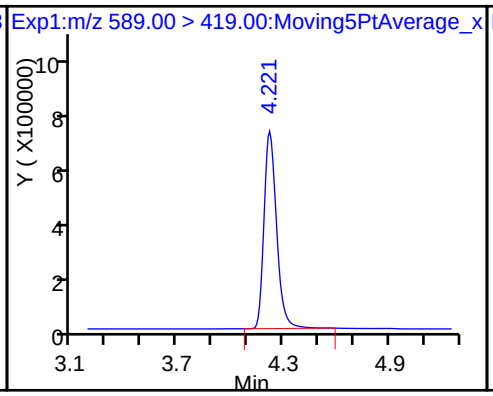
28 N-methyl perfluorooctane sulfonami



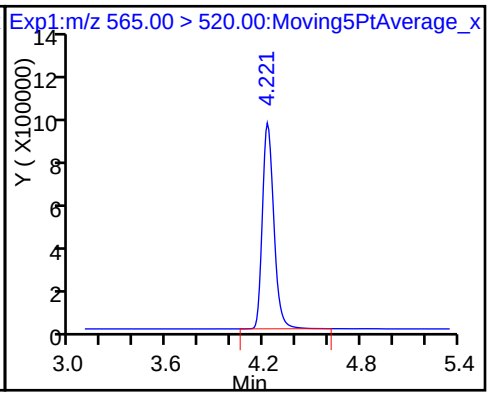
29 Perfluorodecane Sulfonic acid



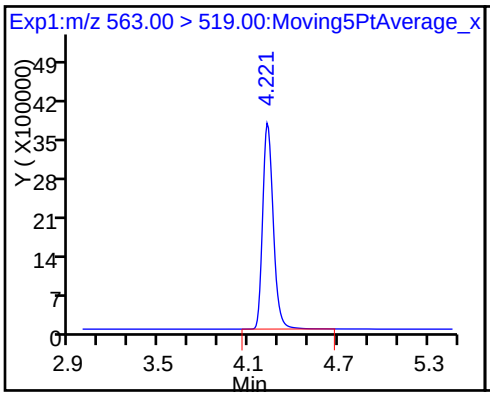
D 32 d5-NEtFOSAA



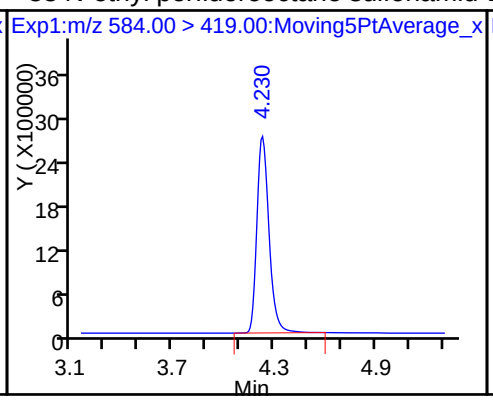
D 30 13C2 PFUnA



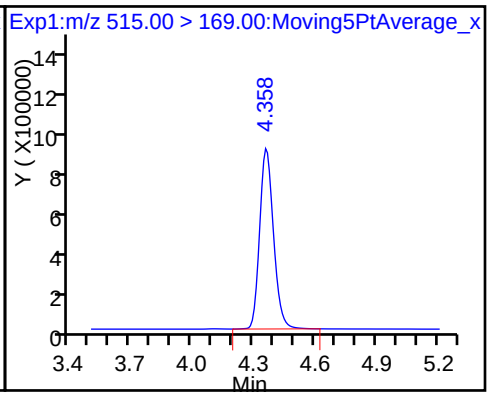
31 Perfluoroundecanoic acid



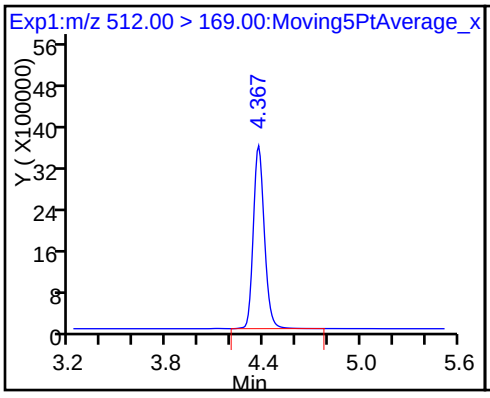
33 N-ethyl perfluorooctane sulfonamid



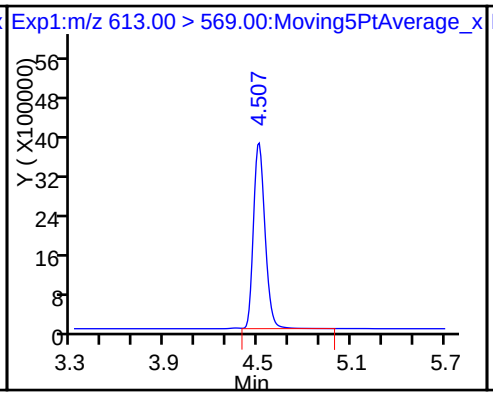
D 34 d-N-MeFOSA-M



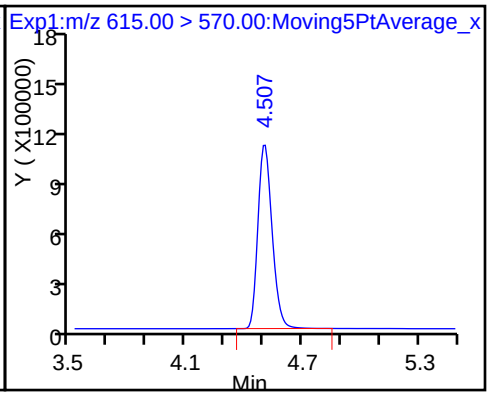
35 MeFOSA



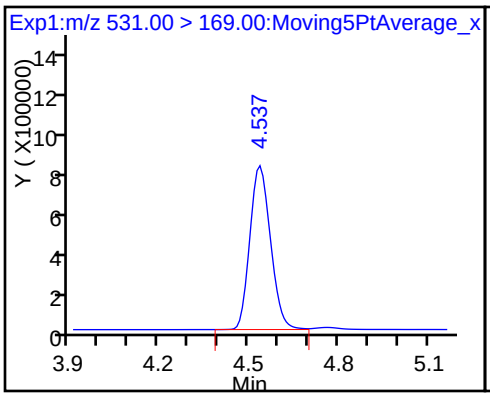
37 Perfluorododecanoic acid



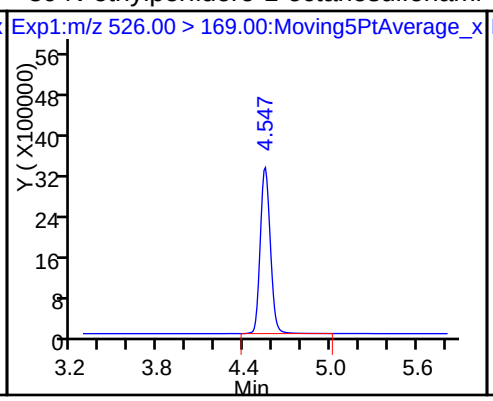
D 36 13C2 PFDoA



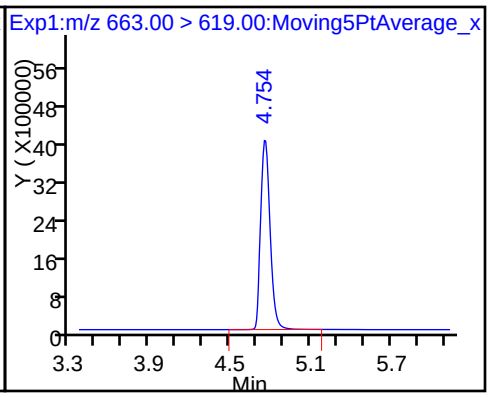
D 38 d-N-EtFOSA-M



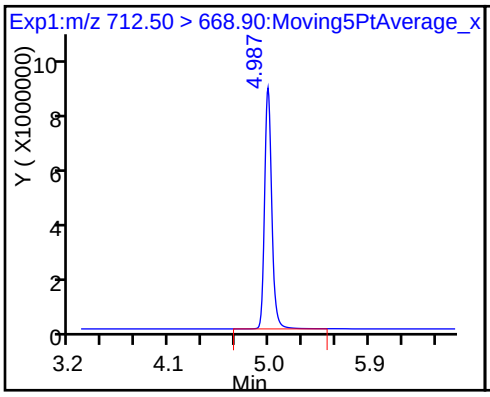
39 N-ethylperfluoro-1-octanesulfonami



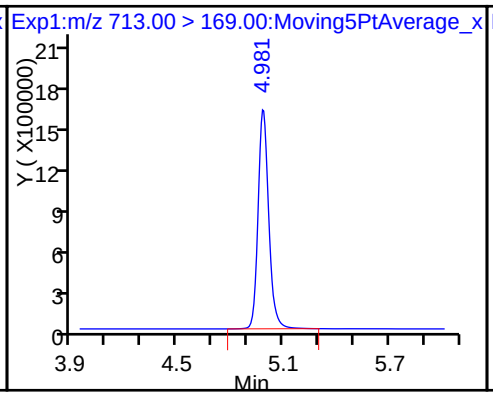
41 Perfluorotridecanoic acid



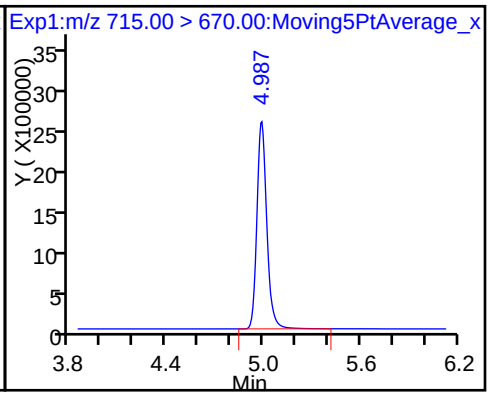
42 Perfluorotetradecanoic acid



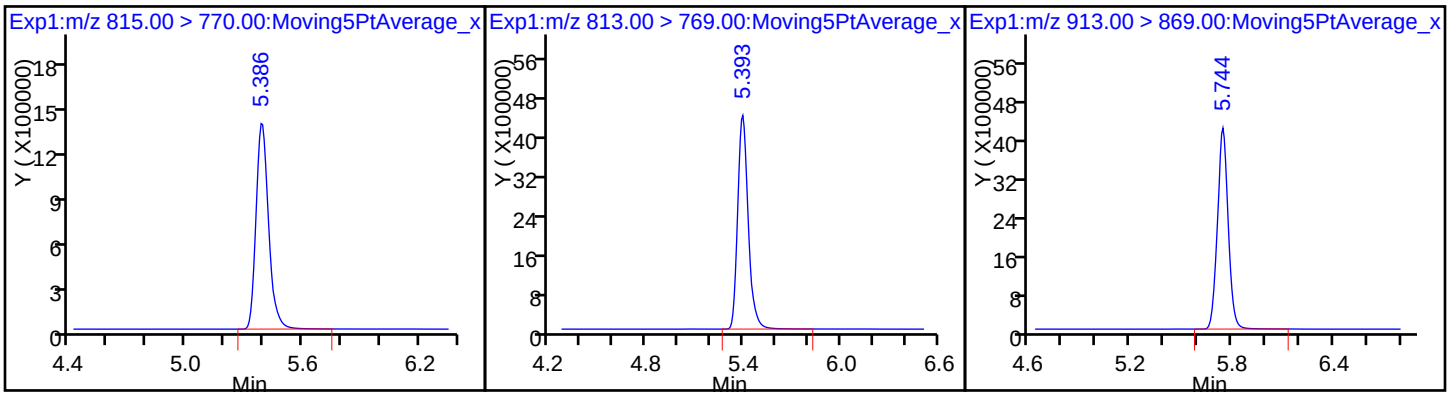
42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



D 44 13C2-PFHxDA | 45 Perfluorohexadecanoic acid | 46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d
Lims ID: IC M2-4:2FTS
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 14:25:49 ALS Bottle#: 37 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: M2:4-2FTS Calibration Std
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub19

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:30 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 16:47:09

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 60 M2-4:2FTS										
329.00 > 309.00	2.372	2.372	0.0		3924126	NC				
* 62 13C2-PFOA										
415.00 > 370.00	3.177	3.174	0.003		9827231	50.0				

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

LCM2-4:2FTSIC_00002 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:30 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Injection Date: 06-Jun-2017 14:25:49 Instrument ID: A8_N

Lims ID: IC M2-4:2FTS

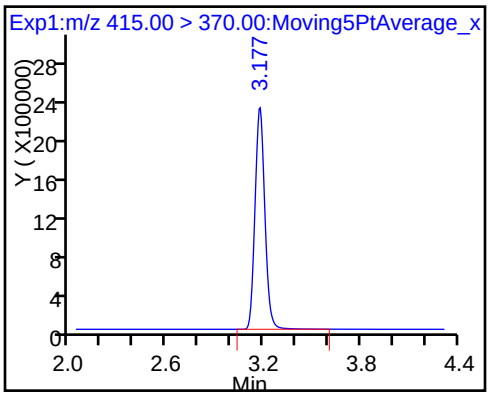
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 37 Worklist Smp#: 9

Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

* 62 13C2-PFOA



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab Sample ID: ICV 320-167755/11 Calibration Date: 06/06/2017 14:41

Instrument ID: A8_N Calib Start Date: 06/06/2017 13:31

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 06/06/2017 14:25

Lab File ID: 2017.06.06CURVE_012.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9186	0.9694		52.2	49.5	5.5	25.0
Perfluoropentanoic acid (PFPeA)	AveID	1.041	1.089		51.8	49.5	4.6	25.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.633	1.866		50.1	43.8	14.3	25.0
Perfluorohexanoic acid (PFHxA)	AveID	1.012	1.071		52.4	49.5	5.8	25.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.048	1.085		51.3	49.5	3.6	25.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.096	1.109		47.3	46.8	1.2	25.0
6:2FTS	AveID	0.9879	0.9593		45.6	46.9	-2.9	25.0
Perfluorooctanoic acid (PFOA)	AveID	1.068	1.084		50.2	49.5	1.5	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.141	1.173		48.5	47.1	2.9	25.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.055	1.001		44.8	47.3	-5.2	25.0
Perfluorononanoic acid (PFNA)	AveID	1.002	1.070		52.8	49.5	6.7	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9693	0.9769		49.9	49.5	0.8	25.0
8:2FTS	AveID	0.9716	0.9903		48.3	47.4	1.9	25.0
Perfluorodecanoic acid (PFDA)	AveID	0.9522	1.021		53.1	49.5	7.3	25.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.028	1.000		48.1	49.5	-2.8	25.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6584	0.6775		49.2	47.8	2.9	25.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.065	1.104		51.3	49.5	3.7	25.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9439	0.9495		49.8	49.5	0.6	25.0
MeFOSA	AveID	0.9633	0.9344		48.0	49.5	-3.0	25.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9562	1.013		52.5	49.5	6.0	25.0
N-EtFOSA-M	AveID	1.000	1.003		49.6	49.5	0.3	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.000	1.003		49.7	49.5	0.3	25.0
Perfluorotetradecanoic acid (PFTeA)	L2ID		2.214		52.9	49.5	6.8	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.084		56.5	49.5	14.2	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.8851	0.9911		55.4	49.5	12.0	25.0
13C4 PFBA	Ave	329728	333357		50.0	49.5	1.1	50.0
13C5-PFPeA	Ave	219977	220707		49.7	49.5	0.3	50.0
13C2 PFHxA	Ave	192846	187651		48.2	49.5	-2.7	50.0
13C4-PFHpA	Ave	177883	180087		50.1	49.5	1.2	50.0
18O2 PFHxS	Ave	230540	227539		46.2	46.8	-1.3	50.0
M2-6:2FTS	Ave	88838	84814		44.9	47.0	-4.5	50.0

FORM VII 537 (Modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab Sample ID: ICV 320-167755/11 Calibration Date: 06/06/2017 14:41

Instrument ID: A8_N Calib Start Date: 06/06/2017 13:31

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 06/06/2017 14:25

Lab File ID: 2017.06.06CURVE_012.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C4 PFOA	Ave	180322	182980		50.2	49.5	1.5	50.0
13C4 PFOS	Ave	178130	177178		47.1	47.3	-0.5	50.0
13C5 PFNA	Ave	152667	152782		49.5	49.5	0.0	50.0
13C8 FOSA	Ave	300205	300644		49.6	49.5	0.1	50.0
M2-8:2FTS	Ave	81859	86277		50.0	47.4	5.4	50.0
13C2 PFDA	Ave	150783	148999		48.9	49.5	-1.2	50.0
d3-NMeFOSAA	Ave	88062	89218		50.2	49.5	1.3	50.0
13C2 PFUnA	Ave	119837	116179		48.0	49.5	-3.1	50.0
d5-NEtFOSAA	Ave	87293	82982		47.1	49.5	-4.9	50.0
d-N-MeFOSA-M	Ave	88593	95059		53.1	49.5	7.3	50.0
13C2 PFDoA	Ave	124485	122180		48.6	49.5	-1.9	50.0
d-N-EtFOSA-M	Ave	82760	87829		52.5	49.5	6.1	50.0
13C2-PFTeDA	Ave	257086	258569		49.8	49.5	0.6	50.0
13C2-PFHxDA	Ave	136854	140280		50.7	49.5	2.5	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_012.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 06-Jun-2017 14:41:14 ALS Bottle#: 36 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist:

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 07-Jun-2017 08:20:34 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK033

First Level Reviewer: chandrasenas Date: 06-Jun-2017 16:48:01

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.742	1.746	-0.004		16502805	50.0		101	66036	
2 Perfluorobutyric acid										
212.90 > 169.00	1.746	1.749	-0.003	1.000	15997787	52.2			23049	
D 3 13C5-PFPeA										
267.90 > 223.00	2.069	2.073	-0.004		10926065	49.7		100	36677	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.069	2.074	-0.005	1.000	11893270	51.8			4437	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.114	2.111	0.003	1.000	18600028	50.1				
298.90 > 99.00	2.114	2.111	0.003	1.000	7680989		2.42(0.00-0.00)			
D 47 13C3-PFBS										
301.90 > 83.00	2.105	2.111	-0.006		270335	NC				
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.366	2.373	-0.007	1.000	3796091	52.0				
D 7 13C2 PFHxA										
315.00 > 270.00	2.409	2.413	-0.004		9289652	48.2		97.3	30813	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.409	2.415	-0.006	1.000	9951617	52.4			17824	
D 9 13C4-PFHpA										
367.00 > 322.00	2.795	2.792	0.003		8915183	50.1		101	32164	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.795	2.793	0.002	1.000	9675307	51.3			3712	
D 11 18O2 PFHxS										
403.00 > 84.00	2.803	2.803	0.0		10656046	46.2		98.7	18483	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.803	2.803	0.0	1.000	11801895	47.3				

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.156	3.151	0.005		3988766	44.9		95.5		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.156	3.153	0.003	1.000	3818271	45.6				
* 62 13C2-PFOA										
415.00 > 370.00	3.177	3.174	0.003		8968382	49.5				
D 14 13C4 PFOA										
417.00 > 372.00	3.177	3.176	0.001		9058408	50.2		101	25001	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.177	3.178	-0.001	1.000	9822150	50.2			2892	
413.00 > 169.00	3.177	3.178	-0.001	1.000	5918405		1.66(0.90-1.10)		10211	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.183	3.179	0.004	1.000	9798061	48.5				
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.552	3.481	0.071	1.000	8383847	44.8			11329	
499.00 > 99.00	3.552	3.481	0.071	1.000	1935113		4.33(0.90-1.10)		8079	
D 18 13C4 PFOS										
503.00 > 80.00	3.552	3.546	0.006		8385238	47.1		99.5	17480	
D 19 13C5 PFNA										
468.00 > 423.00	3.559	3.555	0.004		7563443	49.5		100	24634	
20 Perfluorononanoic acid										
463.00 > 419.00	3.559	3.557	0.002	1.000	8089333	52.8			12796	
D 21 13C8 FOSA										
506.00 > 78.00	3.891	3.888	0.003		14883381	49.6		100	17695	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.891	3.889	0.002	1.000	14539162	49.9			23285	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.906	3.903	0.003	1.000	4051904	48.3				
D 26 M2-8:2FTS										
529.00 > 509.00	3.906	3.903	0.003		4091740	50.0		105		
D 23 13C2 PFDA										
515.00 > 470.00	3.913	3.908	0.005		7376165	48.9		98.8	14243	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.913	3.909	0.004	1.000	7533186	53.1			22134	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.067	4.064	0.003		4416719	50.2		101		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.076	4.067	0.009	1.002	4414521	48.1				
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.204	4.202	0.002	1.000	5734533	49.2				
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.229	4.225	0.004		4108032	47.1		95.1		
D 30 13C2 PFUnA										
565.00 > 520.00	4.229	4.226	0.003		5751442	48.0		96.9	9483	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.229	4.226	0.003	1.000	6351729	51.3			10021	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.238	4.233	0.005	1.002	3900544	49.8				

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.366	4.364	0.002		4705883	53.1		107		
35 MeFOSA										
512.00 > 169.00	4.375	4.370	0.005	1.000	4397283	48.0				
37 Perfluorododecanoic acid										
613.00 > 569.00	4.516	4.509	0.007	1.000	6128264	52.5			2212	
D 36 13C2 PFDoA										
615.00 > 570.00	4.506	4.509	-0.003		6048520	48.6		98.1	5563	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.545	4.540	0.005		4347976	52.5		106		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.545	4.550	-0.005	1.000	4361151	49.6				
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.763	4.762	0.001	1.000	6065786	49.7			3689	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.994	4.988	0.006	1.000	13390423	52.9			9540	
713.00 > 169.00	4.994	4.988	0.006	1.000	1855509		7.22(0.00-0.00)		6411	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.994	4.988	0.006		12800459	49.8		101	17883	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.393	5.391	0.002		6944535	50.7		103	5768	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.400	5.395	0.005	1.000	6556007	56.5			3411	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.751	5.745	0.006	1.000	5994905	55.4			5413	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFCIC_FULL_00003 Amount Added: 1.00 Units: mL

Report Date: 07-Jun-2017 08:20:34 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_012.d

Injection Date: 06-Jun-2017 14:41:14 Instrument ID: A8_N

Lims ID: ICV Full

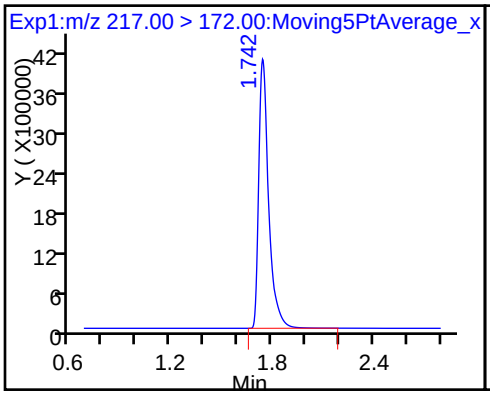
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 36 Worklist Smp#: 11

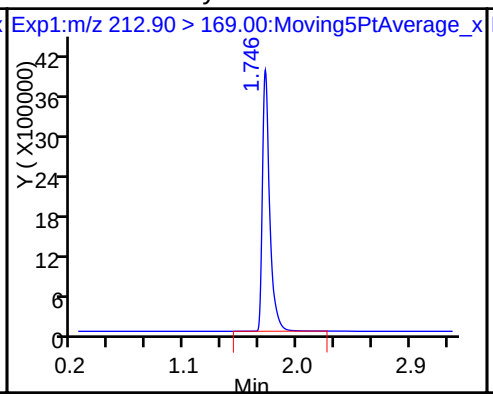
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

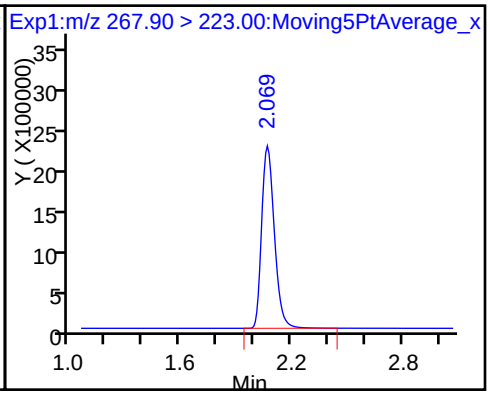
D 1 13C4 PFBA



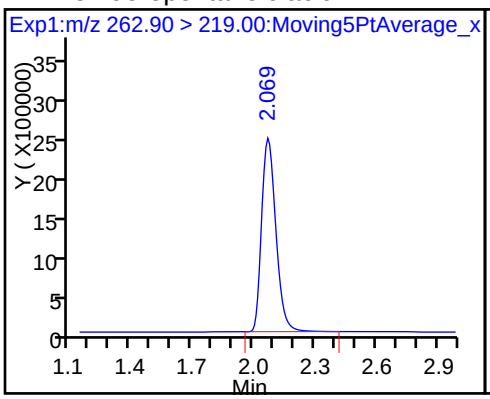
2 Perfluorobutyric acid



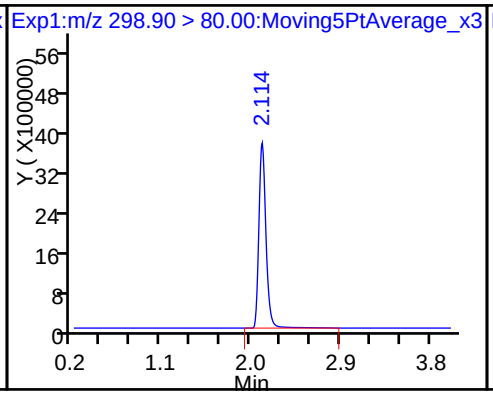
D 3 13C5-PFPeA



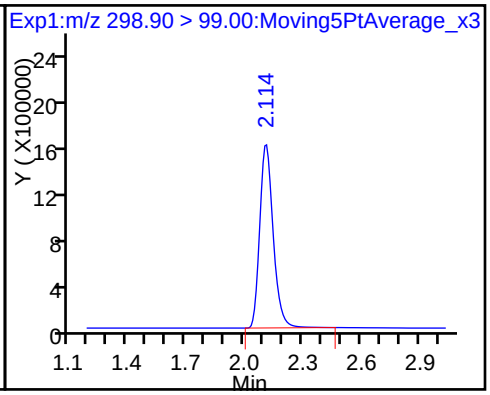
4 Perfluoropentanoic acid



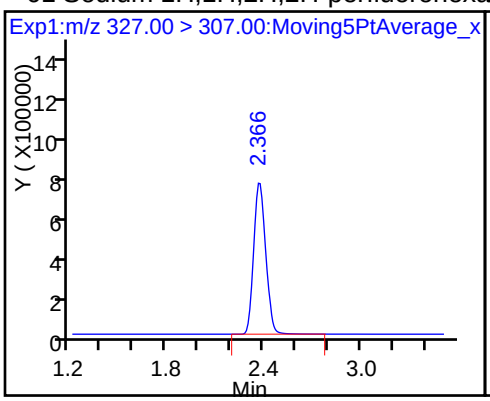
5 Perfluorobutanesulfonic acid



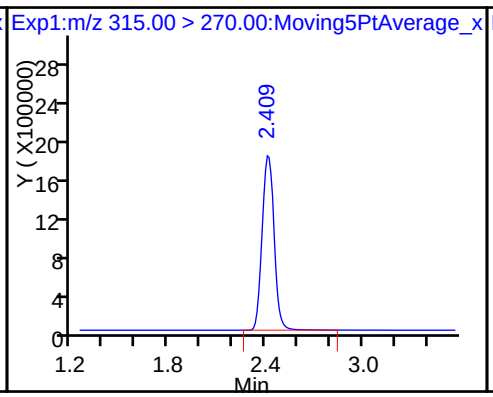
5 Perfluorobutanesulfonic acid



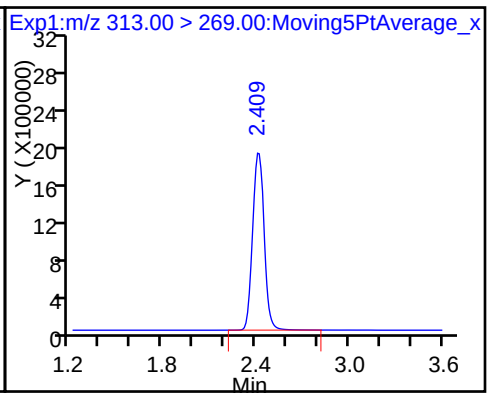
61 Sodium 1H,1H,2H,2H-perfluorohexa



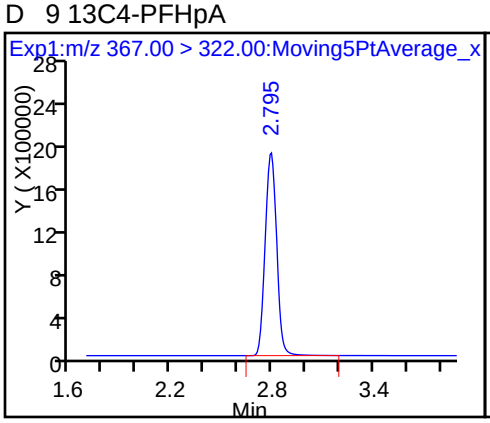
De 7 13C2 PFHxA



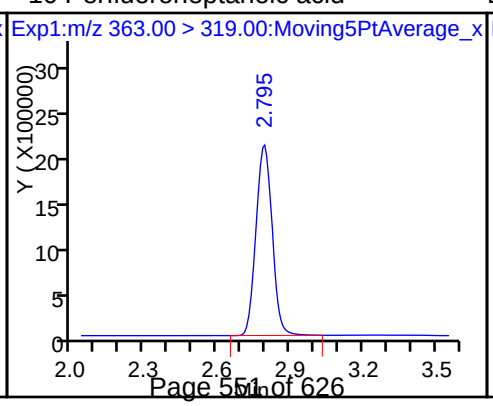
6 Perfluorohexanoic acid



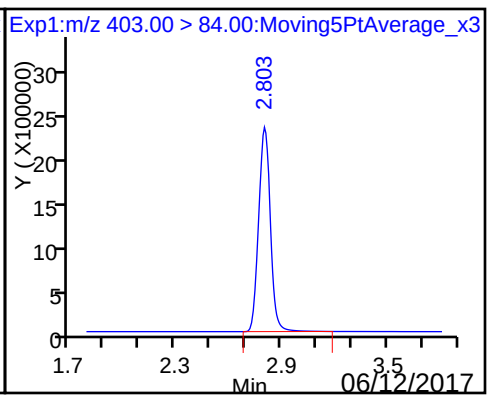
D 9 13C4-PFHpA



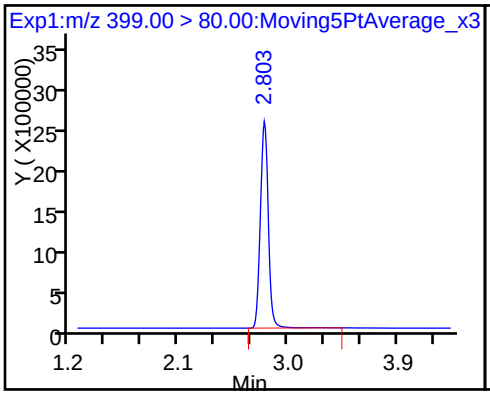
10 Perfluoroheptanoic acid



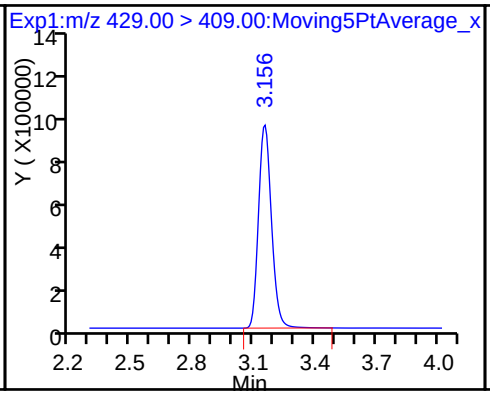
D 11 18O2 PFHxS



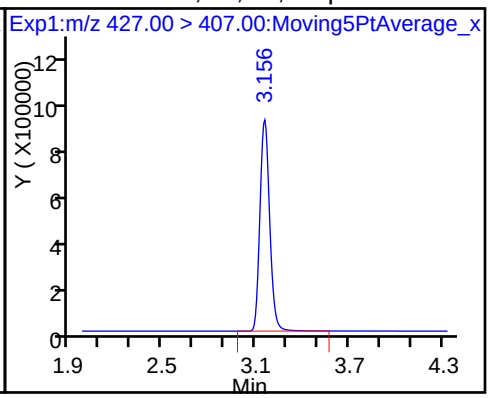
8 Perfluorohexanesulfonic acid



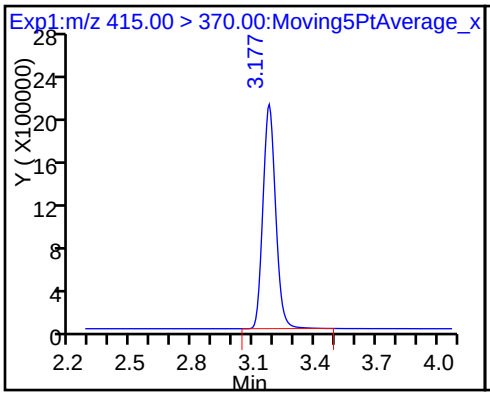
D 12 M2-6:2FTS



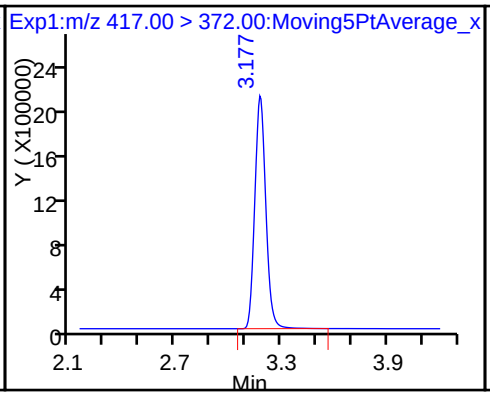
13 Sodium 1H,1H,2H,2H-perfluorooctane



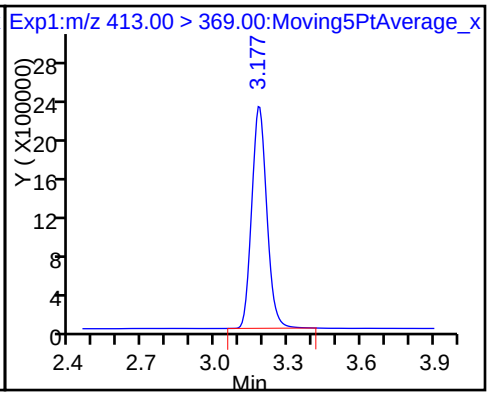
* 62 13C2-PFOA



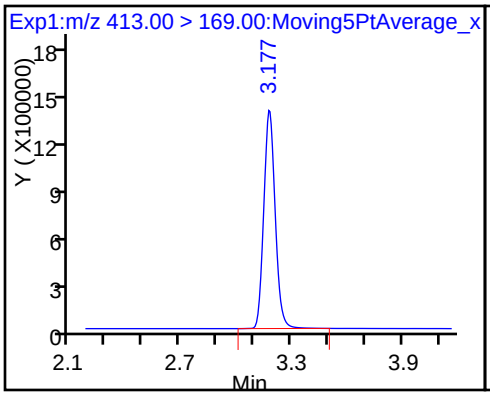
D 14 13C4 PFOA



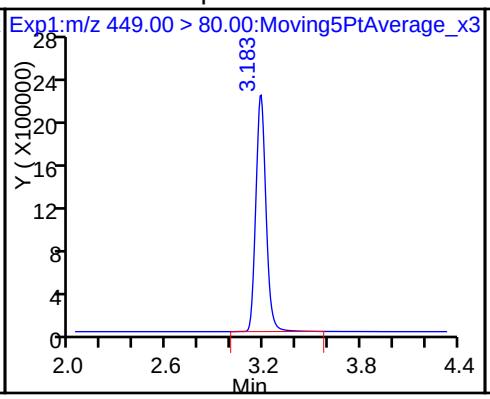
15 Perfluorooctanoic acid



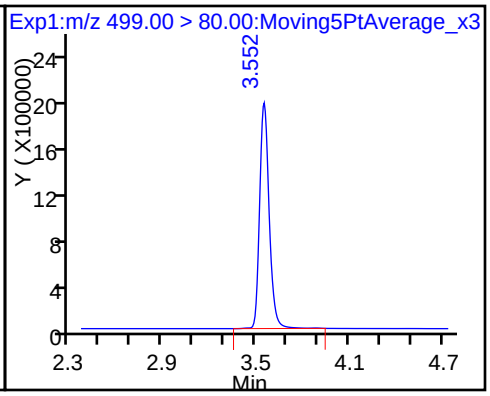
15 Perfluorooctanoic acid



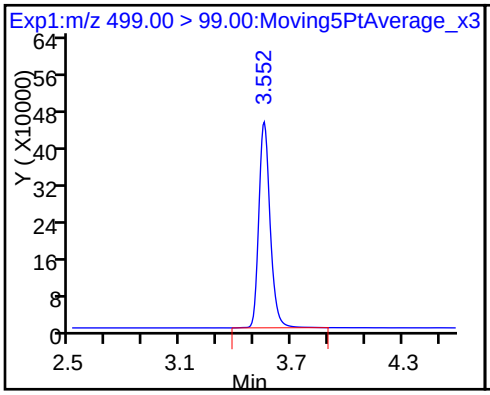
16 Perfluoroheptanesulfonic Acid



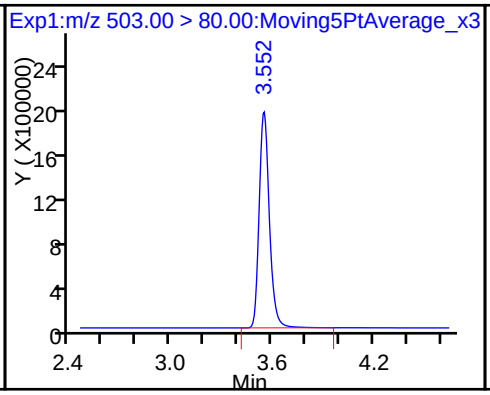
17 Perfluorooctane sulfonic acid



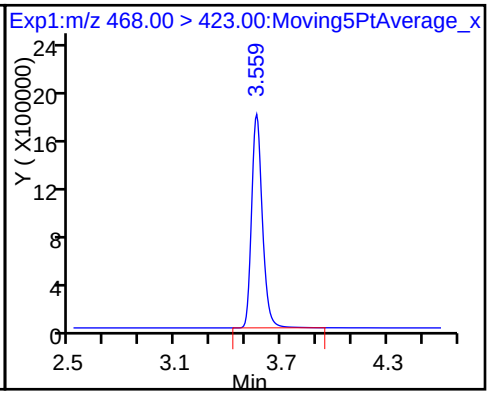
17 Perfluorooctane sulfonic acid



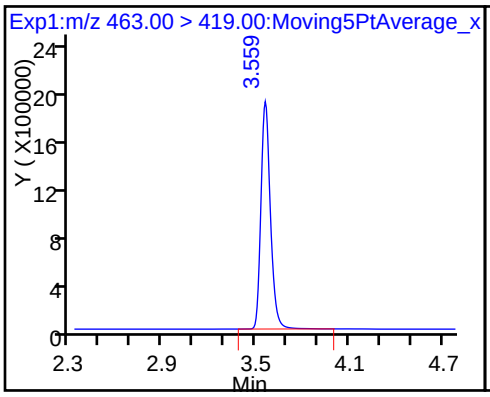
D 18 13C4 PFOS



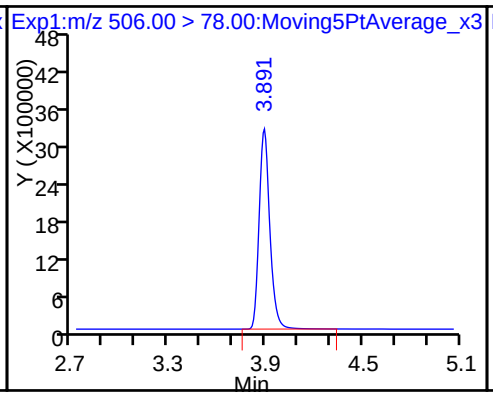
D 19 13C5 PFNA



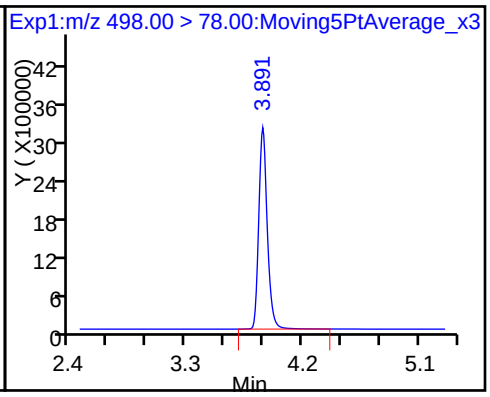
20 Perfluorononanoic acid



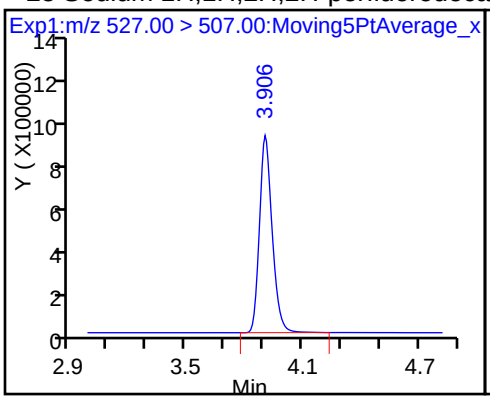
D 21 13C8 FOSA



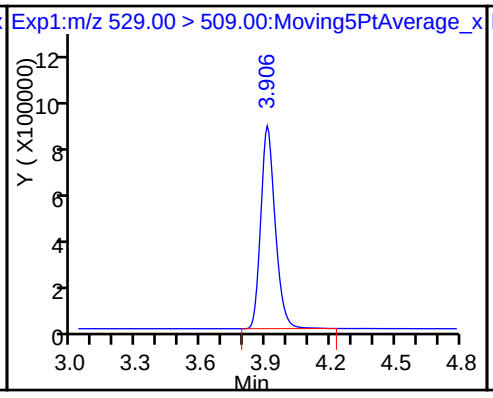
22 Perfluorooctane Sulfonamide



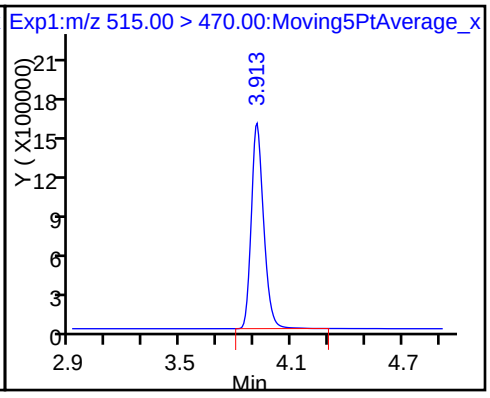
25 Sodium 1H,1H,2H,2H-perfluorodecane



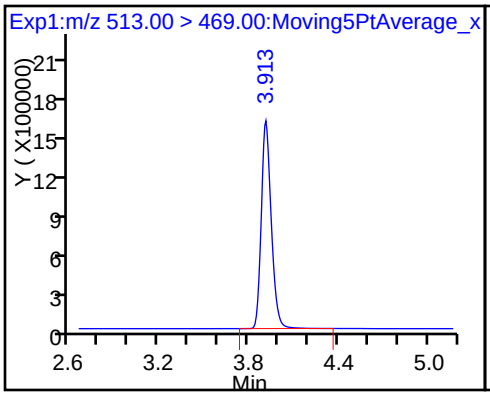
D 26 M2-8:2FTS



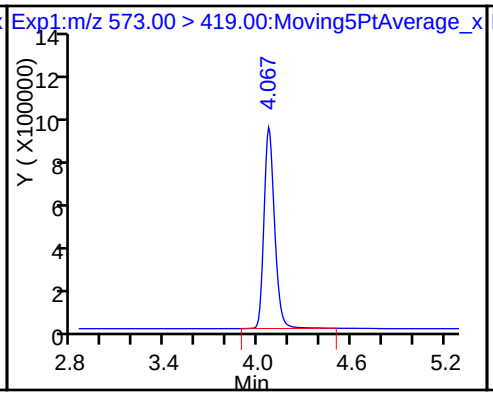
D 23 13C2 PFDA



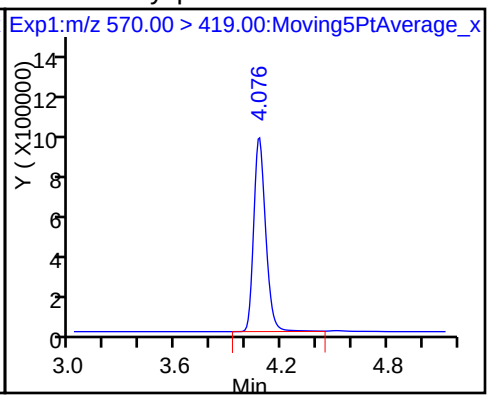
24 Perfluorodecanoic acid



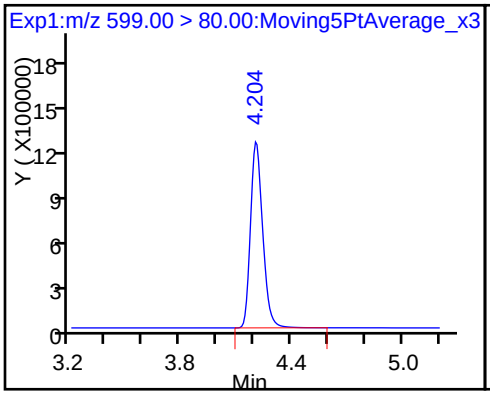
D 27 d3-NMeFOSAA



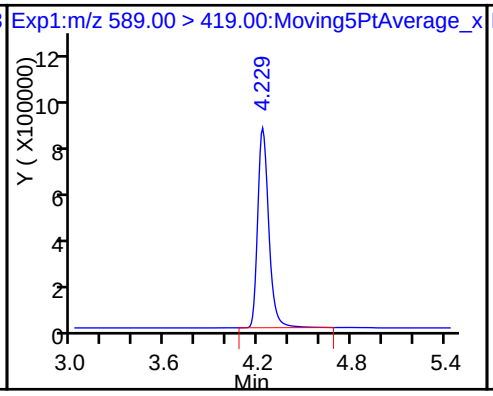
28 N-methyl perfluorooctane sulfonami



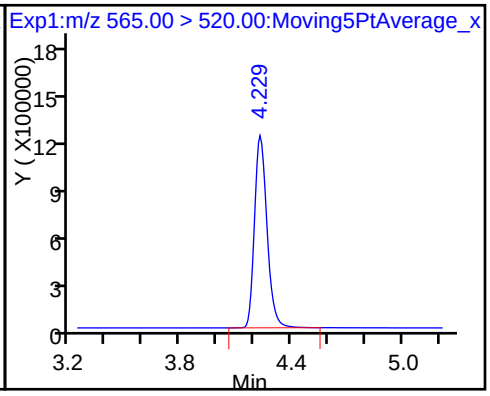
29 Perfluorodecane Sulfonic acid



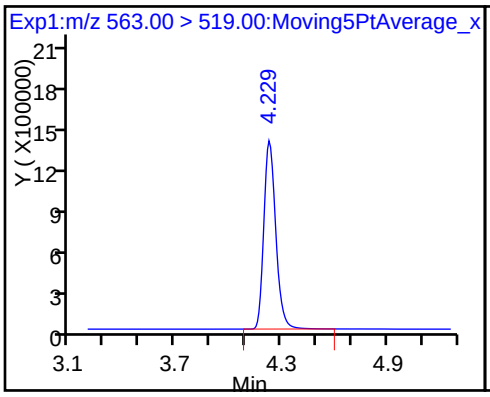
D 32 d5-NEtFOSAA



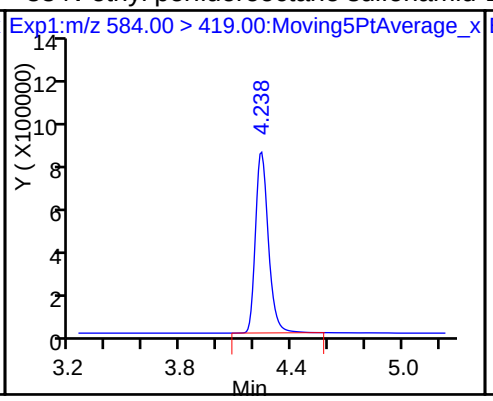
D 30 13C2 PFUnA



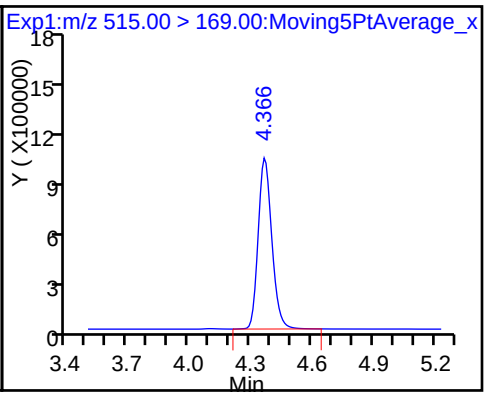
31 Perfluoroundecanoic acid



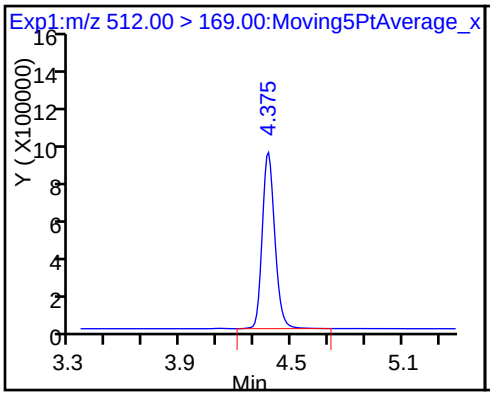
33 N-ethyl perfluorooctane sulfonamid



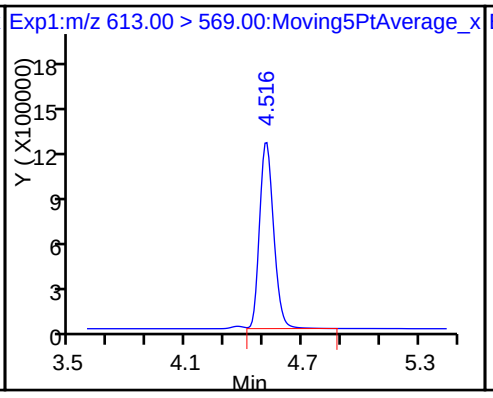
D 34 d-N-MeFOSA-M



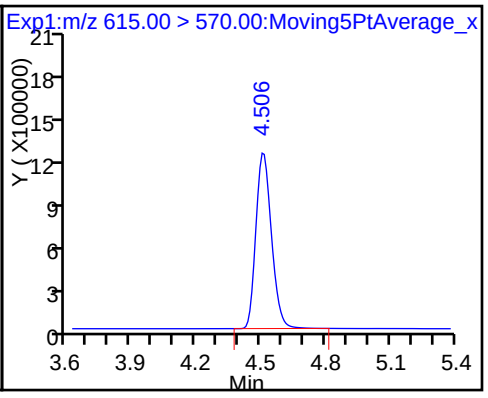
35 MeFOSA



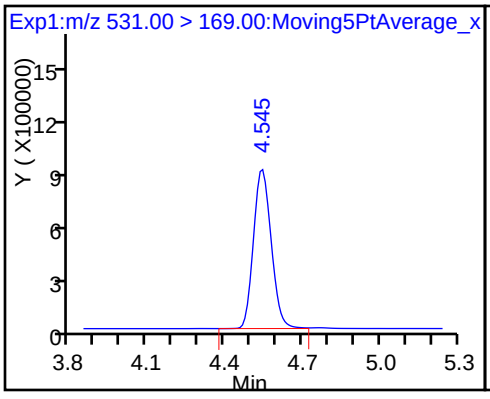
37 Perfluorododecanoic acid



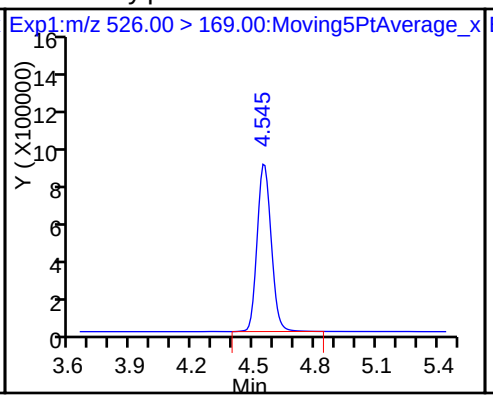
D 36 13C2 PFDoA



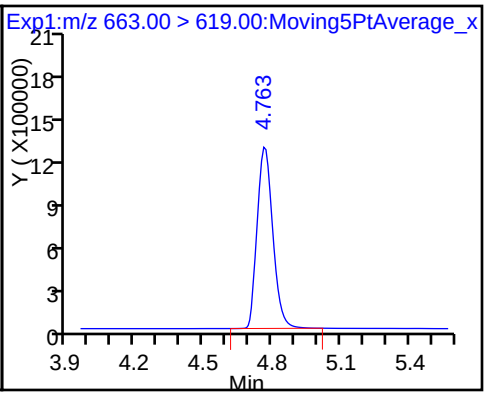
D 38 d-N-EtFOSA-M



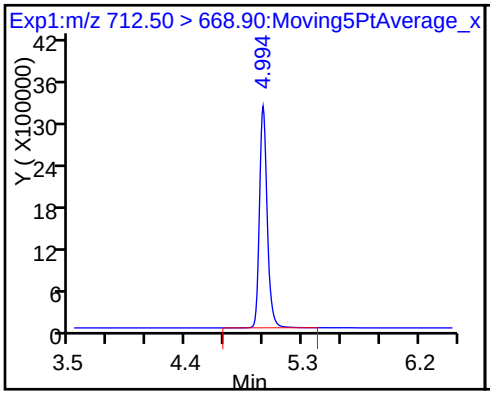
39 N-ethylperfluoro-1-octanesulfonami



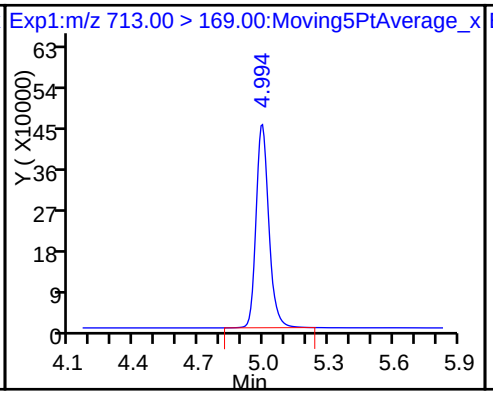
41 Perfluorotridecanoic acid



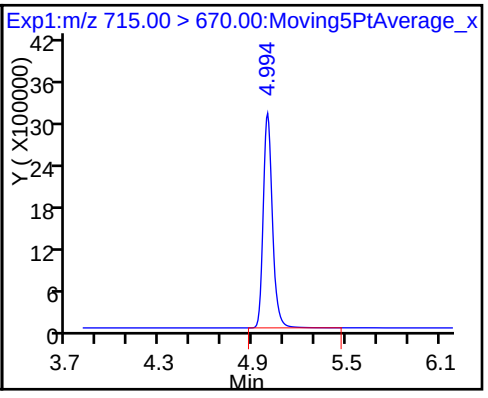
42 Perfluorotetradecanoic acid



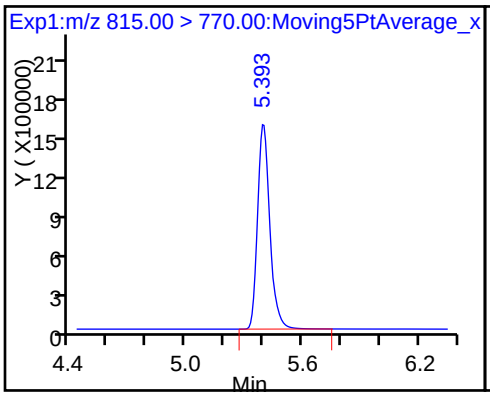
42 Perfluorotetradecanoic acid



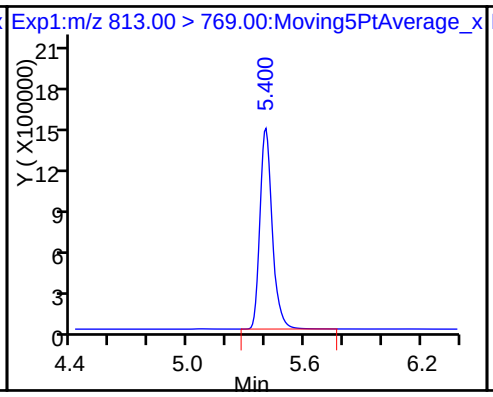
D 43 13C2-PFTeDA



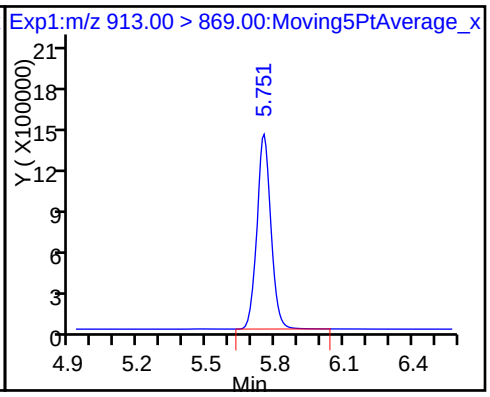
D 44 13C2-PFHxDA



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab Sample ID: CCVL 320-168184/3 Calibration Date: 06/08/2017 09:21

Instrument ID: A8_N Calib Start Date: 06/06/2017 13:31

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 06/06/2017 14:25

Lab File ID: 2017.06.08A_003.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9186	0.9537		1.03	0.990	3.8	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.041	1.014		0.965	0.990	-2.6	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.633	1.584		0.849	0.875	-2.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.012	1.009		0.987	0.990	-0.3	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.048	1.052		0.994	0.990	0.4	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.096	1.183		0.973	0.901	8.0	50.0
6:2FTS	AveID	0.9879	0.9418		0.895	0.939	-4.7	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.141	1.142		0.943	0.943	0.0	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.068	1.085		1.01	0.990	1.5	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.055	1.011		0.880	0.919	-4.2	50.0
Perfluorononanoic acid (PFNA)	AveID	1.002	0.9757		0.964	0.990	-2.7	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9693	0.9434		0.964	0.990	-2.7	50.0
8:2FTS	AveID	0.9716	1.000		0.976	0.949	2.9	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.9522	0.9907		1.03	0.990	4.0	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.028	0.9710		0.935	0.990	-5.6	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6584	0.6632		0.961	0.954	0.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9439	0.8856		0.929	0.990	-6.2	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.065	1.084		1.01	0.990	1.8	50.0
MeFOSA	AveID	0.9633	0.9063		0.931	0.990	-5.9	50.0
N-EtFOSA-M	AveID	1.000	0.9512		0.941	0.990	-4.9	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9562	0.9545		0.988	0.990	-0.2	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.000	1.124		1.11	0.990	12.5	50.0
Perfluorotetradecanoic acid (PFTeA)	L2ID		2.500		1.15	0.990	16.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		2.434		1.77	0.990	78.4*	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.8851	1.227		1.37	0.990	38.6	50.0
13C4 PFBA	Ave	329728	305336		45.8	49.5	-7.4	50.0
13C5-PFPeA	Ave	219977	224230		50.5	49.5	1.9	50.0
13C2 PFHxA	Ave	192846	190047		48.8	49.5	-1.5	50.0
13C4-PFHpA	Ave	177883	178691		49.7	49.5	0.5	50.0
18O2 PFHxS	Ave	230540	209663		42.6	46.8	-9.1	50.0
M2-6:2FTS	Ave	88838	231847		123	47.0	161.0*	50.0

FORM VII 537 (Modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab Sample ID: CCVL 320-168184/3 Calibration Date: 06/08/2017 09:21

Instrument ID: A8_N Calib Start Date: 06/06/2017 13:31

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 06/06/2017 14:25

Lab File ID: 2017.06.08A_003.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C4 PFOA	Ave	180322	195704		53.7	49.5	8.5	50.0
13C4 PFOS	Ave	178130	160384		42.6	47.3	-10.0	50.0
13C5 PFNA	Ave	152667	152471		49.4	49.5	-0.1	50.0
13C8 FOSA	Ave	300205	249639		41.2	49.5	-16.8	50.0
M2-8:2FTS	Ave	81859	52583		30.5	47.4	-35.8	50.0
13C2 PFDA	Ave	150783	129989		42.7	49.5	-13.8	50.0
d3-NMeFOSAA	Ave	88062	83032		46.7	49.5	-5.7	50.0
13C2 PFUnA	Ave	119837	113568		46.9	49.5	-5.2	50.0
d5-NEtFOSAA	Ave	87293	82206		46.6	49.5	-5.8	50.0
d-N-MeFOSA-M	Ave	88593	80639		45.1	49.5	-9.0	50.0
d-N-EtFOSA-M	Ave	82760	75797		45.3	49.5	-8.4	50.0
13C2 PFDoA	Ave	124485	111174		44.2	49.5	-10.7	50.0
13C2-PFTeDA	Ave	257086	279024		53.7	49.5	8.5	50.0
13C2-PFHxDA	Ave	136854	182449		66.0	49.5	33.3	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170608-43995.b\2017.06.08A_003.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 08-Jun-2017 09:21:52 ALS Bottle#: 29 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub20

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170608-43995.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 08-Jun-2017 10:28:26 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: chandrasenas Date: 08-Jun-2017 09:51:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.700	1.692	0.008		15115667	45.8		92.6	102056	
2 Perfluorobutyric acid										
212.90 > 169.00	1.704	1.692	0.012	1.000	288325	1.03		104	228	
D 3 13C5-PFPeA										
267.90 > 223.00	2.027	2.011	0.016		11100495	50.5		102	53692	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.027	2.011	0.016	1.000	225157	0.9648		97.4	115	
D 47 13C3-PFBS										
301.90 > 83.00	2.060	2.051	0.009		244690	NC				
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.069	2.051	0.018	1.000	290745	0.8494		97.1		
298.90 > 99.00	2.060	2.051	0.009	0.996	119299		2.44(0.00-0.00)			
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.324	2.313	0.011	1.000	56532	0.2832		30.6		
D 7 13C2 PFHxA										
315.00 > 270.00	2.366	2.345	0.021		9408263	48.8		98.5	23314	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.366	2.345	0.021	1.000	189899	0.9871		99.7	370	
D 9 13C4-PFHpA										
367.00 > 322.00	2.740	2.720	0.020		8846066	49.7		100	15493	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.740	2.720	0.020	1.000	186170	0.99		100	89.0	
D 11 18O2 PFHxS										
403.00 > 84.00	2.749	2.730	0.019		9818894	42.6		90.9	13466	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.749	2.730	0.019	1.000	223557	0.9731		108		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 409.00	3.110	3.087	0.023		10903676	122.7		261		
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.110	3.087	0.023	1.000	204939	0.8948		95.3		
D 14 13C4 PFOA										
417.00 > 372.00	3.133	3.110	0.023		9688309	53.7		109	15580	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.133	3.110	0.023	1.000	210227	1.01		102	80.6	
413.00 > 169.00	3.133	3.110	0.023	1.000	118731		1.77(0.90-1.10)		270	
* 62 13C2-PFOA										
415.00 > 370.00	3.126	3.110	0.016		10352809	49.5		100		
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.133	3.110	0.023	1.000	172580	0.9434		100		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.507	3.446	0.061	1.000	148999	0.8803		95.8	559	
499.00 > 99.00	3.507	3.446	0.061	1.000	33521		4.44(0.90-1.10)		366	
D 18 13C4 PFOS										
503.00 > 80.00	3.507	3.485	0.022		7590460	42.6		90.0	14332	
D 19 13C5 PFNA										
468.00 > 423.00	3.513	3.500	0.013		7548093	49.4		99.9	25413	
20 Perfluorononanoic acid										
463.00 > 419.00	3.513	3.500	0.013	1.000	147292	0.9637		97.3	319	
D 21 13C8 FOSA										
506.00 > 78.00	3.808	3.789	0.019		12358382	41.2		83.2	15450	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.808	3.799	0.009	1.000	233174	0.9637		97.3	1643	
D 26 M2-8:2FTS										
529.00 > 509.00	3.869	3.851	0.018		2493803	30.5		64.2		
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.869	3.851	0.018	1.000	49885	0.9765		103		
D 23 13C2 PFDA										
515.00 > 470.00	3.877	3.860	0.017		6435091	42.7		86.2	11379	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.877	3.860	0.017	1.000	127508	1.03		104	678	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.037	4.021	0.016		4110519	46.7		94.3		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	4.037	4.021	0.016	1.000	79829	0.9349		94.4		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.181	4.156	0.025	1.000	101514	0.9613		101		
D 30 13C2 PFUnA										
565.00 > 520.00	4.206	4.181	0.025		5622190	46.9		94.8	9114	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.206	4.181	0.025		4069584	46.6		94.2		
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.206	4.181	0.025	1.000	121881	1.01		102	494	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.206	4.189	0.017	1.000	72080	0.9289		93.8		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
35 MeFOSA										
512.00 > 169.00	4.284	4.268	0.016	1.000	72356	0.9315		94.1		
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.275	4.268	0.007		3992015	45.1		91.0		
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.450	4.442	0.008		3752315	45.3		91.6		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.460	4.451	0.009	1.000	71387	0.9415		95.1		
D 36 13C2 PFDoA										
615.00 > 570.00	4.498	4.469	0.029		5503687	44.2		89.3	6684	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.498	4.469	0.029	1.000	105069	0.9884		99.8	76.0	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.764	4.736	0.028	1.000	123749	1.11		112	268	
D 43 13C2-PFTeDA										
715.00 > 670.00	5.001	4.974	0.027		13813048	53.7		109	13668	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	5.001	4.974	0.027	1.000	275160	1.15		116	440	
713.00 > 169.00	4.994	4.974	0.020	0.999	44359		6.20(0.00-0.00)		736	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.432	5.405	0.027		9032134	66.0		133	6852	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.432	5.405	0.027	1.000	267872	1.77		178	257	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.820	5.789	0.031	1.000	135016	1.37		139	81.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L2_00003 Amount Added: 1.00 Units: mL

Report Date: 08-Jun-2017 10:28:26 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170608-43995.b\2017.06.08A_003.d

Injection Date: 08-Jun-2017 09:21:52 Instrument ID: A8_N

Lims ID: CCVL

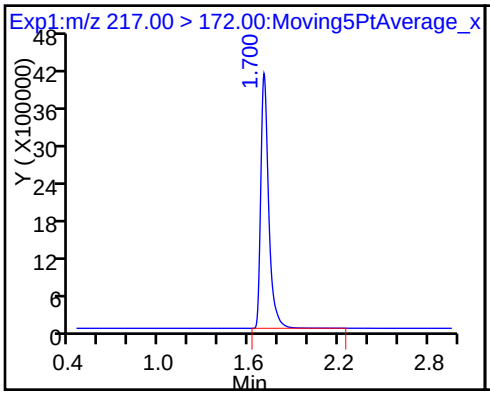
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 3

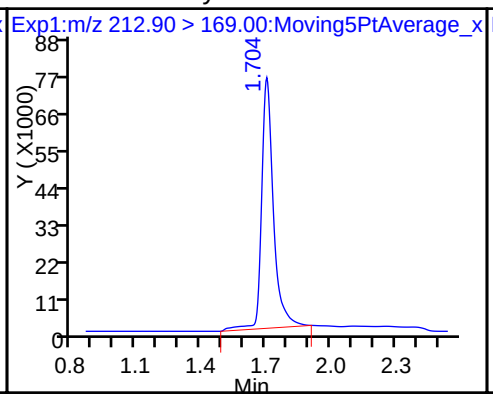
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

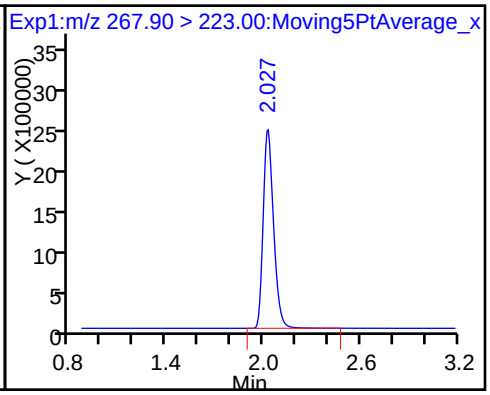
D 1 13C4 PFBA



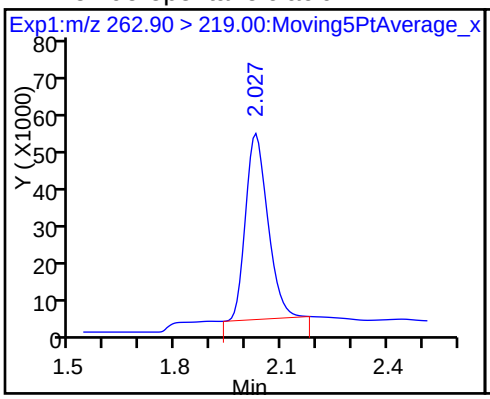
2 Perfluorobutyric acid



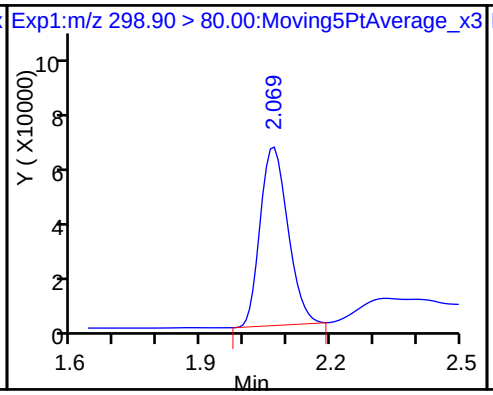
D 3 13C5-PFPeA



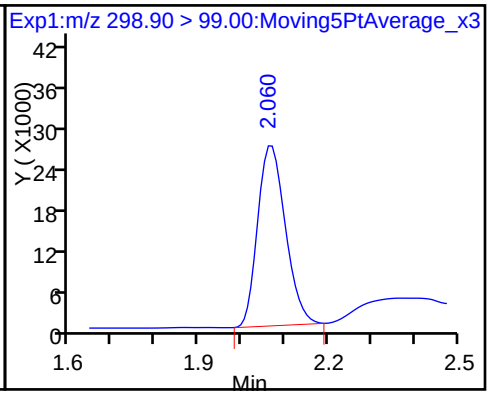
4 Perfluoropentanoic acid



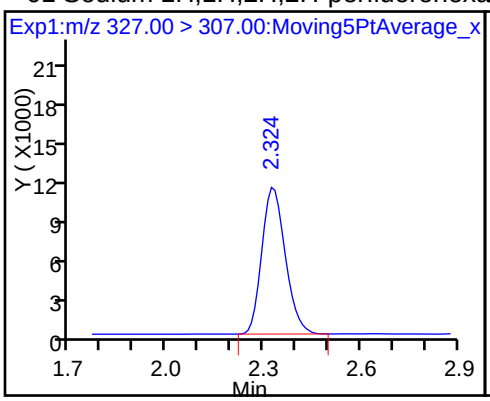
5 Perfluorobutanesulfonic acid



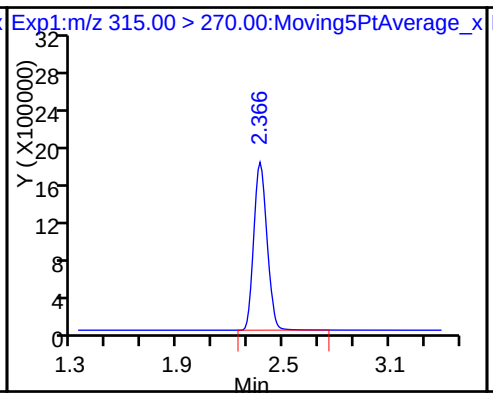
5 Perfluorobutanesulfonic acid



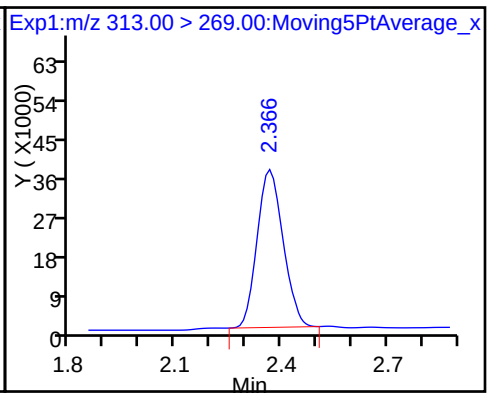
61 Sodium 1H,1H,2H,2H-perfluorohexa



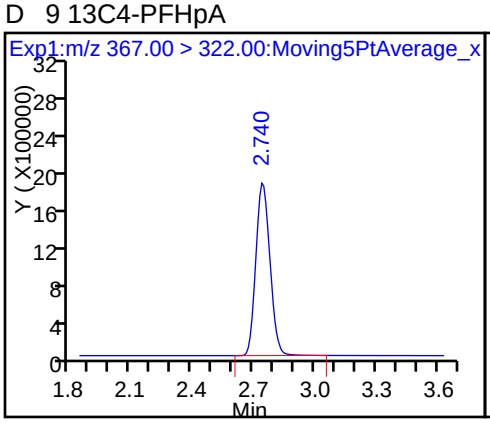
De 7 13C2 PFHxA



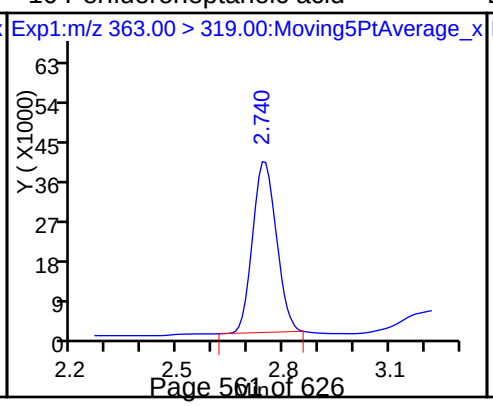
6 Perfluorohexanoic acid



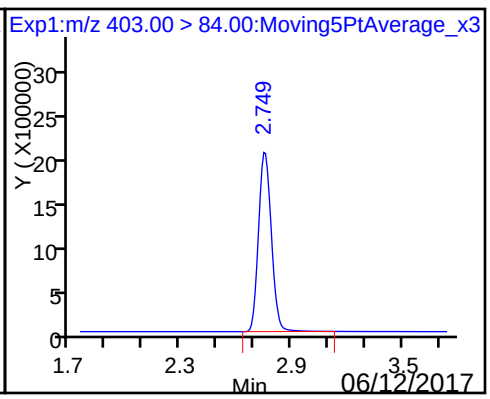
D 9 13C4-PFHpA



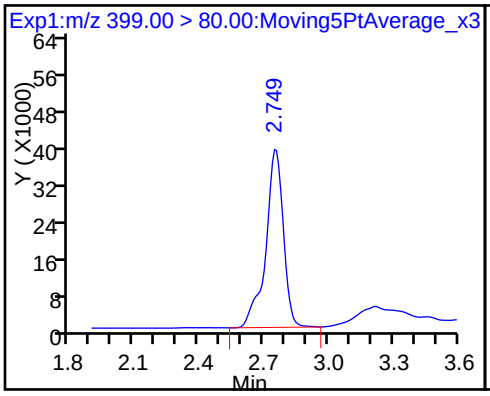
10 Perfluoroheptanoic acid



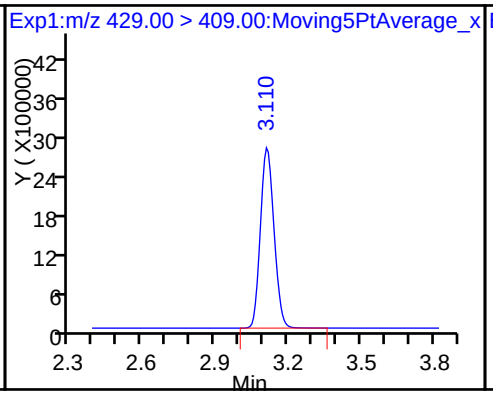
D 11 18O2 PFHxS



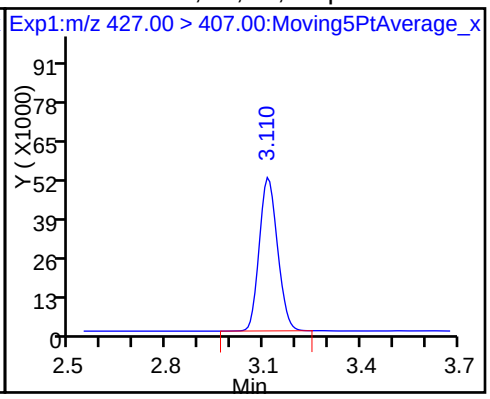
8 Perfluorohexanesulfonic acid



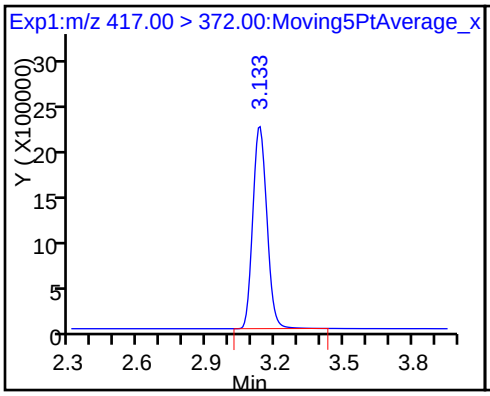
D 12 M2-6:2FTS



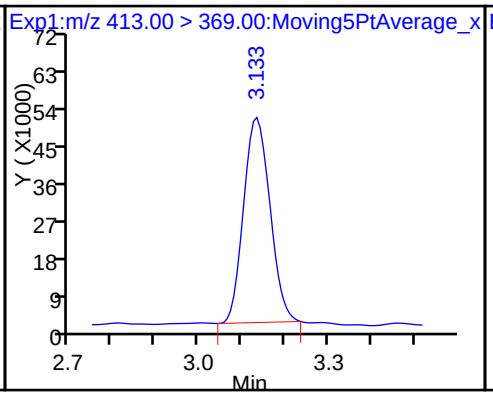
13 Sodium 1H,1H,2H,2H-perfluorooctane



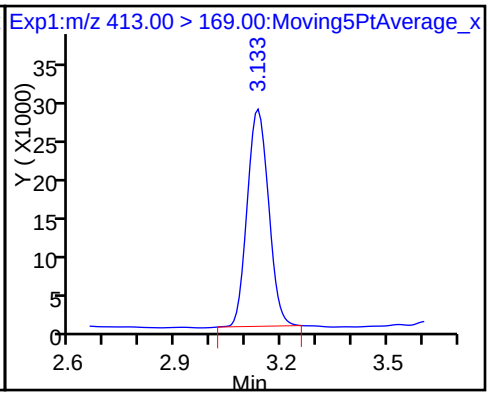
D 14 13C4 PFOA



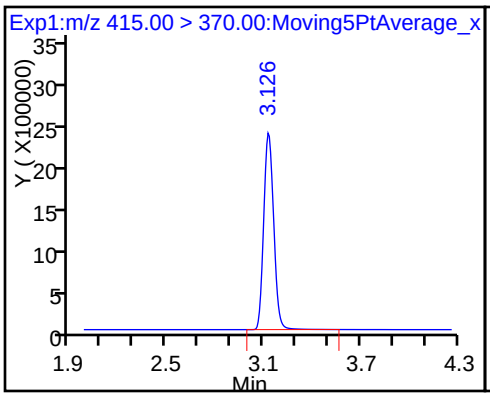
15 Perfluorooctanoic acid



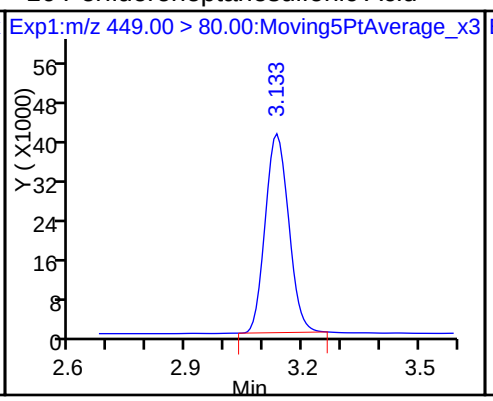
15 Perfluorooctanoic acid



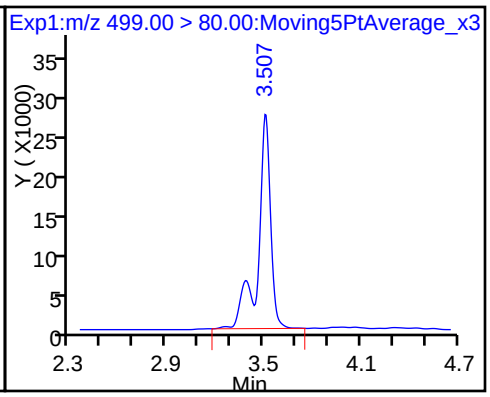
* 62 13C2-PFOA



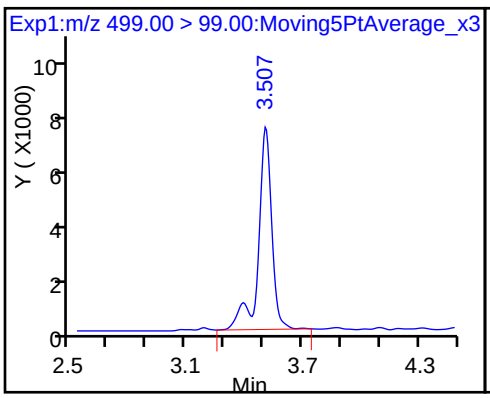
16 Perfluoroheptanesulfonic Acid



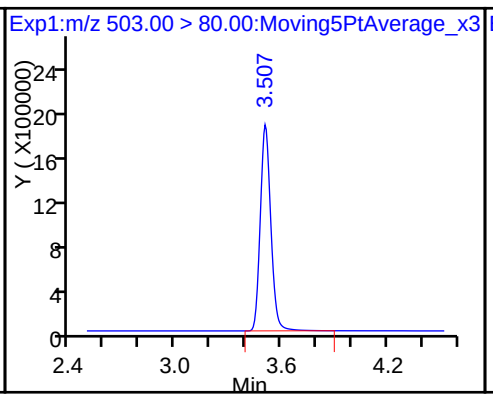
17 Perfluorooctane sulfonic acid



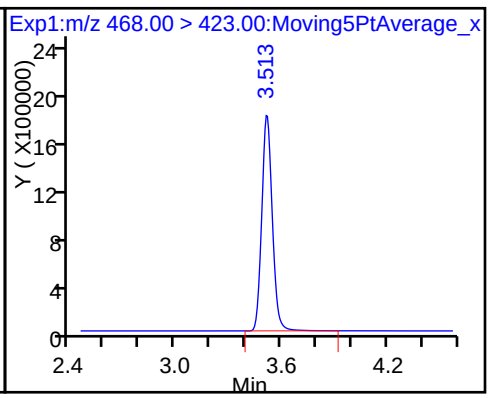
17 Perfluorooctane sulfonic acid



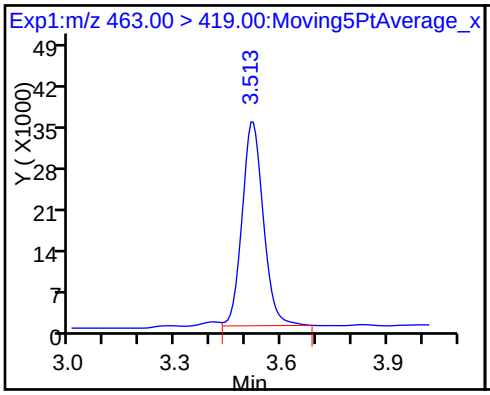
D 18 13C4 PFOS



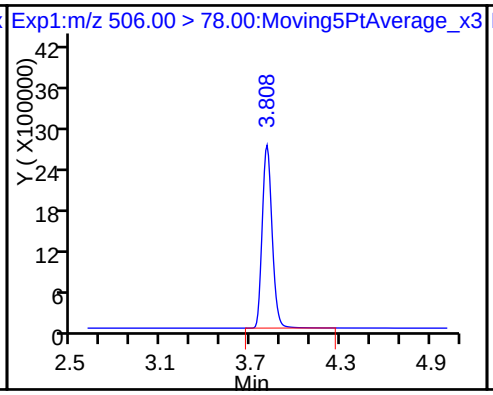
D 19 13C5 PFNA



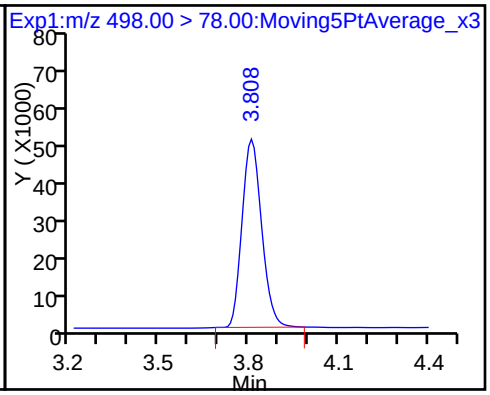
20 Perfluorononanoic acid



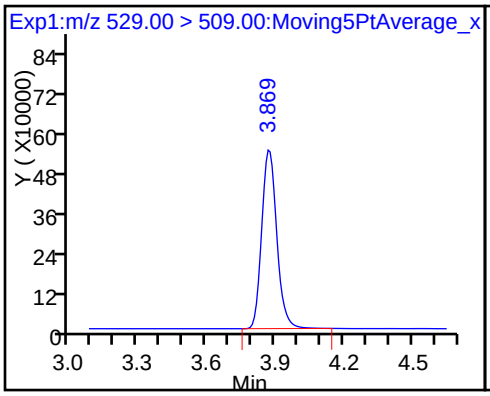
D 21 13C8 FOSA



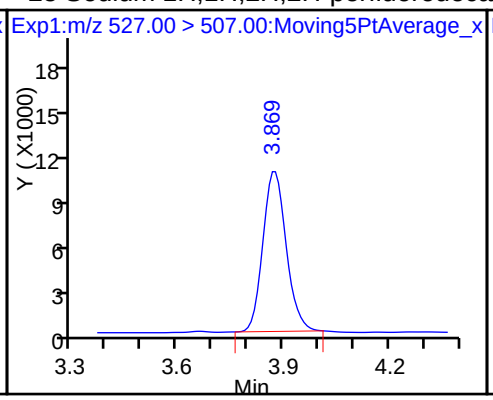
22 Perfluorooctane Sulfonamide



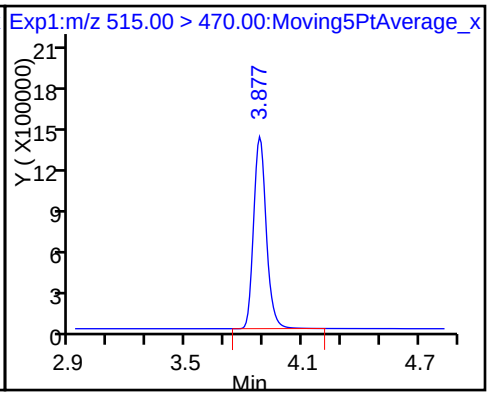
D 26 M2-8:2FTS



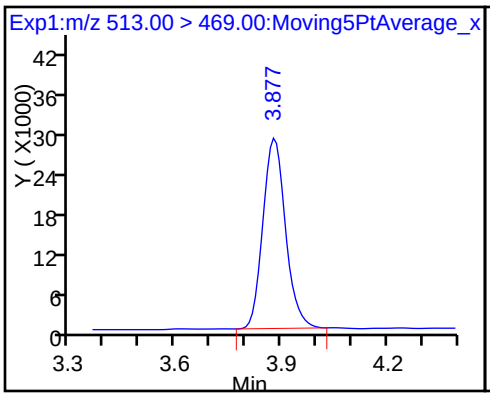
25 Sodium 1H,1H,2H,2H-perfluorodecane



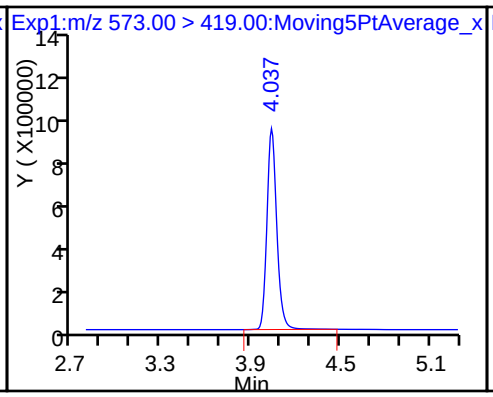
D 23 13C2 PFDA



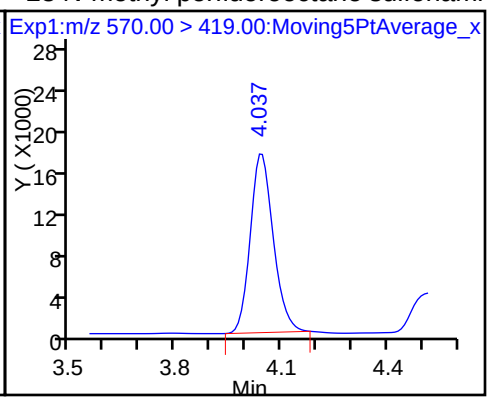
24 Perfluorodecanoic acid



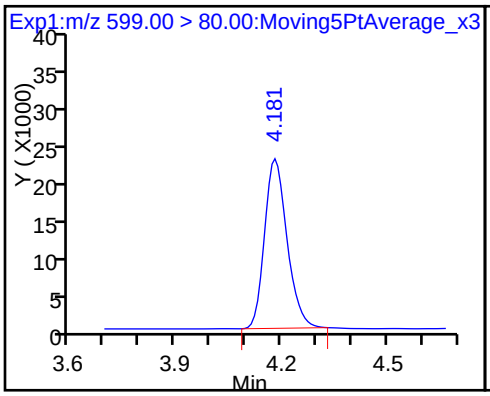
D 27 d3-NMeFOSAA



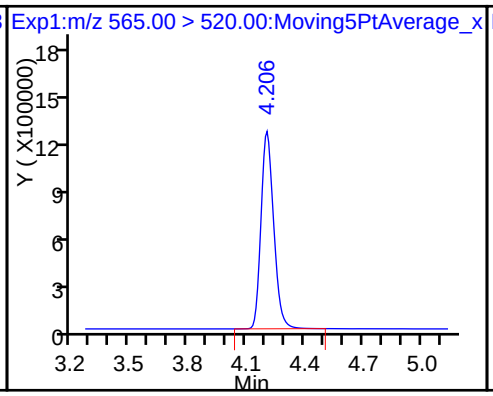
28 N-methyl perfluorooctane sulfonami



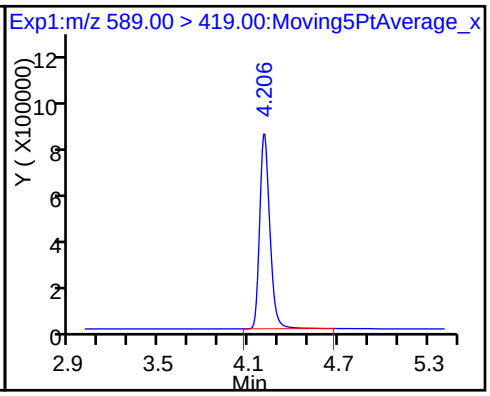
29 Perfluorodecane Sulfonic acid



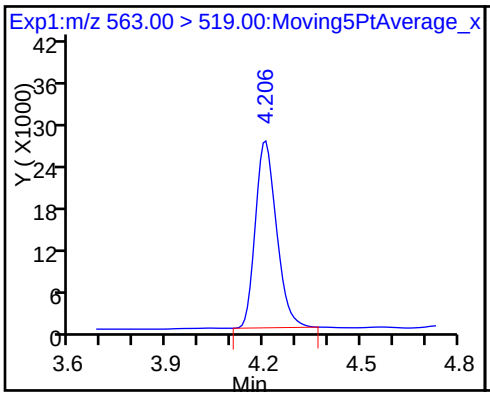
D 30 13C2 PFUnA



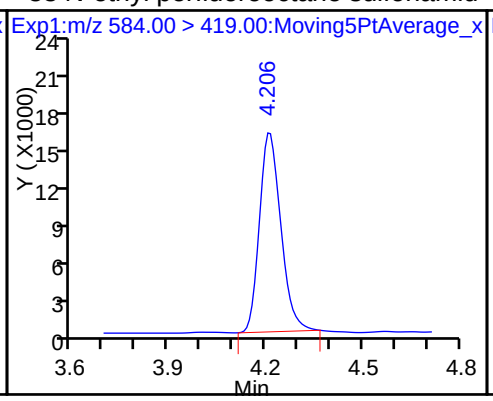
D 32 d5-NEtFOSAA



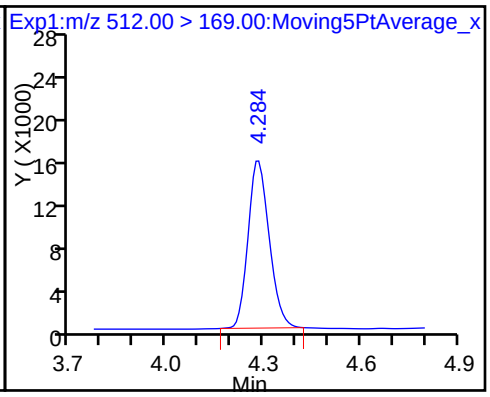
31 Perfluoroundecanoic acid



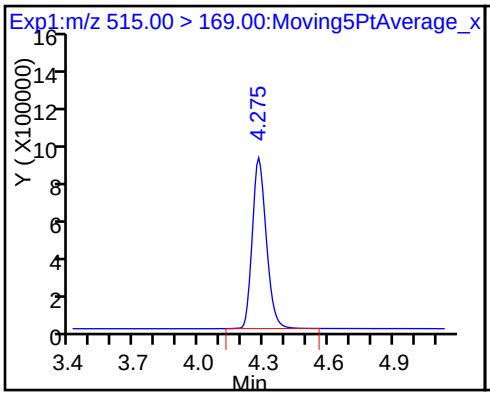
33 N-ethyl perfluorooctane sulfonamid



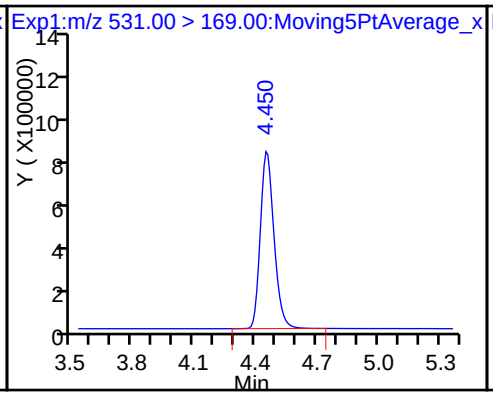
35 MeFOSA



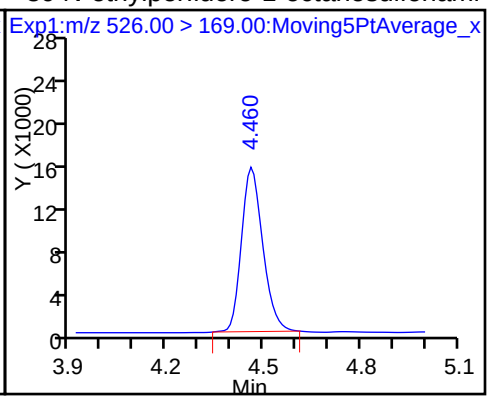
D 34 d-N-MeFOSA-M



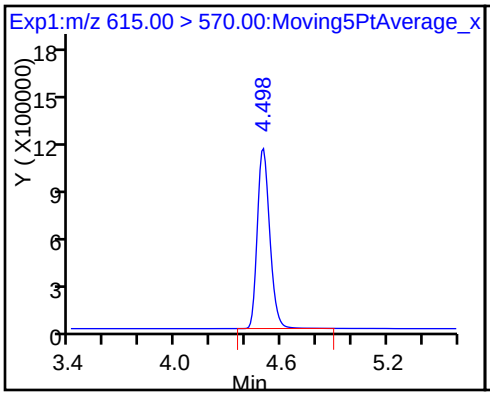
D 38 d-N-EtFOSA-M



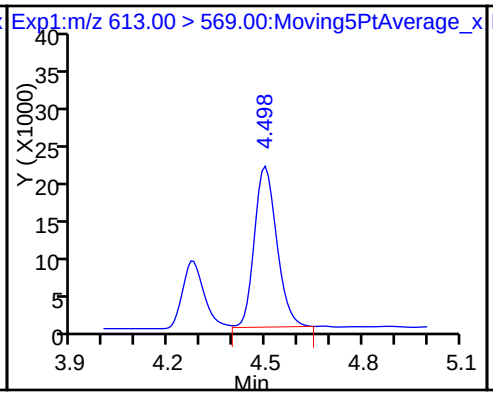
39 N-ethylperfluoro-1-octanesulfonami



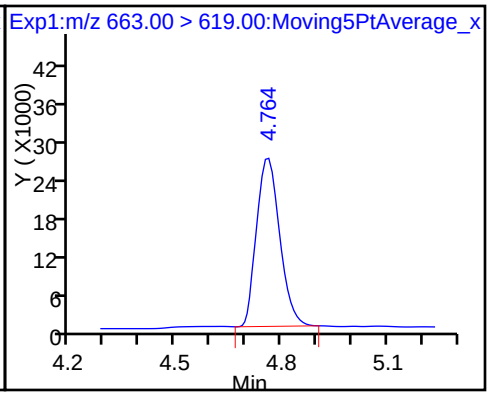
D 36 13C2 PFDoA



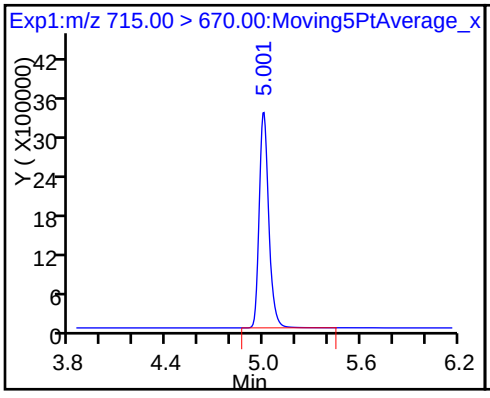
37 Perfluorododecanoic acid



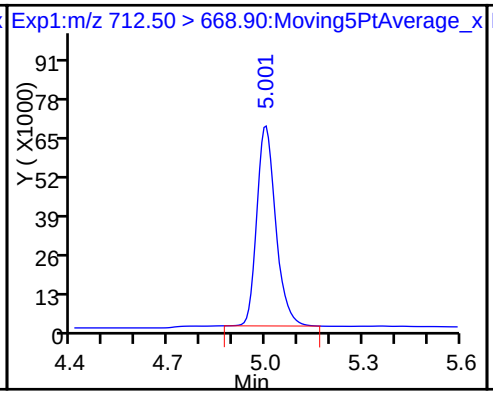
41 Perfluorotridecanoic acid



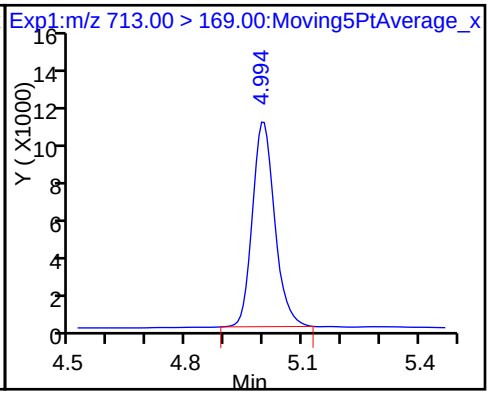
D 43 13C2-PFTeDA



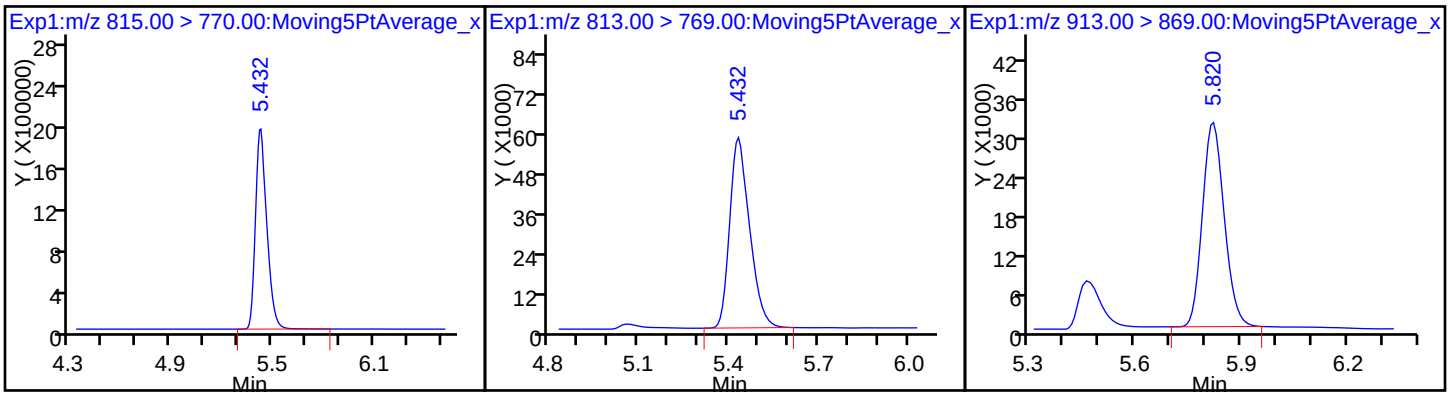
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 44 13C2-PFHxDA 45 Perfluorohexadecanoic acid 46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab Sample ID: CCV 320-168409/1 Calibration Date: 06/09/2017 00:46

Instrument ID: A8_N Calib Start Date: 06/06/2017 13:31

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 06/06/2017 14:25

Lab File ID: 2017.06.08D_001.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9186	0.9579		20.6	19.8	4.3	25.0
Perfluoropentanoic acid (PFPeA)	AveID	1.041	1.037		19.7	19.8	-0.4	25.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.633	1.831		19.6	17.5	12.2	25.0
Perfluorohexanoic acid (PFHxA)	AveID	1.012	1.017		19.9	19.8	0.5	25.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.048	1.096		20.7	19.8	4.6	25.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.096	1.000		16.5	18.0	-8.7	25.0
6:2FTS	AveID	0.9879	1.044		19.8	18.8	5.7	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.141	1.294		21.4	18.9	13.5	25.0
Perfluorooctanoic acid (PFOA)	AveID	1.068	1.056		19.6	19.8	-1.2	25.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.055	1.095		19.1	18.4	3.7	25.0
Perfluorononanoic acid (PFNA)	AveID	1.002	1.025		20.2	19.8	2.2	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9693	0.9867		20.2	19.8	1.8	25.0
8:2FTS	AveID	0.9716	0.995		19.4	19.0	2.4	25.0
Perfluorodecanoic acid (PFDA)	AveID	0.9522	0.9464		19.7	19.8	-0.6	25.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.028	1.107		21.3	19.8	7.7	25.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6584	0.6750		19.6	19.1	2.5	25.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.065	1.029		19.1	19.8	-3.4	25.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9439	1.044		21.9	19.8	10.6	25.0
MeFOSA	AveID	0.9633	0.9941		20.4	19.8	3.2	25.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9562	0.9746		20.2	19.8	1.9	25.0
N-EtFOSA-M	AveID	1.000	1.050		20.8	19.8	5.0	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.000	1.162		23.0	19.8	16.3	25.0
Perfluorotetradecanoic acid (PFTeA)	L2ID		2.465		23.5	19.8	18.8	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.433		29.5	19.8	49.0*	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.8851	1.424		31.9	19.8	60.9*	25.0
13C4 PFBA	Ave	329728	331624		49.8	49.5	0.6	50.0
13C5-PFPeA	Ave	219977	235174		52.9	49.5	6.9	50.0
13C2 PFHxA	Ave	192846	218186		56.0	49.5	13.1	50.0
13C4-PFHpA	Ave	177883	193985		54.0	49.5	9.1	50.0
18O2 PFHxS	Ave	230540	220172		44.7	46.8	-4.5	50.0
M2-6:2FTS	Ave	88838	77752		41.2	47.0	-12.5	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab Sample ID: CCV 320-168409/1 Calibration Date: 06/09/2017 00:46

Instrument ID: A8_N Calib Start Date: 06/06/2017 13:31

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 06/06/2017 14:25

Lab File ID: 2017.06.08D_001.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C4 PFOA	Ave	180322	208335		57.2	49.5	15.5	50.0
13C4 PFOS	Ave	178130	152609		40.5	47.3	-14.3	50.0
13C5 PFNA	Ave	152667	163860		53.1	49.5	7.3	50.0
13C8 FOSA	Ave	300205	242642		40.0	49.5	-19.2	50.0
13C2 PFDA	Ave	150783	139818		45.9	49.5	-7.3	50.0
M2-8:2FTS	Ave	81859	59749		34.6	47.4	-27.0	50.0
d3-NMeFOSAA	Ave	88062	73976		41.6	49.5	-16.0	50.0
13C2 PFUnA	Ave	119837	109623		45.3	49.5	-8.5	50.0
d5-NEtFOSAA	Ave	87293	77049		43.7	49.5	-11.7	50.0
d-N-MeFOSA-M	Ave	88593	79936		44.7	49.5	-9.8	50.0
13C2 PFDoA	Ave	124485	104018		41.4	49.5	-16.4	50.0
d-N-EtFOSA-M	Ave	82760	76099		45.5	49.5	-8.0	50.0
13C2-PFTeDA	Ave	257086	228924		44.1	49.5	-11.0	50.0
13C2-PFHxDA	Ave	136854	115784		41.9	49.5	-15.4	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_001.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 09-Jun-2017 00:46:13 ALS Bottle#: 31 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub20

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 09-Jun-2017 12:54:51 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: raineys Date: 09-Jun-2017 12:54:51

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.677	1.677	0.0		16417029	49.8		101	35094	
2 Perfluorobutyric acid										
212.90 > 169.00	1.681	1.681	0.0	1.000	6290384	20.6		104	7674	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.988	1.988	0.0	1.000	4827838	19.7		99.6	2438	
D 3 13C5-PFPeA										
267.90 > 223.00	1.988	1.988	0.0		11642291	52.9		107	51713	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.027	2.027	0.0	1.000	7057241	19.6		112		
298.90 > 99.00	2.027	2.027	0.0	1.000	2844146		2.48(0.00-0.00)			
D 47 13C3-PFBS										
301.90 > 83.00	2.027	2.027	0.0		266776	NC				
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.282	2.282	0.0	1.000	1379403	20.6		111		
D 7 13C2 PFHxA										
315.00 > 270.00	2.313	2.313	0.0		10801300	56.0		113	26291	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.323	2.323	0.0	1.000	4394870	19.9		100	5287	
D 9 13C4-PFHpA										
367.00 > 322.00	2.692	2.692	0.0		9603195	54.0		109	23242	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.692	2.692	0.0	1.000	4210615	20.7		105	1228	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.701	2.701	0.0	1.000	3968728	16.5		91.3		
D 11 18O2 PFHxS										
403.00 > 84.00	2.701	2.701	0.0		10311042	44.7		95.5	17521	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.043	3.043	0.0	1.000	1524238	19.8		106		
D 12 M2-6:2FTS										
429.00 > 409.00	3.043	3.043	0.0		3656658	41.2		87.5		
* 62 13C2-PFOA										
415.00 > 370.00	3.064	3.064	0.0		10529303	49.5		100		
D 14 13C4 PFOA										
417.00 > 372.00	3.064	3.064	0.0		10313629	57.2		116	21347	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.072	3.072	0.0	1.000	4356814	19.6		98.8	1119	
413.00 > 169.00	3.064	3.072	-0.008	0.997	2435403		1.79(0.90-1.10)		2954	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.072	3.072	0.0	1.000	3723912	21.4		113		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.323	3.323	0.0	1.000	3069384	19.1		104	1076	
499.00 > 99.00	3.439	3.323	0.116	1.035	651381		4.71(0.90-1.10)		3226	
D 18 13C4 PFOS										
503.00 > 80.00	3.439	3.439	0.0		7222484	40.5		85.7	14782	
20 Perfluorononanoic acid										
463.00 > 419.00	3.447	3.447	0.0	1.000	3324829	20.2		102	4218	
D 19 13C5 PFNA										
468.00 > 423.00	3.447	3.447	0.0		8111895	53.1		107	17202	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.780	3.780	0.0	1.000	4740711	20.2		102	6197	
D 21 13C8 FOSA										
506.00 > 78.00	3.780	3.780	0.0		12011981	40.0		80.8	10951	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.799	3.799	0.0	1.000	1128069	19.4		102		
24 Perfluorodecanoic acid										
513.00 > 469.00	3.799	3.799	0.0	1.000	2620185	19.7		99.4	5973	
D 26 M2-8:2FTS										
529.00 > 509.00	3.799	3.799	0.0		2833645	34.6		73.0		
D 23 13C2 PFDA										
515.00 > 470.00	3.799	3.799	0.0		6921687	45.9		92.7	10063	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.958	3.958	0.0		3662157	41.6		84.0		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.967	3.967	0.0	1.002	1622038	21.3		108		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.104	4.104	0.0	1.000	1966445	19.6		103		
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.122	4.122	0.0	1.000	2234305	19.1		96.6	4104	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.122	4.122	0.0		3814296	43.7		88.3		
D 30 13C2 PFUnA										
565.00 > 520.00	4.122	4.122	0.0		5426904	45.3		91.5	6978	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.131	4.131	0.0	1.002	1592809	21.9		111		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.258	4.258	0.0		3957211	44.7		90.2		
35 MeFOSA										
512.00 > 169.00	4.267	4.267	0.0	1.000	1573614	20.4		103		
D 36 13C2 PFDoA										
615.00 > 570.00	4.405	4.405	0.0		5149405	41.4		83.6	4734	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.414	4.414	0.0	1.000	2007523	20.2		102	1272	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.441	4.441	0.0		3767300	45.5		92.0		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.450	4.450	0.0	1.000	1582157	20.8		105		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.668	4.668	0.0	1.000	2394283	23.0		116	3459	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.897	4.897	0.0	1.000	5077675	23.5		119	4190	
713.00 > 169.00	4.897	4.897	0.0	1.000	641854		7.91(0.00-0.00)		2993	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.897	4.897	0.0		11332896	44.1		89.0	7708	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.309	5.309	0.0	1.000	2950666	29.5		149	2082	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.309	5.309	0.0		5731876	41.9		84.6	4262	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.670	5.670	0.0	1.000	2933454	31.9		161	2533	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L4_00003 Amount Added: 1.00 Units: mL

Report Date: 09-Jun-2017 12:54:52 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_001.d

Injection Date: 09-Jun-2017 00:46:13 Instrument ID: A8_N

Lims ID: CCV L4

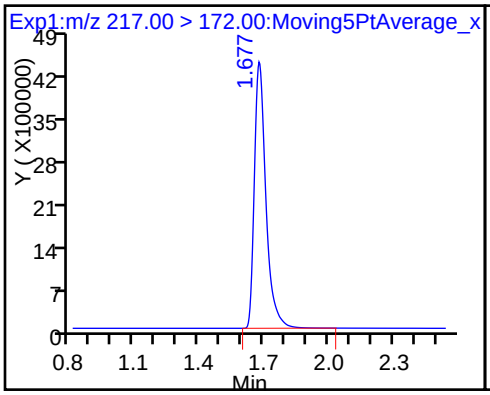
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 31 Worklist Smp#: 1

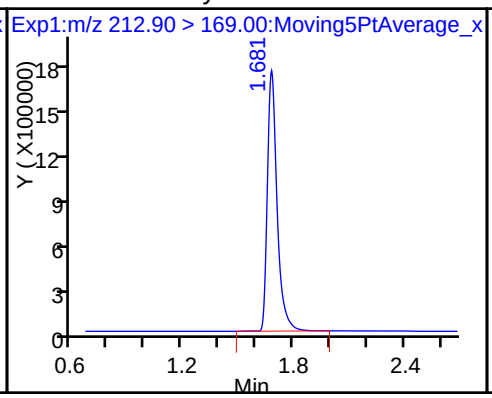
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

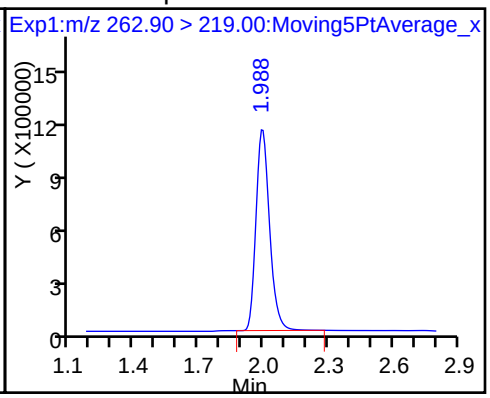
D 1 13C4 PFBA



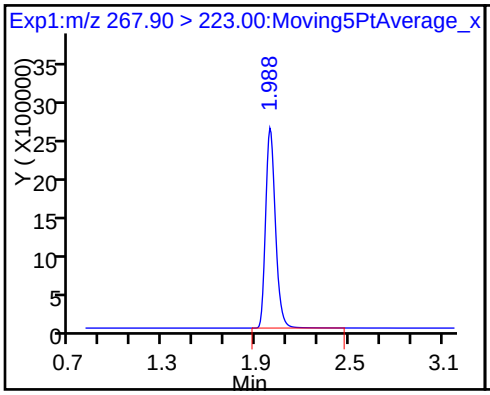
2 Perfluorobutyric acid



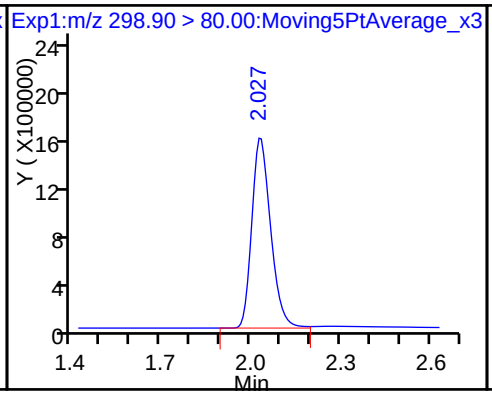
4 Perfluoropentanoic acid



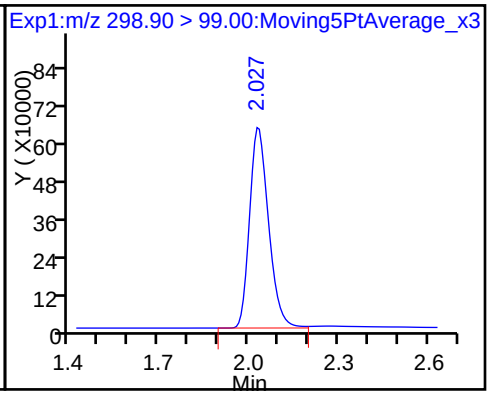
D 3 13C5-PFPeA



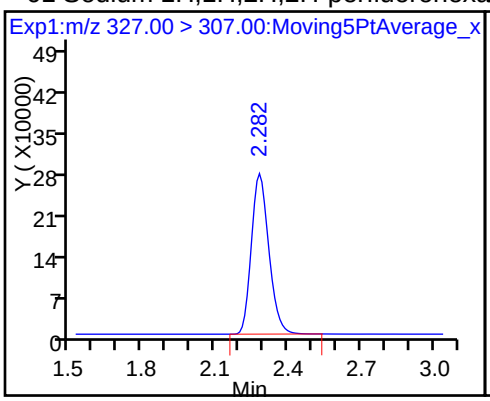
5 Perfluorobutanesulfonic acid



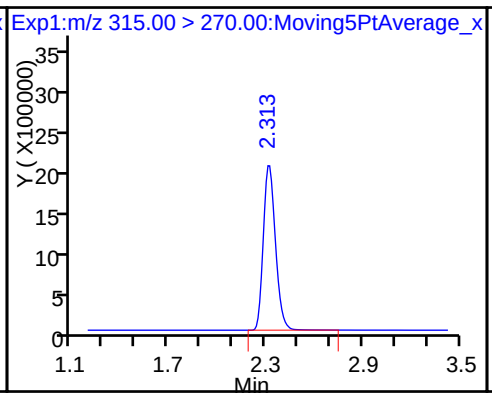
5 Perfluorobutanesulfonic acid



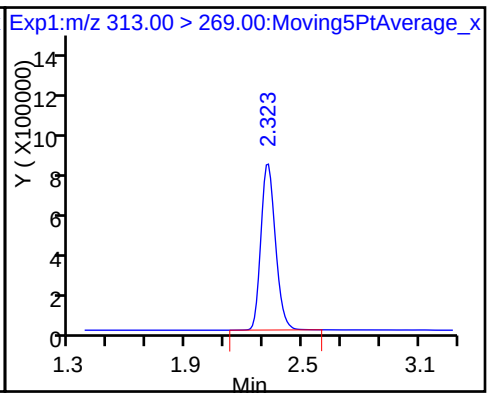
61 Sodium 1H,1H,2H,2H-perfluorohexa



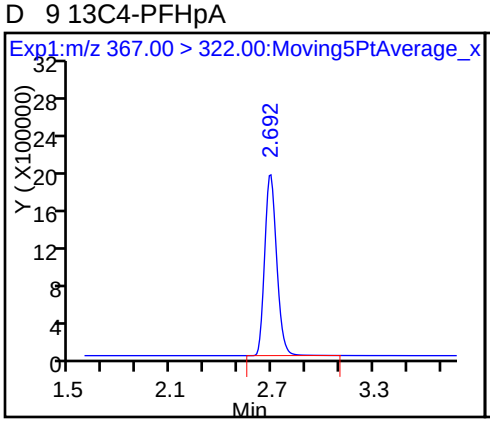
De 7 13C2 PFHxA



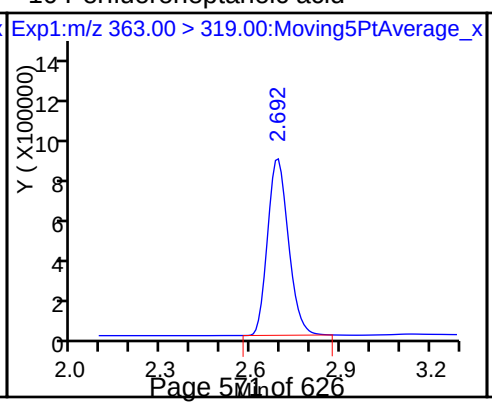
6 Perfluorohexanoic acid



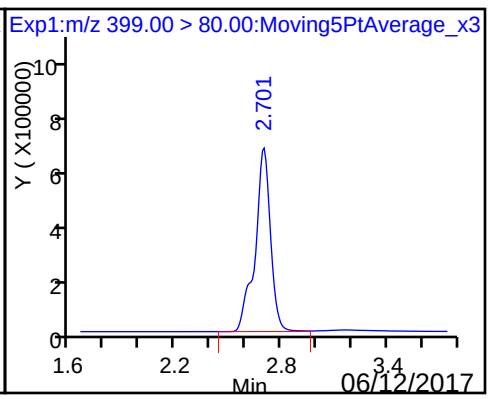
D 9 13C4-PFHpA



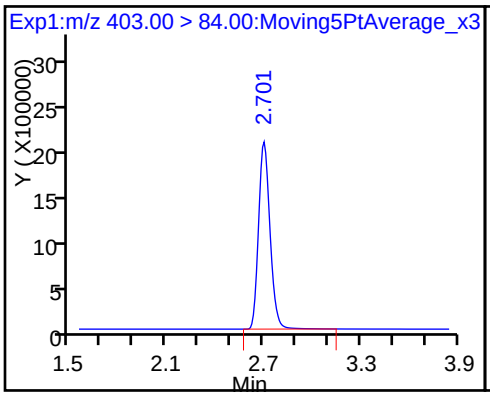
10 Perfluoroheptanoic acid



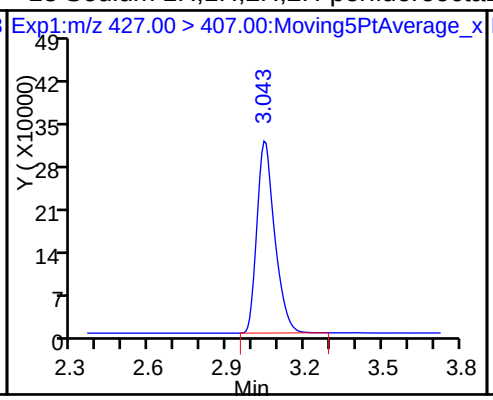
8 Perfluorohexanesulfonic acid



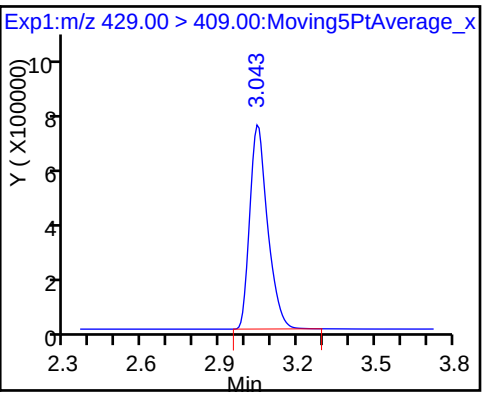
D 11 18O2 PFHxS



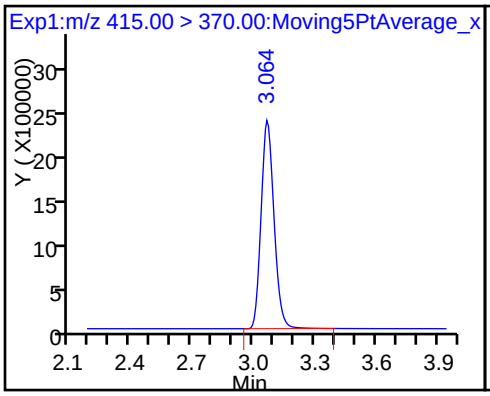
13 Sodium 1H,1H,2H,2H-perfluorooctane



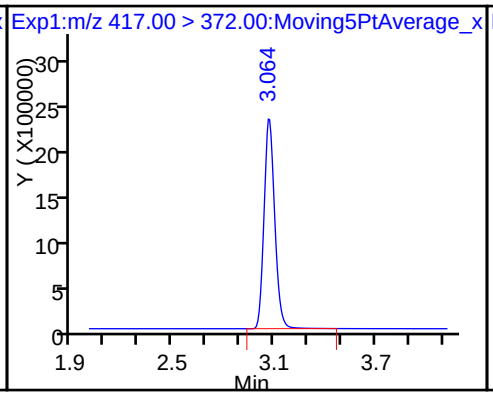
D 12 M2-6:2FTS



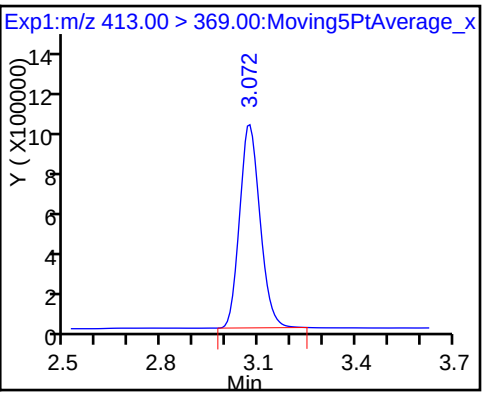
* 62 13C2-PFOA



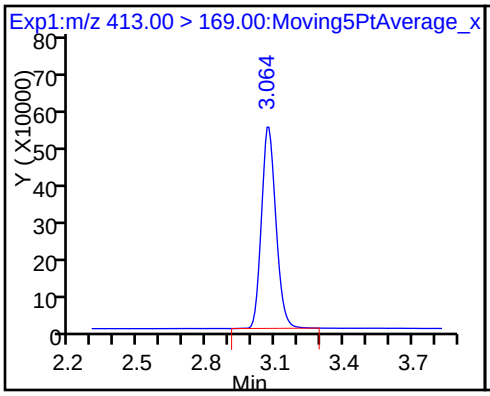
D 14 13C4 PFOA



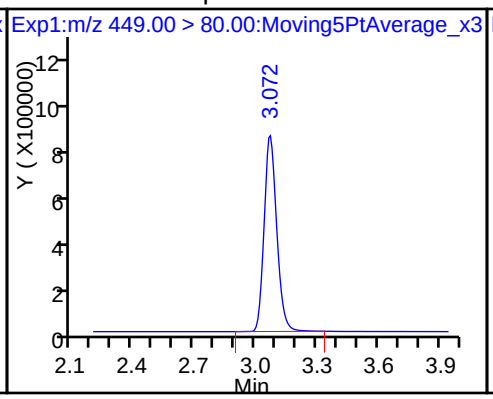
15 Perfluorooctanoic acid



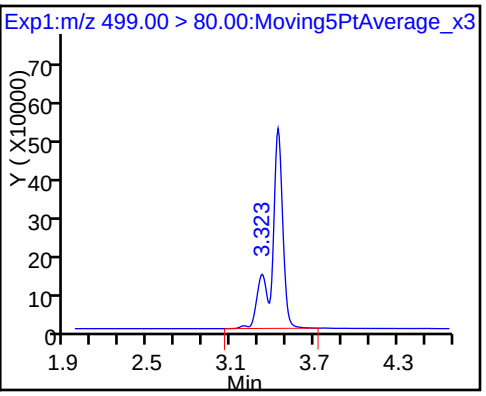
15 Perfluorooctanoic acid



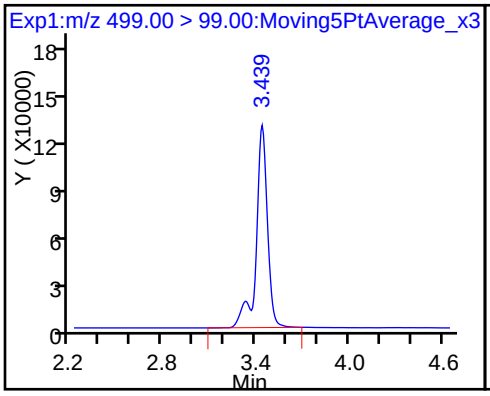
16 Perfluoroheptanesulfonic Acid



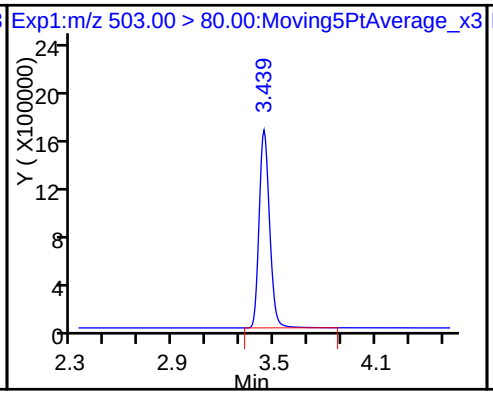
17 Perfluorooctane sulfonic acid



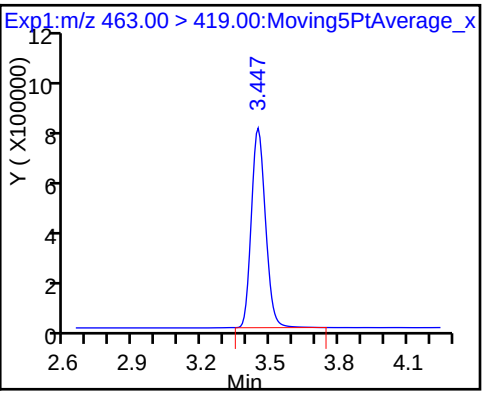
17 Perfluorooctane sulfonic acid



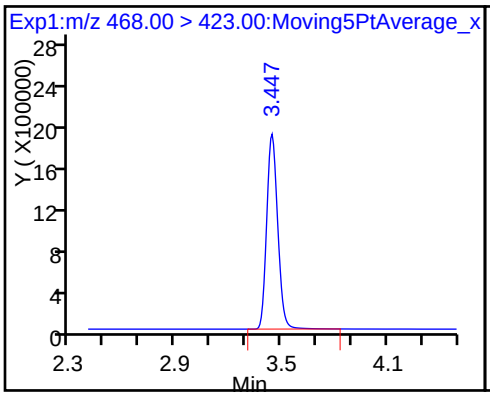
D 18 13C4 PFOS



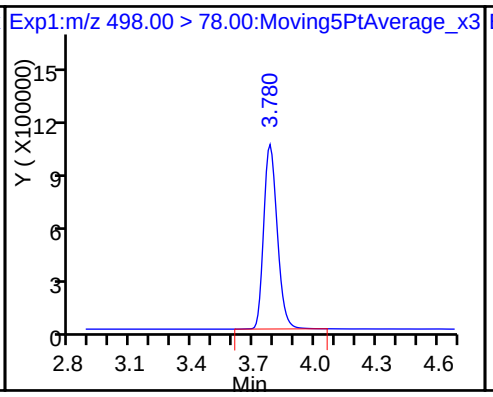
20 Perfluorononanoic acid



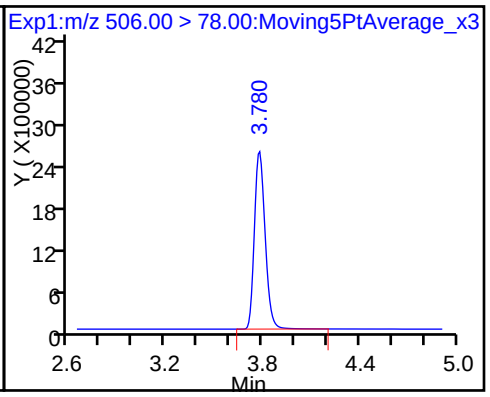
D 19 13C5 PFNA



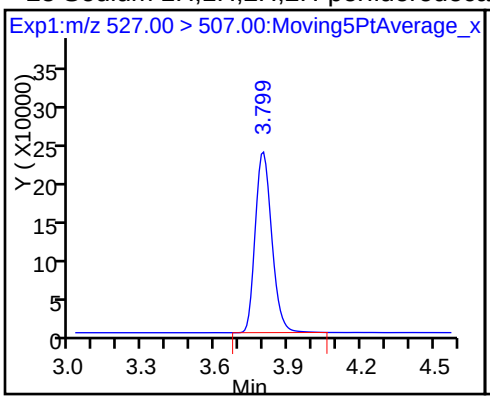
22 Perfluorooctane Sulfonamide



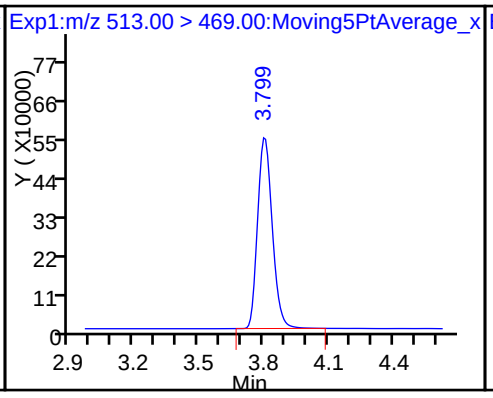
D 21 13C8 FOSA



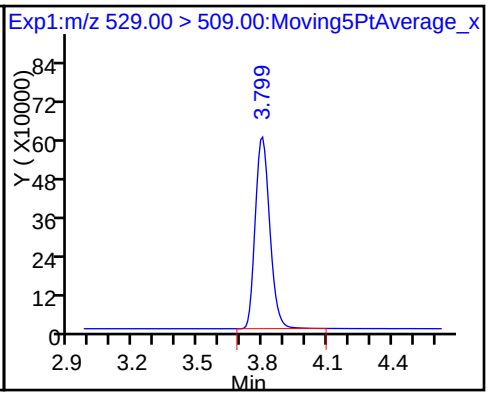
25 Sodium 1H,1H,2H,2H-perfluorodecane



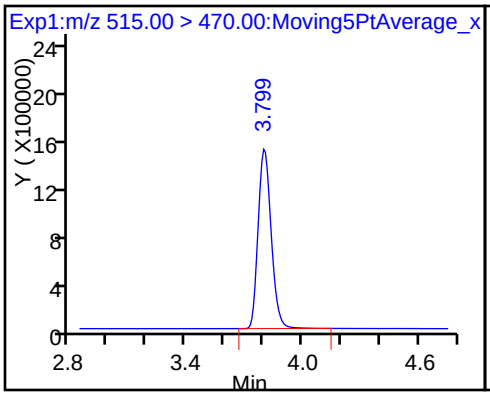
24 Perfluorodecanoic acid



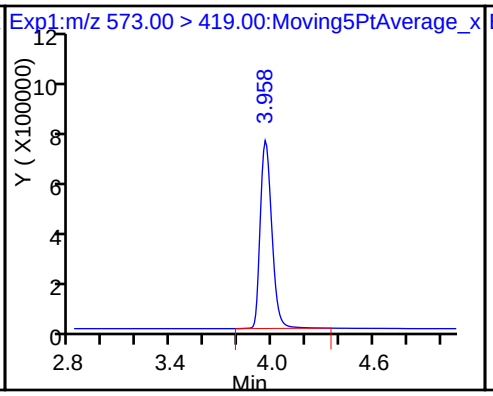
D 26 M2-8:2FTS



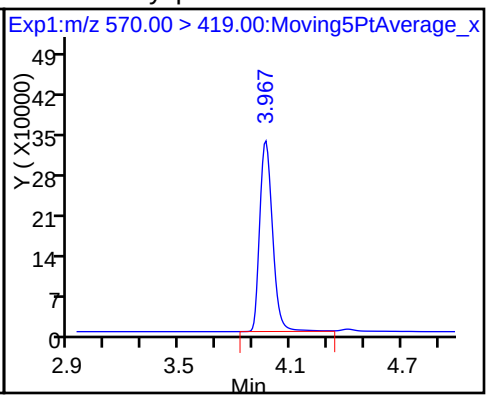
D 23 13C2 PFDA



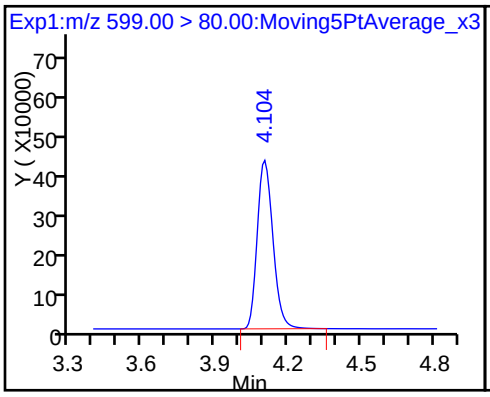
D 27 d3-NMeFOSAA



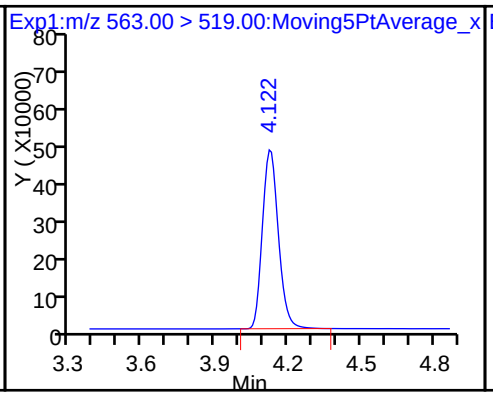
28 N-methyl perfluorooctane sulfonami



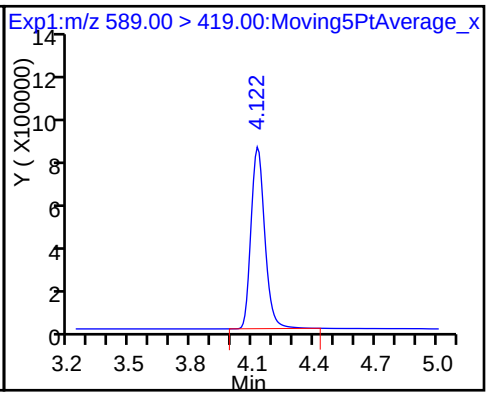
29 Perfluorodecane Sulfonic acid



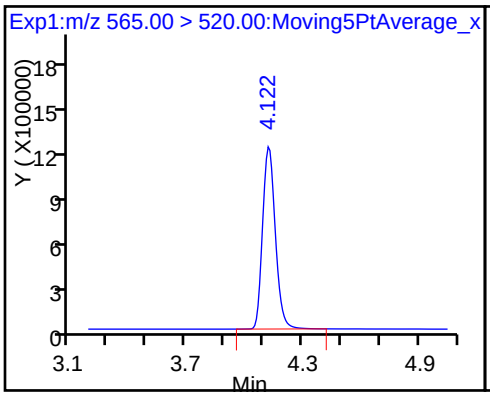
31 Perfluoroundecanoic acid



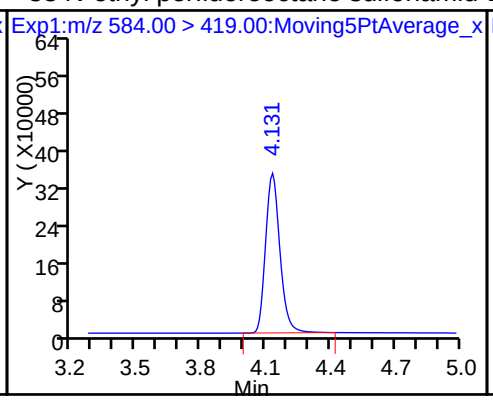
D 32 d5-NEtFOSAA



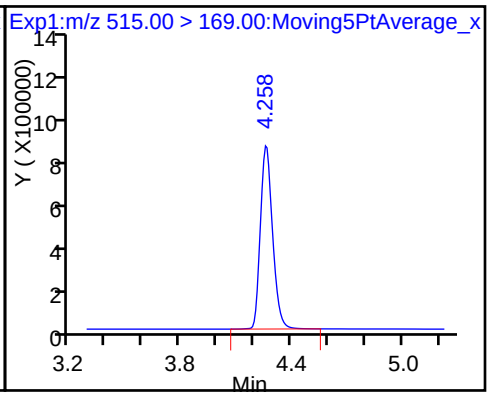
D 30 13C2 PFUnA



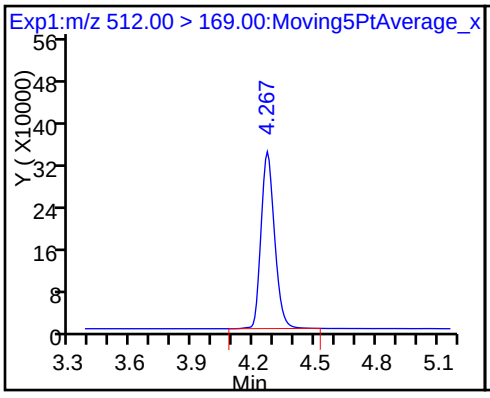
33 N-ethyl perfluorooctane sulfonamid



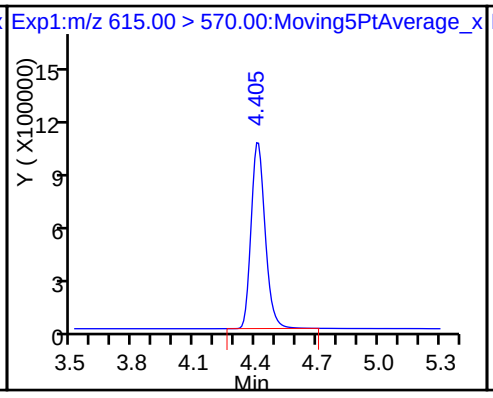
D 34 d-N-MeFOSA-M



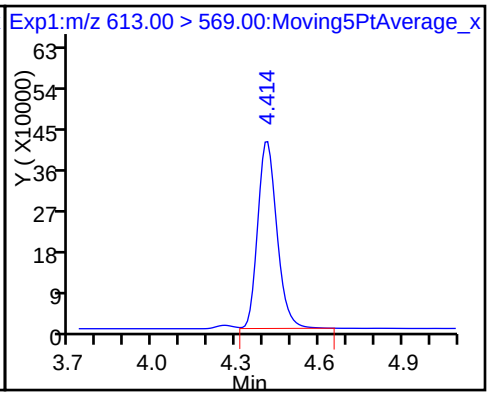
35 MeFOSA



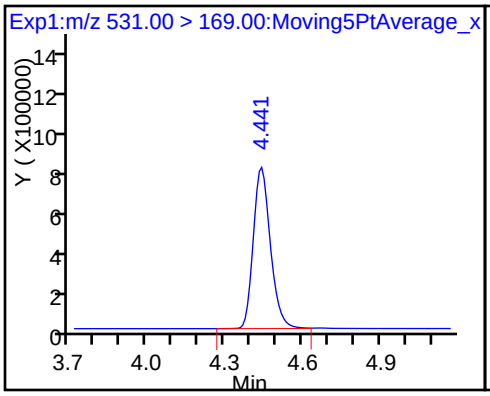
D 36 13C2 PFDoA



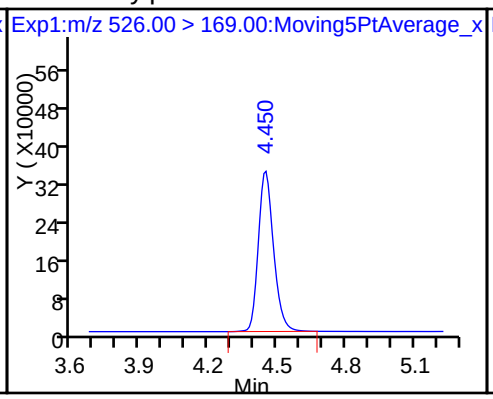
37 Perfluorododecanoic acid



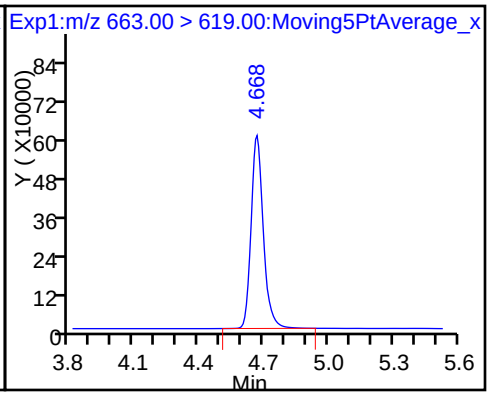
D 38 d-N-EtFOSA-M



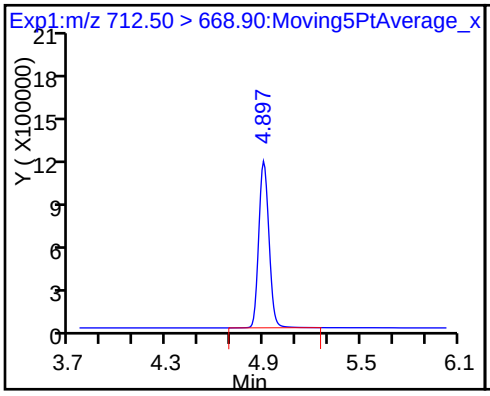
39 N-ethylperfluoro-1-octanesulfonami



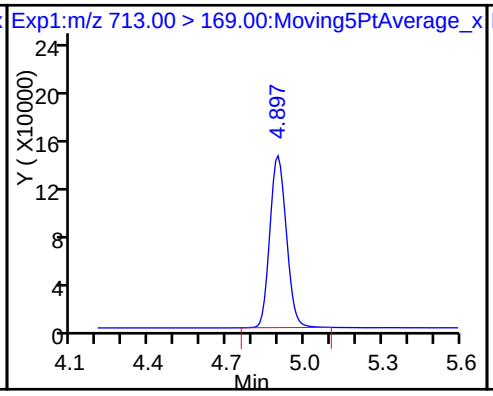
41 Perfluorotridecanoic acid



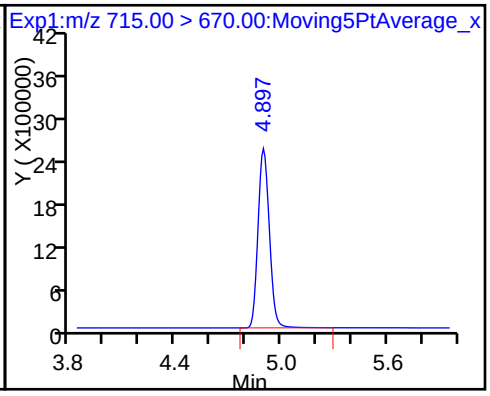
42 Perfluorotetradecanoic acid



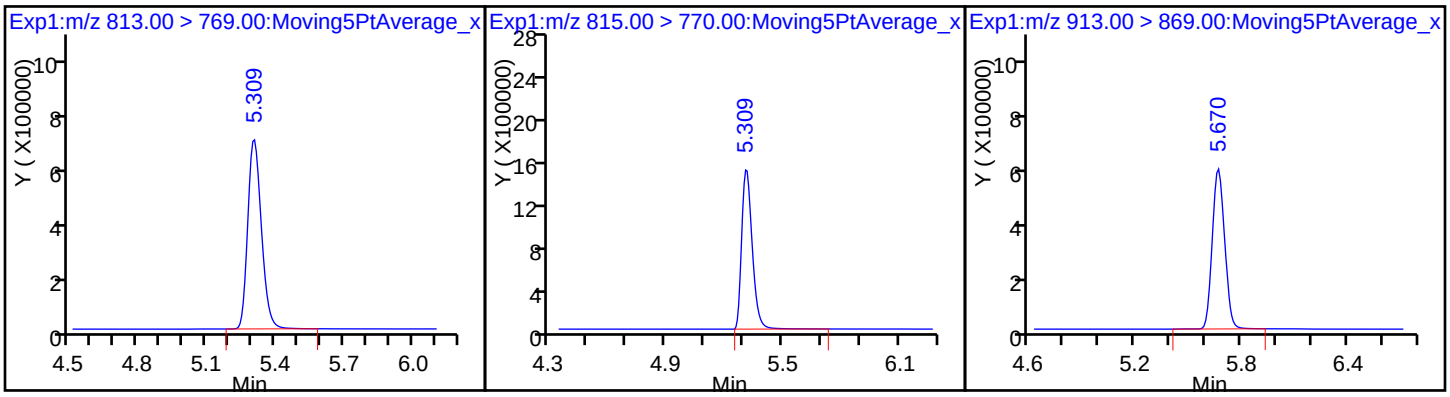
42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid D 44 13C2-PFHxDA 46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab Sample ID: CCV 320-168409/12 Calibration Date: 06/09/2017 02:10

Instrument ID: A8_N Calib Start Date: 06/06/2017 13:31

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 06/06/2017 14:25

Lab File ID: 2017.06.08D_012.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9186	0.9456		51.0	49.5	2.9	25.0
Perfluoropentanoic acid (PFPeA)	AveID	1.041	1.066		50.7	49.5	2.5	25.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.633	1.890		50.7	43.8	15.7	25.0
Perfluorohexanoic acid (PFHxA)	AveID	1.012	1.016		49.7	49.5	0.4	25.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.048	1.097		51.8	49.5	4.7	25.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.096	1.056		43.4	45.0	-3.6	25.0
6:2FTS	AveID	0.9879	1.028		48.9	46.9	4.1	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.141	1.267		52.4	47.1	11.1	25.0
Perfluorooctanoic acid (PFOA)	AveID	1.068	1.069		49.5	49.5	0.0	25.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.055	1.097		47.7	45.9	3.9	25.0
Perfluorononanoic acid (PFNA)	AveID	1.002	1.042		51.5	49.5	4.0	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9693	0.9927		50.7	49.5	2.4	25.0
8:2FTS	AveID	0.9716	0.9779		47.7	47.4	0.6	25.0
Perfluorodecanoic acid (PFDA)	AveID	0.9522	0.9828		51.1	49.5	3.2	25.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.028	1.098		52.9	49.5	6.8	25.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6584	0.6814		49.4	47.7	3.5	25.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.065	1.021		47.4	49.5	-4.2	25.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9439	1.043		54.7	49.5	10.4	25.0
MeFOSA	AveID	0.9633	1.020		52.4	49.5	5.9	25.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9562	0.9560		49.5	49.5	-0.0	25.0
N-EtFOSA-M	AveID	1.000	0.9774		48.4	49.5	-2.3	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.000	1.093		54.1	49.5	9.3	25.0
Perfluorotetradecanoic acid (PFTeA)	L2ID		2.277		54.4	49.5	9.8	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.421		74.3	49.5	50.2*	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.8851	1.436		80.3	49.5	62.2*	25.0
13C4 PFBA	Ave	329728	325529		48.9	49.5	-1.3	50.0
13C5-PFPeA	Ave	219977	231381		52.1	49.5	5.2	50.0
13C2 PFHxA	Ave	192846	211942		54.4	49.5	9.9	50.0
13C4-PFHpA	Ave	177883	192059		53.5	49.5	8.0	50.0
18O2 PFHxS	Ave	230540	217016		44.1	46.8	-5.9	50.0
M2-6:2FTS	Ave	88838	77327		40.9	47.0	-13.0	50.0

FORM VII 537 (Modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Lab Sample ID: CCV 320-168409/12 Calibration Date: 06/09/2017 02:10

Instrument ID: A8_N Calib Start Date: 06/06/2017 13:31

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 06/06/2017 14:25

Lab File ID: 2017.06.08D_012.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C4 PFOA	Ave	180322	195782		53.7	49.5	8.6	50.0
13C4 PFOS	Ave	178130	147484		39.2	47.3	-17.2	50.0
13C5 PFNA	Ave	152667	156286		50.7	49.5	2.4	50.0
13C8 FOSA	Ave	300205	225354		37.2	49.5	-24.9	50.0
13C2 PFDA	Ave	150783	137436		45.1	49.5	-8.9	50.0
M2-8:2FTS	Ave	81859	62253		36.1	47.4	-24.0	50.0
d3-NMeFOSAA	Ave	88062	73425		41.3	49.5	-16.6	50.0
13C2 PFUnA	Ave	119837	104068		43.0	49.5	-13.2	50.0
d5-NEtFOSAA	Ave	87293	74547		42.3	49.5	-14.6	50.0
d-N-MeFOSA-M	Ave	88593	82804		46.3	49.5	-6.5	50.0
13C2 PFDoA	Ave	124485	104126		41.4	49.5	-16.4	50.0
d-N-EtFOSA-M	Ave	82760	78104		46.7	49.5	-5.6	50.0
13C2-PFTeDA	Ave	257086	219974		42.4	49.5	-14.4	50.0
13C2-PFHxDA	Ave	136854	123518		44.7	49.5	-9.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_012.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 09-Jun-2017 02:10:59 ALS Bottle#: 32 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub20

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 09-Jun-2017 14:00:34 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: raineys Date: 09-Jun-2017 14:00:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.681	1.677	0.004		16115280	48.9		98.7	170391	
2 Perfluorobutyric acid										
212.90 > 169.00	1.681	1.681	0.0	1.000	15238103	51.0		103	11284	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.996	1.988	0.008	1.000	12215194	50.7		102	6812	
D 3 13C5-PFPeA										
267.90 > 223.00	1.988	1.988	0.0		11454519	52.1		105	49556	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.034	2.027	0.007	1.000	17945107	50.7		116		
298.90 > 99.00	2.034	2.027	0.007	1.000	7208315		2.49(0.00-0.00)			
D 47 13C3-PFBS										
301.90 > 83.00	2.026	2.027	-0.001		263595	NC				
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.281	2.282	-0.001	1.000	3446006	51.8		112		
D 7 13C2 PFHxA										
315.00 > 270.00	2.323	2.313	0.010		10492194	54.4		110	23112	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.323	2.323	0.0	1.000	10660157	49.7		100	9507	
D 9 13C4-PFHpA										
367.00 > 322.00	2.691	2.692	-0.001		9507890	53.5		108	19473	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.691	2.692	-0.001	1.000	10431537	51.8		105	2807	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.700	2.701	-0.001	1.000	10325884	43.4		96.4		
D 11 18O2 PFHxS										
403.00 > 84.00	2.700	2.701	-0.001		10163245	44.1		94.1	13901	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.041	3.043	-0.002	1.000	3732081	48.9		104		
D 12 M2-6:2FTS										
429.00 > 409.00	3.041	3.043	-0.002		3636688	40.9		87.0		
* 62 13C2-PFOA										
415.00 > 370.00	3.065	3.064	0.001		9939658	49.5		100		
D 14 13C4 PFOA										
417.00 > 372.00	3.072	3.064	0.008		9692194	53.7		109	19611	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.072	3.072	0.0	1.000	10362213	49.5		100	2448	
413.00 > 169.00	3.072	3.072	0.0	1.000	6018073		1.72(0.90-1.10)		5522	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.072	3.072	0.0	1.000	8806959	52.4		111		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.323	3.323	0.0	1.000	7431275	47.7		104	1312	
499.00 > 99.00	3.439	3.323	0.116	1.035	1627597		4.57(0.90-1.10)		6196	
D 18 13C4 PFOS										
503.00 > 80.00	3.439	3.439	0.0		6979954	39.2		82.8	9057	
20 Perfluorononanoic acid										
463.00 > 419.00	3.447	3.447	0.0	1.000	8065452	51.5		104	10345	
D 19 13C5 PFNA										
468.00 > 423.00	3.447	3.447	0.0		7736923	50.7		102	15705	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.781	3.780	0.001	1.000	11074640	50.7		102	10379	
D 21 13C8 FOSA										
506.00 > 78.00	3.781	3.780	0.001		11156130	37.2		75.1	9948	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.799	3.799	0.0	1.000	2886986	47.7		101		
24 Perfluorodecanoic acid										
513.00 > 469.00	3.799	3.799	0.0	1.000	6686914	51.1		103	10515	
D 26 M2-8:2FTS										
529.00 > 509.00	3.799	3.799	0.0		2952390	36.1		76.0		
D 23 13C2 PFDA										
515.00 > 470.00	3.799	3.799	0.0		6803777	45.1		91.1	10870	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.959	3.958	0.001		3634895	41.3		83.4		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.968	3.967	0.001	1.002	3991865	52.9		107		
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.105	4.104	0.001	1.000	4795756	49.4		103		
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.123	4.122	0.001	1.000	5259574	47.4		95.8	6121	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.123	4.122	0.001		3690451	42.3		85.4		
D 30 13C2 PFUnA										
565.00 > 520.00	4.123	4.122	0.001		5151876	43.0		86.8	7413	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.132	4.131	0.001	1.002	3847352	54.7		110		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.259	4.258	0.001		4099224	46.3		93.5		
35 MeFOSA										
512.00 > 169.00	4.267	4.267	0.0	1.000	4182816	52.4		106		
D 36 13C2 PFDoA										
615.00 > 570.00	4.405	4.405	0.001		5154777	41.4		83.6	4845	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.414	4.414	0.0	1.000	4928143	49.5		100.0	2427	
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.441	4.441	0.0		3866546	46.7		94.4		
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.451	4.450	0.001	1.000	3779071	48.4		97.7		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.668	4.668	0.0	1.000	5634988	54.1		109	4795	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.897	4.897	0.0	1.000	11736714	54.4		110	6165	
713.00 > 169.00	4.897	4.897	0.0	1.000	1635327		7.18(0.00-0.00)		4409	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.897	4.897	0.0		10889802	42.4		85.6	8978	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.308	5.309	-0.001	1.000	7323374	74.3		150	3654	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.316	5.309	0.007		6114752	44.7		90.3	4315	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.669	5.670	-0.001	1.000	7400577	80.3		162	5661	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_FULL-L5_00004 Amount Added: 1.00 Units: mL

Report Date: 09-Jun-2017 14:00:35 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_012.d

Injection Date: 09-Jun-2017 02:10:59 Instrument ID: A8_N

Lims ID: CCV L5

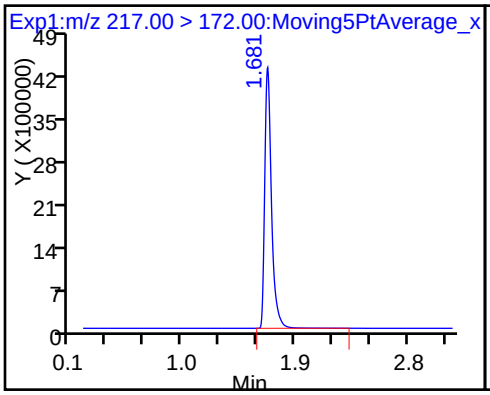
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 32 Worklist Smp#: 12

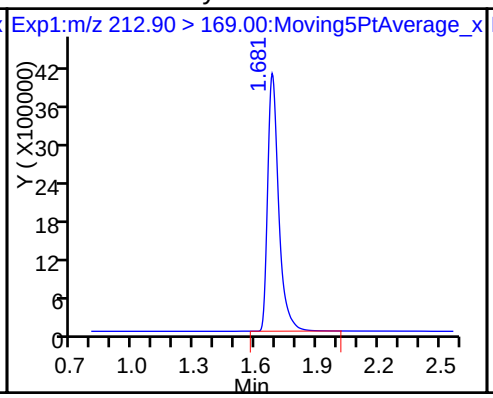
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

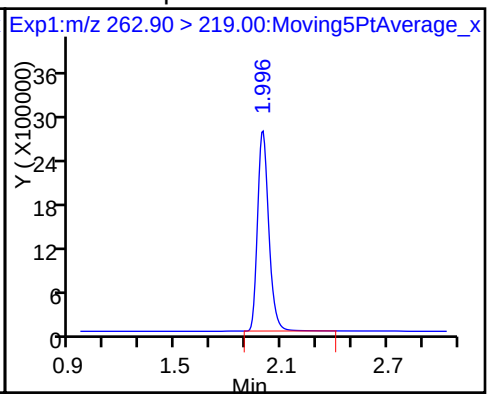
D 1 13C4 PFBA



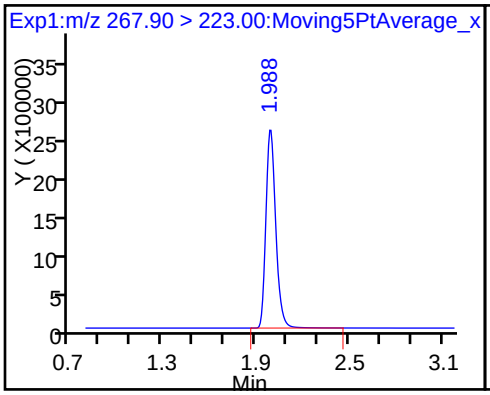
2 Perfluorobutyric acid



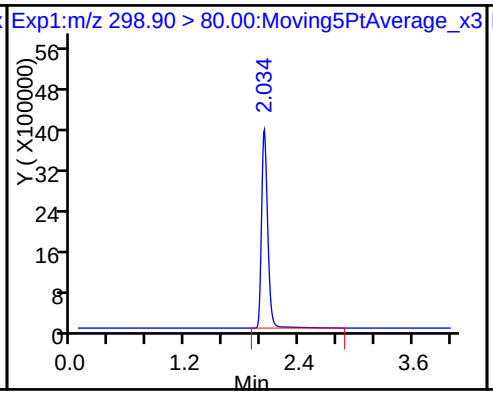
4 Perfluoropentanoic acid



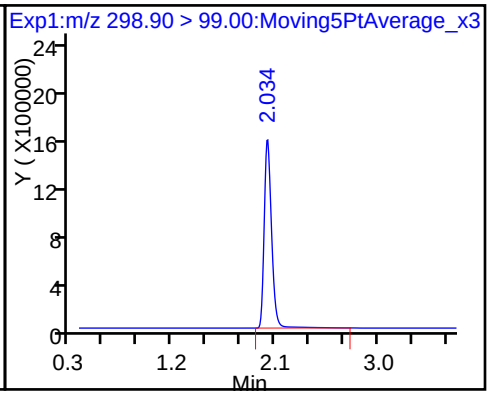
D 3 13C5-PFPeA



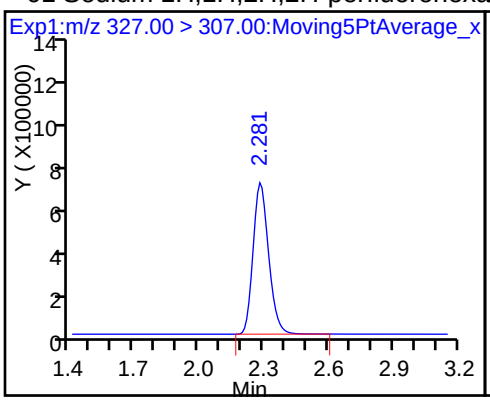
5 Perfluorobutanesulfonic acid



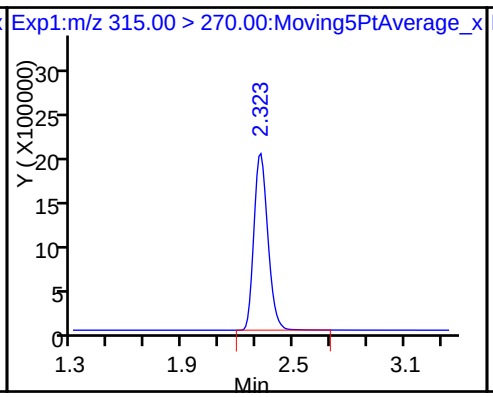
5 Perfluorobutanesulfonic acid



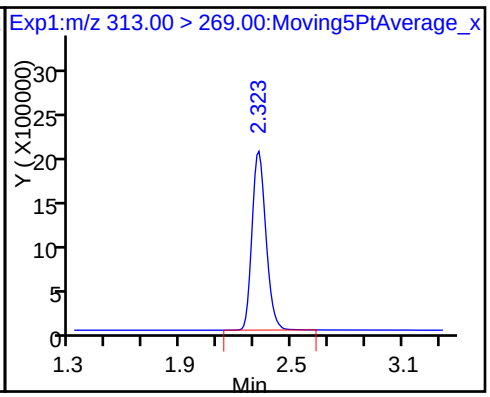
61 Sodium 1H,1H,2H,2H-perfluorohexa



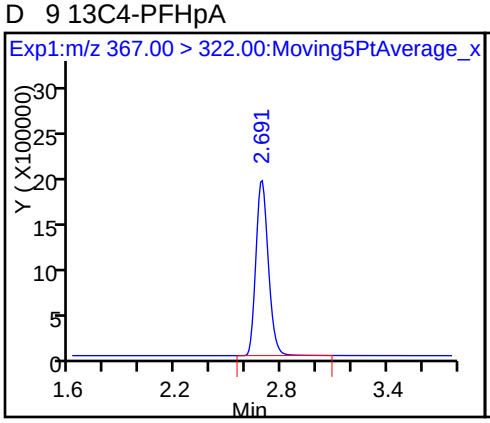
De 7 13C2 PFHxA



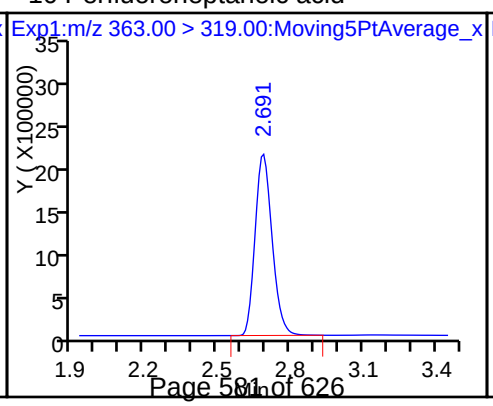
6 Perfluorohexanoic acid



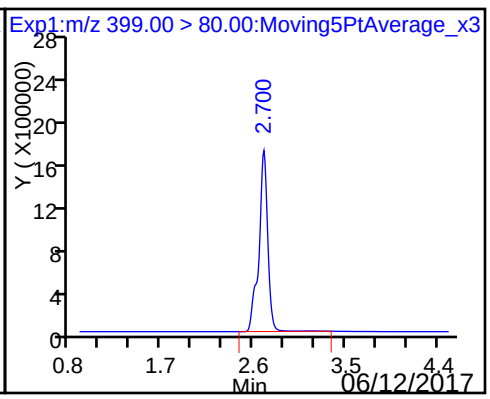
D 9 13C4-PFHpA



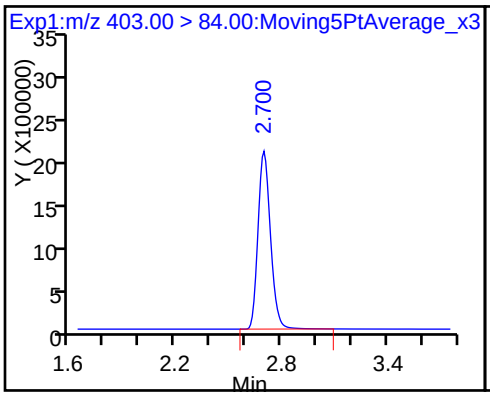
10 Perfluoroheptanoic acid



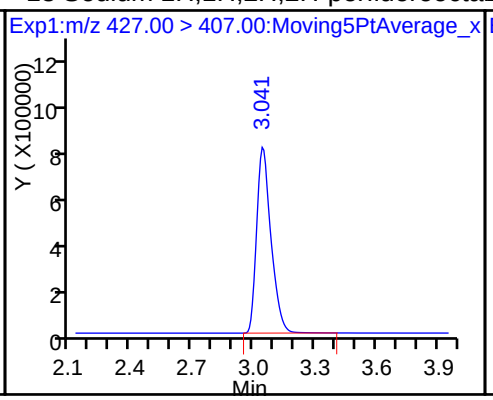
8 Perfluorohexanesulfonic acid



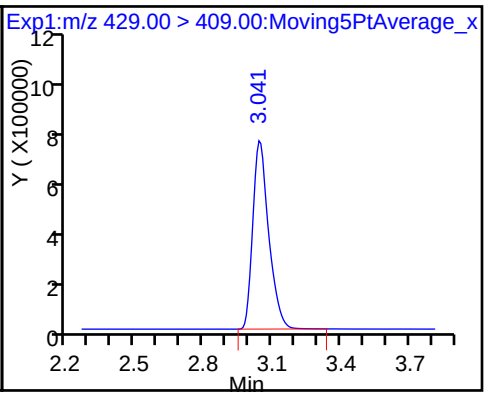
D 11 18O2 PFHxS



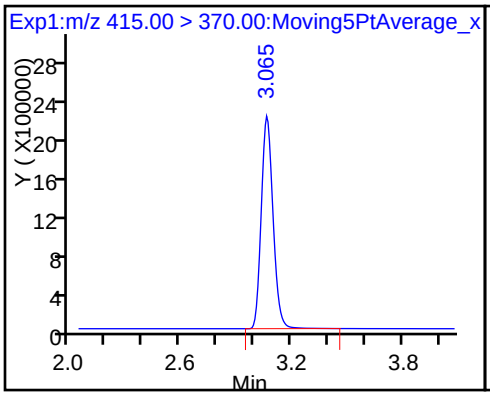
13 Sodium 1H,1H,2H,2H-perfluorooctane



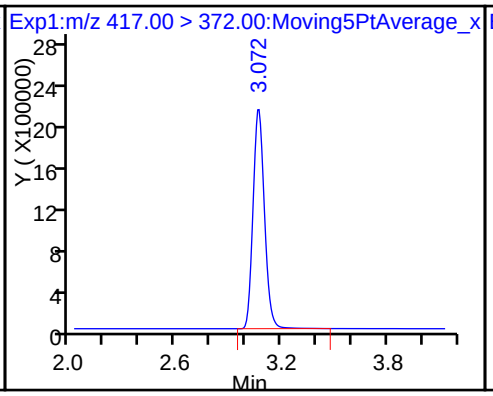
D 12 M2-6:2FTS



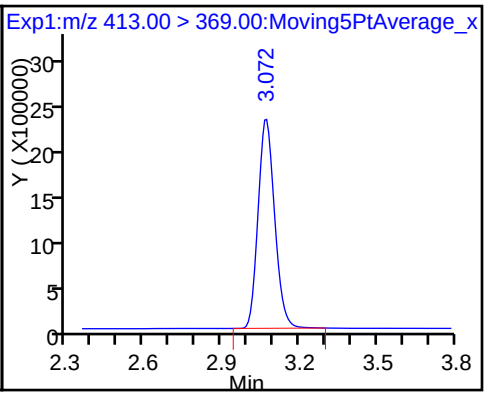
* 62 13C2-PFOA



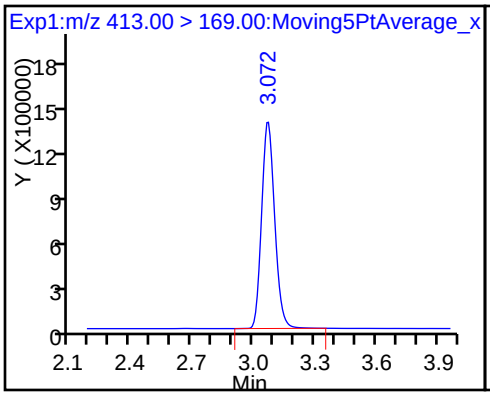
D 14 13C4 PFOA



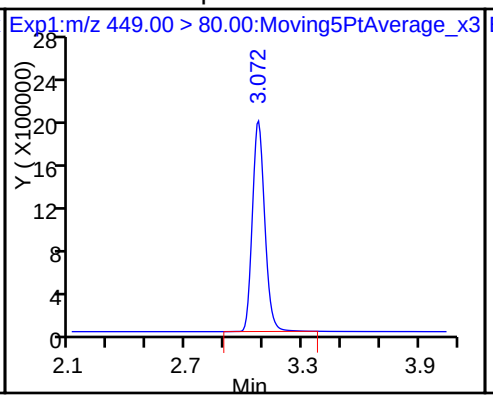
15 Perfluorooctanoic acid



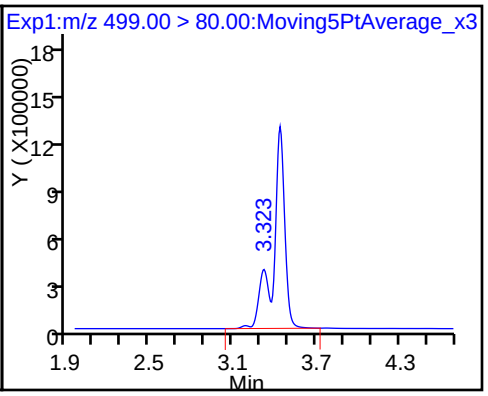
15 Perfluorooctanoic acid



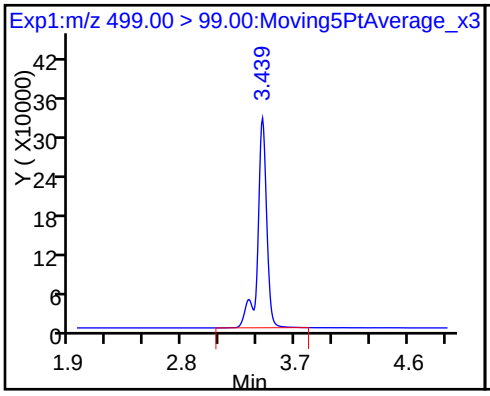
16 Perfluoroheptanesulfonic Acid



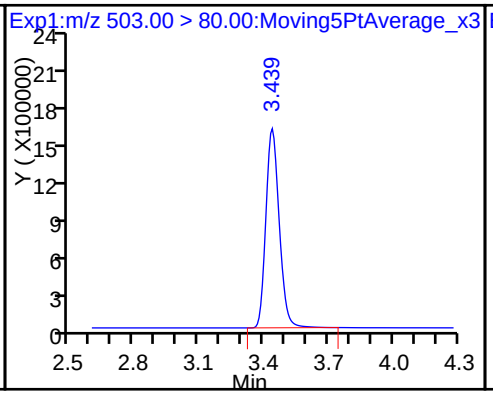
17 Perfluorooctane sulfonic acid



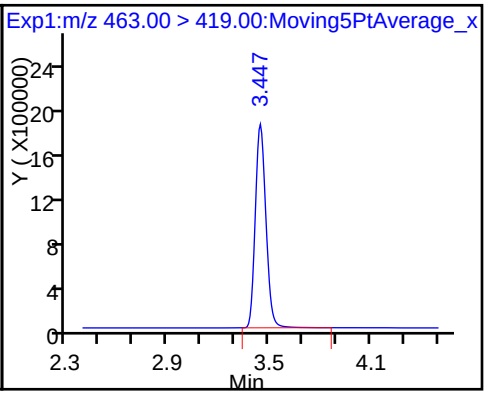
17 Perfluorooctane sulfonic acid



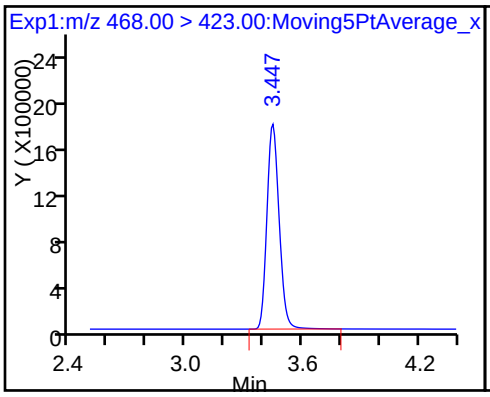
D 18 13C4 PFOS



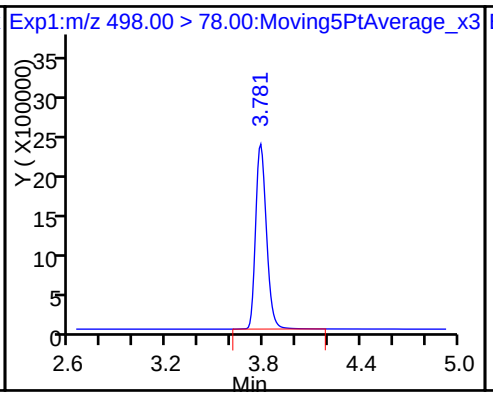
20 Perfluorononanoic acid



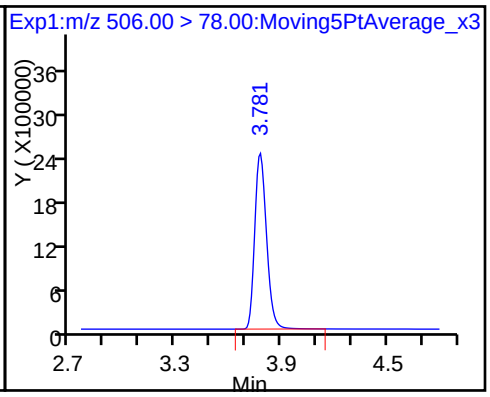
D 19 13C5 PFNA



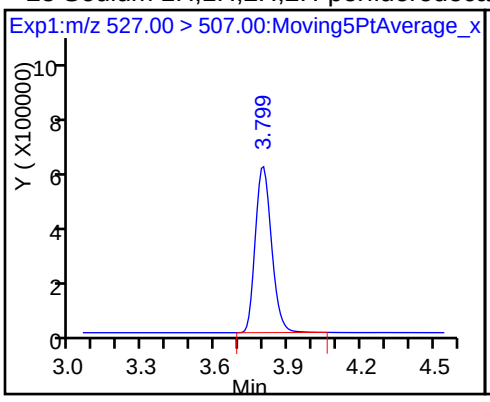
22 Perfluorooctane Sulfonamide



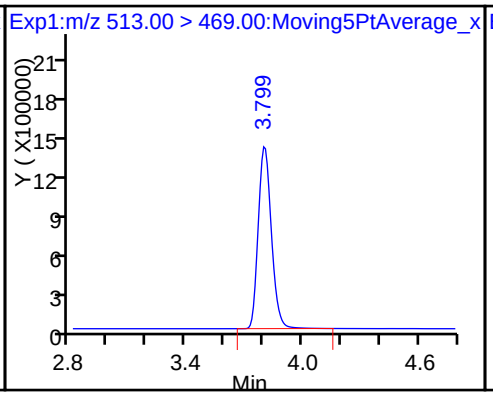
D 21 13C8 FOSA



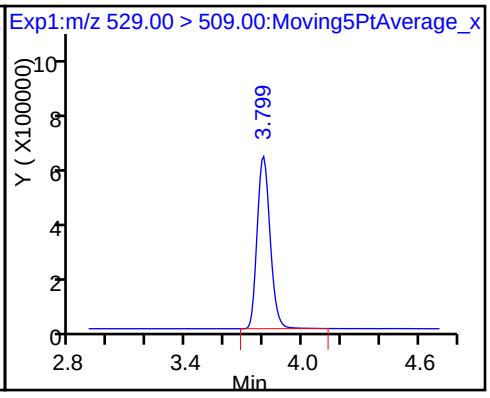
25 Sodium 1H,1H,2H,2H-perfluorodecane



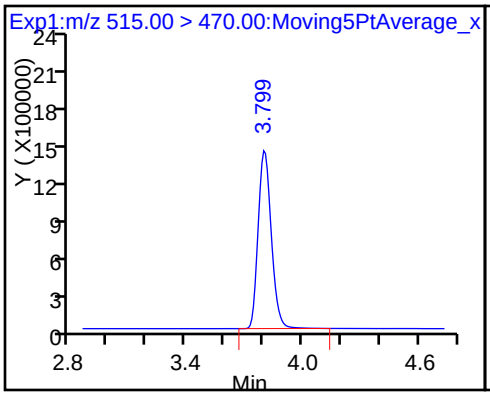
24 Perfluorodecanoic acid



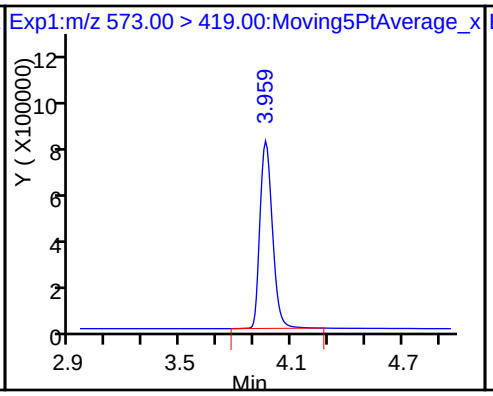
D 26 M2-8:2FTS



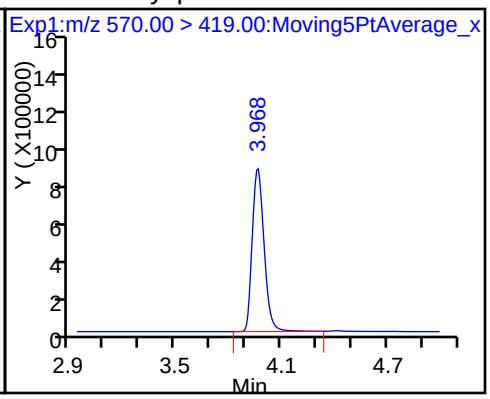
D 23 13C2 PFDA



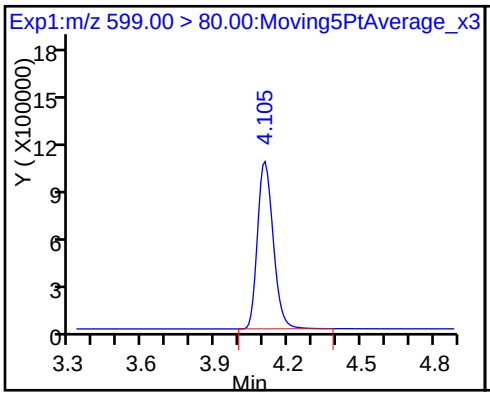
D 27 d3-NMeFOSAA



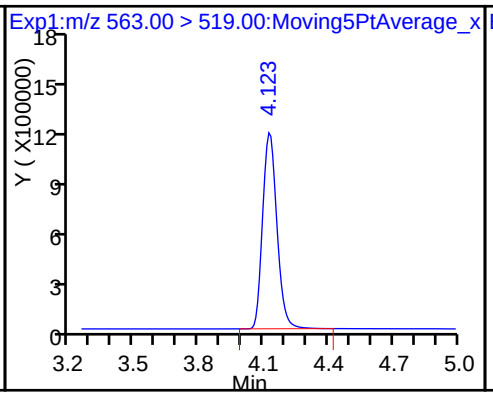
28 N-methyl perfluorooctane sulfonami



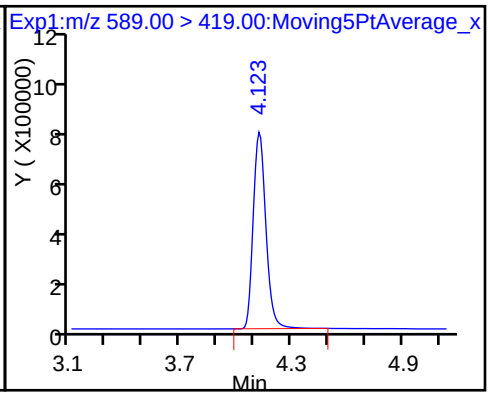
29 Perfluorodecane Sulfonic acid



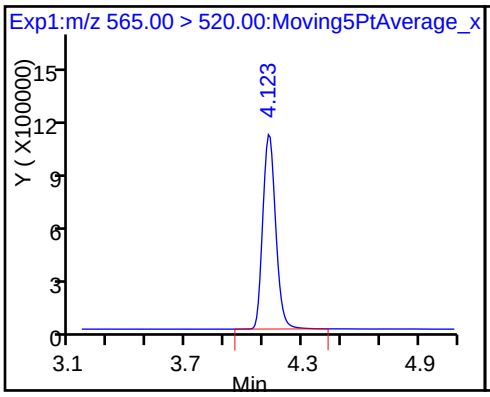
31 Perfluoroundecanoic acid



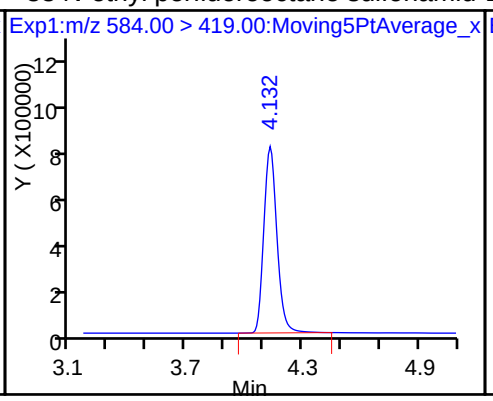
D 32 d5-NEtFOSAA



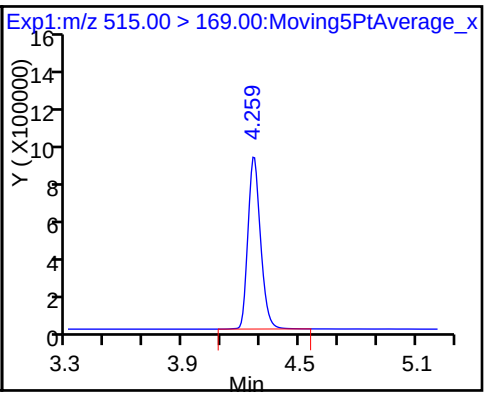
D 30 13C2 PFUnA



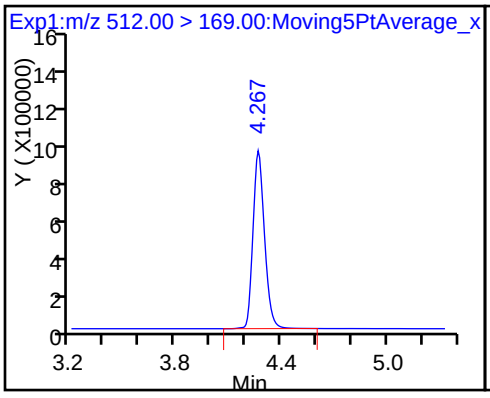
33 N-ethyl perfluorooctane sulfonamid



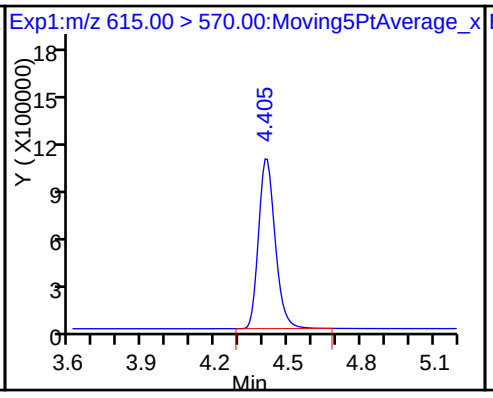
D 34 d-N-MeFOSA-M



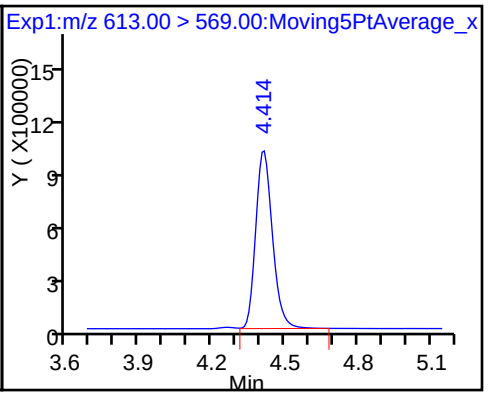
35 MeFOSA



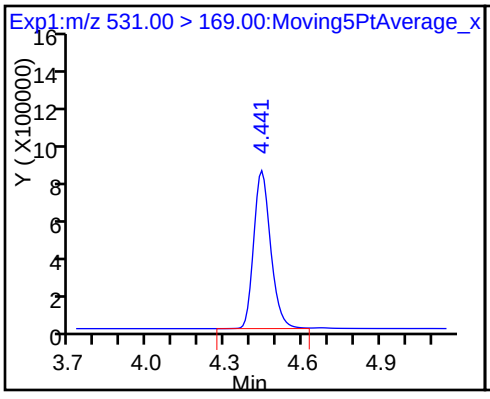
D 36 13C2 PFDoA



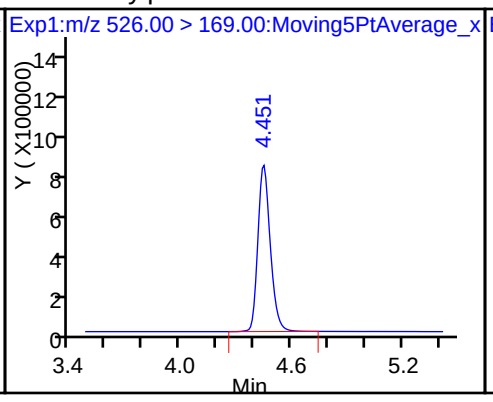
37 Perfluorododecanoic acid



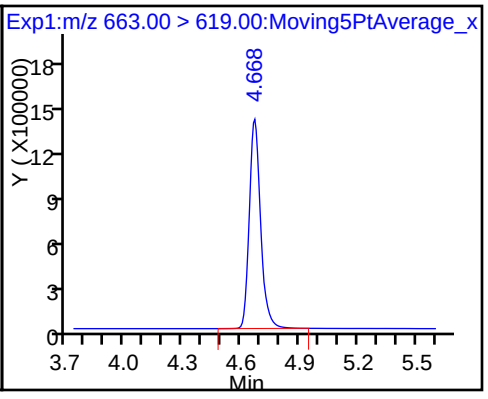
D 38 d-N-EtFOSA-M



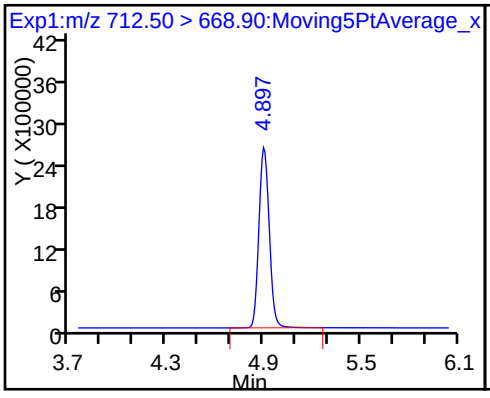
39 N-ethylperfluoro-1-octanesulfonami



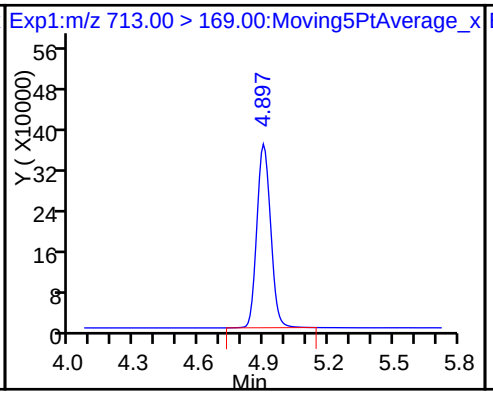
41 Perfluorotridecanoic acid



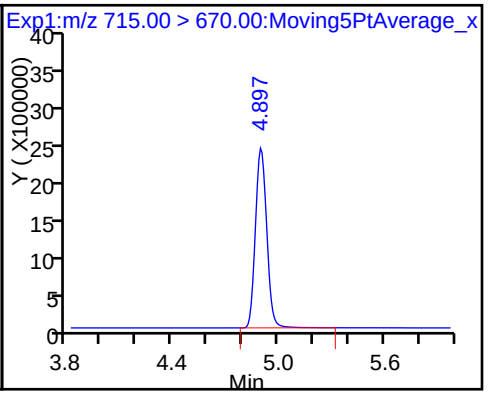
42 Perfluorotetradecanoic acid



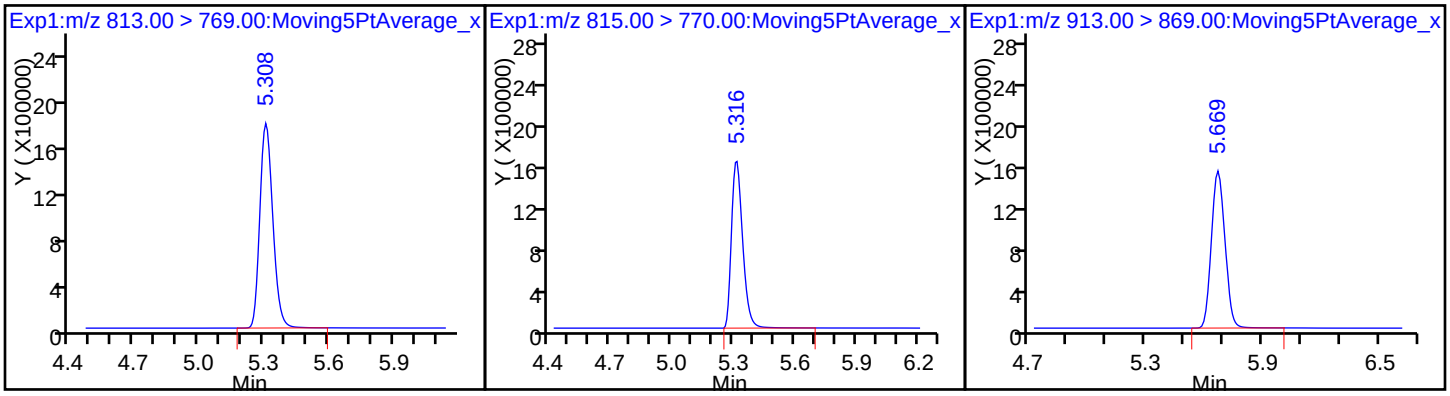
42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid D 44 13C2-PFHxDA 46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 320-166258/1-A

Matrix: Water Lab File ID: 2017.06.08D_002.d

Analysis Method: 537 (Modified) Date Collected:

Extraction Method: 3535 Date Extracted: 05/25/2017 15:37

Sample wt/vol: 250(mL) Date Analyzed: 06/09/2017 00:53

Con. Extract Vol.: 0.5(mL) Dilution Factor: 1

Injection Volume: 2(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	2.0	U	2.5	2.0	0.75
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.0	U	4.0	3.0	1.3
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.0	U	2.5	2.0	0.92

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	126		25-150
STL00991	13C4 PFOS	93		25-150
STL00994	18O2 PFHxS	102		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_002.d
Lims ID: MB 320-166258/1-A
Client ID:
Sample Type: MB
Inject. Date: 09-Jun-2017 00:53:55 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-166258/1-a
Misc. Info.: Plate: 1 Rack: 4
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 09-Jun-2017 14:19:44 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: raineys Date: 09-Jun-2017 12:57:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.677	1.677	0.0		16290339	49.4		98.8	87733	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.681	1.681	0.0	1.000	85033	0.2841			42.1	M
D 57 d9-N-EtFOSE-M										
212.90 > 169.00	1.806	1.857	-0.051		18615	NC				
D 56 d7-N-MeFOSE-M										M
212.90 > 169.00	1.806	1.857	-0.051		2960	NC				M
D 40 d-N-EtFOSE-M										
212.90 > 169.00	1.806	1.857	-0.051		18615	NC				
D 3 13C5-PFPeA										
267.90 > 223.00	1.988	1.988	0.0		12238157	55.6		111	52269	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.027	2.027	0.0	1.000	7931	0.0207				
298.90 > 99.00	2.027	2.027	0.0	1.000	2269		3.50(0.00-0.00)			
D 47 13C3-PFBS										
301.90 > 83.00	2.027	2.027	0.0		284690	NC				
D 7 13C2 PFHxA										
315.00 > 270.00	2.323	2.313	0.010		11327204	58.7		117	26188	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.312	2.323	-0.011	1.000	11104	0.0484			12.3	M
D 9 13C4-PFHpA										
367.00 > 322.00	2.682	2.692	-0.010		11133255	62.6		125	25392	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.682	2.692	-0.010	1.000	8384	0.0359			2.9	M
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.701	2.701	0.0	1.000	43081	0.1673				
D 11 18O2 PFHxS										
403.00 > 84.00	2.701	2.701	0.0		1111 4035	48.2		102	25616	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	3.042	3.043	-0.001	1.000	93133	NR				
D 12 M2-6:2FTS										
429.00 > 409.00	3.042	3.043	-0.001		7131	0.0803		0.0		
* 62 13C2-PFOA										
415.00 > 370.00	3.064	3.064	0.0		12101	50.0				
D 14 13C4 PFOA										
417.00 > 372.00	3.064	3.064	0.0		11377001	63.1		126	28591	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.064	3.072	-0.008	1.000	17269	0.0710			5.6	
413.00 > 169.00	3.064	3.072	-0.008	1.000	15407		1.12(0.90-1.10)		24.8	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.072	3.072	0.0	1.000	5224	0.0276				
D 18 13C4 PFOS										
503.00 > 80.00	3.439	3.439	0.0		7926032	44.5		93.1	20787	
20 Perfluorononanoic acid										
463.00 > 419.00	3.446	3.447	-0.001	1.000	5405	0.0318			7.2	
D 19 13C5 PFNA										
468.00 > 423.00	3.446	3.447	-0.001		8468714	55.5		111	25896	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.780	3.780	0.0	1.000	10624	0.1309			68.4	
D 21 13C8 FOSA										
506.00 > 78.00	3.780	3.780	0.0		4187094	13.9		27.9	8499	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.807	3.799	0.008	1.000	8908	0.0650			33.0	
D 23 13C2 PFDA										
515.00 > 470.00	3.807	3.799	0.008		7197037	47.7		95.5	14425	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.966	3.958	0.008		57216	0.6497		0.0		
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.966	3.967	-0.001	1.000	22512	NR				
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.103	4.104	-0.001	1.000	3252	0.0298				
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.131	4.122	0.009	1.000	20431	0.1658			54.3	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.122	4.122	0.0		87176	1.00		0.0		
D 30 13C2 PFUnA										
565.00 > 520.00	4.131	4.122	0.009		5785689	48.3		96.6	9655	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	4.131	4.131	0.0	1.002	22607	NR				
D 34 d-N-MeFOSA-M										
515.00 > 169.00	4.267	4.258	0.009		3047	0.0344		0.0		
D 36 13C2 PFDoA										
615.00 > 570.00	4.413	4.405	0.009		5785781	46.5		93.0	6859	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.413	4.414	-0.001	1.000	9925	0.0897			16.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 38 d-N-EtFOSA-M										
531.00 > 169.00	4.441	4.441	0.0		3660	0.0442		0.0		
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.668	4.668	0.0	1.000	10215	0.0883			23.5	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.906	4.897	0.009	1.000	67538	0.2375			77.3	
713.00 > 169.00	4.897	4.897	0.0	0.998	7847		8.61(0.00-0.00)		141	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.897	4.897	0.0		12786939	49.7		99.5	11101	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.309	5.309	0.0	1.000	110135	0.2089			88.7	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.309	5.309	0.0		5649987	41.3		82.6	3482	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.669	5.670	-0.001	1.000	18184	0.1775			23.3	M

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Review Flags

M - Manually Integrated

Report Date: 09-Jun-2017 14:19:45 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_002.d

Injection Date: 09-Jun-2017 00:53:55 Instrument ID: A8_N

Lims ID: MB 320-166258/1-A

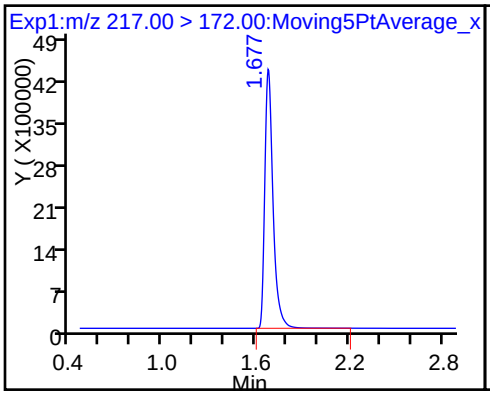
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 1 Worklist Smp#: 2

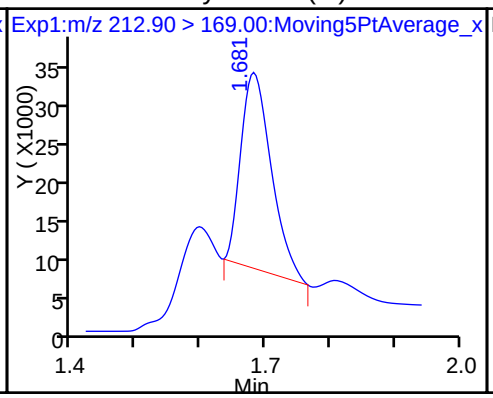
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

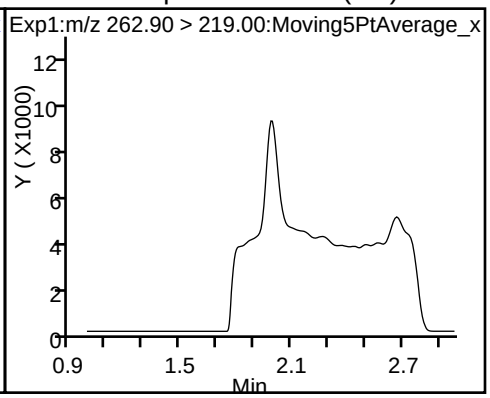
D 1 13C4 PFBA



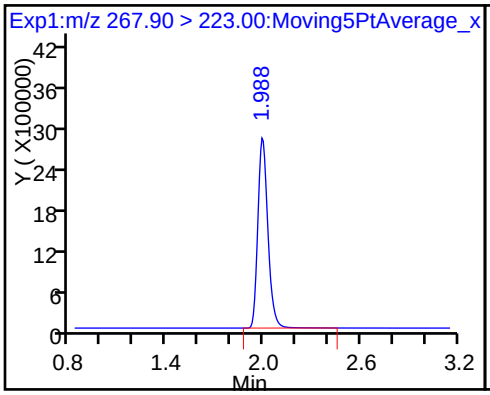
2 Perfluorobutyric acid (M)



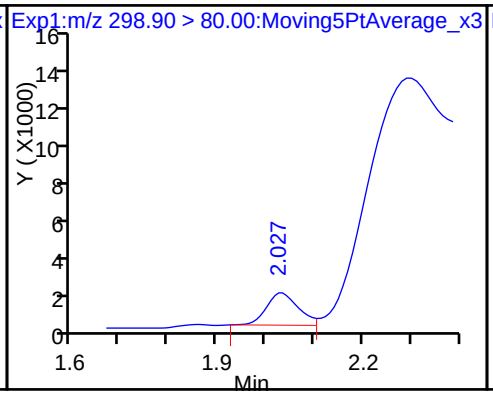
4 Perfluoropentanoic acid (ND)



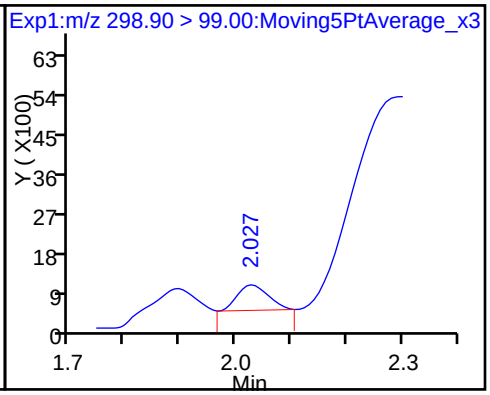
D 3 13C5-PFPeA



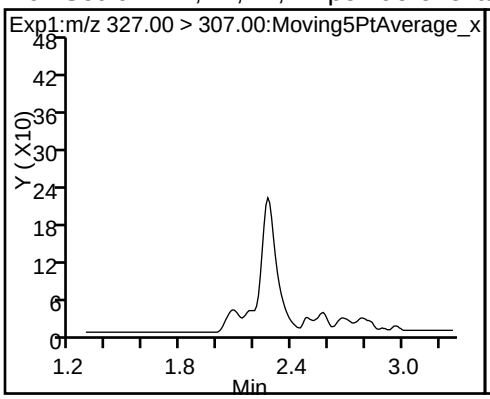
5 Perfluorobutanesulfonic acid



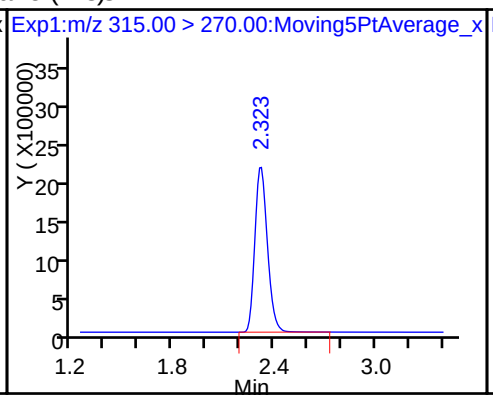
5 Perfluorobutanesulfonic acid



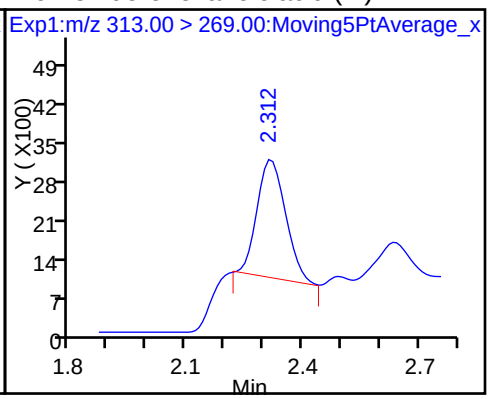
61 Sodium 1H,1H,2H,2H-perfluorohexane (NC)



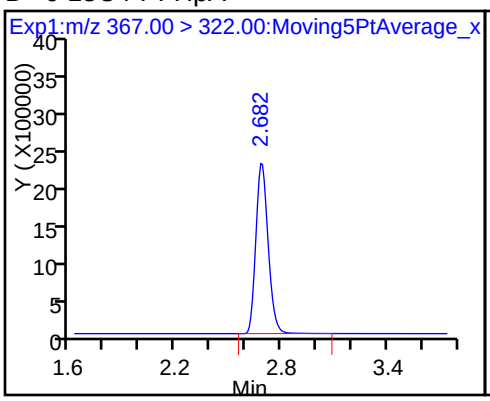
D 7 13C2 PFHxA



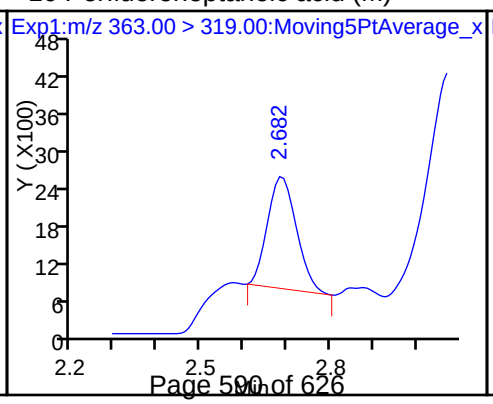
6 Perfluorohexanoic acid (M)



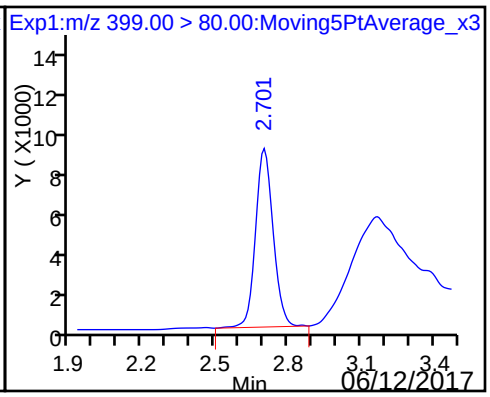
D 9 13C4-PFHpA



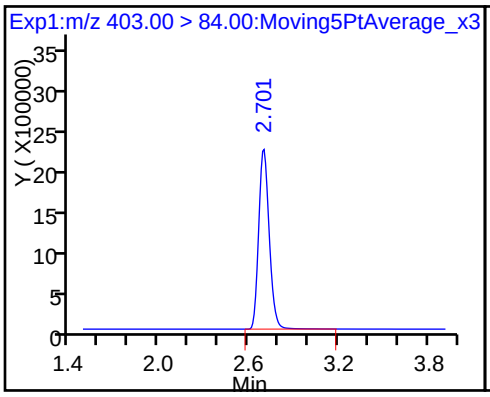
10 Perfluoroheptanoic acid (M)



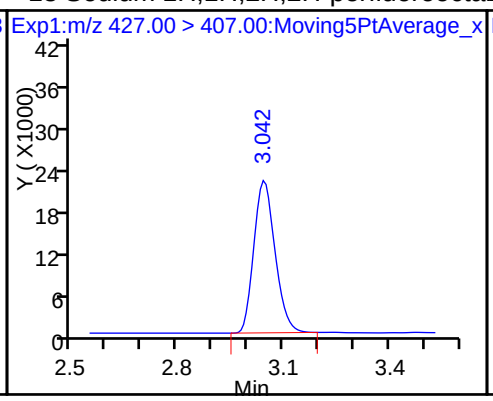
8 Perfluorohexanesulfonic acid



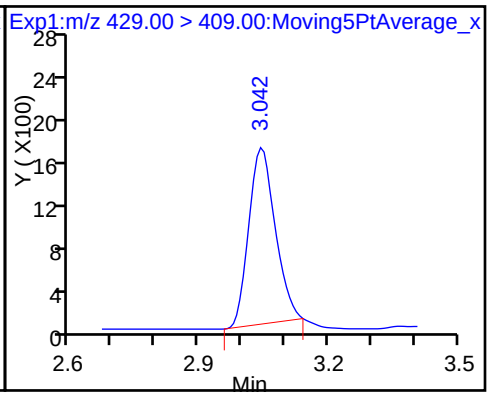
D 11 18O2 PFHxS



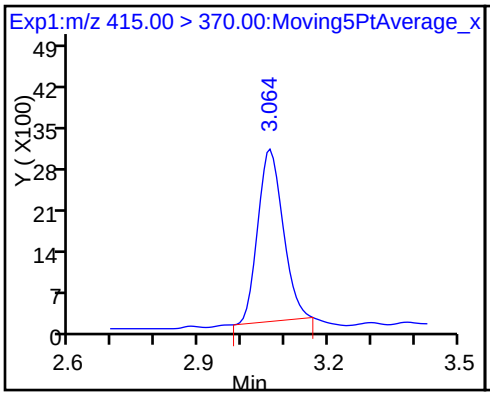
13 Sodium 1H,1H,2H,2H-perfluorooctane



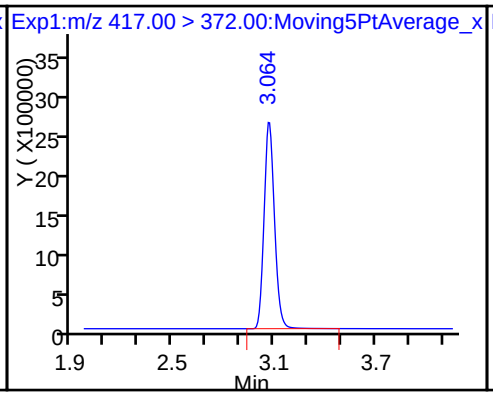
D 12 M2-6:2FTS



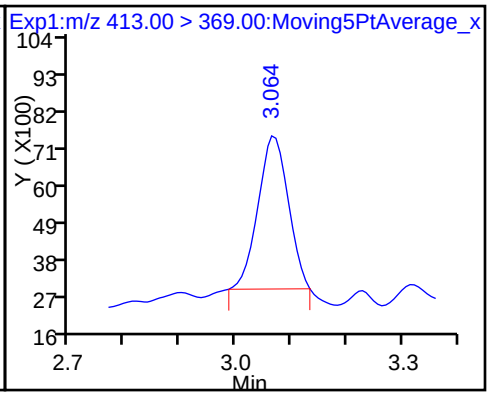
* 62 13C2-PFOA



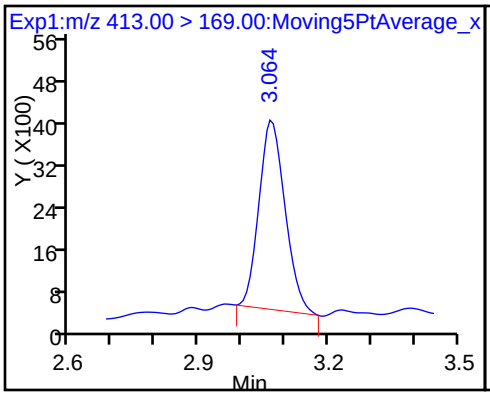
D 14 13C4 PFOA



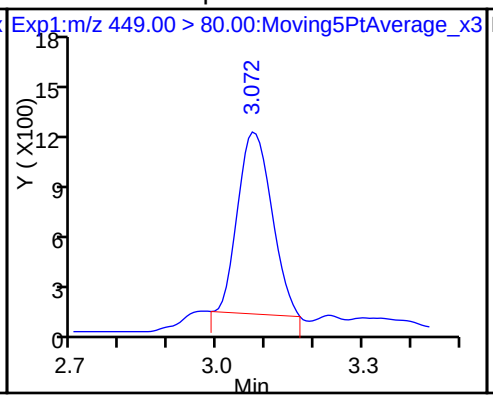
15 Perfluorooctanoic acid



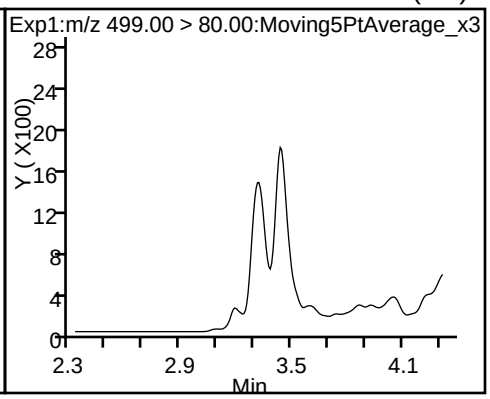
15 Perfluorooctanoic acid



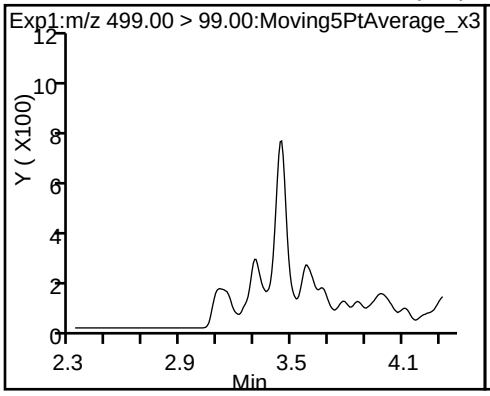
16 Perfluoroheptanesulfonic Acid



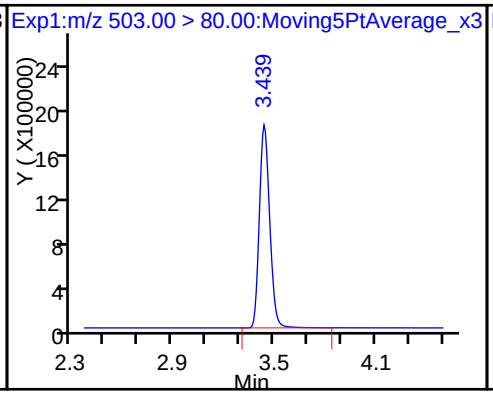
17 Perfluorooctane sulfonic acid (ND)



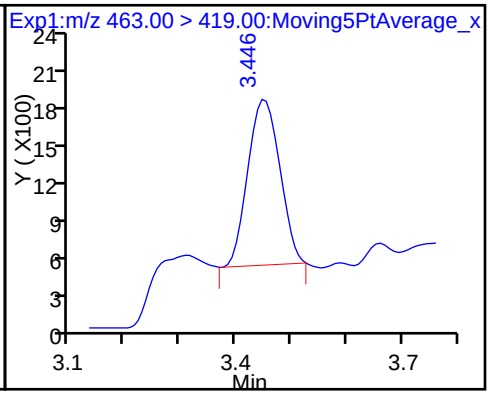
17 Perfluorooctane sulfonic acid (ND)



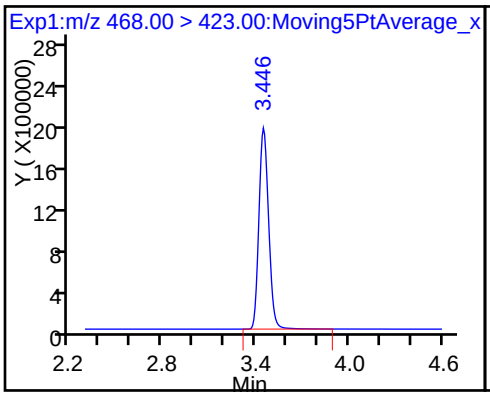
D 18 13C4 PFOS



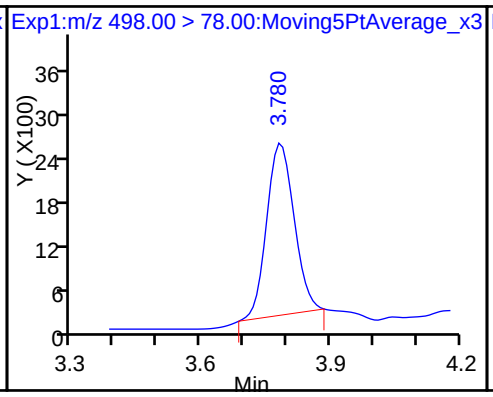
20 Perfluorononanoic acid



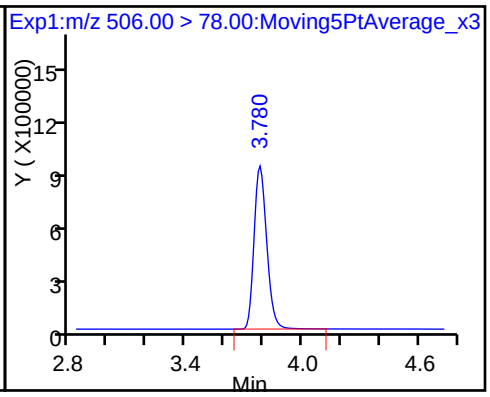
D 19 13C5 PFNA



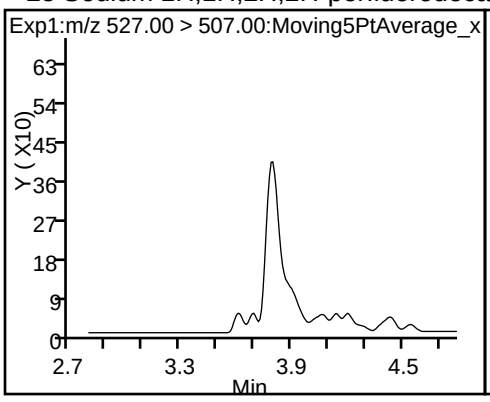
22 Perfluorooctane Sulfonamide



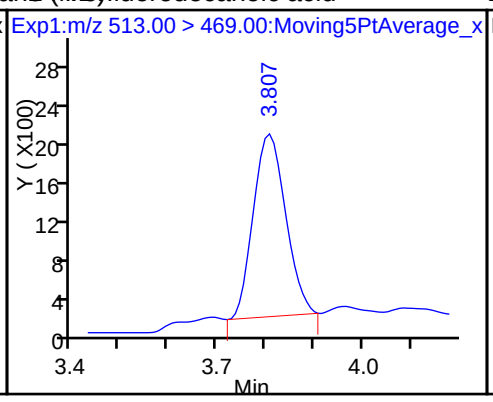
D 21 13C8 FOSA



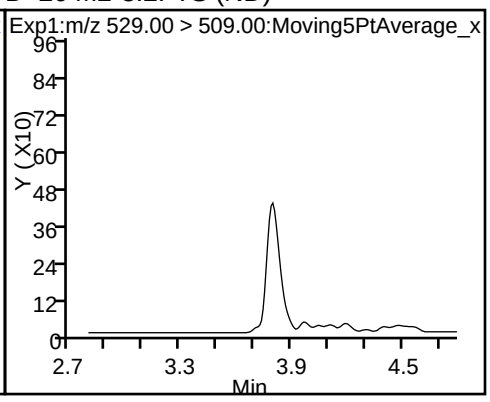
25 Sodium 1H,1H,2H,2H-perfluorodecane sulfonate



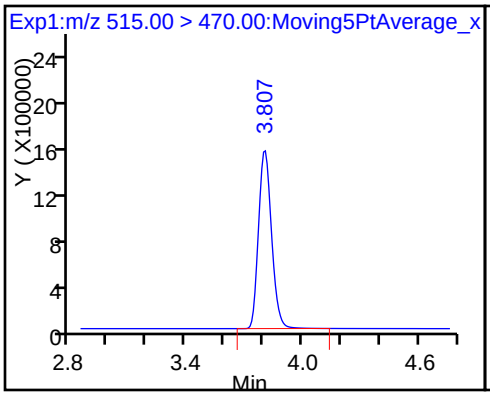
24 Perfluorodecanoic acid



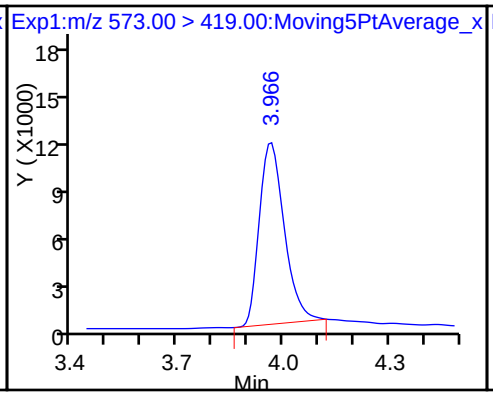
D 26 M2-8:2FTS (ND)



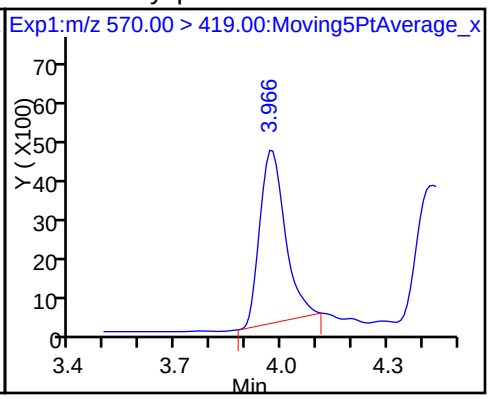
D 23 13C2 PFDA



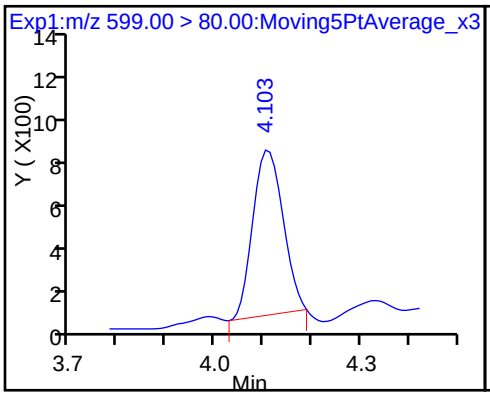
D 27 d3-NMeFOSAA



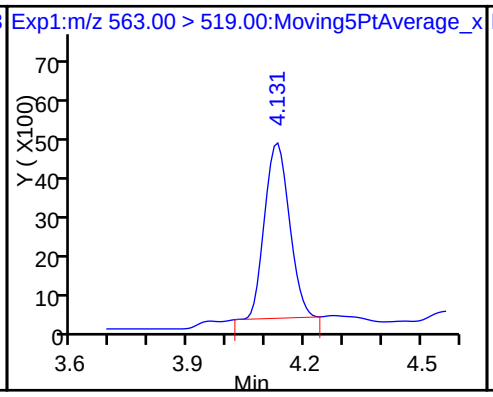
28 N-methyl perfluorooctane sulfonami



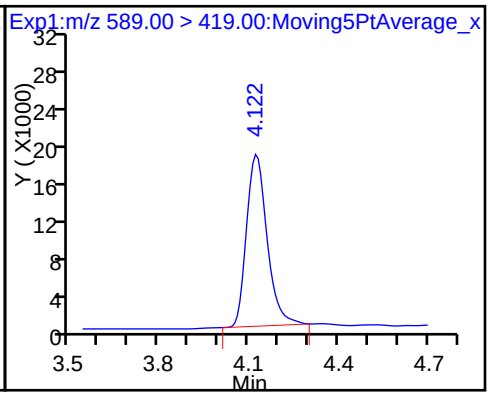
29 Perfluorodecane Sulfonic acid



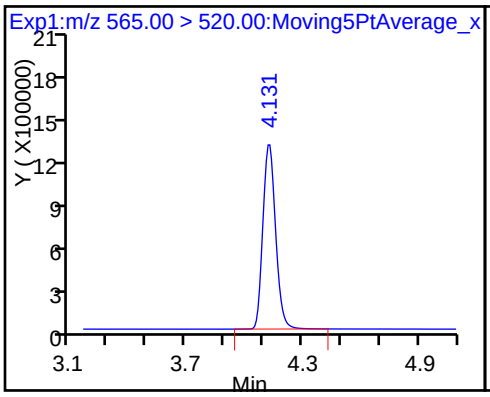
31 Perfluoroundecanoic acid



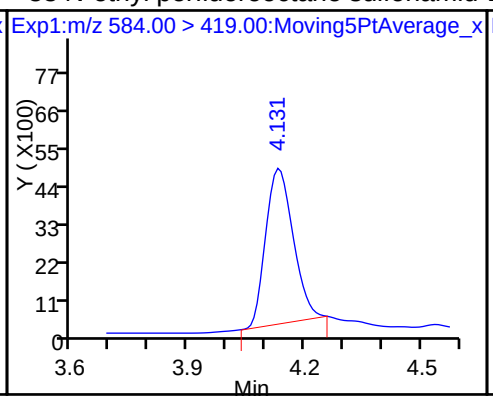
D 32 d5-NEtFOSAA



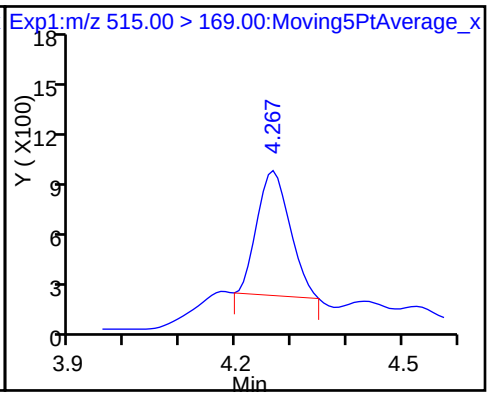
D 30 13C2 PFUnA



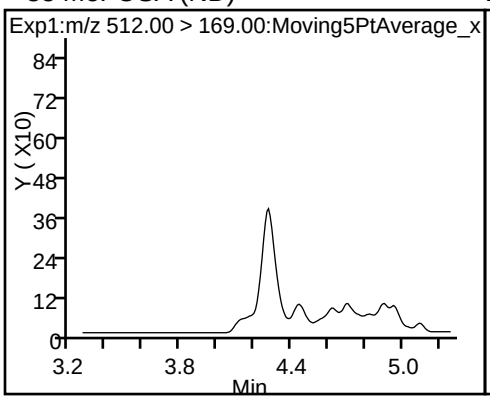
33 N-ethyl perfluorooctane sulfonamid



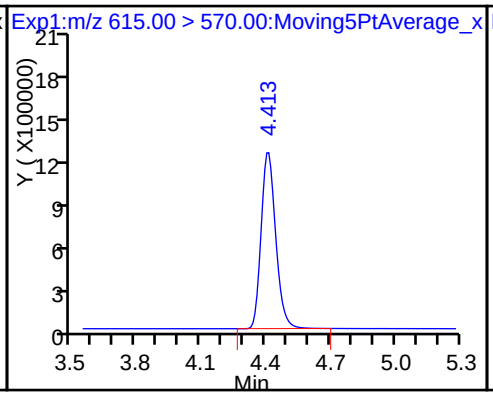
D 34 d-N-MeFOSA-M



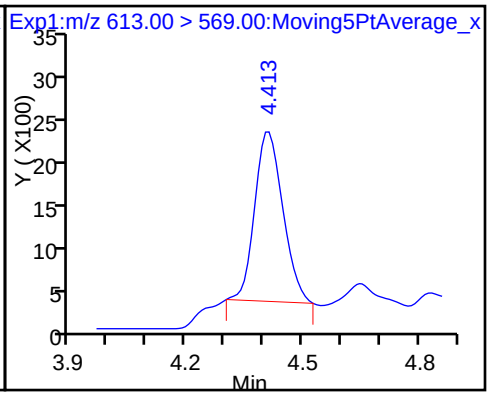
35 MeFOSA (ND)



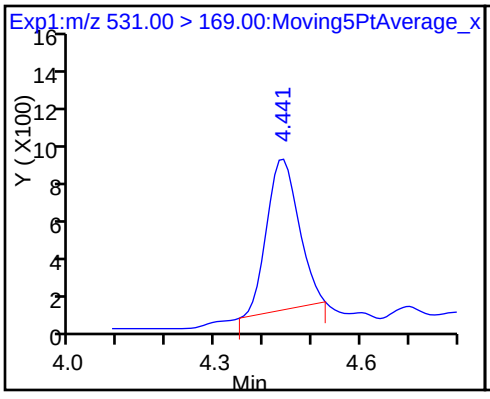
D 36 13C2 PFDoA



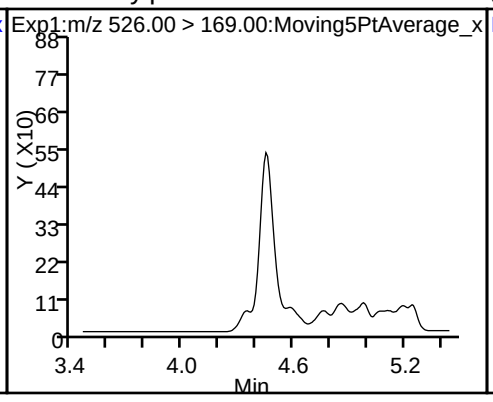
37 Perfluorododecanoic acid



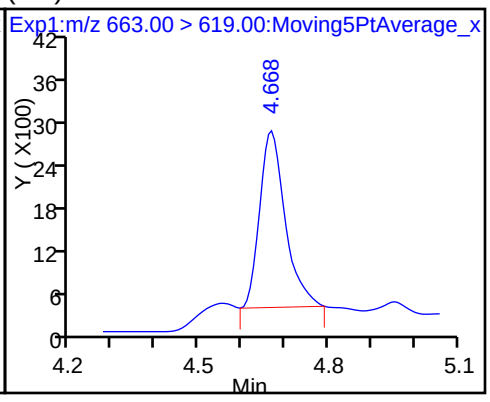
D 38 d-N-EtFOSA-M



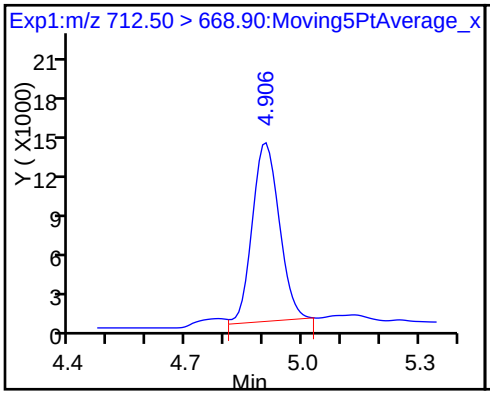
39 N-ethylperfluoro-1-octanesulfonami (ND)



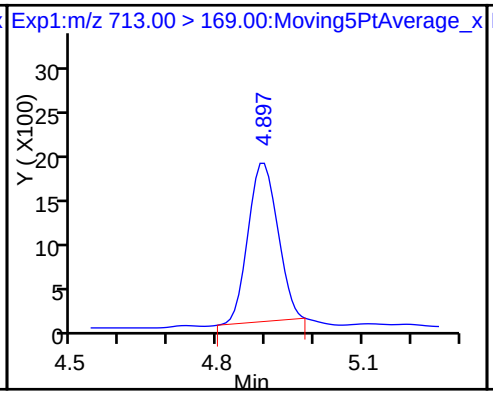
41 Perfluorotridecanoic acid



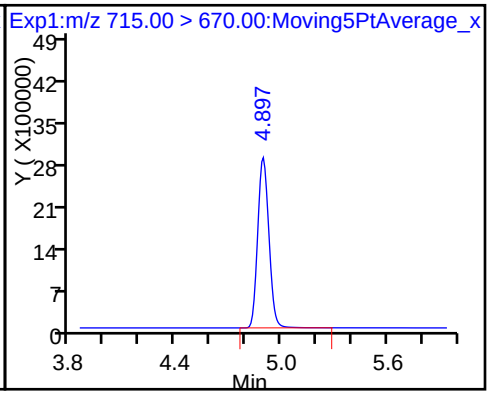
42 Perfluorotetradecanoic acid



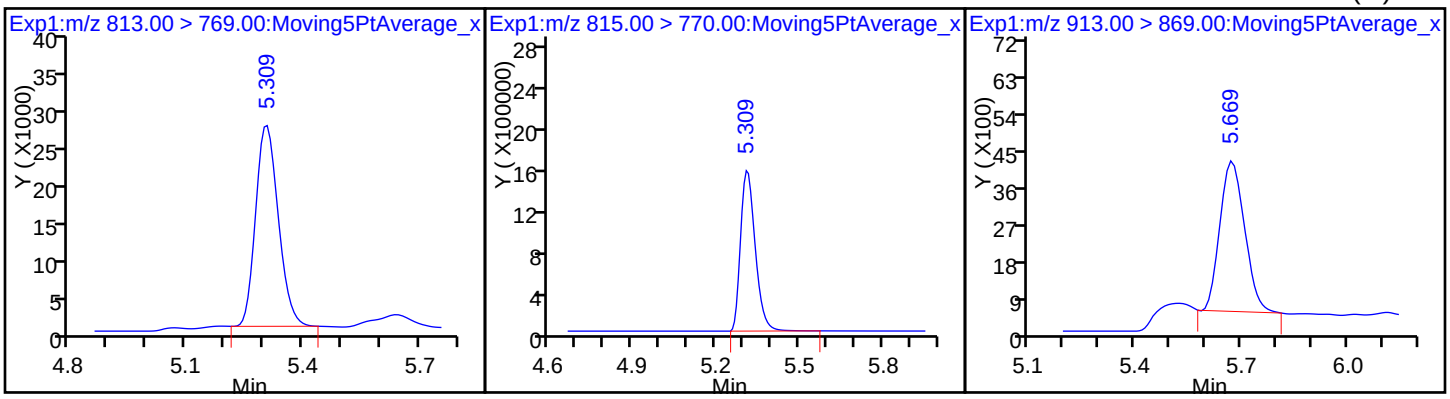
42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid D 44 13C2-PFHxDA 46 Perfluorooctadecanoic acid (M)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 320-166258/2-A

Matrix: Water Lab File ID: 2017.06.08D_003.d

Analysis Method: 537 (Modified) Date Collected:

Extraction Method: 3535 Date Extracted: 05/25/2017 15:37

Sample wt/vol: 250(mL) Date Analyzed: 06/09/2017 01:01

Con. Extract Vol.: 0.5(mL) Dilution Factor: 1

Injection Volume: 2(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	39.1		2.5	2.0	0.75
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	39.7		4.0	3.0	1.3
375-73-5	Perfluorobutanesulfonic acid (PFBS)	40.6		2.5	2.0	0.92

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	130		25-150
STL00991	13C4 PFOS	89		25-150
STL00994	18O2 PFHxS	99		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_003.d
Lims ID: LCS 320-166258/2-A
Client ID:
Sample Type: LCS
Inject. Date: 09-Jun-2017 01:01:39 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-166258/2-a
Misc. Info.: Plate: 1 Rack: 4
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 09-Jun-2017 14:19:44 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: raineys Date: 09-Jun-2017 12:58:03

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.677	1.677	0.0		16585000	50.3		101	171971	
2 Perfluorobutyric acid										
212.90 > 169.00	1.677	1.681	-0.004	1.000	6731291	22.1		110	3616	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.988	1.988	0.0	1.000	4859068	19.9		99.4	2136	
D 3 13C5-PFPeA										
267.90 > 223.00	1.988	1.988	0.0		11743569	53.4		107	37553	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.027	2.027	0.0	1.000	7535625	20.3		115		
298.90 > 99.00	2.027	2.027	0.0	1.000	3022438		2.49(0.00-0.00)			
D 47 13C3-PFBS										
301.90 > 83.00	2.027	2.027	0.0		284071	NC				
D 7 13C2 PFHxA										
315.00 > 270.00	2.313	2.313	0.0		10916878	56.6		113	22081	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.313	2.323	-0.010	1.000	4301974	19.5		97.3	4219	
D 9 13C4-PFHpA										
367.00 > 322.00	2.682	2.692	-0.010		10873956	61.1		122	22224	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.682	2.692	-0.010	1.000	4652732	20.4		102	1390	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.692	2.701	-0.009	1.000	4773040	19.1		105		
D 11 18O2 PFHxS										
403.00 > 84.00	2.692	2.701	-0.009		10765281	46.7		98.7	19751	
D 14 13C4 PFOA										
417.00 > 372.00	3.064	3.064	0.0		11760687	65.2		130	31763	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										
413.00 > 369.00	3.064	3.072	-0.008	1.000	4912071	19.5		97.7	1362	
413.00 > 169.00	3.064	3.072	-0.008	1.000	2736711		1.79(0.90-1.10)		3124	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.064	3.072	-0.008	1.000	4748232	26.3		138		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.315	3.323	-0.008	1.000	3316302	19.8		107	1301	
499.00 > 99.00	3.431	3.323	0.108	1.035	712706		4.65(0.90-1.10)		3305	
D 18 13C4 PFOS										
503.00 > 80.00	3.431	3.439	-0.008		7572853	42.5		88.9	18540	
20 Perfluorononanoic acid										
463.00 > 419.00	3.439	3.447	-0.008	1.000	3480110	20.8		104	4220	
D 19 13C5 PFNA										
468.00 > 423.00	3.439	3.447	-0.008		8329463	54.6		109	22666	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.771	3.780	-0.009	1.000	818917	19.9		99.4	3787	
D 21 13C8 FOSA										
506.00 > 78.00	3.771	3.780	-0.009		2124028	7.08		14.2	8025	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.799	3.799	-0.001	1.000	2911859	20.6		103	7339	
D 23 13C2 PFDA										
515.00 > 470.00	3.799	3.799	-0.001		7431189	49.3		98.6	12276	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.094	4.104	-0.010	1.000	1875824	18.0		93.3		
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.122	4.122	0.0	1.000	2473584	19.9		99.5	4486	
D 30 13C2 PFUnA										
565.00 > 520.00	4.122	4.122	0.0		5834736	48.7		97.4	10502	
D 36 13C2 PFDoA										
615.00 > 570.00	4.404	4.405	0.0		5392703	43.3		86.6	6604	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.404	4.414	-0.010	1.000	2106989	20.4		102	2910	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.661	4.668	-0.007	1.000	2448157	22.7		114	4127	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.888	4.897	-0.009	1.000	5102474	22.8		114	5367	
713.00 > 169.00	4.888	4.897	-0.009	1.000	726489		7.02(0.00-0.00)		4009	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.888	4.897	-0.009		12993673	50.5		101	9907	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.301	5.309	-0.008	1.000	3032056	29.2		146	1812	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.309	5.309	0.0		4790559	35.0		70.0	3514	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.670	5.670	0.0	1.000	2681683	28.1		140	2435	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 09-Jun-2017 14:20:19 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_003.d

Injection Date: 09-Jun-2017 01:01:39 Instrument ID: A8_N

Lims ID: LCS 320-166258/2-A

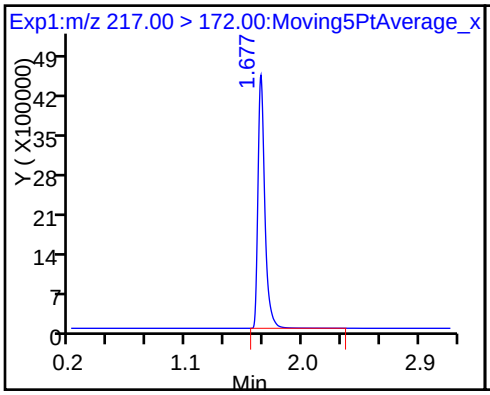
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 2 Worklist Smp#: 3

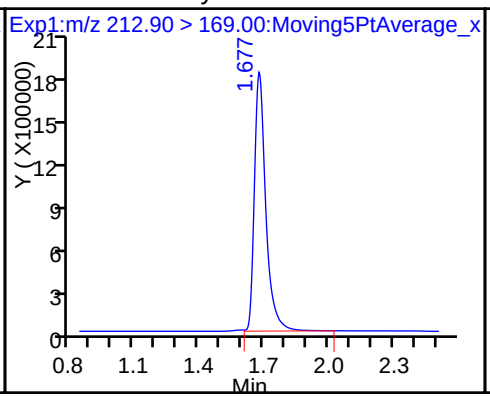
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

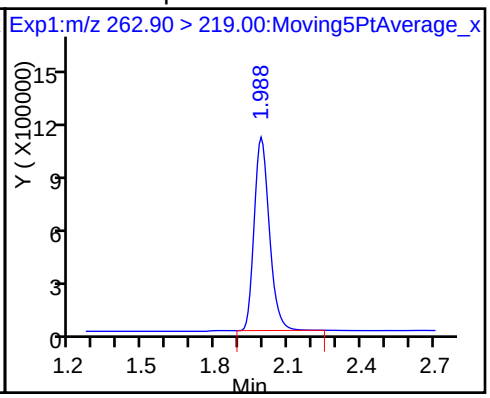
D 1 13C4 PFBA



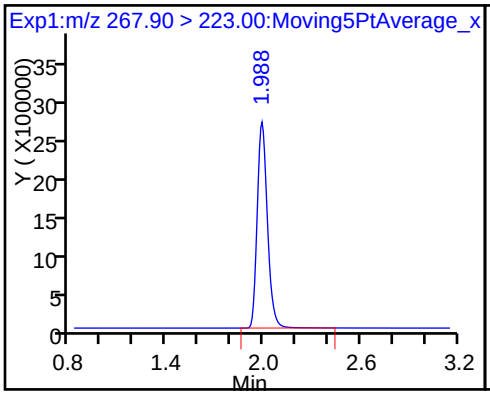
2 Perfluorobutyric acid



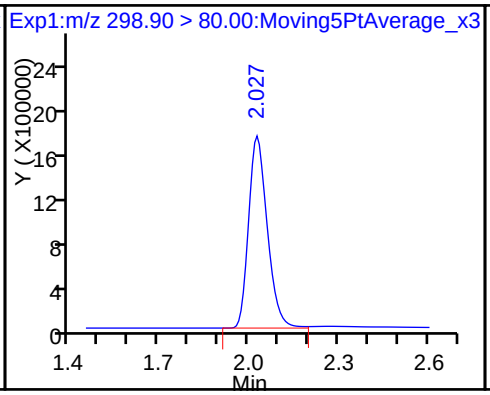
4 Perfluoropentanoic acid



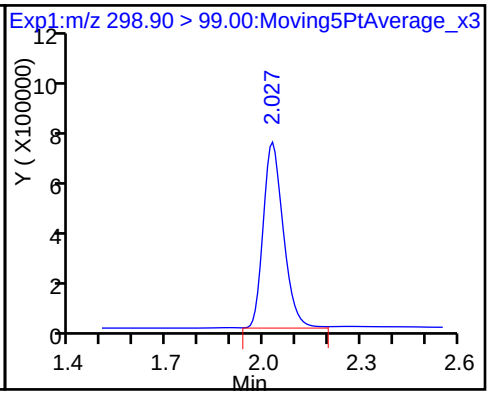
D 3 13C5-PFPeA



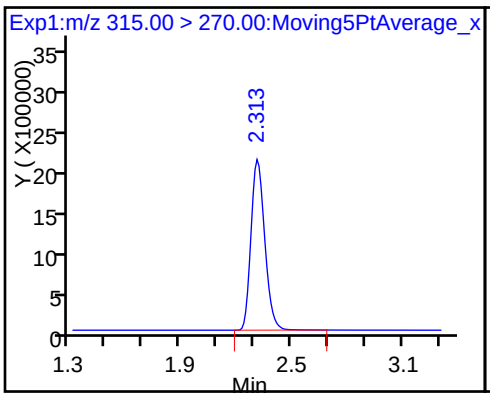
5 Perfluorobutanesulfonic acid



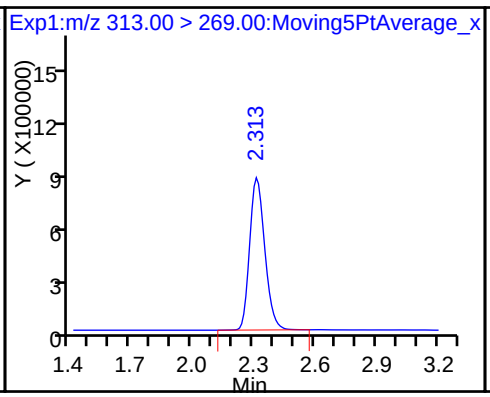
5 Perfluorobutanesulfonic acid



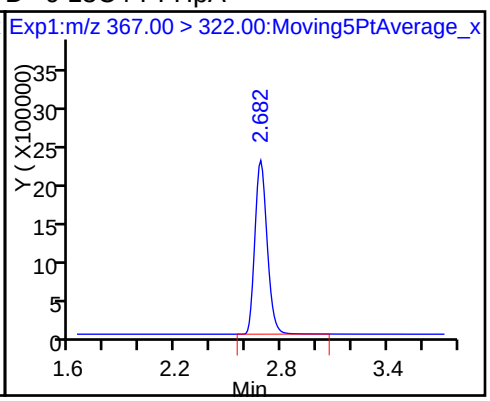
D 7 13C2 PFHxA



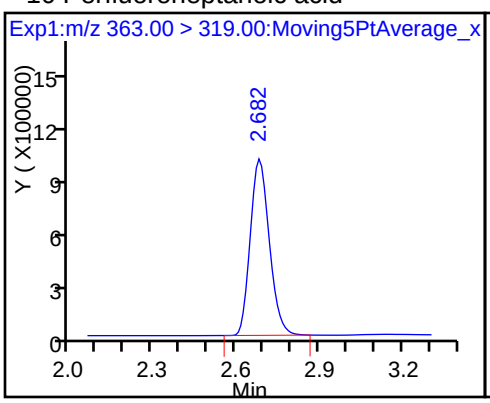
6 Perfluorohexanoic acid



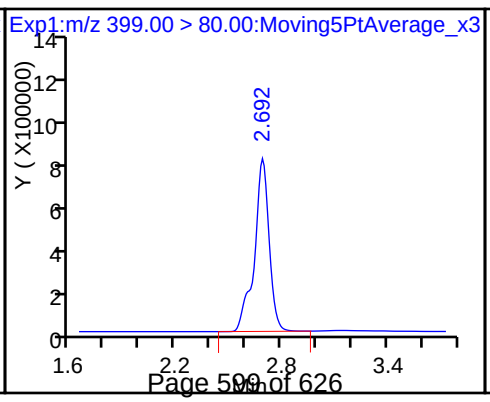
D 9 13C4-PFHpA



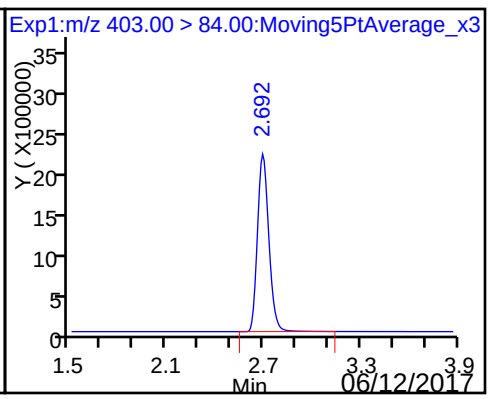
10 Perfluoroheptanoic acid



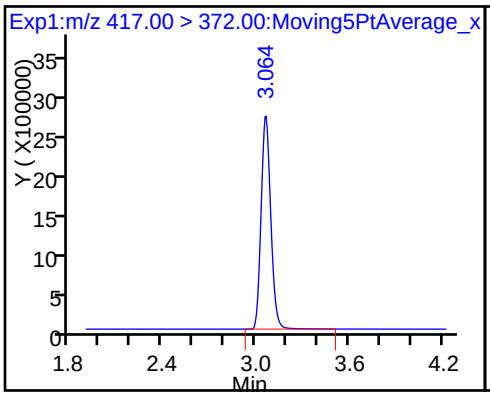
8 Perfluorohexanesulfonic acid



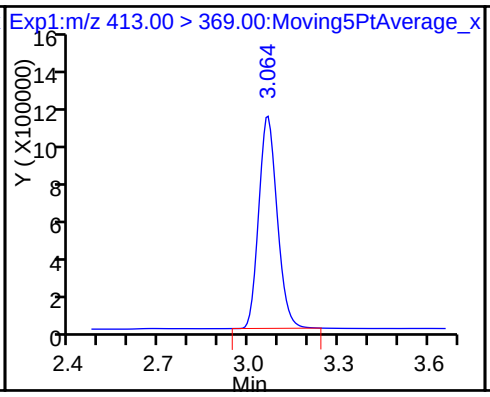
D 11 18O2 PFHxS



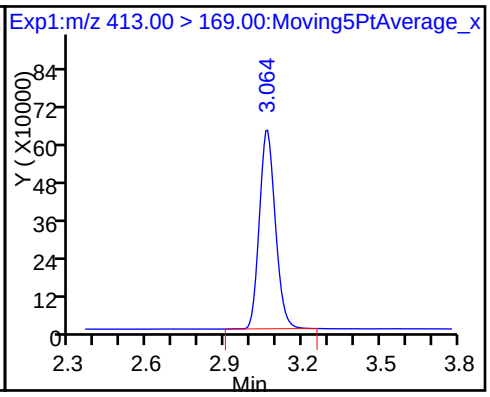
D 14 13C4 PFOA



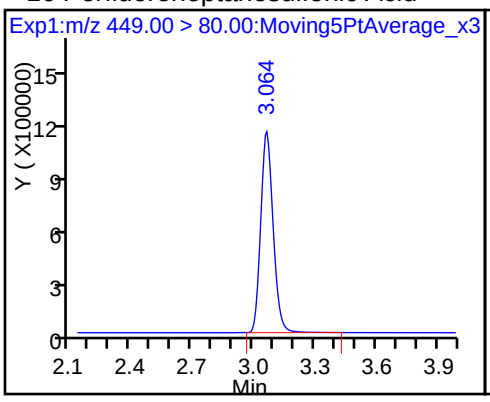
15 Perfluorooctanoic acid



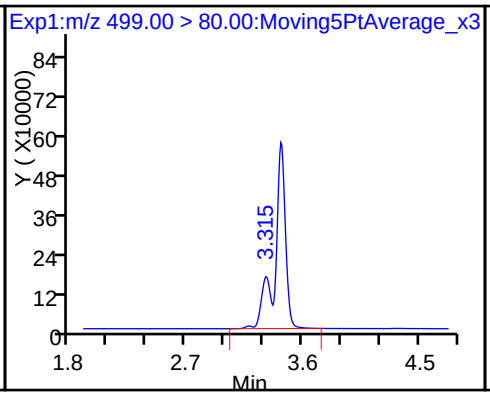
15 Perfluorooctanoic acid



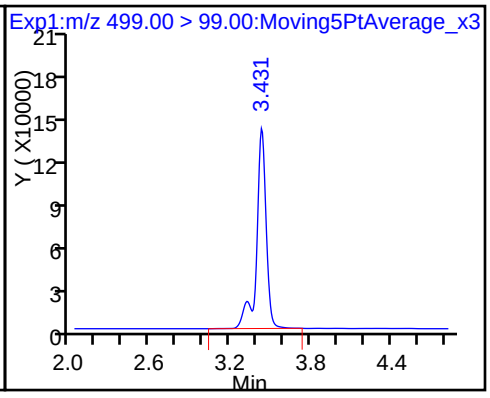
16 Perfluoroheptanesulfonic Acid



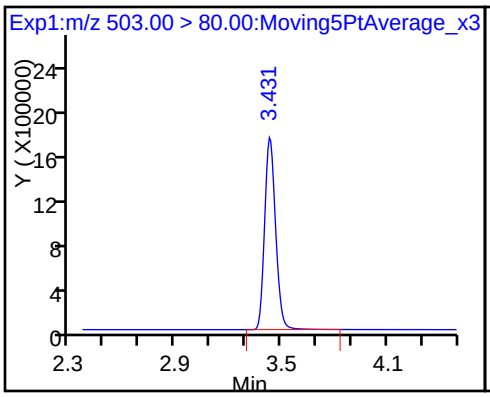
17 Perfluorooctane sulfonic acid



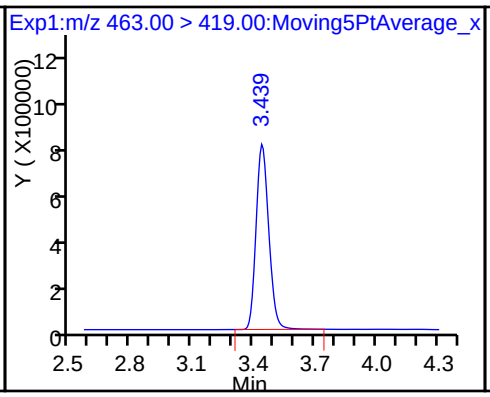
17 Perfluorooctane sulfonic acid



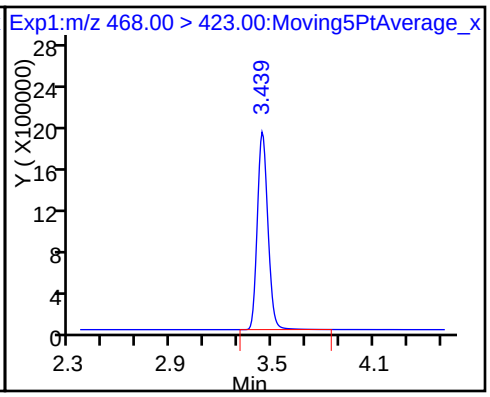
D 18 13C4 PFOS



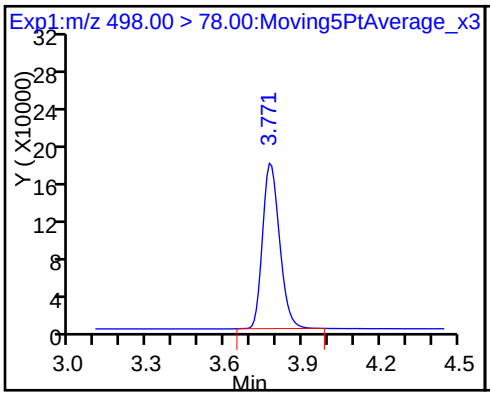
20 Perfluorononanoic acid



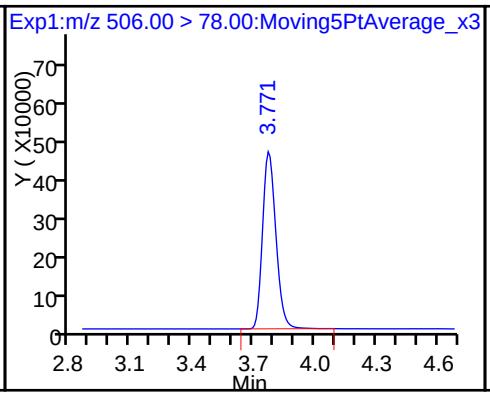
D 19 13C5 PFNA



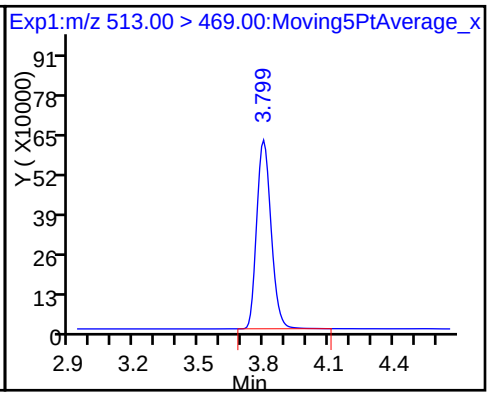
22 Perfluorooctane Sulfonamide



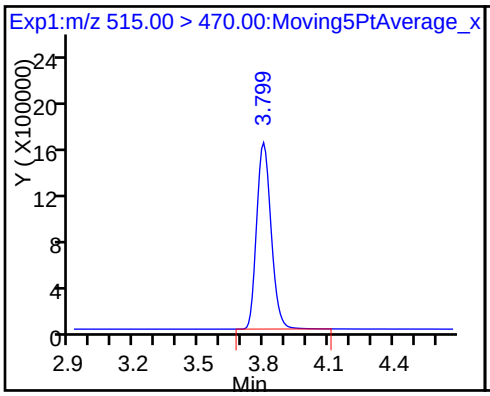
D 21 13C8 FOSA



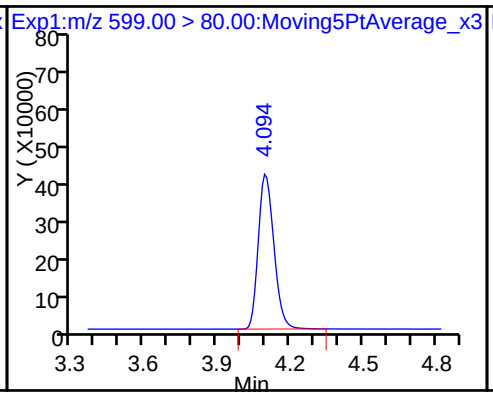
24 Perfluorodecanoic acid



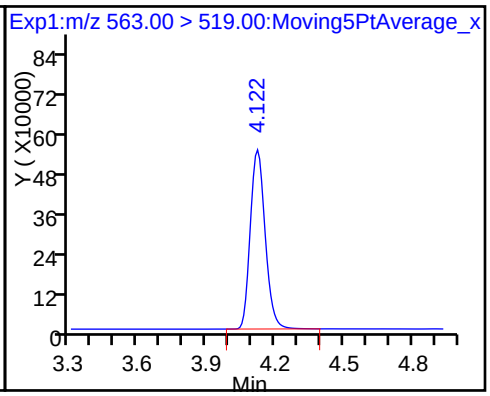
D 23 13C2 PFDA



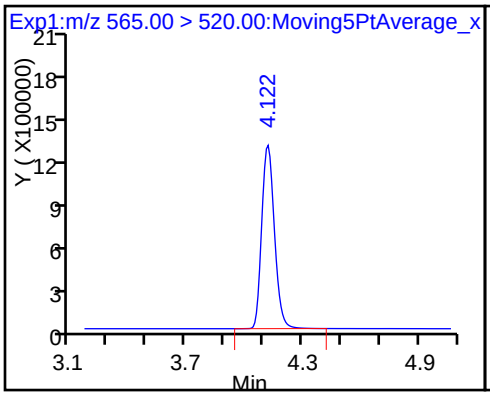
29 Perfluorodecane Sulfonic acid



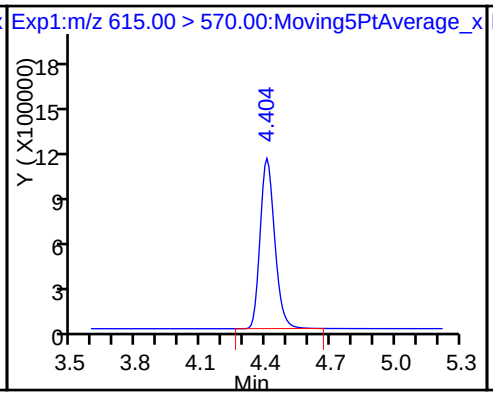
31 Perfluoroundecanoic acid



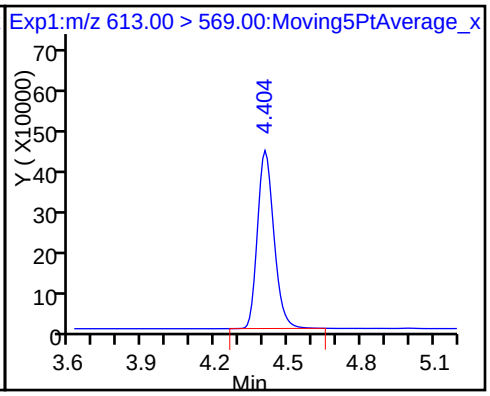
D 30 13C2 PFUnA



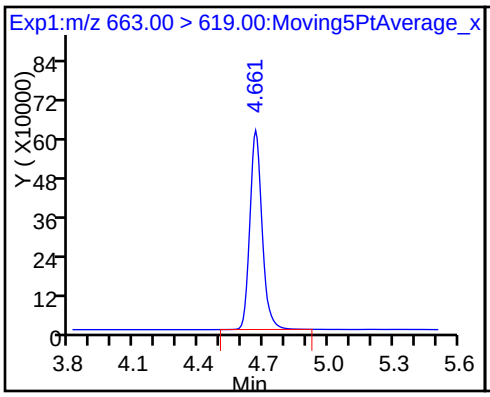
D 36 13C2 PFDoA



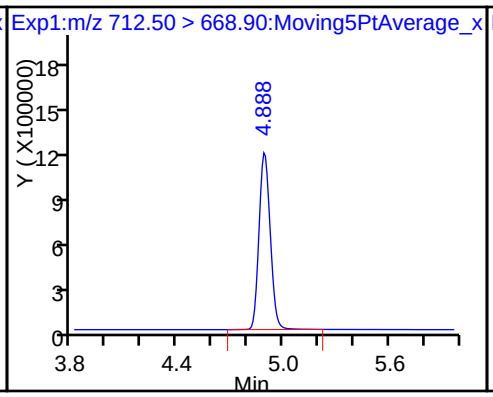
37 Perfluorododecanoic acid



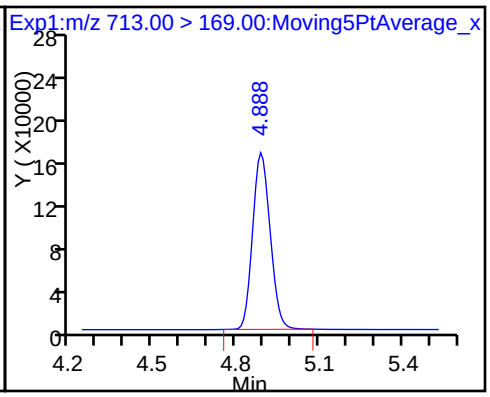
41 Perfluorotridecanoic acid



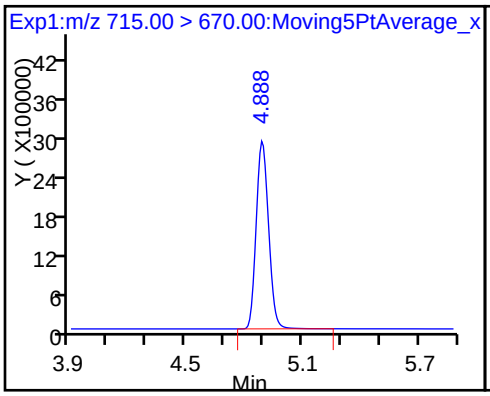
42 Perfluorotetradecanoic acid



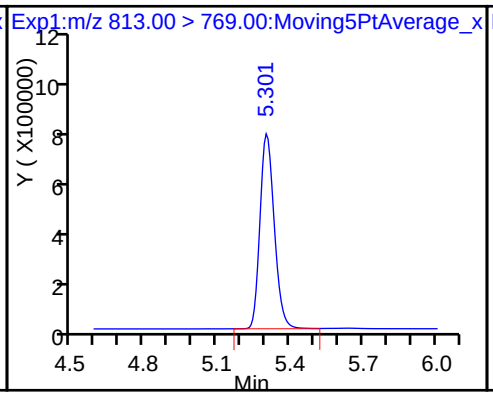
42 Perfluorotetradecanoic acid



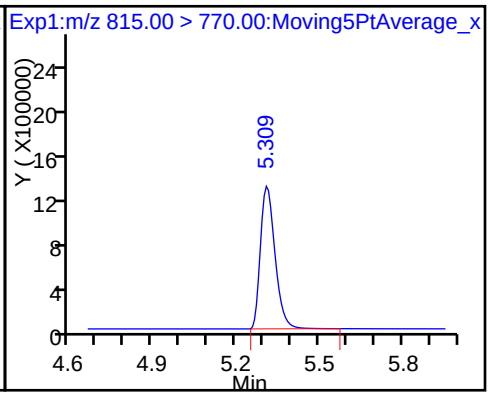
D 43 13C2-PFTeDA



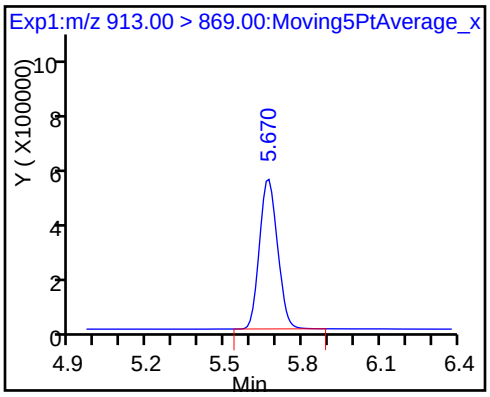
45 Perfluorohexadecanoic acid



D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 320-166258/3-A

Matrix: Water Lab File ID: 2017.06.08D_004.d

Analysis Method: 537 (Modified) Date Collected:

Extraction Method: 3535 Date Extracted: 05/25/2017 15:37

Sample wt/vol: 250(mL) Date Analyzed: 06/09/2017 01:09

Con. Extract Vol.: 0.5(mL) Dilution Factor: 1

Injection Volume: 2(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	41.0		2.5	2.0	0.75
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	39.8		4.0	3.0	1.3
375-73-5	Perfluorobutanesulfonic acid (PFBS)	40.2		2.5	2.0	0.92

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	123		25-150
STL00991	13C4 PFOS	87		25-150
STL00994	18O2 PFHxS	101		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_004.d
Lims ID: LCSD 320-166258/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 09-Jun-2017 01:09:21 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcsd 320-166258/3-a
Misc. Info.: Plate: 1 Rack: 4
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\A8_N.m
Limit Group: LC PFC_DOD ICAL
Last Update: 09-Jun-2017 12:57:34 Calib Date: 06-Jun-2017 14:25:49
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20170606-43899.b\2017.06.06CURVE_010.d

Column 1 : Det: EXP1
Process Host: XAWRK025

First Level Reviewer: raineys Date: 09-Jun-2017 12:58:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.678	1.677	0.001		15618686	47.4		94.7	50402	
2 Perfluorobutyric acid										
212.90 > 169.00	1.682	1.681	0.001	1.000	6544501	22.8		114	4832	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.989	1.988	0.001	1.000	4877421	19.7		98.5	2242	
D 3 13C5-PFPeA										
267.90 > 223.00	1.989	1.988	0.001		11891049	54.1		108	49378	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.036	2.027	0.008	1.000	7597712	20.1		114		
298.90 > 99.00	2.028	2.027	0.001	0.996	3015680		2.52(0.00-0.00)			
D 47 13C3-PFBS										
301.90 > 83.00	2.028	2.027	0.001		278262	NC				
D 7 13C2 PFHxA										
315.00 > 270.00	2.326	2.313	0.013		10656173	55.3		111	25396	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.326	2.323	0.003	1.000	4389311	20.3		102	4675	
D 9 13C4-PFHpA										
367.00 > 322.00	2.694	2.692	0.002		10825015	60.9		122	27209	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.694	2.692	0.002	1.000	4564862	20.1		101	1310	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.704	2.701	0.003	1.000	4899636	19.3		106		
D 11 18O2 PFHxS										
403.00 > 84.00	2.704	2.701	0.003		10963838	47.6		101	19563	
D 14 13C4 PFOA										
417.00 > 372.00	3.073	3.064	0.008		11081717	61.5		123	28390	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										
413.00 > 369.00	3.073	3.072	0.0	1.000	4854356	20.5		102	1301	
413.00 > 169.00	3.073	3.072	0.0	1.000	2719505		1.79(0.90-1.10)		3552	
16 Perfluoroheptanesulfonic Acid										
449.00 > 80.00	3.073	3.072	0.0	1.000	4402163	24.8		130		
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.409	3.323	0.085	1.000	3267809	19.9		107	1822	
499.00 > 99.00	3.447	3.323	0.124	1.011	712123		4.59(0.90-1.10)		4177	
D 18 13C4 PFOS										
503.00 > 80.00	3.447	3.439	0.008		7441876	41.8		87.4	14553	
20 Perfluorononanoic acid										
463.00 > 419.00	3.455	3.447	0.008	1.000	3319632	20.2		101	3946	
D 19 13C5 PFNA										
468.00 > 423.00	3.455	3.447	0.008		8196230	53.7		107	20962	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.790	3.780	0.010	1.000	404610	20.7		103	2592	
D 21 13C8 FOSA										
506.00 > 78.00	3.781	3.780	0.001		1010102	3.36		6.7	4830	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.808	3.799	0.009	1.000	2877801	20.9		104	7611	
D 23 13C2 PFDA										
515.00 > 470.00	3.808	3.799	0.009		7237651	48.0		96.0	15650	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	4.105	4.104	0.001	1.000	1999386	19.5		101		
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.133	4.122	0.011	1.000	2475660	21.1		105	4999	
D 30 13C2 PFUnA										
565.00 > 520.00	4.133	4.122	0.011		5516363	46.0		92.1	10887	
D 36 13C2 PFDoA										
615.00 > 570.00	4.414	4.405	0.010		5355881	43.0		86.0	6779	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.414	4.414	0.0	1.000	2074339	20.3		101	3034	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.669	4.668	0.001	1.000	2245060	21.0		105	3524	
42 Perfluorotetradecanoic acid										
712.50 > 668.90	4.898	4.897	0.001	1.000	4941855	22.2		111	6013	
713.00 > 169.00	4.898	4.897	0.001	1.000	680641		7.26(0.00-0.00)		4557	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.898	4.897	0.001		12079730	47.0		94.0	13363	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.309	5.309	0.0	1.000	2893436	28.1		140	1684	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.316	5.309	0.007		5925157	43.3		86.6	6015	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.670	5.670	0.0	1.000	2669690	28.2		141	2582	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 09-Jun-2017 12:58:27 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b\2017.06.08D_004.d

Injection Date: 09-Jun-2017 01:09:21 Instrument ID: A8_N

Lims ID: LCSD 320-166258/3-A

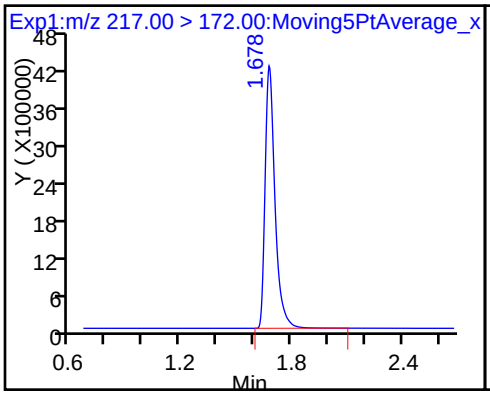
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 3 Worklist Smp#: 4

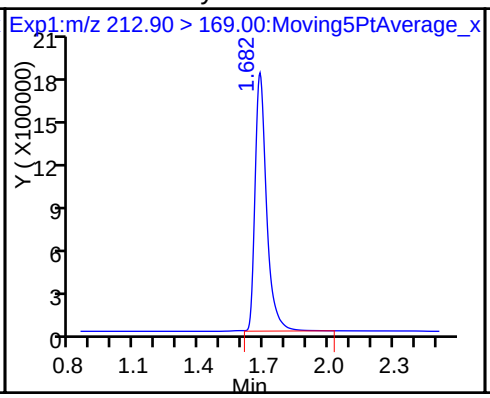
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC_DOD ICAL

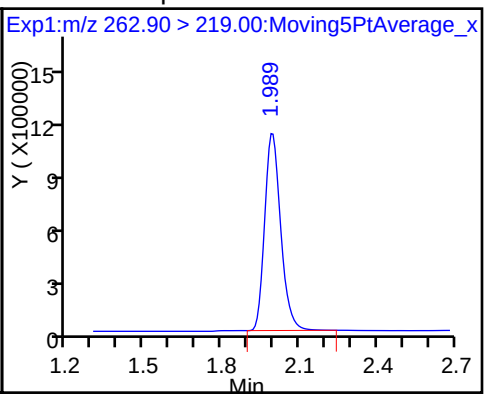
D 1 13C4 PFBA



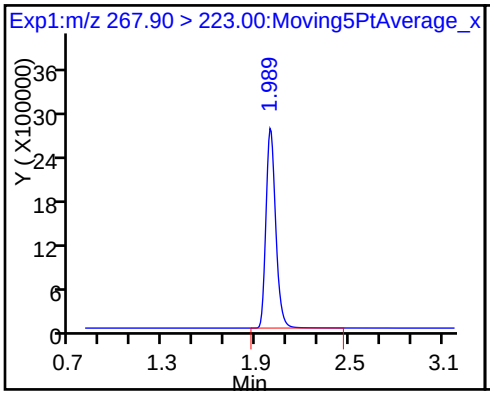
2 Perfluorobutyric acid



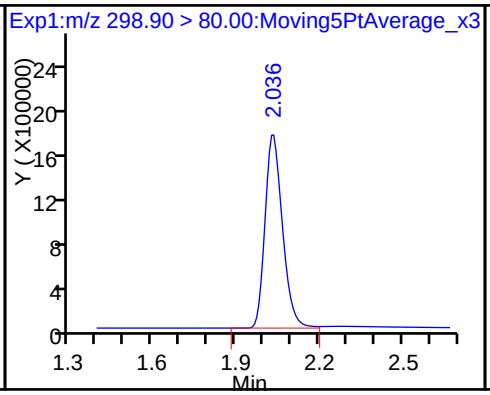
4 Perfluoropentanoic acid



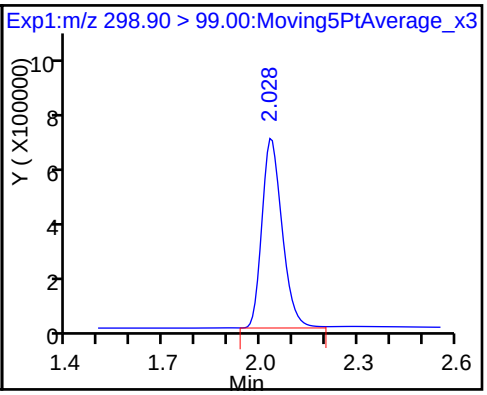
D 3 13C5-PFPeA



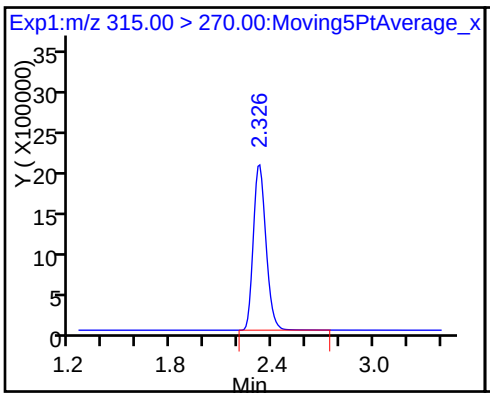
5 Perfluorobutanesulfonic acid



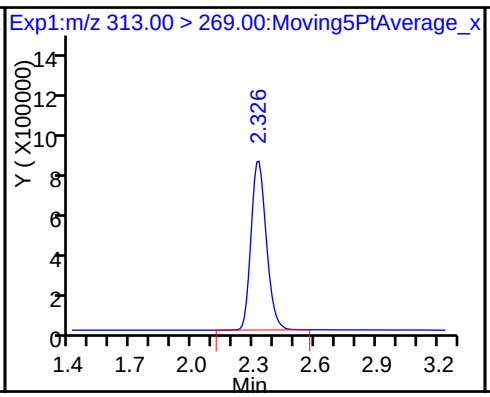
5 Perfluorobutanesulfonic acid



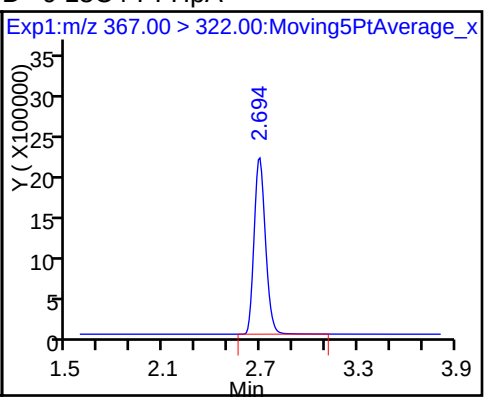
D 7 13C2 PFHxA



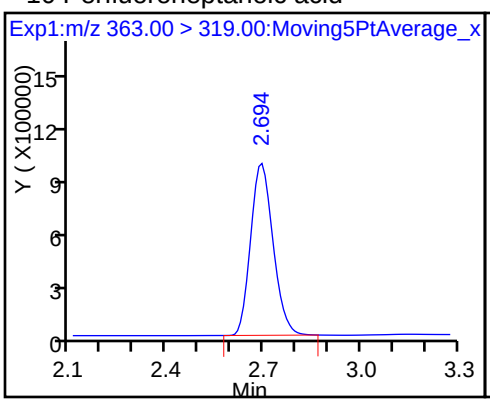
6 Perfluorohexanoic acid



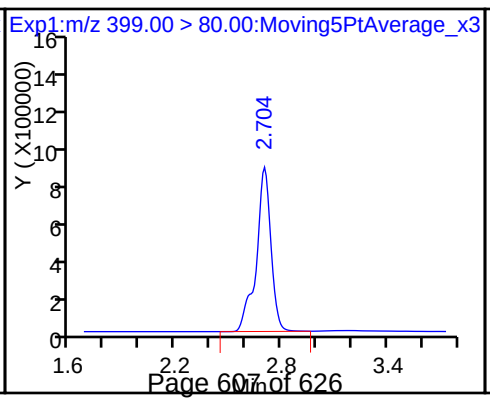
D 9 13C4-PFHpA



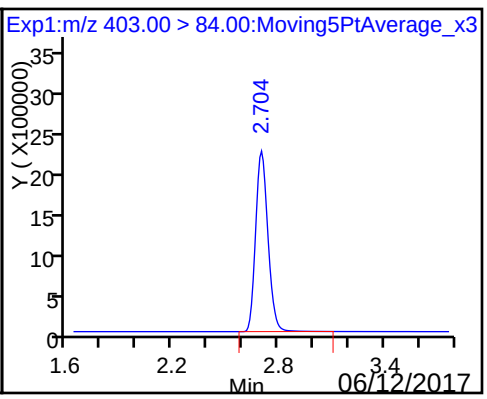
10 Perfluoroheptanoic acid



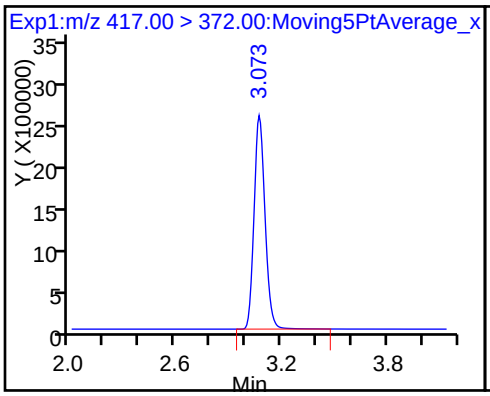
8 Perfluorohexanesulfonic acid



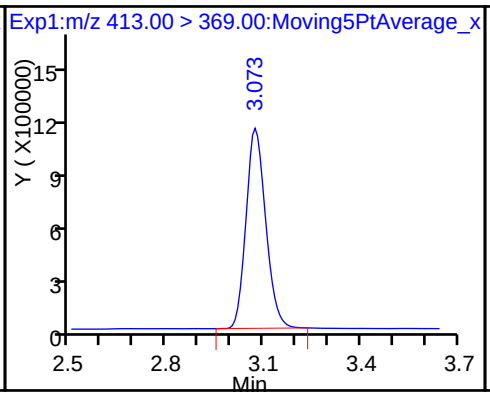
D 11 18O2 PFHxS



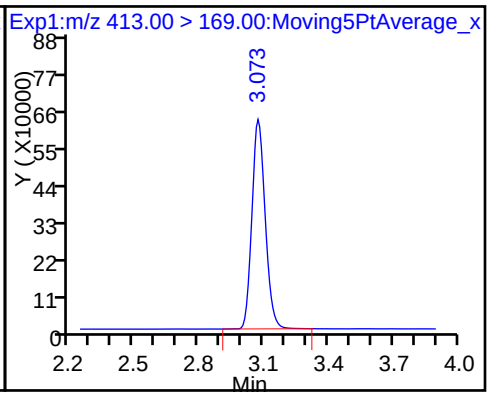
D 14 13C4 PFOA



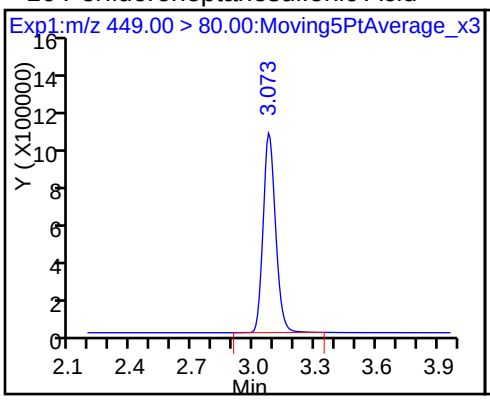
15 Perfluorooctanoic acid



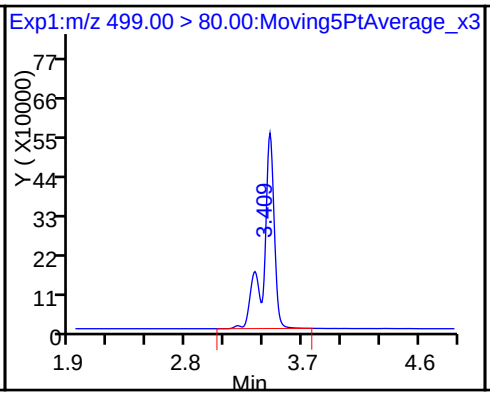
15 Perfluorooctanoic acid



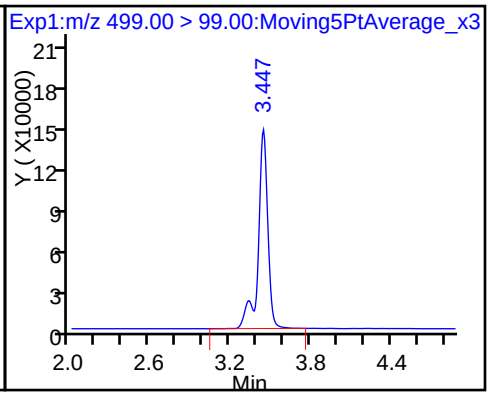
16 Perfluoroheptanesulfonic Acid



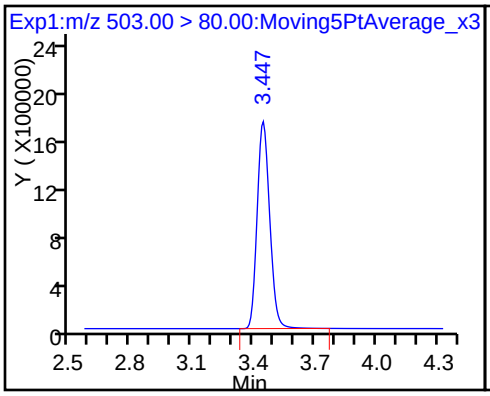
17 Perfluorooctane sulfonic acid



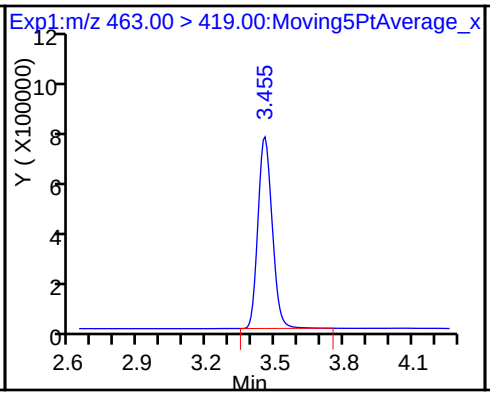
17 Perfluorooctane sulfonic acid



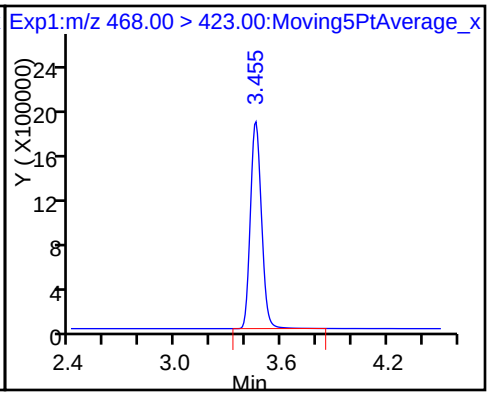
D 18 13C4 PFOS



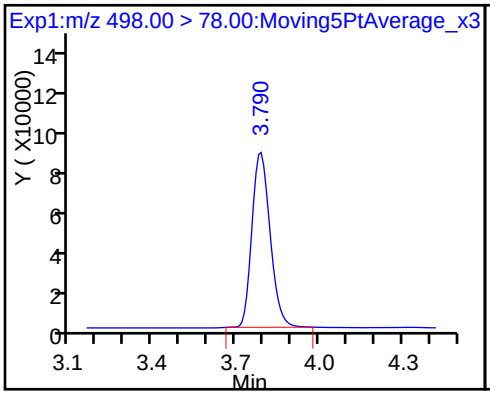
20 Perfluorononanoic acid



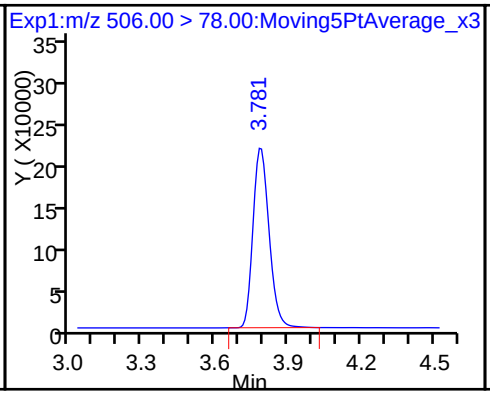
D 19 13C5 PFNA



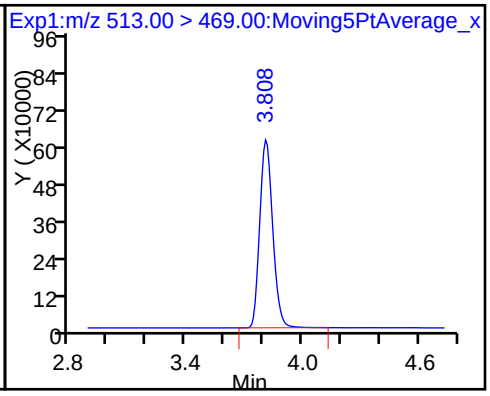
22 Perfluorooctane Sulfonamide



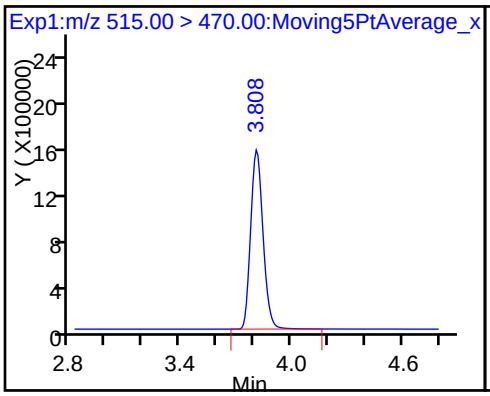
D 21 13C8 FOSA



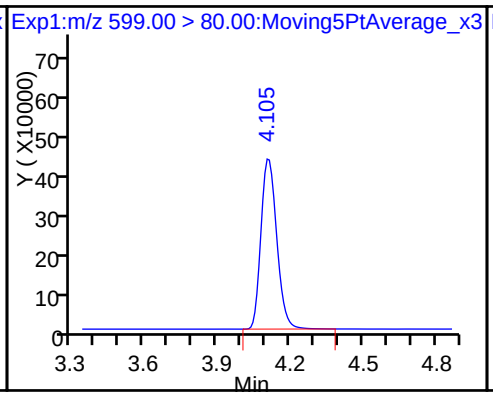
24 Perfluorodecanoic acid



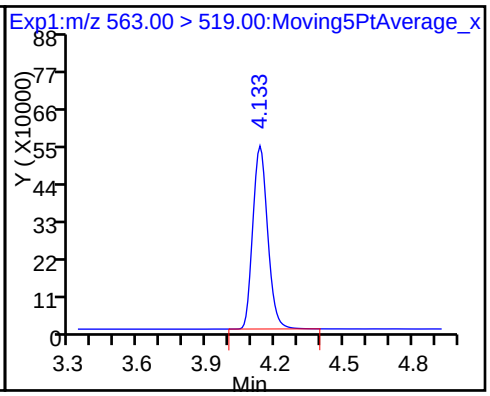
D 23 13C2 PFDA



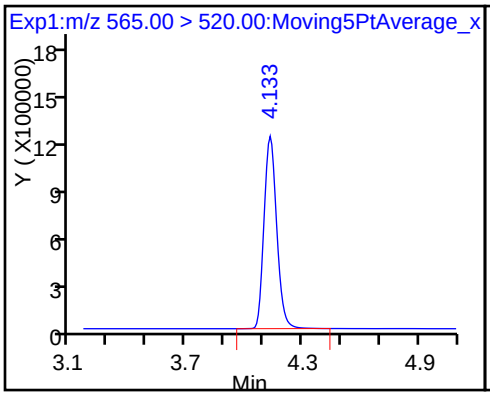
29 Perfluorodecane Sulfonic acid



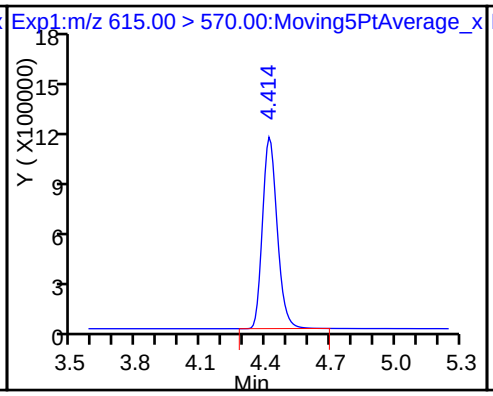
31 Perfluoroundecanoic acid



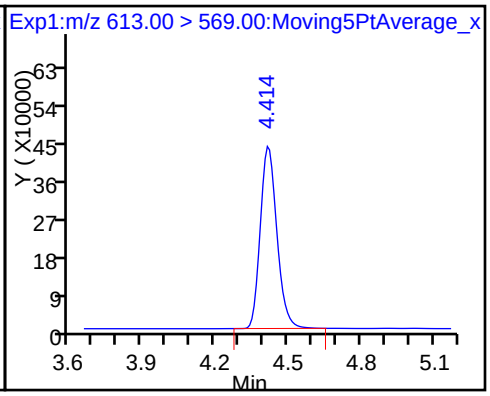
D 30 13C2 PFUnA



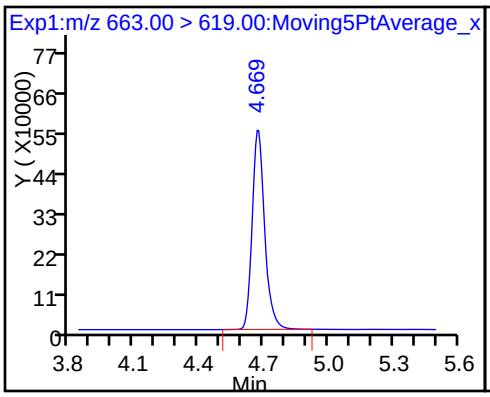
D 36 13C2 PFDoA



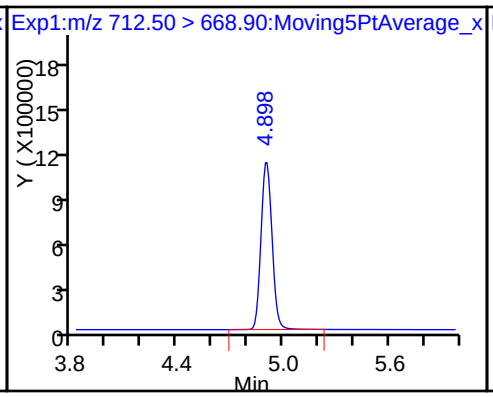
37 Perfluorododecanoic acid



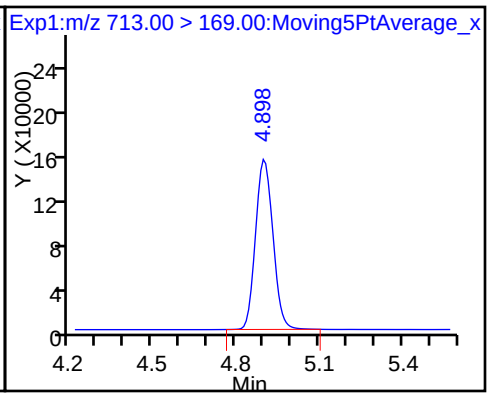
41 Perfluorotridecanoic acid



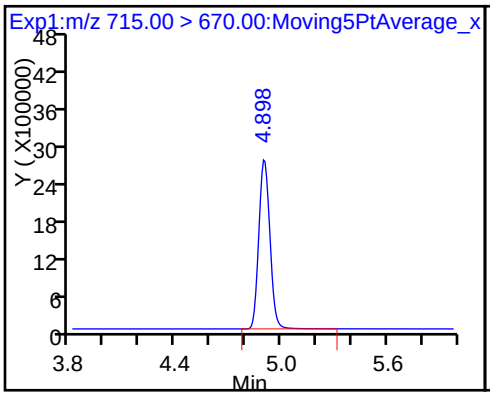
42 Perfluorotetradecanoic acid



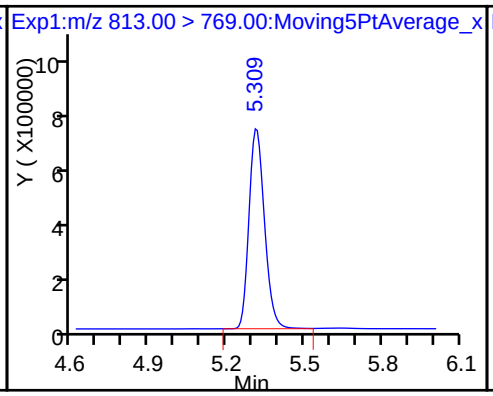
42 Perfluorotetradecanoic acid



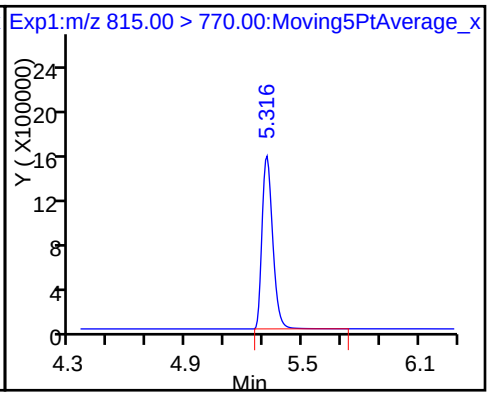
D 43 13C2-PFTeDA



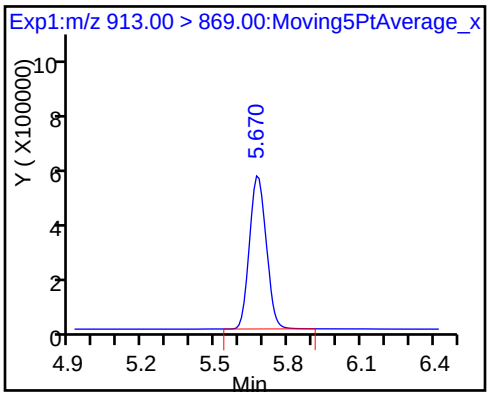
45 Perfluorohexadecanoic acid



D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Instrument ID: A8_N Start Date: 06/06/2017 13:31

Analysis Batch Number: 167755 End Date: 06/06/2017 14:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-167755/2		06/06/2017 13:31	1	2017.06.06CURVE 003.d	GeminiC18 3x100 3(mm)
IC 320-167755/3		06/06/2017 13:39	1	2017.06.06CURVE 004.d	GeminiC18 3x100 3(mm)
IC 320-167755/4		06/06/2017 13:47	1	2017.06.06CURVE 005.d	GeminiC18 3x100 3(mm)
IC 320-167755/5		06/06/2017 13:55	1	2017.06.06CURVE 006.d	GeminiC18 3x100 3(mm)
IC 320-167755/6		06/06/2017 14:02	1	2017.06.06CURVE 007.d	GeminiC18 3x100 3(mm)
IC 320-167755/7		06/06/2017 14:10	1	2017.06.06CURVE 008.d	GeminiC18 3x100 3(mm)
IC 320-167755/8		06/06/2017 14:18	1	2017.06.06CURVE 009.d	GeminiC18 3x100 3(mm)
IC 320-167755/9		06/06/2017 14:25	1	2017.06.06CURVE 010.d	GeminiC18 3x100 3(mm)
ICB 320-167755/10		06/06/2017 14:33	1		GeminiC18 3x100 3(mm)
ICV 320-167755/11		06/06/2017 14:41	1	2017.06.06CURVE 012.d	GeminiC18 3x100 3(mm)

537 (Modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Instrument ID: A8_N Start Date: 06/08/2017 09:21

Analysis Batch Number: 168184 End Date: 06/08/2017 10:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVL 320-168184/3		06/08/2017 09:21	1	2017.06.08A_003 .d	GeminiC18 3x100 3(mm)
CCV 320-168184/4		06/08/2017 09:29	1		GeminiC18 3x100 3(mm)
ZZZZZ		06/08/2017 09:37	1		GeminiC18 3x100 3(mm)
CCV 320-168184/7		06/08/2017 09:52	1		GeminiC18 3x100 3(mm)
ZZZZZ		06/08/2017 10:00	1		GeminiC18 3x100 3(mm)
CCV 320-168184/10		06/08/2017 10:15	1		GeminiC18 3x100 3(mm)

537 (Modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Instrument ID: A8_N Start Date: 06/09/2017 00:46

Analysis Batch Number: 168409 End Date: 06/09/2017 03:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-168409/1		06/09/2017 00:46	1	2017.06.08D_001.d	GeminiC18 3x100 3(mm)
MB 320-166258/1-A		06/09/2017 00:53	1	2017.06.08D_002.d	GeminiC18 3x100 3(mm)
LCS 320-166258/2-A		06/09/2017 01:01	1	2017.06.08D_003.d	GeminiC18 3x100 3(mm)
LCSD 320-166258/3-A		06/09/2017 01:09	1	2017.06.08D_004.d	GeminiC18 3x100 3(mm)
320-28427-1		06/09/2017 01:40	1	2017.06.08D_008.d	GeminiC18 3x100 3(mm)
320-28427-2		06/09/2017 01:47	1	2017.06.08D_009.d	GeminiC18 3x100 3(mm)
320-28427-3		06/09/2017 01:55	1	2017.06.08D_010.d	GeminiC18 3x100 3(mm)
CCV 320-168409/12		06/09/2017 02:10	1	2017.06.08D_012.d	GeminiC18 3x100 3(mm)
CCV 320-168409/20		06/09/2017 03:12	1		GeminiC18 3x100 3(mm)

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28427-1

SDG No.:

Batch Number: 166258 Batch Start Date: 05/25/17 15:36 Batch Analyst: Marchenko, Veronika P

Batch Method: 3535 Batch End Date: 05/26/17 14:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFCSU 00067	LCPFCSP 00095
MB 320-166258/1		3535, 537 (Modified)				250 mL	0.5 mL	500 uL	
LCS 320-166258/2		3535, 537 (Modified)				250 mL	0.5 mL	500 uL	500 uL
LCSD 320-166258/3		3535, 537 (Modified)				250 mL	0.5 mL	500 uL	500 uL
320-28427-A-1	Rig1_Blank	3535, 537 (Modified)	T	281.68 g	26.42 g	255.3 mL	0.5 mL	500 uL	
320-28427-A-2	Rig2_Blank	3535, 537 (Modified)	T	283.01 g	27.12 g	255.9 mL	0.5 mL	500 uL	
320-28427-A-3	Grout Truck_Blank	3535, 537 (Modified)	T	309.81 g	28.37 g	281.4 mL	0.5 mL	500 uL	

Batch Notes	
Balance ID	QA-070
H2O ID	5/04/17
Hexane ID	921664
Manifold ID	2,12
Methanol ID	931320
Sodium Hydroxide ID	924543
Pipette ID	MD05306
Analyst ID - Reagent Drop	VPM
Analyst ID - SU Reagent Drop	VPM
Analyst ID - SU Reagent Drop Witness	TN
Solvent Lot #	932747
Solvent Name	0.3% NH4OH/MEOH
SOP Number	WS-LC-0025
SPE Cartridge Type	WAX 500mg
Solid Phase Extraction Disk ID	002836112A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

HPLC/LCMS Data Review Checklist

Job Number(s): 28427 | Work List ID(s): 44050 or

Extraction Batch: 166258 | Analysis Batch(es): ~~166258~~ 6/9/17 or 168409

Delivery Rank: 4 | Due Date: 5/26/17

A. Calibration/Instrument Run QC	1st Level	2nd Level	N/A
1. ICAL locked in Chrom and TALS? ICAL Batch# 167755	✓	✓	
2. ICAL, CCV Frequency & Criteria met.	✓	✓	
• $RF_{average}$ criteria appropriate for the method.	✓	✓	
• Linear Regression criteria appropriate if required ($r \geq 0.995$).	✓	✓	
• Quadratic fit criteria appropriate if required ($r^2 \geq 0.990$).			✓
• For Linear Regression and Quadratic fit – Does the y-intercept support ½ the reporting limit as described in CA-Q-S-005?	✓	✓	
• All curve points show calculated concentrations.	✓	✓	
3. Peaks correctly ID'd by data system.	✓	✓	
5. Tune check frequency & criteria met and Tune check report attached.			✓
B. QA/QC			
1. Are all QC samples properly linked in TALS?	✓	✓	
2. Method blank, LCS/LCSD and MS/SD frequencies met.	✓	✓	
3. LCS/LCSD and MB data are within control limits. If not, NCM is present.	✓	✓	
4. Are MS/MSD recoveries and RPD within control limits?	✓	✓	
5. Holding Times were met for prep and analytical.	✓	✓	
6. IS/Surrogate recoveries meet criteria or properly noted.	✓	✓	
C. Sample Analysis			
1. Was correct analysis performed and were project instructions followed?	✓	✓	
2. If required, are compounds within RT windows?	✓		
3. If required, are positive hits confirmed and >40% RPD flagged?			✓
4. Manual Integrations reviewed and appropriate.	✓	✓	
5. All analytes correctly reported. (Primary, secondary, acceptable status)	✓	✓	
6. Correct reporting limits used. (based on client request, prep factors, and dilutions)	✓	✓	
D. Documentation			
1. Are all non-conformances documented/attached? NCM#	✓	✓	
2. Do results make sense (e.g. dilutions, etc.)?	✓	✓	
3. Have all flags been reviewed for appropriateness?	✓	✓	
4. For level 3 and 4 reports, have forms and raw data been reviewed?		✓	
5. Was QC Checker run for this job?	✓	✓	

**Upon completion of this checklist, the reviewer must scan and attach the checklist to the TALS job.*

1st Level (Analyst): Shane Ramey Date: 6/9/17

2nd Level Reviewer: MWay Date: 6/11/2017

TestAmerica Laboratories
Worklist QC Batch Report

Worklist Name: 08JUN2017H_PFC Worklist Number: 44050
Instrument Name: A8_N Chrom Method: A8_N
Data Directory: \\ChromNa\Sacramento\ChromData\A8_N\20170609-44050.b
QC Batching: Disabled Limit Group Batching: Enabled

QC Batch: 1	LC PFC_DOD ICAL Raw Batch: 168409	LC PFC ICAL Raw Batch: 168410	LC PFAS ICAL Raw Batch: 168411
# 1 CCV L4	# 1 CCV L4	# 1 CCV L4	
# 2 MB 320-166258/1-A	# 2 MB 320-166258/1-A	# 2 MB 320-166258/1-A	
# 3 LCS 320-166258/2-A	# 3 LCS 320-166258/2-A	# 3 LCS 320-166258/2-A	
# 4 LCSD 320-166258/3-A	# 4 LCSD 320-166258/3-A	# 4 LCSD 320-166258/3-A	
# 5 320-28321-A-1-A		# 5 320-28321-A-1-A	# 5 320-28321-A-1-A
# 6 320-28321-A-2-A		# 6 320-28321-A-2-A	# 6 320-28321-A-2-A
# 7 320-28321-A-3-A		# 7 320-28321-A-3-A	# 7 320-28321-A-3-A
# 8 320-28427-A-1-A	# 8 320-28427-A-1-A		
# 9 320-28427-A-2-A	# 9 320-28427-A-2-A		
#10 320-28427-A-3-A	#10 320-28427-A-3-A		
#11 320-28328-A-1-A		#11 320-28328-A-1-A FOSA <1%	#11 320-28328-A-1-A
#12 CCV L5	#12 CCV L5	#12 CCV L5	
#13 320-28328-A-2-A	168184	#13 320-28328-A-2-A	#13 320-28328-A-2-A
#14 320-28328-A-3-A		#14 320-28328-A-3-A	#14 320-28328-A-3-A
#15 320-28328-A-4-A		#15 320-28328-A-4-A FOSA <1%	#15 320-28328-A-4-A
#16 320-28244-A-1-A		#16 320-28244-A-1-A	#16 320-28244-A-1-A
#17 320-28244-A-1-B MS		#17 320-28244-A-1-B MS	#17 320-28244-A-1-B MS
#18 320-28244-A-1-C MSD		#18 320-28244-A-1-C MSD	#18 320-28244-A-1-C MSD
#19 320-28244-A-2-A		#19 320-28244-A-2-A PFAS interference	#19 320-28244-A-2-A
#20 CCV L4	#20 CCV L4	#20 CCV L4	

168183

8C1

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

DS 6/7/17

Batch Number: 320-166258

Method Code: 320-3535_PFC-320

Analyst: Marchenko, Veronika P

Batch Open: 5/25/2017 3:36:00PM

Batch End: 05/26/17 14:34

Solid-Phase Extraction (SPE)

6/19

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	GrossWt TareWt	InitAmnt FinAmnt	PHs Rcvd	PHs Adj1	PHs Adj2	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~320-166258/1 N/A	N/A		250 mL				N/A	N/A	N/A		MB 320-166258/1-A
				0.5 mL								
2	LCS~320-166258/2 N/A	N/A		250 mL				N/A	N/A	N/A		LCS 320-166258/2-A
				0.5 mL								
3	LCSD~320-166258/3 N/A	N/A		250 mL				N/A	N/A	N/A		LCSD 320-166258/3-A
				0.5 mL								
4	320-28321-A-1 (PFC_IDA)	N/A (320-28142-1)	253.57 g	227 mL				6/22/17	25_Days	4		320-28321-A-1-A
			26.58 g	0.5 mL								
5	320-28321-A-2 (PFC_IDA)	N/A (320-28142-1)	277.44 g	250.8 mL				6/22/17	25_Days	4		320-28321-A-2-A
			26.66 g	0.5 mL								
6	320-28321-A-3 (PFC_IDA)	N/A (320-28142-1)	273.74 g	247.1 mL				6/22/17	25_Days	4		320-28321-A-3-A
			26.69 g	0.5 mL								
7	320-28427-A-1 (PFC_IDA_DOD5)	N/A (320-28427-1)	281.68 g	255.3 mL				5/26/17	23_Days	4		320-28427-A-1-A
			26.42 g	0.5 mL								
8	320-28427-A-2 (PFC_IDA_DOD5)	N/A (320-28427-1)	283.01 g	255.9 mL				5/26/17	23_Days	4		320-28427-A-2-A
			27.12 g	0.5 mL								
9	320-28427-A-3 (PFC_IDA_DOD5)	N/A (320-28427-1)	309.81 g	281.4 mL				5/26/17	23_Days	4		320-28427-A-3-A
			28.37 g	0.5 mL								
10	320-28328-A-1 (PFC_IDA)	N/A (320-28142-1)	260.37 g	234.1 mL				6/22/17	25_Days	4		320-28328-A-1-A
			26.30 g	0.5 mL								

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06/12/2017

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-166258

Analyst: Marchenko, Veronika P

Batch Open: 5/25/2017 3:36:00PM

Method Code: 320-3535_PFC-320

Batch End:

11	320-28328-A-2 (PFC_IDA)	N/A (320-28142-1)	276.25 g 26.53 g	249.7 mL 0.5 mL				6/22/17	25_Days	4	
12	320-28328-A-3 (PFC_IDA)	N/A (320-28142-1)	255.33 g 26.48 g	228.9 mL 0.5 mL				6/22/17	25_Days	4	
13	320-28328-A-4 (PFC_IDA)	N/A (320-28142-1)	266.35 g 26.81 g	239.5 mL 0.5 mL				6/22/17	25_Days	4	
14	320-28244-A-1 (PFC_IDA)	N/A (320-28142-1)	287.43 g 26.69 g	260.7 mL 0.5 mL				6/22/17	25_Days	4	
15	320-28244-A-1~MS (PFC_IDA)	N/A (320-28142-1)	283.42 g 26.39 g	257 mL 0.5 mL				6/22/17	25_Days	4	
16	320-28244-A-1~MSD (PFC_IDA)	N/A (320-28142-1)	284.21 g 26.63 g	257.6 mL 0.5 mL				6/22/17	25_Days	4	
17	320-28244-A-2 (PFC_IDA)	N/A (320-28142-1)	304.48 g 26.97 g	277.5 mL 0.5 mL				6/22/17	25_Days	4	

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-166258

Method Code: 320-3535_PFC-320

Analyst: Marchenko, Veronika P

Batch Open: 5/25/2017 3:36:00PM

Batch End:

Batch Notes

Manifold ID	2,12
Methanol ID	931320
Hexane ID	921664
Sodium Hydroxide ID	924543
First Start time	NA
First End time	NA
SPE Cartridge Type	WAX 500mg
Solid Phase Extraction Disk ID	002836112A
Balance ID	QA-070
H2O ID	5/04/17
Pipette ID	MD05306
Solvent Name	0.3% NH4OH/MEOH
Solvent Lot #	932747
Analyst ID - Reagent Drop	VPM
Analyst ID - SU Reagent Drop	VPM
Analyst ID - SU Reagent Drop Witness	TN
Acid Name	NA
Acid ID	NA
Reagent ID	NA
Reagent Lot Number	NA
SOP Number	WS-LC-0025

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-166258

Method Code: 320-3535_PFC-320

Analyst: Marchenko, Veronika P

Batch Open: 5/25/2017 3:36:00PM

Batch End:

Batch Comment

Comments

320-28427-A-1	Method Comments:	DOD site, Screen-caution
320-28427-A-2	Method Comments:	DOD site, Screen-caution
320-28427-A-3	Method Comments:	DOD site, Screen-caution

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-166258

Method Code: 320-3535_PFC-320

Analyst: Marchenko, Veronika P

Batch Open: 5/25/2017 3:36:00PM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness
MB 320-166258/1	LCMPFCSU_00067	500 uL	0.5 mL	VPM 5/25/17	5/25/17
LCS 320-166258/2	LCMPFCSU_00067	500 uL	0.5 mL		
LCS 320-166258/2	LCPFCSP_00095	500 uL	0.5 mL		
LCSD 320-166258/3	LCMPFCSU_00067	500 uL	0.5 mL		
LCSD 320-166258/3	LCPFCSP_00095	500 uL	0.5 mL		
320-28321-A-1	LCMPFCSU_00067	500 uL	0.5 mL		
320-28321-A-2	LCMPFCSU_00067	500 uL	0.5 mL		
320-28321-A-3	LCMPFCSU_00067	500 uL	0.5 mL		
320-28427-A-1	LCMPFCSU_00067	500 uL	0.5 mL		
320-28427-A-2	LCMPFCSU_00067	500 uL	0.5 mL		
320-28427-A-3	LCMPFCSU_00067	500 uL	0.5 mL		
320-28328-A-1	LCMPFCSU_00067	500 uL	0.5 mL		
320-28328-A-2	LCMPFCSU_00067	500 uL	0.5 mL		
320-28328-A-3	LCMPFCSU_00067	500 uL	0.5 mL		
320-28328-A-4	LCMPFCSU_00067	500 uL	0.5 mL		
320-28244-A-1	LCMPFCSU_00067	500 uL	0.5 mL		
320-28244-A-1 MS	LCMPFCSU_00067	500 uL	0.5 mL		
320-28244-A-1 MS	LCPFCSP_00095	500 uL	0.5 mL		

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-166258

Analyst: Marchenko, Veronika P

Method Code: 320-3535_PFC-320

Batch Open: 5/25/2017 3:36:00PM

Batch End:

320-28244-A-1 MSD	LCMPFCSU_00067	500 uL	0.5 mL	VPM 5/25/17	5/25/17
320-28244-A-1 MSD	LCPFCSP_00095	500 uL	0.5 mL		
320-28244-A-2	LCMPFCSU_00067	500 uL	0.5 mL		

Other Reagents:

Reagent	Amount/Units	Lot#:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Preparation Data Review Checklist

Preparation Batch Number(s): 160258 Test: PFC-10A/PFC-10AD005(L)

Earliest Holding Time: 5/25/17

Sample List Tab	1st Level Reviewer	2nd Level Reviewer
Samples identified to the correct method	✓	✓
All necessary NCMs filed (including holding time)	✓	✓
Method/sample/login/QAS checked and correct	✓	✓
Worksheet Tab	**1st Level Reviewer**	**2nd Level Reviewer**
All samples properly preserved	N/A	N/A
Weights in anticipated range and not targeted	✓	✓
All additional test requirements performed, documented, and uploaded to TALS correctly (e.g. final amount, initial amount, turbidity, and Cl Check)	✓	✓
The pH is transcribed correctly in TALS	N/A	N/A
All additional information transcribed into TALS is correct and raw data is attached	✓	✓
Comments are transcribed correctly in TALS	✓	✓
Reagents Tab	**1st Level Reviewer**	**2nd Level Reviewer**
All necessary reagents not expired and entered into TALS	✓	✓
All spike amounts correct and added to necessary samples and QC	✓	✓
Batch Information	**1st Level Reviewer**	**2nd Level Reviewer**
Date and time accurate and entered into TALS correctly	✓	✓
All necessary 'batch information' complete and entered into TALS correctly	✓	✓

1st Level Reviewer: TN Date: 05/26/17

2nd Level Reviewer: VM Date: 5/26/17

Comments:

Shipping and Receiving Documents

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467.7248

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

Client Contact	Project Manager: Bryan Burkingstock	Site Contact: Ryan Brown	Date: 5/18/17	COC No: 10
CH2M Hill	Tel/Fax:	Lab Contact: Jill Kellmann	Carrier: FedEx	1 of 1 COCs
6600 Peachtree Dunwoody Rd., 400 Embassy Row, Suite 600	**Analysis Turnaround Time**			Sampler:
Atlanta, GA 30328	☒CALENDAR DAYS ☐WORKING DAYS			**For Lab Use Only:**
(678) 530-4060 Phone	TAT if different from Below 28days			Walk-in Client:
(770) 604-9183 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Meridian 10006-7-105420 JM01 Navy Clean	☐ 1 week			Job / SDG No.:
Site: NAS Meridian	☐ 2 days			
P O #: 10006-7-105420	☐ 1 day			

320-28427 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFCs (EPA 537M)	Sample Specific Notes:
Rig 1 - Blank	5/18/17	1711	G	W	2	N	N	X	Tank on Curtis Lee's Rig
Rig 2 - Blank	↓	1725	↓	↓	↓	↓	↓	↓	Tank on Kevin Peak's Rig
Grout Truck - Blank	↓	1735	↓	↓	↓	↓	↓	↓	Tank on grout truck

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

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

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

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

Special Instructions/QC Requirements & Comments:
Send results to Mike Zamboni - address is on file

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 6.7 Corr'd: 1.0 | Therm ID No.: AK-1

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ryan Brown	CH2M Hill	5/19/17 1609		TAMS	5/20/17 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.11, dated 1/24/2017

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 320-28427-1

Login Number: 28427
List Number: 1
Creator: Edman, Connor M

List Source: TestAmerica Sacramento

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

Contract_ID	DO_CTO_ID	Phase	Installation	Sample_Name	CH2M_Code	Analysis_G	Analytical_	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_ID	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime_	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Sampl	Dilution	Run_Num	Percent_N	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_R	Validator	Val_Date
N6247016	JM01		MERIDIAN	MEAFF-MRD-1A01-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/21/203	02/22/2017			20170224	15:44:00	20170306	16:12:00	320-25962	1	1			1,4-Dioxane	123-91-1	0.48	0.48	UG_L	U	U	PR	TRG					00000000	GW			5.0	0.19	0.48	0.95	320-25962	320-153398		
N6247016	JM01		MERIDIAN	MEAFF-MRD-1A01-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/21/203	02/22/2017			20170224	15:44:00	20170306	16:12:00	320-25962	1	1			Nitrobenzene-D5	4165-60-0	61	61	PCT_REC			PR	SURR	SLSA	91	42	00000000	GW			5.0				320-25962	320-153398		
N6247016	JM01		MERIDIAN	MEAFF-MRD-1A01P-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/21/203	02/22/2017			20170224	15:44:00	20170306	16:34:00	320-25962	1	1			1,4-Dioxane	123-91-1	0.48	0.48	UG_L	U	U	PR	TRG					00000000	GW			5.0	0.19	0.48	0.97	320-25962	320-153398		
N6247016	JM01		MERIDIAN	MEAFF-MRD-1A01P-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/21/203	02/22/2017			20170224	15:44:00	20170306	16:34:00	320-25962	1	1			Nitrobenzene-D5	4165-60-0	63	63	PCT_REC			PR	SURR	SLSA	91	42	00000000	GW			5.0				320-25962	320-153398		
N6247016	JM01		MERIDIAN	MEAFF-EB01-022117-SO	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/21/203	02/22/2017			20170228	16:42:00	20170302	11:12:00	320-25962	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.0018	0.0018	UG_L	UM	UM	PR	TRG					00000000	AQ (Field Blanks)			5.0	0.00067	0.0018	0.0022	320-25962	320-152836		
N6247016	JM01		MERIDIAN	MEAFF-EB01-022117-SO	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/21/203	02/22/2017			20170228	16:42:00	20170302	11:12:00	320-25962	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0027	0.0027	UG_L	U	U	PR	TRG					00000000	AQ (Field Blanks)			5.0	0.0011	0.0027	0.0036	320-25962	320-152836		
N6247016	JM01		MERIDIAN	MEAFF-EB01-022117-SO	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/21/203	02/22/2017			20170228	16:42:00	20170302	11:12:00	320-25962	1	1			13C4 PFOA	152			PCT_REC	Q	Q	PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	MEAFF-EB01-022117-SO	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/21/203	02/22/2017			20170228	16:42:00	20170302	11:12:00	320-25962	1	1			13C4 PFOS	135			PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	MEAFF-EB01-022117-SO	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/21/203	02/22/2017			20170228	16:42:00	20170302	11:12:00	320-25962	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0018	0.0018	UG_L	U	U	PR	TRG					00000000	AQ (Field Blanks)			5.0	0.00082	0.0018	0.0022	320-25962	320-152836		
N6247016	JM01		MERIDIAN	MEAFF-EB01-022117-SO	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/21/203	02/22/2017			20170228	16:42:00	20170302	11:12:00	320-25962	1	1			1802 PFHXS	141			PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	19:45:00	320-25962	1	13.3			Perfluorooctanoic acid (PFOA)	335-67-1	27	27	UG_KG			PR	TRG					00000000	SO			5.0	0.12	0.34	0.57	320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	19:45:00	320-25962	1	13.3			Perfluorooctane Sulfonate (PFOS)	1763-23-1	220	220	UG_KG	E	E	PR	TRG					00000000	SO			5.0	0.14	0.34	0.57	320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	19:45:00	320-25962	1	13.3			13C4 PFOA	111			PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	19:45:00	320-25962	1	13.3			13C4 PFOS	55			PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	19:45:00	320-25962	1	13.3			Perfluorobutanesulfonic acid (PFBS)	375-73-5	2.0	2.0	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.12	0.34	0.46	320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	19:45:00	320-25962	1	13.3			1802 PFHXS	95	95		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170303	09:53:00	320-25962	10	2	13.3		Perfluorooctanoic acid (PFOA)	335-67-1	28	28	UG_KG	DM	DM	PR	TRG					00000000	SO			5.0	1.2	3.4	5.7	320-25962	320-153020		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170303	09:53:00	320-25962	10	2	13.3		Perfluorooctane Sulfonate (PFOS)	1763-23-1	270	270	UG_KG	D	D	PR	TRG					00000000	SO			5.0	1.4	3.4	5.7	320-25962	320-153020		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170303	09:53:00	320-25962	10	2	13.3		13C4 PFOA	136	136		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-153020		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170303	09:53:00	320-25962	10	2	13.3		13C4 PFOS	90	90		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-153020		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170303	09:53:00	320-25962	10	2	13.3		Perfluorobutanesulfonic acid (PFBS)	375-73-5	1.6	1.6	UG_KG	JDM	JDM	PR	TRG					00000000	SO			5.0	1.2	3.4	4.6	320-25962	320-153020		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170303	09:53:00	320-25962	10	2	13.3		1802 PFHXS	1802 PFHX	122	122	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-153020		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	20:00:00	320-25962	1	14.7			Perfluorooctanoic acid (PFOA)	335-67-1	5.5	5.5	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.12	0.35	0.59	320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	20:00:00	320-25962	1	14.7			Perfluorooctane Sulfonate (PFOS)	1763-23-1	30	30	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.15	0.35	0.59	320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	20:00:00	320-25962	1	14.7			13C4 PFOA	101	101		PCT_REC	M	M	PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	20:00:00	320-25962	1	14.7			13C4 PFOS	56	56		PCT_REC	M	M	PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	20:00:00	320-25962	1	14.7			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.95	0.95	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.12	0.35	0.47	320-25962	320-152825		
N6247016	JM01		MERIDIAN	MEAFF-PWMA-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/21/203	02/22/2017			20170223	17:22:00	20170301	20:00:00	320-25962	1	14.7			1802 PFHXS	1802 PFHX	95	95	PCT_REC	M	M	PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	LCS 320-152015/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170303	09:37:00	LCS 320-15	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	102	102	PCT_REC			PR	TRG	LSA	140	60	00000000	SO			5.0	0.10	0.30	0.50	320-25962	320-153020		
N6247016	JM01		MERIDIAN	LCS 320-152015/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170303	09:37:00	LCS 320-15	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	107	107	PCT_REC			PR	TRG	LSA	140	60	00000000	SO			5.0	0.13	0.30	0.50	320-25962	320-153020		
N6247016	JM01		MERIDIAN	LCS 320-152015/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170303	09:37:00	LCS 320-15	1	1			13C4 PFOA	106	106		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-153020		
N6247016	JM01		MERIDIAN	LCS 320-152015/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170303	09:37:00	LCS 320-15	1	1			13C4 PFOS	91	91		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-153020		
N6247016	JM01		MERIDIAN	LCS 320-152015/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170303	09:37:00	LCS 320-15	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	112	112	PCT_REC			PR	TRG	LSA	150	50	00000000	SO			5.0	0.10	0.30	0.40	320-25962	320-153020		
N6247016	JM01		MERIDIAN	LCS 320-152015/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170303	09:37:00	LCS 320-15	1	1			1802 PFHXS	1802 PFHX	101	101	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-153020		
N6247016	JM01		MERIDIAN	LCS 320-152172/2-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	BS	W	4	02/24/203	02/24/2017			20170224	15:44:00	20170306	11:46:00	LCS 320-15	1	1			1,4-Dioxane	123-91-1	29	29	PCT_REC	M	M	PR	TRG	LSA	52	12	00000000	SO			5.0	0.20	0.50	1.0	320-25962	320-153398		
N6247016	JM01		MERIDIAN	LCS 320-152172/2-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	BS	W	4	02/24/203	02/24/2017			20170224	15:44:00	20170306	11:46:00	LCS 320-15	1	1			Nitrobenzene-D5	4165-60-0	73	73	PCT_REC			PR	SURR	SLSA	91	42	00000000	SO			5.0				320-25962	320-153398		
N6247016	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-15	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	97	97	PCT_REC			PR	TRG	LSA	140	60	00000000	SO			5.0	0.75	2.0	2.5	320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-15	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	96	96	PCT_REC			PR	TRG	LSA	140	60	00000000	SO			5.0	1.3	3.0	4.0	320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-15	1	1			13C4 PFOA	142	142		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-15	1	1			13C4 PFOS	133	133		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-15	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	112	112	PCT_REC			PR	TRG	LSA	150	50	00000000	SO			5.0	0.92	2.0	2.5	320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-15	1	1			1802 PFHXS	1802 PFHX	136	136	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCSD 320-152172/3-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	BSD	W	4	02/24/203	02/24/2017			20170224	15:44:00	20170306	12:08:00	LCSD 320-1	1	1			1,4-Dioxane	123-91-1	26	26	PCT_REC	M	M	PR	TRG	LSP	52	12	00000000	SO			5.0	0.20	0.50	1.0	320-25962	320-153398		
N6247016	JM01		MERIDIAN	LCSD 320-152172/3-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	BSD	W	4	02/24/203	02/24/2017			20170224	15:44:00	20170306	12:08:00	LCSD 320-1	1	1			Nitrobenzene-D5	4165-60-0	61	61	PCT_REC			PR	SURR	SLSA	91	42	00000000	SO			5.0				320-25962	320-153398		
N6247016	JM01		MERIDIAN	LCSD 320-152587/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:50:00	LCSD 320-1	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	96	96	PCT_REC			PR	TRG	LSP	140	60	00000000	SO			5.0	0.75	2.0	2.5	320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCSD 320-152587/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:50:00	LCSD 320-1	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	96	96	PCT_REC	M	M	PR	TRG	LSP	140	60	00000000	SO			5.0	1.3	3.0	4.0	320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCSD 320-152587/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:50:00	LCSD 320-1	1	1			13C4 PFOA	142	142		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCSD 320-152587/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:50:00	LCSD 320-1	1	1			13C4 PFOS	135	135		PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCSD 320-152587/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:50:00	LCSD 320-1	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	114	114	PCT_REC	M	M	PR	TRG	LSP	150	50	00000000	SO			5.0	0.92	2.0	2.5	320-25962	320-152836		
N6247016	JM01		MERIDIAN	LCSD 320-152587/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:50:00	LCSD 320-1	1	1			1802 PFHXS	1802 PFHX	140	140	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-25962	320-152836		
N6247016	JM01		MERIDIAN	MB 320-152015/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170301	18:37:00	MB 320-15	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.178	0.178	UG_KG	J	J	PR	TRG					00000000	SO			5.0	0.13	0.30	0.50	320-25962	320-152825		
N6247016	JM01		MERIDIAN	MB 320-152015/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170301	18:37:00	MB 320-15	1	1			13C4 PFOA	121	121		PCT_REC			PR	SURR	SMSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	MB 320-152015/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170301	18:37:00	MB 320-15	1	1			13C4 PFOS	95	95		PCT_REC			PR	SURR	SMSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	MB 320-152015/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170301	18:37:00	MB 320-15	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.30	0.30	UG_KG	U	U	PR	TRG					00000000	SO			5.0	0.10	0.30	0.40	320-25962	320-152825		
N6247016	JM01		MERIDIAN	MB 320-152015/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	02/23/203	02/23/2017			20170223	17:22:00	20170301	18:37:00	MB 320-15	1	1			1802 PFHXS	1802 PFHX	113	113	PCT_REC			PR	SURR	SMSA	150	25	00000000	SO			5.0				320-25962	320-152825		
N6247016	JM01		MERIDIAN	MB 320-152172/1-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	LB1	W	4	02/24/203	02/24/2017			20170224	15:44:00	20170306	11:24:00	MB 320-15	1	1			1,4-Dioxane	123-91-1	0.50	0.50	UG_L	U	U	PR	TRG					00000000	SO			5.0	0.20	0.50	1.0	320-25962	320-153398		
N6247016	JM01		MERIDIAN	MB 320-152172/1-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	LB1	W	4	02/24/203	02/24/2017			20170224	15:44:00	20170306	11:24:00	MB 320-15	1	1			Nitrobenzene-D5	4165-60-0	63	63	PCT_REC			PR	SURR	SLSA	91	42	00000000	SO			5.0				320-25962	320-153398		
N6247016	JM01		MERIDIAN	MB 320-152587/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:35:00	MB 320-15	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.002	0.002	UG_L	UM	UM	PR	TRG					00000000	SO			5.0	0.00075	0.002	0.0025	320-25962	320-152836		
N6247016	JM01		MERIDIAN	MB 320-152587/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	02/28/203	02/28/2017			20170228	16:42:00	20170302	10:35:00	MB 320-15	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.003	0.003	UG_L	U	U	PR	TRG					00000000	SO			5.0	0.0013	0.003	0.004	320-25962	320-152836		
N6247016	JM01		MERIDIAN	MB 320-152587/1-A	NONS	SVOA	537_MOD	OR

Contract_ID	DO_CTO_ID	Phase	Installation	Sample_Name	CH2M_Code	Analysis_G	Analytical_	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_Ba	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime_	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_I	Analysis_T	Lab_Sampl	Dilution	Run_Num	Percent_N	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	00:58:00	320-26011	1	1	19.2		Perfluorooctanoic acid (PFOA)	335-67-1	0.26	0.26	UG_KG	JM	JM	PR	TRG					00000000	SO			5.0	0.12	0.37	0.61	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	00:58:00	320-26011	1	1	19.2		Perfluorooctane Sulfonate (PFOS)	1763-23-1	21	21	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.15	0.37	0.61	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	00:58:00	320-26011	1	1	19.2		13C4 PFOA	13C4 PFO	128	128	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	00:58:00	320-26011	1	1	19.2		13C4 PFOS	13C4 PFO	74	74	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	00:58:00	320-26011	1	1	19.2		Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.37	0.37	UG_KG	UM	UM	PR	TRG					00000000	SO			5.0	0.13	0.37	0.49	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	00:58:00	320-26011	1	1	19.2		18O2 PFHXS	18O2 PFH	95	95	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:05:00	320-26011	1	1	14.9		Perfluorooctanoic acid (PFOA)	335-67-1	1.4	1.4	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.12	0.35	0.58	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:05:00	320-26011	1	1	14.9		Perfluorooctane Sulfonate (PFOS)	1763-23-1	21	21	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.15	0.35	0.58	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:05:00	320-26011	1	1	14.9		13C4 PFOA	13C4 PFO	101	101	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:05:00	320-26011	1	1	14.9		13C4 PFOS	13C4 PFO	37	37	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:05:00	320-26011	1	1	14.9		Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.35	0.35	UG_KG	UM	UM	PR	TRG					00000000	SO			5.0	0.12	0.35	0.46	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4A-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:05:00	320-26011	1	1	14.9		18O2 PFHXS	18O2 PFH	91	91	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB01-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:13:00	320-26011	1	1	17.5		Perfluorooctanoic acid (PFOA)	335-67-1	0.36	0.36	UG_KG	UM	UM	PR	TRG					00000000	SO			5.0	0.12	0.36	0.60	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB01-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:13:00	320-26011	1	1	17.5		Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.72	0.72	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.15	0.36	0.60	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB01-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:13:00	320-26011	1	1	17.5		13C4 PFOA	13C4 PFO	108	108	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB01-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:13:00	320-26011	1	1	17.5		13C4 PFOS	13C4 PFO	51	51	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB01-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:13:00	320-26011	1	1	17.5		Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.36	0.36	UG_KG	U	U	PR	TRG					00000000	SO			5.0	0.12	0.36	0.48	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB01-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:13:00	320-26011	1	1	17.5		18O2 PFHXS	18O2 PFH	98	98	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:20:00	320-26011	1	1	24.2		Perfluorooctanoic acid (PFOA)	335-67-1	0.40	0.40	UG_KG	UM	UM	PR	TRG					00000000	SO			5.0	0.14	0.40	0.67	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:20:00	320-26011	1	1	24.2		Perfluorooctane Sulfonate (PFOS)	1763-23-1	1.4	1.4	UG_KG	M	M	PR	TRG					00000000	SO			5.0	0.17	0.40	0.67	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:20:00	320-26011	1	1	24.2		13C4 PFOA	13C4 PFO	110	110	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:20:00	320-26011	1	1	24.2		13C4 PFOS	13C4 PFO	56	56	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:20:00	320-26011	1	1	24.2		Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.40	0.40	UG_KG	UM	UM	PR	TRG					00000000	SO			5.0	0.14	0.40	0.54	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:20:00	320-26011	1	1	24.2		18O2 PFHXS	18O2 PFH	98	98	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:28:00	320-26011	1	1	28.3		Perfluorooctanoic acid (PFOA)	335-67-1	0.42	0.42	UG_KG	UM	UM	PR	TRG					00000000	SO			5.0	0.14	0.42	0.70	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:28:00	320-26011	1	1	28.3		Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.20	0.20	UG_KG	JM	JM	PR	TRG					00000000	SO			5.0	0.18	0.42	0.70	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:28:00	320-26011	1	1	28.3		13C4 PFOA	13C4 PFO	107	107	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:28:00	320-26011	1	1	28.3		13C4 PFOS	13C4 PFO	52	52	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:28:00	320-26011	1	1	28.3		Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.42	0.42	UG_KG	U	U	PR	TRG					00000000	SO			5.0	0.14	0.42	0.56	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:28:00	320-26011	1	1	28.3		18O2 PFHXS	18O2 PFH	99	99	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:43:00	320-26011	1	1	28.3		Perfluorooctanoic acid (PFOA)	335-67-1	100	100	PCT_REC			PR	SURR	MSA	140	60	00000000	SO			5.0	0.14	0.42	0.70	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:43:00	320-26011	1	1	28.3		Perfluorooctane Sulfonate (PFOS)	1763-23-1	102	102	PCT_REC	M	M	PR	TRG	MSA	140	60	00000000	SO			5.0	0.18	0.42	0.70	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:43:00	320-26011	1	1	28.3		13C4 PFOA	13C4 PFO	98	98	PCT_REC			PR	SURR	SLSA	140	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:43:00	320-26011	1	1	28.3		13C4 PFOS	13C4 PFO	59	59	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:43:00	320-26011	1	1	28.3		Perfluorobutanesulfonic acid (PFBS)	375-73-5	127	127	PCT_REC			PR	SURR	MSA	150	50	00000000	SO			5.0	0.14	0.42	0.56	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:43:00	320-26011	1	1	28.3		18O2 PFHXS	18O2 PFH	91	91	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:50:00	320-26011	1	1	28.3		Perfluorooctanoic acid (PFOA)	335-67-1	103	103	PCT_REC			PR	SURR	MSP	140	60	00000000	SO			5.0	0.14	0.42	0.70	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:50:00	320-26011	1	1	28.3		Perfluorooctane Sulfonate (PFOS)	1763-23-1	106	106	PCT_REC	M	M	PR	TRG	MSP	140	60	00000000	SO			5.0	0.18	0.42	0.70	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:50:00	320-26011	1	1	28.3		13C4 PFOA	13C4 PFO	110	110	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:50:00	320-26011	1	1	28.3		13C4 PFOS	13C4 PFO	61	61	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:50:00	320-26011	1	1	28.3		Perfluorobutanesulfonic acid (PFBS)	375-73-5	125	125	PCT_REC			PR	SURR	MSP	150	50	00000000	SO			5.0	0.14	0.42	0.56	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SWTP-SB02-1012-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:50:00	320-26011	1	1	28.3		18O2 PFHXS	18O2 PFH	106	106	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-UNKNOWN22-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:58:00	320-26011	1	1	15.6		Perfluorooctanoic acid (PFOA)	335-67-1	0.36	0.36	UG_KG	U	U	PR	TRG					00000000	SO			5.0	0.12	0.36	0.59	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-UNKNOWN22-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/22/203	02/23/2017			20170302	16:23:00	20170312	01:58:00	320-26011	1	1	15.6		Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.36	0.36	UG_KG	U	U	PR	TRG					00000000	SO			5.0	0.15	0.36	0.59	320-26011	320-154516		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:12:00	320-26013	1	1	15.7		Perfluorooctanoic acid (PFOA)	335-67-1	108	108	PCT_REC	M	M	PR	TRG	MSA	140	60	00000000	SO			5.0	0.12	0.36	0.60	320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:12:00	320-26013	1	1	15.7		Perfluorooctane Sulfonate (PFOS)	1763-23-1	104	104	PCT_REC	M	M	PR	TRG	MSA	140	60	00000000	SO			5.0	0.15	0.36	0.60	320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:20:00	320-26013	1	1	15.7		13C4 PFOA	13C4 PFO	104	104	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:20:00	320-26013	1	1	15.7		13C4 PFOS	13C4 PFO	68	68	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:20:00	320-26013	1	1	15.7		Perfluorobutanesulfonic acid (PFBS)	375-73-5	123	123	PCT_REC			PR	TRG	MSA	150	50	00000000	SO			5.0	0.12	0.36	0.48	320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:20:00	320-26013	1	1	15.7		18O2 PFHXS	18O2 PFH	90	90	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:27:00	320-26013	1	1	15.7		Perfluorooctanoic acid (PFOA)	335-67-1	105	105	PCT_REC	M	M	PR	TRG	MSP	140	60	00000000	SO			5.0	0.12	0.35	0.59	320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:27:00	320-26013	1	1	15.7		Perfluorooctane Sulfonate (PFOS)	1763-23-1	114	114	PCT_REC	M	M	PR	TRG	MSP	140	60	00000000	SO			5.0	0.15	0.35	0.59	320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:27:00	320-26013	1	1	15.7		13C4 PFOA	13C4 PFO	112	112	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:27:00	320-26013	1	1	15.7		13C4 PFOS	13C4 PFO	72	72	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:27:00	320-26013	1	1	15.7		Perfluorobutanesulfonic acid (PFBS)	375-73-5	123	123	PCT_REC			PR	TRG	MSP	150	50	00000000	SO			5.0	0.12	0.35	0.47	320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0001-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:27:00	320-26013	1	1	15.7		18O2 PFHXS	18O2 PFH	94	94	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/203	02/24/2017			20170302	17:04:00	20170311	16:35:00	320-26013	1	1	17.6		Perfluorooctanoic acid (PFOA)	335-67-1	0.22	0.22	UG_KG	JM	JM	PR	TRG					00000000	SO			5.0	0.12	0.36	0.60	320-26013	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SDA4C-

Contract_ID	DO_CTO_ID	Phase	Installation	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Sampl	Dilution	Run_Num	Percent_N	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N624706	JM01		MERIDIAN	LCS 320-152961/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	WET	METHOD	000	BS	S	4	03/02/2017	03/02/2017																																									
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB02-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	16:42:00	320-26103	1	1	26.1		Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.41	0.41	UG_KG	UM	UM	PR	TRG												5.0	0.14	0.41	0.54	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB02-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	16:42:00	320-26103	1	1	26.1		1802 PFHXS	1802 PFHX	103	103	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-MRD-0504-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/23/2017	02/24/2017			20170302	13:45:00	20170314	16:12:00	320-26103	1	1			1,4-Dioxane	123-91-1	0.47	0.47	UG_L	U	U	PR	TRG												5.0	0.19	0.47	0.94	320-26103	320-154875		
N624706	JM01		MERIDIAN	MEAFF-MRD-0504-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/23/2017	02/24/2017			20170302	13:45:00	20170314	16:12:00	320-26103	1	1			Nitrobenzene-D5	4165-60-0	72	72	PCT_REC			PR	SURR	SLSA	91	42	00000000	GW			5.0				320-26103	320-154875		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/23/2017	02/24/2017			20170302	13:45:00	20170314	16:35:00	320-26103	1	1			1,4-Dioxane	123-91-1	0.47	0.47	UG_L	U	U	PR	TRG												5.0	0.19	0.47	0.95	320-26103	320-154875		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/23/2017	02/24/2017			20170302	13:45:00	20170314	16:35:00	320-26103	1	1			Nitrobenzene-D5	4165-60-0	58	58	PCT_REC			PR	SURR	SLSA	91	42	00000000	GW			5.0				320-26103	320-154875		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:42:00	320-26103	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	5.4	5.4	UG_L	ME	ME	PR	TRG												5.0	0.00063	0.0017	0.0021	320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:42:00	320-26103	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.4	0.4	UG_L	E	E	PR	TRG												5.0	0.0011	0.0025	0.0034	320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:42:00	320-26103	1	1			13C4 PFOA	13C4 PFOA	25	25	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:42:00	320-26103	1	1			13C4 PFOS	13C4 PFOS	121	121	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:42:00	320-26103	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.86	0.86	UG_L	ME	ME	PR	TRG												5.0	0.00078	0.0017	0.0021	320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:42:00	320-26103	1	1			1802 PFHXS	1802 PFHX	32	32	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170303	09:45:00	320-26103	50	2			Perfluorooctanoic acid (PFOA)	335-67-1	13	13	UG_L	DM	DM	PR	TRG												5.0	0.032	0.085	0.11	320-26103	320-153020		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170303	09:45:00	320-26103	50	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.41	0.41	UG_L	D	D	PR	TRG												5.0	0.054	0.13	0.17	320-26103	320-153020		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170303	09:45:00	320-26103	50	2			13C4 PFOA	13C4 PFOA	101	101	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-153020		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170303	09:45:00	320-26103	50	2			13C4 PFOS	13C4 PFOS	138	138	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-153020		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170303	09:45:00	320-26103	50	2			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.69	0.69	UG_L	D	D	PR	TRG												5.0	0.039	0.085	0.11	320-26103	320-153020		
N624706	JM01		MERIDIAN	MEAFF-MRD-0621-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170303	09:45:00	320-26103	50	2			1802 PFHXS	1802 PFHX	137	137	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-153020		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB05-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	16:57:00	320-26103	1	1	23.0		Perfluorooctanoic acid (PFOA)	335-67-1	0.41	0.41	UG_KG	JM	JM	PR	TRG												5.0	0.13	0.39	0.65	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB05-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	16:57:00	320-26103	1	1	23.0		Perfluorooctane Sulfonate (PFOS)	1763-23-1	2.4	2.4	UG_KG	M	M	PR	TRG												5.0	0.16	0.39	0.65	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB05-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	16:57:00	320-26103	1	1	23.0		13C4 PFOA	13C4 PFOA	99	99	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB05-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	16:57:00	320-26103	1	1	23.0		13C4 PFOS	13C4 PFOS	60	60	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB05-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	16:57:00	320-26103	1	1	23.0		Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.37	0.37	UG_KG	JM	JM	PR	TRG												5.0	0.13	0.39	0.52	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB05-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	16:57:00	320-26103	1	1	23.0		1802 PFHXS	1802 PFHX	93	93	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:05:00	320-26103	1	1	29.2		Perfluorooctanoic acid (PFOA)	335-67-1	22	22	UG_KG	M	M	PR	TRG												5.0	0.14	0.43	0.71	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:05:00	320-26103	1	1	29.2		Perfluorobutanesulfonic acid (PFBS)	375-73-5	770	770	UG_KG	EM	EM	PR	TRG												5.0	0.18	0.43	0.71	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:05:00	320-26103	1	1	29.2		13C4 PFOA	13C4 PFOA	85	85	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:05:00	320-26103	1	1	29.2		13C4 PFOS	13C4 PFOS	32	32	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:05:00	320-26103	1	1	29.2		Perfluorobutanesulfonic acid (PFBS)	375-73-5	3.1	3.1	UG_KG			PR	TRG												5.0	0.15	0.43	0.57	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:05:00	320-26103	1	1	29.2		1802 PFHXS	1802 PFHX	86	86	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170313	16:46:00	320-26103	100	2	29.2		Perfluorooctanoic acid (PFOA)	335-67-1	22	22	UG_KG	JDM	JDM	PR	TRG												5.0	14	43	71	320-26103	320-154808		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170313	16:46:00	320-26103	100	2	29.2		Perfluorooctane Sulfonate (PFOS)	1763-23-1	1000	1000	UG_KG	DM	DM	PR	TRG												5.0	18	43	71	320-26103	320-154808		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170313	16:46:00	320-26103	100	2	29.2		13C4 PFOA	13C4 PFOA	89	89	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154808		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170313	16:46:00	320-26103	100	2	29.2		13C4 PFOS	13C4 PFOS	54	54	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154808		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170313	16:46:00	320-26103	100	2	29.2		Perfluorobutanesulfonic acid (PFBS)	375-73-5	43	43	UG_KG	U	U	PR	TRG												5.0	15	43	57	320-26103	320-154808		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB04-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	DL1	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170313	16:46:00	320-26103	100	2	29.2		1802 PFHXS	1802 PFHX	75	75	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154808		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:12:00	320-26103	1	1	24.1		Perfluorooctanoic acid (PFOA)	335-67-1	0.14	0.14	UG_KG	JM	JM	PR	TRG												5.0	0.13	0.39	0.65	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:12:00	320-26103	1	1	24.1		Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.61	0.61	UG_KG	JM	JM	PR	TRG												5.0	0.16	0.39	0.65	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:12:00	320-26103	1	1	24.1		13C4 PFOA	13C4 PFOA	102	102	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:12:00	320-26103	1	1	24.1		13C4 PFOS	13C4 PFOS	87	87	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:12:00	320-26103	1	1	24.1		Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.74	0.74	UG_KG	M	M	PR	TRG												5.0	0.13	0.39	0.52	320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-FTA2-SB03-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/23/2017	02/24/2017			20170302	17:04:00	20170311	17:12:00	320-26103	1	1	24.1		1802 PFHXS	1802 PFHX	98	98	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0				320-26103	320-154503		
N624706	JM01		MERIDIAN	MEAFF-MRD-0503-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/23/2017	02/24/2017			20170302	13:45:00	20170314	16:57:00	320-26103	1	1			1,4-Dioxane	123-91-1	0.48	0.48	UG_L	U	U	PR	TRG												5.0	0.19	0.48	0.97	320-26103	320-154875		
N624706	JM01		MERIDIAN	MEAFF-MRD-0503-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/23/2017	02/24/2017			20170302	13:45:00	20170314	16:57:00	320-26103	1	1			Nitrobenzene-D5	4165-60-0	68	68	PCT_REC			PR	SURR	SLSA	91	42	00000000	GW			5.0				320-26103	320-154875		
N624706	JM01		MERIDIAN	MEAFF-MRD-0615-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/23/2017	02/24/2017			20170302	13:45:00	20170314	17:20:00	320-26103	1	1			1,4-Dioxane	123-91-1	0.49	0.49	UG_L	U	U	PR	TRG												5.0	0.19	0.49	0.97	320-26103	320-154875		
N624706	JM01		MERIDIAN	MEAFF-MRD-0615-0217	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	REG	W	4	02/23/2017	02/24/2017			20170302	13:45:00	20170314	17:20:00	320-26103	1	1			Nitrobenzene-D5	4165-60-0	59	59	PCT_REC			PR	SURR	SLSA	91	42	00000000	GW			5.0				320-26103	320-154875		
N624706	JM01		MERIDIAN	MEAFF-MRD-0615-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:57:00	320-26103	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.21	0.21	UG_L			PR	SURR	SLSA	150	25	00000000	GW			5.0	0.00064	0.0017	0.0021	320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0615-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:57:00	320-26103	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.046	0.046	UG_L			PR	TRG												5.0	0.0011	0.0026	0.0034	320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0615-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:57:00	320-26103	1	1			13C4 PFOA	13C4 PFOA	77	77	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0615-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:57:00	320-26103	1	1			13C4 PFOS	13C4 PFOS	133	133	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0615-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:57:00	320-26103	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.18	0.18	UG_L			PR	SURR	SLSA	150	25	00000000	GW			5.0	0.00078	0.0017	0.0021	320-26103	320-152836		
N624706	JM01		MERIDIAN	MEAFF-MRD-0615-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	02/23/2017	02/24/2017			20170228	16:42:00	20170302	11:57:00	320-26103	1	1			1802 PFHXS	1802 PFHX	117	117	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/2017	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-11	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	97	97	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	0.75	2.0	2.5	320-26103	320-152836		
N624706	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/2017	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-11	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	96	96	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	1.3	3.0	4.0	320-26103	320-152836		
N624706	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/2017	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-11	1	1			13C4 PFOA	13C4 PFOA	142	142	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/2017	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-11	1	1			13C4 PFOS	13C4 PFOS	133	133	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/2017	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-11	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	112	112	PCT_REC			PR	TRG	LSA	150	50	00000000				5.0	0.92	2.0	2.5	320-26103	320-152836		
N624706	JM01		MERIDIAN	LCS 320-152587/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	02/28/2017	02/28/2017			20170228	16:42:00	20170302	10:42:00	LCS 320-11	1	1			1802 PFHXS	1802 PFHX	136	136	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0				320-26103	320-152836		
N624706	JM01		MERIDIAN	LCS 320-152910/2-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE

Contract_ID	DO_CTO_ID	Phase	Installation	Sample_Name	CH2M_Code	Analysis_Grp	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Sample_Basis	Extraction_Basis	Result_Type	Lab_QC_Type	Sample_Matrix	QC_Level	DateTime_Analyzed	Date_Received	Leachate_Expiration	Leachate_Expiration	Extraction_Date	Extraction_Time	Analysis_Date	Analysis_Time	Dilution_Factor	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Version	Original_Result	Result_Unit	Lab_Qualifiers	Validator_Qualifiers	GC_Column	Analysis_Reason	Result_Name	QC_Control_Type	QC_Accuracy	QC_Accuracy_Unit	Control_Limit_Group	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:24:00	320-26105	5	2			13C4 PFOA	13C4 PFOA	48	48	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW				5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:24:00	320-26105	5	2			13C4 PFOS	13C4 PFOS	120	120	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW				5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:24:00	320-26105	5	2			Perfluorooctanesulfonic acid (PFBS)	375-73-5	0.0093	0.0093	UG_L	UM	UM		PR	TRG				00000000	GW				5.0	0.0043	0.0093	0.012	320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:24:00	320-26105	5	2			18O2 PFHXS	18O2 PFHXS	141	141	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW				5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MS	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:32:00	320-26105	5	2			Perfluorooctanoic acid (PFOA)	335-67-1	84	84	PCT_REC	DM4	DM4	PR	TRG	MSA	140	60	00000000					5.0	3.4	9.1	11	320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MS	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:32:00	320-26105	5	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1	162	162	PCT_REC	DM1	DM1	PR	TRG	MSA	140	60	00000000					5.0	5.8	14	18	320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MS	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:32:00	320-26105	5	2			13C4 PFOA	13C4 PFOA	71	71	PCT_REC				PR	SURR	SLSA	150	25	00000000					5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MS	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:32:00	320-26105	5	2			13C4 PFOS	13C4 PFOS	119	119	PCT_REC				PR	SURR	SLSA	150	25	00000000					5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MS	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:32:00	320-26105	5	2			Perfluorobutanesulfonic acid (PFBS)	375-73-5	132	132	PCT_REC	D	D	PR	TRG	MSA	150	50	00000000					5.0	4.2	9.1	11	320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MS	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:32:00	320-26105	5	2			18O2 PFHXS	18O2 PFHXS	134	134	PCT_REC				PR	SURR	SLSA	150	25	00000000					5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MSD	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:39:00	320-26105	5	2			Perfluorooctanoic acid (PFOA)	335-67-1	12	12	PCT_REC	DM4	DM4	PR	TRG	MSP	140	60	00000000					5.0	3.5	9.2	12	320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MSD	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:39:00	320-26105	5	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1	154	154	PCT_REC	DM1	DM1	PR	TRG	MSP	140	60	00000000					5.0	5.9	14	18	320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MSD	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:39:00	320-26105	5	2			13C4 PFOA	13C4 PFOA	68	68	PCT_REC				PR	SURR	SLSA	150	25	00000000					5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MSD	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:39:00	320-26105	5	2			13C4 PFOS	13C4 PFOS	128	128	PCT_REC				PR	SURR	SLSA	150	25	00000000					5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MSD	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:39:00	320-26105	5	2			Perfluorobutanesulfonic acid (PFBS)	375-73-5	125	125	PCT_REC	D	D	PR	TRG	MSP	150	50	00000000					5.0	4.2	9.2	12	320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-MRD-1A14-0217-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	MSD	W	4	02/24/2017	02/25/2017			20170302	14:24:00	20170308	20:39:00	320-26105	5	2			18O2 PFHXS	18O2 PFHXS	147	147	PCT_REC				PR	SURR	SLSA	150	25	00000000					5.0				320-26105	320-154016		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:20:00	320-26105	1	17.5			Perfluorooctanoic acid (PFOA)	335-67-1	0.37	0.37	UG_KG	UM	UM	PR	TRG				00000000	SO				5.0	0.12	0.37	0.61	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:20:00	320-26105	1	17.5			Perfluorooctane Sulfonate (PFOS)	1763-23-1	2.1	2.1	UG_KG	M	M	PR	TRG				00000000	SO				5.0	0.15	0.37	0.61	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:20:00	320-26105	1	17.5			13C4 PFOA	13C4 PFOA	100	100	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:20:00	320-26105	1	17.5			13C4 PFOS	13C4 PFOS	58	58	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:20:00	320-26105	1	17.5			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.37	0.37	UG_KG	UM	UM	PR	TRG				00000000	SO				5.0	0.13	0.37	0.49	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:20:00	320-26105	1	17.5			18O2 PFHXS	18O2 PFHXS	93	93	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:27:00	320-26105	1	10.1			Perfluorooctanoic acid (PFOA)	335-67-1	0.25	0.25	UG_KG	JM	JM	PR	TRG				00000000	SO				5.0	0.11	0.33	0.55	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:27:00	320-26105	1	10.1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	19	19	UG_KG	M	M	PR	TRG				00000000	SO				5.0	0.14	0.33	0.55	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:27:00	320-26105	1	10.1			13C4 PFOA	13C4 PFOA	109	109	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:27:00	320-26105	1	10.1			13C4 PFOS	13C4 PFOS	83	83	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:27:00	320-26105	1	10.1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.33	0.33	UG_KG	UM	UM	PR	TRG				00000000	SO				5.0	0.11	0.33	0.44	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:27:00	320-26105	1	10.1			18O2 PFHXS	18O2 PFHXS	93	93	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:35:00	320-26105	1	12.8			Perfluorooctanoic acid (PFOA)	335-67-1	6.3	6.3	UG_KG	M	M	PR	TRG				00000000	SO				5.0	0.12	0.35	0.58	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:35:00	320-26105	1	12.8			Perfluorooctane Sulfonate (PFOS)	1763-23-1	21	21	UG_KG	M	M	PR	TRG				00000000	SO				5.0	0.15	0.35	0.58	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:35:00	320-26105	1	12.8			13C4 PFOA	13C4 PFOA	95	95	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:35:00	320-26105	1	12.8			13C4 PFOS	13C4 PFOS	61	61	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:35:00	320-26105	1	12.8			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.35	0.35	UG_KG	UM	UM	PR	TRG				00000000	SO				5.0	0.12	0.35	0.46	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:35:00	320-26105	1	12.8			18O2 PFHXS	18O2 PFHXS	92	92	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:42:00	320-26105	1	13.7			Perfluorooctanoic acid (PFOA)	335-67-1	0.15	0.15	UG_KG	JM	JM	PR	TRG				00000000	SO				5.0	0.12	0.35	0.58	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:42:00	320-26105	1	13.7			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.35	0.35	UG_KG	UM	UM	PR	TRG				00000000	SO				5.0	0.15	0.35	0.58	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:42:00	320-26105	1	13.7			13C4 PFOA	13C4 PFOA	104	104	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:42:00	320-26105	1	13.7			13C4 PFOS	13C4 PFOS	56	56	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:42:00	320-26105	1	13.7			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.35	0.35	UG_KG	U	U	PR	TRG				00000000	SO				5.0	0.12	0.35	0.46	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD002-SB02-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:42:00	320-26105	1	13.7			18O2 PFHXS	18O2 PFHXS	95	95	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:50:00	320-26105	1	16.7			Perfluorooctanoic acid (PFOA)	335-67-1	5.1	5.1	UG_KG	M	M	PR	TRG				00000000	SO				5.0	0.12	0.36	0.60	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:50:00	320-26105	1	16.7			Perfluorooctane Sulfonate (PFOS)	1763-23-1	15	15	UG_KG	M	M	PR	TRG				00000000	SO				5.0	0.15	0.36	0.60	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:50:00	320-26105	1	16.7			13C4 PFOA	13C4 PFOA	107	107	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:50:00	320-26105	1	16.7			13C4 PFOS	13C4 PFOS	72	72	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:50:00	320-26105	1	16.7			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.36	0.36	UG_KG	UM	UM	PR	TRG				00000000	SO				5.0	0.12	0.36	0.48	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:50:00	320-26105	1	16.7			18O2 PFHXS	18O2 PFHXS	100	100	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:57:00	320-26105	1	20.7			Perfluorooctanoic acid (PFOA)	335-67-1	0.28	0.28	UG_KG	J	J	PR	TRG				00000000	SO				5.0	0.13	0.38	0.64	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:57:00	320-26105	1	20.7			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.40	0.40	UG_KG	JM	JM	PR	TRG				00000000	SO				5.0	0.16	0.38	0.64	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:57:00	320-26105	1	20.7			13C4 PFOA	13C4 PFOA	119	119	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:57:00	320-26105	1	20.7			13C4 PFOS	13C4 PFOS	78	78	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:57:00	320-26105	1	20.7			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.38	0.38	UG_KG	U	U	PR	TRG				00000000	SO				5.0	0.13	0.38	0.51	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-BLD192-SB03-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	17:57:00	320-26105	1	20.7			18O2 PFHXS	18O2 PFHXS	108	108	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SWON-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	18:05:00	320-26105	1	13.9			Perfluorooctanoic acid (PFOA)	335-67-1	38	38	UG_KG	M	M	PR	TRG				00000000	SO				5.0	0.12	0.35	0.58	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SWON-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	18:05:00	320-26105	1	13.9			Perfluorooctane Sulfonate (PFOS)	1763-23-1	65	65	UG_KG	EM	EM	PR	TRG				00000000	SO				5.0	0.15	0.35	0.58	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SWON-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	18:05:00	320-26105	1	13.9			13C4 PFOA	13C4 PFOA	85	85	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SWON-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	18:05:00	320-26105	1	13.9			13C4 PFOS	13C4 PFOS	56	56	PCT_REC				PR	SURR	SLSA	150	25	00000000	SO				5.0				320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SWON-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	18:05:00	320-26105	1	13.9			Perfluorobutanesulfonic acid (PFBS)	375-73-5	3.0	3.0	UG_KG			PR	TRG				00000000	SO				5.0	0.12	0.35	0.46	320-26105	320-154503		
N624706	JM01		MERIDIAN	MEAFF-SWON-SB03-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	02/24/2017	02/25/2017			20170302	17:04:00	20170311	18:05:00	320-26105	1	13.9

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Sampl	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_L	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_R	Validator	Val_Date
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	22:52:00	320-26263	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.26	0.26	UG_L	M	M	PR	TRG					00000000	GW			5.0	0.00072	0.0019	0.0024	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	22:52:00	320-26263	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.37	0.37	UG_L	ME	ME	PR	TRG					00000000	GW			5.0	0.0012	0.0029	0.0038	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	22:52:00	320-26263	1	1			13C4 PFOA	13C4 PFO	85	85	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	22:52:00	320-26263	1	1			13C4 PFOS	13C4 PFO	107	107	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	22:52:00	320-26263	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.025	0.025	UG_L	M	M	PR	TRG					00000000	GW			5.0	0.00088	0.0019	0.0024	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	22:52:00	320-26263	1	1			18O2 PFHXS	18O2 PFH	110	110	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:16:00	320-26263	5	2			Perfluorooctanoic acid (PFOA)	335-67-1	0.27	0.27	UG_L	DM	DM	PR	TRG					00000000	GW			5.0	0.0036	0.0096	0.012	320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:16:00	320-26263	5	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.38	0.38	UG_L	DM	DM	PR	TRG					00000000	GW			5.0	0.0061	0.014	0.019	320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:16:00	320-26263	5	2			13C4 PFOA	13C4 PFO	81	81	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:16:00	320-26263	5	2			13C4 PFOS	13C4 PFO	98	98	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:16:00	320-26263	5	2			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.018	0.018	UG_L	DM	DM	PR	TRG					00000000	GW			5.0	0.0044	0.0096	0.012	320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-WWTP-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:16:00	320-26263	5	2			18O2 PFHXS	18O2 PFH	116	116	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:00:00	320-26263	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	2.5	2.5	UG_L	ME	ME	PR	TRG					00000000	GW			5.0	0.00069	0.0018	0.0023	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:00:00	320-26263	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	1.3	1.3	UG_L	ME	ME	PR	TRG					00000000	GW			5.0	0.0012	0.0028	0.0037	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:00:00	320-26263	1	1			13C4 PFOA	13C4 PFO	48	48	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:00:00	320-26263	1	1			13C4 PFOS	13C4 PFO	99	99	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:00:00	320-26263	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.65	0.65	UG_L	ME	ME	PR	TRG					00000000	GW			5.0	0.00084	0.0018	0.0023	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:00:00	320-26263	1	1			18O2 PFHXS	18O2 PFH	46	46	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:23:00	320-26263	10	2			Perfluorooctanoic acid (PFOA)	335-67-1	4.4	4.4	UG_L	DME	DME	PR	TRG					00000000	GW			5.0	0.0069	0.018	0.023	320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:23:00	320-26263	10	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1	1.6	1.6	UG_L	DM	DM	PR	TRG					00000000	GW			5.0	0.012	0.028	0.037	320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:23:00	320-26263	10	2			13C4 PFOA	13C4 PFO	83	83	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:23:00	320-26263	10	2			13C4 PFOS	13C4 PFO	112	112	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:23:00	320-26263	10	2			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.83	0.83	UG_L	D	D	PR	TRG					00000000	GW			5.0	0.0084	0.018	0.023	320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170313	17:23:00	320-26263	10	2			18O2 PFHXS	18O2 PFH	97	97	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154808		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170314	15:13:00	320-26262	25	3			Perfluorooctanoic acid (PFOA)	335-67-1	4.5	4.5	UG_L	DM	DM	PR	TRG					00000000	GW			5.0	0.017	0.046	0.057	320-26263	320-155009		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170314	15:13:00	320-26262	25	3			Perfluorooctane Sulfonate (PFOS)	1763-23-1	1.5	1.5	UG_L	DM	DM	PR	TRG					00000000	GW			5.0	0.029	0.069	0.092	320-26263	320-155009		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170314	15:13:00	320-26262	25	3			13C4 PFOA	13C4 PFO	108	108	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-155009		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170314	15:13:00	320-26262	25	3			13C4 PFOS	13C4 PFO	112	112	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-155009		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170314	15:13:00	320-26262	25	3			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.73	0.73	UG_L	D	D	PR	TRG					00000000	GW			5.0	0.021	0.046	0.057	320-26263	320-155009		
N624701	6JM01		MERIDIAN	MEAFF-PWMA-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170314	15:13:00	320-26262	25	3			18O2 PFHXS	18O2 PFH	108	108	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-155009		
N624701	6JM01		MERIDIAN	MEAFF-UNKNOWN22-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:07:00	320-26263	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.009	0.009	UG_L	M	M	PR	TRG					00000000	GW			5.0	0.00069	0.0019	0.0023	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-UNKNOWN22-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:07:00	320-26263	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.002	0.002	UG_L	JM	JM	PR	TRG					00000000	GW			5.0	0.0012	0.0028	0.0037	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-UNKNOWN22-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:07:00	320-26263	1	1			13C4 PFOA	13C4 PFO	87	87	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-UNKNOWN22-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:07:00	320-26263	1	1			13C4 PFOS	13C4 PFO	118	118	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-UNKNOWN22-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:07:00	320-26263	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0037	0.0037	UG_L			PR	TRG					00000000	GW			5.0	0.00085	0.0019	0.0023	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-UNKNOWN22-MW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:07:00	320-26263	1	1			18O2 PFHXS	18O2 PFH	125	125	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD04-030117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:15:00	320-26263	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.0081	0.0081	UG_L	M	M	PR	TRG					00000000	GW			5.0	0.00069	0.0018	0.0023	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD04-030117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:15:00	320-26263	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0012	0.0012	UG_L	JM	JM	PR	TRG					00000000	GW			5.0	0.0012	0.0028	0.0037	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD04-030117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:15:00	320-26263	1	1			13C4 PFOA	13C4 PFO	83	83	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD04-030117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:15:00	320-26263	1	1			13C4 PFOS	13C4 PFO	134	134	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD04-030117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:15:00	320-26263	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0036	0.0036	UG_L			PR	TRG					00000000	GW			5.0	0.00085	0.0018	0.0023	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD04-030117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/01/20	03/02/2017			20170306	16:19:00	20170310	23:15:00	320-26263	1	1			18O2 PFHXS	18O2 PFH	137	137	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD05-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/02/20	03/03/2017			20170306	16:19:00	20170311	00:07:00	320-26271	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.16	0.16	UG_L	M	M	PR	TRG					00000000	GW			5.0	0.00068	0.0018	0.0023	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD05-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/02/20	03/03/2017			20170306	16:19:00	20170311	00:07:00	320-26271	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.042	0.042	UG_L	M	M	PR	TRG					00000000	GW			5.0	0.0012	0.0027	0.0036	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD05-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/02/20	03/03/2017			20170306	16:19:00	20170311	00:07:00	320-26271	1	1			13C4 PFOA	13C4 PFO	70	70	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD05-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/02/20	03/03/2017			20170306	16:19:00	20170311	00:07:00	320-26271	1	1			13C4 PFOS	13C4 PFO	116	116	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD05-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/02/20	03/03/2017			20170306	16:19:00	20170311	00:07:00	320-26271	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0035	0.0035	UG_L			PR	TRG					00000000	GW			5.0	0.00083	0.0018	0.0023	320-26263	320-154459		
N624701	6JM01		MERIDIAN	MEAFF-FD05-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	03/02/20	03/03/2017			20170306	16:19:00	20170311	00:07:00	320-26271	1	1			18O2 PFHXS	18O2 PFH	114	114	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCS 320-153501/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	03/06/20	03/06/2017			20170306	16:19:00	20170310	22:37:00	LCS 320-15	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	100	100	PCT_REC	M	M	PR	TRG	LSA	140	60	00000000				5.0	0.75	2.0	2.5	320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCS 320-153501/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	03/06/20	03/06/2017			20170306	16:19:00	20170310	22:37:00	LCS 320-15	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	102	102	PCT_REC	M	M	PR	TRG	LSA	140	60	00000000				5.0	1.3	3.0	4.0	320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCS 320-153501/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	03/06/20	03/06/2017			20170306	16:19:00	20170310	22:37:00	LCS 320-15	1	1			13C4 PFOA	13C4 PFO	148	148	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCS 320-153501/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	03/06/20	03/06/2017			20170306	16:19:00	20170310	22:37:00	LCS 320-15	1	1			13C4 PFOS	13C4 PFO	132	132	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCS 320-153501/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	03/06/20	03/06/2017			20170306	16:19:00	20170310	22:37:00	LCS 320-15	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	113	113	PCT_REC			PR	TRG	LSA	150	50	00000000				5.0	0.92	2.0	2.5	320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCS 320-153501/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	03/06/20	03/06/2017			20170306	16:19:00	20170310	22:37:00	LCS 320-15	1	1			18O2 PFHXS	18O2 PFH	137	137	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0				320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCS 320-153806/2-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	BS	W	4	03/08/20	03/08/2017			20170308	08:41:00	20170314	21:06:00	LCS 320-15	1	1			1,4-Dioxane	123-91-1	32	32	PCT_REC	M	M	PR	TRG	LSA	52	12	00000000				5.0	0.20	0.50	1.0	320-26273	320-154875		
N624701	6JM01		MERIDIAN	LCS 320-153806/2-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test Amer	NONE	NA	SW3510C	000	BS	W	4	03/08/20	03/08/2017			20170308	08:41:00	20170314	21:06:00	LCS 320-15	1	1			Nitrobenzene-D5	4165-60-0	75	75	PCT_REC			PR	SURR	SLSA	91	42	00000000	GW			5.0				320-26273	320-154875		
N624701	6JM01		MERIDIAN	LCSD 320-153501/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	03/06/20	03/06/2017			20170306	16:19:00	20170310	22:45:00	LCSD 320-1	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	99	99	PCT_REC			PR	TRG	LSP	140	60	00000000				5.0	0.75	2.0	2.5	320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCSD 320-153501/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	03/06/20	03/06/2017			20170306	16:19:00	20170310	22:45:00	LCSD 320-1	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	106	106	PCT_REC	M	M	PR	TRG	LSP	140	60	00000000				5.0	1.3	3.0	4.0	320-26263	320-154459		
N624701	6JM01		MERIDIAN	LCSD 320-153501/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4

Contract_ID	DO_CTO_ID	Phase	Installation_Name	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Leachate_Name	Sample_Basis	Extraction_Code	Result_Type	Lab_QC_Type	Sample_Matrix	QC_Level	DateTime_Collected	Date_Received	Leachate_Leachate_Date	Extraction_Code	Extraction_Date	Analyte_ID	Analyte_Name	Dilution_Factor	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Name	Original_Result	Result_Unit	Lab_Qualifier	Validator_Qualifier	GC_Column	Analysis_Method	Result_Name	QC_Control_Type	QC_Accuracy	QC_Accuracy_Unit	Control_Limit_Type	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Validated_Date
N624706	JM01		MERIDIAN	MB 320-153806/1-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test America	NONE	NA	SW3510C	000	LB1	W	4	03/08/2017	03/08/2017		20170308	08:41:00	20170314	20:43:00	MB 320-153	1				1,4-Dioxane	123-91-1	0.50	0.50	UG_L	U	U		PR	TRG								00000000			5.0	0.20	0.50	1.0	320-26324	320-154875		
N624706	JM01		MERIDIAN	MB 320-153806/1-A	NONS	SVOA	8270_SIM	SVOA	TAMER	Test America	NONE	NA	SW3510C	000	LB1	W	4	03/08/2017	03/08/2017		20170308	08:41:00	20170314	20:43:00	MB 320-153	1				Nitrobenzene-D5	4165-60-0	69	69	PCT_REC				PR	SURR	SLSA	91	42	00000000			5.0				320-26327	320-154875		
N624706	JM01		MERIDIAN	MEAFF-4DMW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:43:00	320-263241	1				Perfluorooctanoic acid (PFOA)	335-67-1	0.22	0.22	UG_L	M	M		PR	TRG				00000000	GW		5.0	0.00073	0.002	0.0025	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:43:00	320-263241	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.21	0.21	UG_L	M	M		PR	TRG				00000000	GW		5.0	0.0013	0.0029	0.0039	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:43:00	320-263241	1				13C4 PFOA	13C4 PFOA	67	67	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:43:00	320-263241	1				13C4 PFOS	13C4 PFOS	90	90	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:43:00	320-263241	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.011	0.011	UG_L				PR	TRG				00000000	GW		5.0	0.0009	0.002	0.0025	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW01-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:43:00	320-263241	1				18O2 PFHxS	18O2 PFHxS	91	91	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:50:00	320-263241	1				Perfluorooctanoic acid (PFOA)	335-67-1	0.36	0.36	UG_L	M	M		PR	TRG				00000000	GW		5.0	0.00072	0.0019	0.0024	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:50:00	320-263241	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	1.1	1.1	UG_L	ME	ME		PR	TRG				00000000	GW		5.0	0.0012	0.0029	0.0038	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:50:00	320-263241	1				13C4 PFOA	13C4 PFOA	69	69	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:50:00	320-263241	1				13C4 PFOS	13C4 PFOS	76	76	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:50:00	320-263241	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.015	0.015	UG_L	M	M		PR	TRG				00000000	GW		5.0	0.00088	0.0019	0.0024	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:50:00	320-263241	1				18O2 PFHxS	18O2 PFHxS	83	83	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	DL1	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170315	20:16:00	320-263241	10	2			Perfluorooctanoic acid (PFOA)	335-67-1	0.39	0.39	UG_L	DM	DM		PR	TRG				00000000	GW		5.0	0.0072	0.019	0.024	320-26324	320-155237		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	DL1	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170315	20:16:00	320-263241	10	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1	1.1	1.1	UG_L	D	D		PR	TRG				00000000	GW		5.0	0.012	0.029	0.038	320-26324	320-155237		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	DL1	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170315	20:16:00	320-263241	10	2			13C4 PFOA	13C4 PFOA	93	93	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-155237		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	DL1	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170315	20:16:00	320-263241	10	2			13C4 PFOS	13C4 PFOS	100	100	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-155237		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	DL1	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170315	20:16:00	320-263241	10	2			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.016	0.016	UG_L	JDM	JDM		PR	TRG				00000000	GW		5.0	0.0088	0.019	0.024	320-26324	320-155237		
N624706	JM01		MERIDIAN	MEAFF-4DMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	DL1	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170315	20:16:00	320-263241	10	2			18O2 PFHxS	18O2 PFHxS	113	113	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-155237		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:58:00	320-263241	1				Perfluorooctanoic acid (PFOA)	335-67-1	0.0019	0.0019	UG_L	UM	UM		PR	TRG				00000000	GW		5.0	0.0007	0.0019	0.0024	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:58:00	320-263241	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0028	0.0028	UG_L	UM	UM		PR	TRG				00000000	GW		5.0	0.0012	0.0028	0.0038	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:58:00	320-263241	1				13C4 PFOA	13C4 PFOA	38	38	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:58:00	320-263241	1				13C4 PFOS	13C4 PFOS	93	93	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:58:00	320-263241	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0019	0.0019	UG_L	U	U		PR	TRG				00000000	GW		5.0	0.00086	0.0019	0.0024	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	03:58:00	320-263241	1				18O2 PFHxS	18O2 PFHxS	102	102	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MS	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:05:00	320-263241	1				Perfluorooctanoic acid (PFOA)	335-67-1	109	109	PCT_REC				PR	TRG	MSA	140	60	00000000			5.0	0.70	1.9	2.3	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MS	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:05:00	320-263241	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	116	116	PCT_REC	M	M		PR	TRG	MSA	140	60	00000000			5.0	1.2	2.8	3.7	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MS	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:05:00	320-263241	1				13C4 PFOA	13C4 PFOA	40	40	PCT_REC				PR	SURR	SLSA	150	25	00000000			5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MS	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:05:00	320-263241	1				13C4 PFOS	13C4 PFOS	91	91	PCT_REC				PR	SURR	SLSA	150	25	00000000			5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MS	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:05:00	320-263241	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	117	117	PCT_REC				PR	SURR	MSA	150	50	00000000			5.0	0.86	1.9	2.3	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MS	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:05:00	320-263241	1				18O2 PFHxS	18O2 PFHxS	100	100	PCT_REC				PR	SURR	SLSA	150	25	00000000			5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MSD	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:13:00	320-263241	1				Perfluorooctanoic acid (PFOA)	335-67-1	109	109	PCT_REC				PR	TRG	MSP	140	60	00000000			5.0	0.70	1.9	2.3	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MSD	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:13:00	320-263241	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	115	115	PCT_REC	M	M		PR	TRG	MSP	140	60	00000000			5.0	1.2	2.8	3.7	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MSD	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:13:00	320-263241	1				13C4 PFOA	13C4 PFOA	49	49	PCT_REC				PR	SURR	SLSA	150	25	00000000			5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MSD	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:13:00	320-263241	1				13C4 PFOS	13C4 PFOS	90	90	PCT_REC				PR	SURR	SLSA	150	25	00000000			5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MSD	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:13:00	320-263241	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	125	125	PCT_REC				PR	TRG	MSP	150	50	00000000			5.0	0.85	1.9	2.3	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW02-0317-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	MSD	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:13:00	320-263241	1				18O2 PFHxS	18O2 PFHxS	96	96	PCT_REC				PR	SURR	SLSA	150	25	00000000			5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:20:00	320-263241	1				Perfluorooctanoic acid (PFOA)	335-67-1	0.0019	0.0019	UG_L	U	U		PR	TRG				00000000	GW		5.0	0.0007	0.0019	0.0023	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:20:00	320-263241	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0028	0.0028	UG_L	U	U		PR	TRG				00000000	GW		5.0	0.0012	0.0028	0.0037	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:20:00	320-263241	1				13C4 PFOA	13C4 PFOA	37	37	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:20:00	320-263241	1				13C4 PFOS	13C4 PFOS	89	89	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:20:00	320-263241	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0043	0.0043	UG_L	U	U		PR	TRG				00000000	GW		5.0	0.00086	0.0019	0.0023	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW03-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:20:00	320-263241	1				18O2 PFHxS	18O2 PFHxS	97	97	PCT_REC				PR	SURR	SLSA	150	25	00000000	GW		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-4BMW03-0317	NONS	SVOA	8270_SIM	SVOA	TAMER	Test America	NONE	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017		20170308	08:41:00	20170315	00:04:00	320-263241	1				1,4-Dioxane	123-91-1	0.57	0.57	UG_L	U	U		PR	TRG				00000000	AQ (Field Blanks)		5.0	0.23	0.57	1.1	320-26324	320-154875		
N624706	JM01		MERIDIAN	MEAFF-E803-GW-0317	NONS	SVOA	8270_SIM	SVOA	TAMER	Test America	NONE	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017		20170308	08:41:00	20170315	00:04:00	320-263241	1				Nitrobenzene-D5	4165-60-0	76	76	PCT_REC				PR	SURR	SLSA	91	42	00000000	AQ (Field Blanks)		5.0				320-26324	320-154875		
N624706	JM01		MERIDIAN	MEAFF-E803-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:28:00	320-263241	1				Perfluorooctanoic acid (PFOA)	335-67-1	0.0019	0.0019	UG_L	U	U		PR	TRG				00000000	AQ (Field Blanks)		5.0	0.00071	0.0019	0.0024	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E803-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:28:00	320-263241	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0028	0.0028	UG_L	U	U		PR	TRG				00000000	AQ (Field Blanks)		5.0	0.0012	0.0028	0.0038	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E803-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:28:00	320-263241	1				13C4 PFOA	13C4 PFOA	106	106	PCT_REC				PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E803-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:28:00	320-263241	1				13C4 PFOS	13C4 PFOS	90	90	PCT_REC				PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E803-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:28:00	320-263241	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0019	0.0019	UG_L	U	U		PR	TRG				00000000	AQ (Field Blanks)		5.0	0.00087	0.0019	0.0024	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E803-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:28:00	320-263241	1				18O2 PFHxS	18O2 PFHxS	99	99	PCT_REC				PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E804-GW-0317	NONS	SVOA	8270_SIM	SVOA	TAMER	Test America	NONE	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017		20170308	08:41:00	20170315	00:27:00	320-263241	1				1,4-Dioxane	123-91-1	0.54	0.54	UG_L	U	U		PR	TRG				00000000	AQ (Field Blanks)		5.0	0.21	0.54	1.1	320-26324	320-154875		
N624706	JM01		MERIDIAN	MEAFF-E804-GW-0317	NONS	SVOA	8270_SIM	SVOA	TAMER	Test America	NONE	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017		20170308	08:41:00	20170315	00:27:00	320-263241	1				Nitrobenzene-D5	4165-60-0	74	74	PCT_REC				PR	SURR	SLSA	91	42	00000000	AQ (Field Blanks)		5.0				320-26324	320-154875		
N624706	JM01		MERIDIAN	MEAFF-E804-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:35:00	320-263241	1				Perfluorooctanoic acid (PFOA)	335-67-1	0.0019	0.0019	UG_L	U	U		PR	TRG				00000000	AQ (Field Blanks)		5.0	0.00072	0.0019	0.0024	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E804-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:35:00	320-263241	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0029	0.0029	UG_L	U	U		PR	TRG				00000000	AQ (Field Blanks)		5.0	0.0012	0.0029	0.0038	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E804-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:35:00	320-263241	1				13C4 PFOA	13C4 PFOA	101	101	PCT_REC				PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E804-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:35:00	320-263241	1				13C4 PFOS	13C4 PFOS	90	90	PCT_REC				PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)		5.0				320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E804-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15:00	20170312	04:35:00	320-263241	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0019	0.0019	UG_L	U	U		PR	TRG				00000000	AQ (Field Blanks)		5.0	0.00088	0.0019	0.0024	320-26324	320-154520		
N624706	JM01		MERIDIAN	MEAFF-E804-GW-0317	NONS	SVOA	537_MOD	ORG	TAMER	Test America	NONE	NA	SW3535	000	REG	W	4	03/03/2017	03/04/2017		20170309	10:15

Contract_ID	DO_CTO_ID	Phase	Installation	Sample_Name	CH2M_Code	Analysis_Code	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Leachate_Batch	Sample_Batch	Extraction_Method	Result_Type	Lab_QC_Type	Sample_Matrix	QC_Level	Date_Time_Received	Date_Received	Leachate_Date_Time	Leachate_Date	Extraction_Date_Time	Extraction_Date	Analysis_Date_Time	Analysis_Date	Dilution_Factor	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Version	Original_Result	Result_Unit	Lab_Qualifier	Validator_Qualifier	GC_Column	Analysis_Batch	Result_Name	QC_Control_Type	QC_Accuracy	QC_Accuracy_Units	Control_Limit_Group	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Version	Val_Date
N6247016	JM01		MERIDIAN	WG201539-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BS	S	4	03/17/2017	03/17/2017			20170317	09:38:00	20170317	09:38:00	WG20153	1	1			1,2-Dichloroethane-d4	17060-07-0	110.	110.	PCT				SURR	SLSA	134	58	20091101				4.2	0	0	0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	WG201539-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BS	S	4	03/17/2017	03/17/2017			20170317	09:38:00	20170317	09:38:00	WG20153	1	1			Dibromofluoromethane	1868-53-7	106.	106.	PCT				SURR	SLSA	130	64	20091101				4.2	0	0	0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	WG2015	1	1			2,4,5,6-Tetrachloro-meta-xylene	877-09-8	96.0	96.0	PCT				SURR	SLSA	140	25	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	WG2015	1	2			Decachlorobiphenyl (209)	2051-24-3	69.2	69.2	PCT				SURR	SLSA	135	30	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681	1	1			2,4,5,6-Tetrachloro-meta-xylene	877-09-8	95.2	95.2	PCT				SURR	SLSA	140	25	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681	1	1			Decachlorobiphenyl (209)	2051-24-3	86.4	86.4	PCT				SURR	SLSA	135	30	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			2,4,5,6-Tetrachloro-meta-xylene	877-09-8	88.3	88.3	PCT				SURR	SLSA	140	25	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			Decachlorobiphenyl (209)	2051-24-3	72.6	72.6	PCT				SURR	SLSA	135	30	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170314	14:39:00	WG20135	1	1			2,4,5,6-Tetrachloro-meta-xylene	877-09-8	86.5	86.5	PCT				SURR	SLSA	140	25	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170314	14:39:00	WG20135	1	2			Decachlorobiphenyl (209)	2051-24-3	68.8	68.8	PCT				SURR	SLSA	135	30	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS1	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170314	15:18:00	WG20135	1	1			2,4,5,6-Tetrachloro-meta-xylene	877-09-8	92.0	92.0	PCT				SURR	SLSA	140	25	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS1	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170314	15:18:00	WG20135	1	2			Decachlorobiphenyl (209)	2051-24-3	53.6	53.6	PCT				SURR	SLSA	135	30	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS2	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170315	15:10:00	WG20135	1	1			2,4,5,6-Tetrachloro-meta-xylene	877-09-8	112.	112.	PCT				SURR	SLSA	140	25	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS2	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170315	15:10:00	WG20135	1	2			Decachlorobiphenyl (209)	2051-24-3	62.1	62.1	PCT				SURR	SLSA	135	30	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-LCSD	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170314	14:59:00	WG20135	1	1			2,4,5,6-Tetrachloro-meta-xylene	877-09-8	87.9	87.9	PCT				SURR	SLSA	140	25	20091101				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201356-LCSD	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/14/2017	03/14/2017			20170314	11:00:00	20170314	14:59:00	WG20135	1	2			Decachlorobiphenyl (209)	2051-24-3	72.5	72.5	PCT				SURR	SLSA	135	30	20091103				4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	03/08/2017	03/08/2017	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG2010	1	1			2,4,5,6-Tetrachloro-meta-xylene	877-09-8	93.2	93.2	PCT				SURR	SLSA	140	25	20091101				4.2	0	0	0	SK1681	WG201034	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	03/08/2017	03/08/2017	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG2010	1	2			Decachlorobiphenyl (209)	2051-24-3	96.2	96.2	PCT				SURR	SLSA	135	30	20091101				4.2	0	0	0	SK1681	WG201034	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201405-BLANK	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/15/2017	03/15/2017			20170315	10:45:00	20170315	17:43:00	WG2014	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-7	79.0	79.0	PCT				SURR	SLSA	126	35	20091101				4.2	0	0	0	SK1681	WG201405	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201405-LCS	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/15/2017	03/15/2017			20170315	10:45:00	20170316	18:07:00	WG2014	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-7	82.2	82.2	PCT				SURR	SLSA	126	35	20091101				4.2	0	0	0	SK1681	WG201405	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201405-LCSD	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/15/2017	03/15/2017			20170315	10:45:00	20170316	18:30:00	WG2014	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-7	84.0	84.0	PCT				SURR	SLSA	126	35	20091101				4.2	0	0	0	SK1681	WG201405	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-BLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	16:08:00	WG2013	1	1			2-Fluorophenol	367-12-4	0.00	0.00	PCT	*			SURR	SLSA	110	20	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-BLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	16:08:00	WG2013	1	1			Phenol-D6	13127-88-3	9.96	9.96	PCT	*			SURR	SLSA	115	10	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-BLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	16:08:00	WG2013	1	1			Nitrobenzene-D5	4165-60-0	91.5	91.5	PCT				SURR	SLSA	110	40	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-BLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	16:08:00	WG2013	1	1			2-Fluorobiphenyl	321-60-8	88.9	88.9	PCT				SURR	SLSA	110	50	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-BLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	16:08:00	WG2013	1	1			2,4,6-Tribromophenol	118-79-6	10.1	10.1	PCT	*			SURR	SLSA	125	40	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-BLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	16:08:00	WG2013	1	1			Terphenyl-D14	1718-51-0	117.	117.	PCT				SURR	SLSA	135	50	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCS	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	17:36:00	WG2013	1	1			2-Fluorophenol	367-12-4	0.00	0.00	PCT	*			SURR	SLSA	110	20	20091103				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCS	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	17:36:00	WG2013	1	1			Phenol-D6	13127-88-3	8.71	8.71	PCT	*			SURR	SLSA	115	10	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCS	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	17:36:00	WG2013	1	1			Nitrobenzene-D5	4165-60-0	76.2	76.2	PCT				SURR	SLSA	110	40	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCS	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	17:36:00	WG2013	1	1			2-Fluorobiphenyl	321-60-8	79.5	79.5	PCT	*			SURR	SLSA	110	50	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCS	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	17:36:00	WG2013	1	1			2,4,6-Tribromophenol	118-79-6	12.8	12.8	PCT	*			SURR	SLSA	125	40	20091103				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCS	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	17:36:00	WG2013	1	1			Terphenyl-D14	1718-51-0	106.	106.	PCT				SURR	SLSA	135	50	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCSD	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	18:05:00	WG2013	1	1			2-Fluorophenol	367-12-4	37.8	37.8	PCT				SURR	SLSA	110	20	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCSD	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	18:05:00	WG2013	1	1			Phenol-D6	13127-88-3	24.5	24.5	PCT				SURR	SLSA	115	10	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCSD	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	18:05:00	WG2013	1	1			Nitrobenzene-D5	4165-60-0	80.3	80.3	PCT				SURR	SLSA	110	40	20091103				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCSD	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	18:05:00	WG2013	1	1			2-Fluorobiphenyl	321-60-8	78.5	78.5	PCT				SURR	SLSA	110	50	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCSD	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	18:05:00	WG2013	1	1			2,4,6-Tribromophenol	118-79-6	103.	103.	PCT				SURR	SLSA	125	40	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201353-LCSD	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4	03/14/2017	03/14/2017			20170314	15:00:00	20170316	18:05:00	WG2013	1	1			Terphenyl-D14	1718-51-0	117.	117.	PCT				SURR	SLSA	135	50	20091101				4.2	0	0	0	SK1681	WG201353	Preload CI	20170331
N6247016	JM01		MERIDIAN	WG201127-TCLP BLK	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	03/08/2017	03/08/2017	20170308	08:05:00	20170310	12:00:00	20170316	00:57:00	WG2011	2	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-7	84.0	84.0	PCT				SURR	SLSA	126	35	20091101				4.2	0	0	0	SK1681	WG201127	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170315	10:45:00	20170316	19:42:00	SK1681	2	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-7	80.0	80.0	PCT				SURR	SLSA	126	35	20091101	IDW			4.2	0	0	0	SK1681	WG201404	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170315	10:45:00	20170316	19:18:00	SK1681	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-7	65.2	65.2	PCT				SURR	SLSA	126	35	20091101	IDW			4.2	0	0	0	SK1681	WG201404	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681	2	1			2-Fluorophenol	367-12-4	31.5	31.5	PCT				SURR	SLSA	110	20	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681	2	1			2-Fluorophenol	367-12-4	1.85	1.85	PCT	*			SURR	SLSA	110	20	20091103	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681	2	R1			Phenol-D6	13127-88-3	20.1	20.1	PCT				SURR	SLSA	115	10	20091101	IDW			4.2	0	0	0	SK1681	WG201934	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681	2	1			Phenol-D6	13127-88-3	5.78	5.78	PCT	*			SURR	SLSA	115	10	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681	2	1			Nitrobenzene-D5	4165-60-0	79.1	79.1	PCT				SURR	SLSA	110	40	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681	2	R1			Nitrobenzene-D5	4165-60-0	89.3	89.3	PCT				SURR	SLSA	110	40	20091101	IDW			4.2	0	0	0	SK1681	WG201934	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681	2	R2			2-Fluorobiphenyl	321-60-8	86.4	86.4	PCT				SURR	SLSA	110	50	20091101	IDW			4.2	0	0	0	SK1681	WG201934	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681	2	1			2-Fluorobiphenyl	321-60-8	88.3	88.3	PCT				SURR	SLSA	110	50	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681	2	R1			2,4,6-Tribromophenol	118-79-6	79.7	79.7	PCT				SURR	SLSA	125	40	20091101	IDW			4.2	0	0	0	SK1681	WG201934	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681	2	1			2,4,6-Tribromophenol	118-79-6	2.75	2.75	PCT	*			SURR	SLSA	125	40	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681	2	R1			Terphenyl-D14	1718-51-0	85.2	85.2	PCT				SURR	SLSA	135	50	20091101	IDW			4.2	0	0	0	SK1681	WG201934	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681	2	1			Terphenyl-D14	1718-51-0	128.	128.	PCT				SURR	SLSA	135	50	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:04:00	20170314	15:00:00	20170316	23:56:00	SK1681	1	1			2-Fluorophenol	367-12-4	34.1	34.1	PCT				SURR	SLSA	110	20	20091101	IDW			4.2	0	0	0	SK1681	WG201354	Preload CI	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	03/03/2017	03/04/2017	20170310	08:

Contract_	DO_CTO_	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_C	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime_	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_I	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_F	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_Li	QC_Narrat	MDL	Detection	QSM_Vers	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N6247016	JM01		MERIDIAN	WG208066-BLANK	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/27/201	06/27/2017			20170627	13:07:00	20170628	16:01:00	WG20806	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		101.	PCT				SURR		SLSA	126	35	20091101				4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208066-LCS	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/27/201	06/27/2017			20170627	13:08:00	20170628	16:25:00	WG20806	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		122.	PCT				SURR		SLSA	126	35	20091101				4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/28/201	06/28/2017			20170628	07:06:00	20170629	09:01:00	WG20816	1	1			2-Fluorophenol	367-12-4		22.5	PCT				SURR		SLSA	110	20	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/28/201	06/28/2017			20170628	07:06:00	20170629	09:01:00	WG20816	1	1			Phenol-D6	13127-88-3		12.5	PCT				SURR		SLSA	115	10	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/28/201	06/28/2017			20170628	07:06:00	20170629	09:01:00	WG20816	1	1			Nitrobenzene-D5	4165-60-0		71.1	PCT				SURR		SLSA	110	40	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/28/201	06/28/2017			20170628	07:06:00	20170629	09:01:00	WG20816	1	1			2-Fluorobiphenyl	321-60-8		59.9	PCT				SURR		SLSA	110	50	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/28/201	06/28/2017			20170628	07:06:00	20170629	09:01:00	WG20816	1	1			2,4,6-Tribromophenol	118-79-6		68.2	PCT				SURR		SLSA	125	40	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/28/201	06/28/2017			20170628	07:06:00	20170629	09:01:00	WG20816	1	1			Terphenyl-D14	1718-51-0		72.8	PCT				SURR		SLSA	135	50	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/28/201	06/28/2017			20170628	07:07:00	20170629	10:04:00	WG20816	1	1			2-Fluorophenol	367-12-4		29.8	PCT				SURR		SLSA	110	20	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/28/201	06/28/2017			20170628	07:07:00	20170629	10:04:00	WG20816	1	1			Phenol-D6	13127-88-3		19.5	PCT				SURR		SLSA	115	10	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/28/201	06/28/2017			20170628	07:07:00	20170629	10:04:00	WG20816	1	1			Nitrobenzene-D5	4165-60-0		81.7	PCT				SURR		SLSA	110	40	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/28/201	06/28/2017			20170628	07:07:00	20170629	10:04:00	WG20816	1	1			2-Fluorobiphenyl	321-60-8		72.3	PCT				SURR		SLSA	110	50	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/28/201	06/28/2017			20170628	07:07:00	20170629	10:04:00	WG20816	1	1			2,4,6-Tribromophenol	118-79-6		63.0	PCT				SURR		SLSA	125	40	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/28/201	06/28/2017			20170628	07:07:00	20170629	10:04:00	WG20816	1	1			Terphenyl-D14	1718-51-0		86.9	PCT				SURR		SLSA	135	50	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/30/201	06/30/2017			20170630	11:02:00	20170703	15:35:00	WG20830	1	1			2-Fluorophenol	367-12-4		15.7	PCT	*			SURR		SLSA	110	20	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/30/201	06/30/2017			20170630	11:02:00	20170703	15:35:00	WG20830	1	1			Phenol-D6	13127-88-3		13.6	PCT				SURR		SLSA	115	10	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/30/201	06/30/2017			20170630	11:02:00	20170703	15:35:00	WG20830	1	1			Nitrobenzene-D5	4165-60-0		56.1	PCT				SURR		SLSA	110	40	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/30/201	06/30/2017			20170630	11:02:00	20170703	15:35:00	WG20830	1	1			2-Fluorobiphenyl	321-60-8		52.9	PCT				SURR		SLSA	110	50	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/30/201	06/30/2017			20170630	11:02:00	20170703	15:35:00	WG20830	1	1			2,4,6-Tribromophenol	118-79-6		41.0	PCT				SURR		SLSA	125	40	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-BLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BLK	W	4	06/30/201	06/30/2017			20170630	11:02:00	20170703	15:35:00	WG20830	1	1			Terphenyl-D14	1718-51-0		76.7	PCT				SURR		SLSA	135	50	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/30/201	06/30/2017			20170630	11:03:00	20170703	16:07:00	WG20830	1	1			2-Fluorophenol	367-12-4		38.2	PCT				SURR		SLSA	110	20	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/30/201	06/30/2017			20170630	11:03:00	20170703	16:07:00	WG20830	1	1			Phenol-D6	13127-88-3		24.1	PCT				SURR		SLSA	115	10	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/30/201	06/30/2017			20170630	11:03:00	20170703	16:07:00	WG20830	1	1			Nitrobenzene-D5	4165-60-0		83.7	PCT				SURR		SLSA	110	40	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/30/201	06/30/2017			20170630	11:03:00	20170703	16:07:00	WG20830	1	1			2-Fluorobiphenyl	321-60-8		71.0	PCT				SURR		SLSA	110	50	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/30/201	06/30/2017			20170630	11:03:00	20170703	16:07:00	WG20830	1	1			2,4,6-Tribromophenol	118-79-6		73.9	PCT				SURR		SLSA	125	40	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208304-LCS	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN ANALYTIC		NA	SW3510C	000	BS	W	4	06/30/201	06/30/2017			20170630	11:03:00	20170703	16:07:00	WG20830	1	1			Terphenyl-D14	1718-51-0		85.8	PCT				SURR		SLSA	135	50	20091101				4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207744-TCLPBLANK	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170622	11:01:00	20170623	18:09:00	WG20774	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		70.5	PCT				SURR		SLSA	126	35	20091101				4.2	0	0	0	SK5275	WG20774	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170623	14:20:00	20170627	13:01:00	20170628	17:12:00	SK5275-1	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		94.9	PCT				SURR		SLSA	126	35	20091101	IDW			4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208066-TCLPBLANK	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/27/201	06/27/201	20170627	08:56:00	20170627	13:09:00	20170628	16:49:00	WG20806	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		75.6	PCT				SURR		SLSA	126	35	20091101				4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170627	13:02:00	20170628	17:36:00	SK5275-2	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		76.1	PCT				SURR		SLSA	126	35	20091101	IDW			4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170627	13:03:00	20170628	18:00:00	SK5275-3	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		71.8	PCT				SURR		SLSA	126	35	20091101	IDW			4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170627	13:04:00	20170628	18:23:00	SK5275-4	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		87.6	PCT				SURR		SLSA	126	35	20091101	IDW			4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170627	13:05:00	20170628	18:47:00	SK5275-5	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		60.7	PCT				SURR		SLSA	126	35	20091101	IDW			4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPH	1311-8151	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170627	13:06:00	20170628	19:11:00	SK5275-6	1	1			2,4-DICHLOROPHENYLACETIC ACID	19719-28-9		80.3	PCT				SURR		SLSA	126	35	20091101	IDW			4.2	0	0	0	SK5275	WG20806	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG20766	1	1			2-Fluorophenol	367-12-4		35.4	PCT				SURR		SLSA	110	20	20091101				4.2	0	0	0	SK5275	WG20766	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG20766	1	1			Phenol-D6	13127-88-3		21.9	PCT				SURR		SLSA	115	10	20091101				4.2	0	0	0	SK5275	WG20766	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG20766	1	1			Nitrobenzene-D5	4165-60-0		80.5	PCT				SURR		SLSA	110	40	20091101				4.2	0	0	0	SK5275	WG20766	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG20766	1	1			2-Fluorobiphenyl	321-60-8		66.9	PCT				SURR		SLSA	110	50	20091101				4.2	0	0	0	SK5275	WG20766	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG20766	1	1			2,4,6-Tribromophenol	118-79-6		73.8	PCT				SURR		SLSA	125	40	20091101				4.2	0	0	0	SK5275	WG20766	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG20766	1	1			Terphenyl-D14	1718-51-0		87.7	PCT				SURR		SLSA	135	50	20091101				4.2	0	0	0	SK5275	WG20766	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170623	14:20:00	20170628	07:01:00	20170629	12:42:00	SK5275-1	1	1			2-Fluorophenol	367-12-4		27.5	PCT				SURR		SLSA	110	20	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170623	14:20:00	20170628	07:01:00	20170629	12:42:00	SK5275-1	1	1			Phenol-D6	13127-88-3		15.8	PCT				SURR		SLSA	115	10	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170623	14:20:00	20170628	07:01:00	20170629	12:42:00	SK5275-1	1	1			Nitrobenzene-D5	4165-60-0		62.2	PCT				SURR		SLSA	110	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170623	14:20:00	20170628	07:01:00	20170629	12:42:00	SK5275-1	1	1			2-Fluorobiphenyl	321-60-8		53.1	PCT				SURR		SLSA	110	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170623	14:20:00	20170628	07:01:00	20170629	12:42:00	SK5275-1	1	1			2,4,6-Tribromophenol	118-79-6		67.0	PCT				SURR		SLSA	125	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170623	14:20:00	20170628	07:01:00	20170629	12:42:00	SK5275-1	1	1			Terphenyl-D14	1718-51-0		91.6	PCT				SURR		SLSA	135	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/27/201	06/27/201	20170627	08:56:00	20170628	07:08:00	20170629	09:33:00	WG20816	1	1			2-Fluorophenol	367-12-4		25.1	PCT				SURR		SLSA	110	20	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/27/201	06/27/201	20170627	08:56:00	20170628	07:08:00	20170629	09:33:00	WG20816	1	1			Phenol-D6	13127-88-3		16.9	PCT				SURR		SLSA	115	10	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/27/201	06/27/201	20170627	08:56:00	20170628	07:08:00	20170629	09:33:00	WG20816	1	1			Nitrobenzene-D5	4165-60-0		73.7	PCT				SURR		SLSA	110	40	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/27/201	06/27/201	20170627	08:56:00	20170628	07:08:00	20170629	09:33:00	WG20816	1	1			2-Fluorobiphenyl	321-60-8		67.5	PCT				SURR		SLSA	110	50	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/27/201	06/27/201	20170627	08:56:00	20170628	07:08:00	20170629	09:33:00	WG20816	1	1			2,4,6-Tribromophenol	118-79-6		64.6	PCT				SURR		SLSA	125	40	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208160-TCLPBLANK	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/27/201	06/27/201	20170627	08:56:00	20170628	07:08:00	20170629	09:33:00	WG20816	1	1			Terphenyl-D14	1718-51-0		82.8	PCT				SURR		SLSA	135	50	20091101				4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:02:00	20170629	13:13:00	SK5275-2	1	1			2-Fluorophenol	367-12-4		33.2	PCT				SURR		SLSA	110	20	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:02:00	20170629	13:13:00	SK5275-2	1	1			Phenol-D6	13127-88-3		21.2	PCT				SURR		SLSA	115	10	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:02:00	20170629	13:13:00	SK5275-2	1	1			Nitrobenzene-D5	4165-60-0		68.7	PCT				SURR		SLSA	110	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:02:00	20170629	13:13:00	SK5275-2	1	1			2-Fluorobiphenyl	321-60-8		56.6	PCT				SURR		SLSA	110	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:02:00	20170629	13:13:00	SK5275-2	1	1			2,4,6-Tribromophenol	118-79-6		69.5	PCT				SURR		SLSA	125	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:02:00	20170629	13:13:00	SK5275-2	1	1			Terphenyl-D14	1718-51-0		73.4	PCT				SURR		SLSA	135	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	11:01:00	20170630	19:51:00	SK5275-3R	1	1			2-Fluorophenol	367-12-4		30.5	PCT				SURR		SLSA	110	20	20091101	IDW			4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	11:01:00	20170630	19:51:00	SK5275-3R	1	1			Phenol-D6	13127-88-3		18.6	PCT				SURR		SLSA	115	10	20091101	IDW			4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	11:01:00	20170630	19:51:00	SK5275-3R	1	1			Nitrobenzene-D5	4165-60-0		73.4	PCT				SURR		SLSA	110	40	20091101	IDW			4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	11:01:00	20170630	19:51:00	SK5275-3R	1	1			2-Fluorobiphenyl	321-60-8		66.9	PCT				SURR		SLSA	110	50	20091101	IDW			4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	11:01:00	20170630	19:51:00	SK5275-3R	1	1			2,4,6-Tribromophenol	118-79-6		72.6	PCT				SURR		SLSA	125	40	20091101	IDW			4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	11:01:00	20170630	19:51:00	SK5275-3R	1	1			Terphenyl-D14	1718-51-0		99.6	PCT				SURR		SLSA	135	50	20091101	IDW			4.2	0	0	0	SK5275	WG20830	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:03:00	20170629	14:16:00	SK5275-4	1	1			2-Fluorophenol	367-12-4		27.0	PCT				SURR		SLSA	110	20	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:03:00	20170629	14:16:00	SK5275-4	1	1			Phenol-D6	13127-88-3		16.4	PCT				SURR		SLSA	115	10	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:03:00	20170629	14:16:00	SK5275-4	1	1			Nitrobenzene-D5	4165-60-0		57.1	PCT				SURR		SLSA	110	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:03:00	20170629	14:16:00	SK5275-4	1	1			2-Fluorobiphenyl	321-60-8		52.7	PCT				SURR		SLSA	110	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:03:00	20170629	14:16:00	SK5275-4	1	1			2,4,6-Tribromophenol	118-79-6		63.1	PCT				SURR		SLSA	125	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:03:00	20170629	14:16:00	SK5275-4	1	1			Terphenyl-D14	1718-51-0		72.1	PCT				SURR		SLSA	135	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:04:00	20170629	14:48:00	SK5275-5	1	1			2-Fluorophenol	367-12-4		38.9	PCT				SURR		SLSA	110	20	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:04:00	20170629	14:48:00	SK5275-5	1	1			Phenol-D6	13127-88-3		24.8	PCT				SURR		SLSA	115	10	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:04:00	20170629	14:48:00	SK5275-5	1	1			Nitrobenzene-D5	4165-60-0		85.6	PCT				SURR		SLSA	110	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:04:00	20170629	14:48:00	SK5275-5	1	1			2-Fluorobiphenyl	321-60-8		75.4	PCT				SURR		SLSA	110	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:04:00	20170629	14:48:00	SK5275-5	1	1			2,4,6-Tribromophenol	118-79-6		79.9	PCT				SURR		SLSA	125	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:04:00	20170629	14:48:00	SK5275-5	1	1			Terphenyl-D14	1718-51-0		84.2	PCT				SURR		SLSA	135	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			2-Fluorophenol	367-12-4		27.3	PCT				SURR		SLSA	110	20	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Phenol-D6	13127-88-3		15.1	PCT				SURR		SLSA	115	10	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Nitrobenzene-D5	4165-60-0		79.2	PCT				SURR		SLSA	110	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			2-Fluorobiphenyl	321-60-8		67.6	PCT				SURR		SLSA	110	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			2,4,6-Tribromophenol	118-79-6		79.4	PCT				SURR		SLSA	125	40	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-8270	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Terphenyl-D14	1718-51-0		88.6	PCT				SURR		SLSA	135	50	20091101	IDW			4.2	0	0	0	SK5275	WG20816	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1D	20	1			1,2-Dichloroethane-d4	17060-07-0		111.	PCT				SURR		SLSA	120	70	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1D	20	1			Toluene-D8	2037-26-5		102.	PCT				SURR		SLSA	120	85	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1D	20	1			4-Bromofluorobenzene	460-00-4		96.7	PCT				SURR		SLSA	120	75	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1D	20	1			Dibromofluoromethane	1868-53-7		108.	PCT				SURR		SLSA	115	85	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2D	20	1			1,2-Dichloroethane-d4	17060-07-0		114.	PCT				SURR		SLSA	120	70	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2D	20	1			Toluene-D8	2037-26-5		109.	PCT				SURR		SLSA	120	85	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2D	20	1			4-Bromofluorobenzene	460-00-4		100.	PCT				SURR		SLSA	120	75	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2D	20	1			Dibromofluoromethane	1868-53-7		106.	PCT				SURR		SLSA	115	85	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3D	20	1			1,2-Dichloroethane-d4	17060-07-0		114.	PCT				SURR		SLSA	120	70	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3D	20	1			Toluene-D8	2037-26-5		106.	PCT				SURR		SLSA	120	85	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3D	20	1			4-Bromofluorobenzene	460-00-4		97.0	PCT				SURR		SLSA	120	75	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3D	20	1			Dibromofluoromethane	1868-53-7		108.	PCT				SURR		SLSA	115	85	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4D	20	1			1,2-Dichloroethane-d4	17060-07-0		114.	PCT				SURR		SLSA	120	70	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4D	20	1			Toluene-D8	2037-26-5		107.	PCT				SURR		SLSA	120	85	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4D	20	1			4-Bromofluorobenzene	460-00-4		98.3	PCT				SURR		SLSA	120	75	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4D	20	1			Dibromofluoromethane	1868-53-7		106.	PCT				SURR		SLSA	115	85	20091101	IDW			4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5D	20	1			1,2-Dichloroethane-d4	17060-07-0		112.	PCT				SURR		SLSA	120	70	20091101	IDW			4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5D	20	1			Toluene-D8	2037-26-5		106.	PCT				SURR		SLSA	120	85	20091101	IDW			4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5D	20	1			4-Bromofluorobenzene	460-00-4		99.0	PCT				SURR		SLSA	120	75	20091101	IDW			4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5D	20	1			Dibromofluoromethane	1868-53-7		106.	PCT				SURR		SLSA	115	85	20091101	IDW			4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170630	07:44:00	20170705	14:55:00	20170705	14:55:00	SK5275-6D	20	1			1,2-Dichloroethane-d4	17060-07-0		110.	PCT				SURR		SLSA	120	70	20091101	IDW			4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170630	07:44:00	20170705	14:55:00	20170705	14:55:00	SK5275-6D	20	1			Toluene-D8	2037-26-5		104.	PCT				SURR		SLSA	120	85	20091101	IDW			4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170630	07:44:00	20170705	14:55:00	20170705	14:55:00	SK5275-6D	20	1			4-Bromofluorobenzene	460-00-4		99.4	PCT				SURR		SLSA	120	75	20091101	IDW			4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170630	07:44:00	20170705	14:55:00	20170705	14:55:00	SK5275-6D	20	1			Dibromofluoromethane	1868-53-7		106.	PCT				SURR		SLSA	115	85	20091101	IDW			4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207751-TCLPBLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	BLK	W	4	06/22/201	06/22/201	20170622	07:42:00	20170622	12:55:00	20170622	12:55:00	WG20775	20	1	50.968		1,2-Dichloroethane-d4	17060-07-0		120	PCT				SURR		SLSA	120	70	20091101				4.2	0	0	0	SK5275	WG20775	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207751-TCLPBLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	BLK	W	4	06/22/201	06/22/201	20170622	07:42:00	20170622	12:55:00	20170622	12:55:00	WG20775	20	1	50.968		Toluene-D8	2037-26-5		105.	PCT				SURR		SLSA	120	85	20091101				4.2	0	0	0	SK5275	WG20775	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207751-TCLPBLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	BLK	W	4	06/22/201	06/22/201	20170622	07:42:00	20170622	12:55:00	20170622	12:55:00	WG20775	20	1	50.968		4-Bromofluorobenzene	460-00-4		100.	PCT				SURR		SLSA	120	75	20091101				4.2	0	0	0	SK5275	WG20775	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG207751-TCLPBLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	BLK	W	4	06/22/201	06/22/201	20170622	07:42:00	20170622	12:55:00	20170622	12:55:00	WG20775	20	1	50.968		Dibromofluoromethane	1868-53-7		115	PCT				SURR		SLSA	115	85	20091101				4.2	0	0	0	SK5275	WG20775	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208296-BLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BLK	W	4	06/30/201	06/30/2017			20170630	12:04:00	20170630	12:04:00	WG20829	1	1			1,2-Dichloroethane-d4	17060-07-0		111.	PCT				SURR		SLSA	120	70	20091101				4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208296-BLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BLK	W	4	06/30/201	06/30/2017			20170630	12:04:00	20170630	12:04:00	WG20829	1	1			Toluene-D8	2037-26-5		102.	PCT				SURR		SLSA	120	85	20091101				4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208296-BLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BLK	W	4	06/30/201	06/30/2017			20170630	12:04:00	20170630	12:04:00	WG20829	1	1			4-Bromofluorobenzene	460-00-4		97.0	PCT				SURR		SLSA	120	75	20091101				4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208296-BLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BLK	W	4	06/30/201	06/30/2017			20170630	12:04:00	20170630	12:04:00	WG20829	1	1			Dibromofluoromethane	1868-53-7		106.	PCT				SURR		SLSA	115	85	20091101				4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208296-LCS	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BS	W	4	06/30/201	06/30/2017			20170630	10:41:00	20170630	10:41:00	WG20829	1	1			1,2-Dichloroethane-d4	17060-07-0		102.	PCT				SURR		SLSA	120	70	20091101				4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208296-LCS	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BS	W	4	06/30/201	06/30/2017			20170630	10:41:00	20170630	10:41:00	WG20829	1	1			Toluene-D8	2037-26-5		102.	PCT				SURR		SLSA	120	85	20091101				4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208296-LCS	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BS	W	4	06/30/201	06/30/2017			20170630	10:41:00	20170630	10:41:00	WG20829	1	1			4-Bromofluorobenzene	460-00-4		106.	PCT				SURR		SLSA	120	75	20091101				4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208296-LCS	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BS	W	4	06/30/201	06/30/2017			20170630	10:41:00	20170630	10:41:00	WG20829	1	1			Dibromofluoromethane	1868-53-7		96.4	PCT				SURR		SLSA	115	85	20091101				4.2	0	0	0	SK5275	WG20829	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208608-BLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BLK	W	4	07/05/201	07/05/2017			20170705	12:41:00	20170705	12:41:00	WG20860	1	1			1,2-Dichloroethane-d4	17060-07-0		108.	PCT				SURR		SLSA	120	70	20091101				4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208608-BLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BLK	W	4	07/05/201	07/05/2017			20170705	12:41:00	20170705	12:41:00	WG20860	1	1			Toluene-D8	2037-26-5		102.	PCT				SURR		SLSA	120	85	20091101				4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208608-BLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BLK	W	4	07/05/201	07/05/2017			20170705	12:41:00	20170705	12:41:00	WG20860	1	1			4-Bromofluorobenzene	460-00-4		101.	PCT				SURR		SLSA	120	75	20091101				4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208608-BLANK	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BLK	W	4	07/05/201	07/05/2017			20170705	12:41:00	20170705	12:41:00	WG20860	1	1			Dibromofluoromethane	1868-53-7		106.	PCT				SURR		SLSA	115	85	20091101				4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208608-LCS	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BS	W	4	07/05/201	07/05/2017			20170705	11:18:00	20170705	11:18:00	WG20860	1	1			1,2-Dichloroethane-d4	17060-07-0		97.6	PCT				SURR		SLSA	120	70	20091101				4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208608-LCS	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BS	W	4	07/05/201	07/05/2017			20170705	11:18:00	20170705	11:18:00	WG20860	1	1			Toluene-D8	2037-26-5		99.0	PCT				SURR		SLSA	120	85	20091101				4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208608-LCS	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BS	W	4	07/05/201	07/05/2017			20170705	11:18:00	20170705	11:18:00	WG20860	1	1			4-Bromofluorobenzene	460-00-4		108.	PCT				SURR		SLSA	120	75	20091101				4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	WG208608-LCS	TCLP	TCLPV	1311-8260	VOA	KAS	KATAHDIN ANALYTIC		NA	SW5030	000	BS	W	4	07/05/201	07/05/2017			20170705	11:18:00	20170705	11:18:00	WG20860	1	1			Dibromofluoromethane	1868-53-7		98.8	PCT				SURR		SLSA	115	85	20091101				4.2	0	0	0	SK5275	WG20860	Preload Ch	20170801
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	15:45:00	20170310	15:45:00	SK1680-2	1	1	34.445		Dichlorodifluoromethane (Freon-12)	75-71-8	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	1.4	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	RA0	REG	S	4	03/03/201	03/06/2017			20170317	15:17:00	20170317	15:17:00	SK1680-2R	1	2	34.445		Dichlorodifluoromethane (Freon-12)	75-71-8	6.0	6.0	UG_KG	U	U		TRG						SO			4.2	1.1	6.0	12.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	RA0	REG	S	4	03/03/201	03/06/2017			20170317	15:17:00	20170317	15:17:00	SK1680-2R	1	2	34.445		Chloromethane	74-87-3	6.0	6.0	UG_KG	U	U		TRG						SO			4.2	1.7	6.0	12.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	15:45:00	20170310	15:45:00	SK1680-2	1	1	34.445		Chloromethane	74-87-3	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	2.1	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	15:45:00	20170310	15:45:00	SK1680-2	1	1	34.445		Vinyl chloride	75-01-4	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	1.3	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	RA0	REG	S	4	03/03/201	03/06/2017			20170317	15:17:00	20170317	15:17:00	SK1680-2R	1	2	34.445		Vinyl chloride	75-01-4	6.0	6.0	UG_KG	U	U		TRG						SO			4.2	1.0	6.0	12.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	15:45:00	20170310	15:45:00	SK1680-2	1	1	34.445		Bromomethane	74-83-9	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	1.6	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	RA0	REG	S	4	03/03/201	03/06/2017			20170317	15:17:00	20170317	15:17:00	SK1680-2R	1	2	34.445		Bromomethane	74-83-9	6.0	6.0	UG_KG	U	U		TRG						SO			4.2	1.3	6.0	12.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	RA0	REG	S	4	03/03/201	03/06/2017			20170317	15:17:00	20170317	15:17:00	SK1680-2R	1	2	34.445		Chloroethane	75-00-3	6.0	6.0	UG_KG	U	U		TRG						SO			4.2	1.6	6.0	12.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	15:45:00	20170310	15:45:00	SK1680-2	1	1	34.445		Chloroethane	75-00-3	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	2.0	7.5	15.	SK1680	WG201121		

Contract_	DO_CTO_	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_Li	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Trichlorofluoromethane (Freon-11)	75-69-4	7.5	7.5	UG_KG	U	U		TRG					SO			4.2	1.4	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Trichlorofluoromethane (Freon-11)	75-69-4	6.0	6.0	UG_KG	U	U		TRG					SO			4.2	1.1	6.0	12.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		1,1-Dichloroethene	75-35-4	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		1,1-Dichloroethene	75-35-4	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.1	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Carbon disulfide	75-15-0	2.5	2.5	UG_KG	J	J		TRG					SO			4.2	0.94	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Carbon disulfide	75-15-0	2.6	2.6	UG_KG	J	J		TRG					SO			4.2	1.2	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	76-13-1	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	76-13-1	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.1	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Methylene chloride	75-09-2	15	15	UG_KG	U	U		TRG					SO			4.2	9.5	15.	30.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Methylene chloride	75-09-2	19	19	UG_KG	U	U		TRG					SO			4.2	12.	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Acetone	67-64-1	33	33	UG_KG				TRG					SO			4.2	6.1	15.	30.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Acetone	67-64-1	70	70	UG_KG				TRG					SO			4.2	7.6	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		trans-1,2-Dichloroethene	156-60-5	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	0.85	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		trans-1,2-Dichloroethene	156-60-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Methyl-tert-butyl ether (MTBE)	1634-04-4	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.6	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Methyl-tert-butyl ether (MTBE)	1634-04-4	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.3	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		1,1-Dichloroethane	75-34-3	11	11	UG_KG				TRG					SO			4.2	2.0	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		1,1-Dichloroethane	75-34-3	10	10	UG_KG				TRG					SO			4.2	2.6	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		cis-1,2-Dichloroethene	156-59-2	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		cis-1,2-Dichloroethene	156-59-2	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.1	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Chloroform	67-66-3	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.52	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Chloroform	67-66-3	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	0.42	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Carbon tetrachloride	56-23-5	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.6	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Carbon tetrachloride	56-23-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	2.0	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		1,1,1-Trichloroethane	71-55-6	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	0.50	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		1,1,1-Trichloroethane	71-55-6	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.63	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		2-Butanone	78-93-3	15	15	UG_KG	U	U		TRG					SO			4.2	7.1	15.	30.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		2-Butanone	78-93-3	19	19	UG_KG	U	U		TRG					SO			4.2	8.8	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Benzene	71-43-2	65	65	UG_KG				TRG					SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Benzene	71-43-2	59	59	UG_KG				TRG					SO			4.2	1.1	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Cyclohexane	110-82-7	96	96	UG_KG				TRG					SO			4.2	2.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Cyclohexane	110-82-7	120	120	UG_KG				TRG					SO			4.2	1.7	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		1,2-Dichloroethane	107-06-2	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.2	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		1,2-Dichloroethane	107-06-2	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.5	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Trichloroethene	79-01-6	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.88	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Trichloroethene	79-01-6	0.82	0.82	UG_KG	J	J		TRG					SO			4.2	0.71	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		1,2-Dichloropropane	78-87-5	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.7	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		1,2-Dichloropropane	78-87-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	2.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Bromodichloromethane	75-27-4	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.90	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Bromodichloromethane	75-27-4	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	0.72	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		cis-1,3-Dichloropropene	10061-01-	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		cis-1,3-Dichloropropene	10061-01-	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	0.86	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Toluene	108-88-3	22	22	UG_KG				TRG					SO			4.2	1.7	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Toluene	108-88-3	26	26	UG_KG				TRG					SO			4.2	2.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		4-Methyl-2-pentanone	108-10-1	19	19	UG_KG	U	U		TRG					SO			4.2	8.8	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		4-Methyl-2-pentanone	108-10-1	15	15	UG_KG	U	U		TRG					SO			4.2	7.1	15.	30.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Tetrachloroethene	127-18-4	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.4	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Tetrachloroethene	127-18-4	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.8	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		trans-1,3-Dichloropropene	10061-02-	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.3	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		trans-1,3-Dichloropropene	10061-02-	3.0	3.0	UG_KG	UL	UL		TRG					SO			4.2	1.0	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		1,1,2-Trichloroethane	79-00-5	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.2	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		1,1,2-Trichloroethane	79-00-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Dibromochloromethane	124-48-1	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.2	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Dibromochloromethane	124-48-1	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.5	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		1,2-Dibromoethane	106-93-4	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	1.4	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		1,2-Dibromoethane	106-93-4	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.8	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		2-Hexanone	591-78-6	19	19	UG_KG	U	U		TRG					SO			4.2	7.2	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		2-Hexanone	591-78-6	15	15	UG_KG	U	U		TRG					SO			4.2	5.8	15.	30.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Chlorobenzene	108-90-7	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.61	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4		03/03/201	03/06/2017		20170317	15:17:00	20170317	15:17:00	SK160-2R	1	2	34.445		Chlorobenzene	108-90-7	3.0	3.0	UG_KG	U	U		TRG					SO			4.2	0.61	3.0	6.0	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	REG	S	4		03/03/201	03/06/2017		20170310	15:45:00	20170310	15:45:00	SK160-2	1	1	34.445		Chlorobenzene	108-90-7	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.76	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-FD04-0217A	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	REG	S	4

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_G	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_B	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,2-Dichloroethane	107-06-2	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.3	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	1	1	34.371		1,2-Dichloroethane	107-06-2	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.5	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Trichloroethene	79-01-6	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	0.77	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	1	2	34.371		Trichloroethene	79-01-6	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.88	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,2-Dichloropropane	78-87-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	2.1	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,2-Dichloropropane	78-87-5	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.8	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Bromodichloromethane	75-27-4	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	0.78	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		cis-1,3-Dichloropropene	10061-01-	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.1	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		cis-1,3-Dichloropropene	10061-01-	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	0.94	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Toluene	108-88-3	26	26	UG_KG				TRG					SO			4.2	1.8	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Toluene	108-88-3	24	24	UG_KG				TRG					SO			4.2	2.1	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		4-Methyl-2-pentanone	108-10-1	16	16	UG_KG	U	U		TRG					SO			4.2	7.7	16.	32.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		4-Methyl-2-pentanone	108-10-1	19	19	UG_KG	U	U		TRG					SO			4.2	8.8	19.	38.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Tetrachloroethene	127-18-4	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.8	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Tetrachloroethene	127-18-4	1.9	1.9	UG_KG	J	J		TRG					SO			4.2	1.6	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		trans-1,3-Dichloropropene	10061-02-	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.1	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		trans-1,3-Dichloropropene	10061-02-	3.8	3.8	UG_KG	UL	UL		TRG					SO			4.2	1.3	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,1,2-Trichloroethane	79-00-5	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.3	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,1,2-Trichloroethane	79-00-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.4	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Dibromochloromethane	124-48-1	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.3	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Dibromochloromethane	124-48-1	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.5	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,2-Dibromoethane	106-93-4	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.6	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,2-Dibromoethane	106-93-4	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.8	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		2-Hexanone	591-78-6	19	19	UG_KG	U	U		TRG					SO			4.2	7.2	19.	38.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		2-Hexanone	591-78-6	16	16	UG_KG	U	U		TRG					SO			4.2	6.2	16.	32.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Chlorobenzene	108-90-7	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.76	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Chlorobenzene	108-90-7	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	0.66	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Ethylbenzene	100-41-4	240	240	UG_KG				TRG					SO			4.2	0.84	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Ethylbenzene	100-41-4	180	180	UG_KG				TRG					SO			4.2	0.98	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Xylene, total	1330-20-7	59	59	UG_KG				TRG					SO			4.2	1.7	9.8	20.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Xylene, total	1330-20-7	141	141	UG_KG				TRG					SO			4.2	2.0	11.	22.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		m- and p-Xylene	m&pXYLE	24	24	UG_KG				TRG					SO			4.2	2.6	7.5	15.	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		m- and p-Xylene	m&pXYLE	34	34	UG_KG				TRG					SO			4.2	2.2	6.5	13.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		o-Xylene	95-47-6	24	24	UG_KG				TRG					SO			4.2	1.7	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		o-Xylene	95-47-6	17	17	UG_KG				TRG					SO			4.2	2.0	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Styrene	100-42-5	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	0.66	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Styrene	100-42-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	0.76	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Bromoform	75-25-2	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.0	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Bromoform	75-25-2	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	0.91	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Isopropylbenzene	98-82-8	85	85	UG_KG				TRG					SO			4.2	1.2	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Isopropylbenzene	98-82-8	68	68	UG_KG				TRG					SO			4.2	1.4	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,1,2,2-Tetrachloroethane	79-34-5	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.1	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,1,2,2-Tetrachloroethane	79-34-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.3	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,3-Dichlorobenzene	541-73-1	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	0.81	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,3-Dichlorobenzene	541-73-1	1.4	1.4	UG_KG	J	J		TRG					SO			4.2	0.93	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,4-Dichlorobenzene	106-46-7	1.4	1.4	UG_KG	J	J		TRG					SO			4.2	0.57	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,4-Dichlorobenzene	106-46-7	2.0	2.0	UG_KG	J	J		TRG					SO			4.2	0.66	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,2-Dichlorobenzene	95-50-1	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.0	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,2-Dichlorobenzene	95-50-1	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.2	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,2-Dibromo-3-chloropropane	96-12-8	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	2.2	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,2-Dibromo-3-chloropropane	96-12-8	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	2.0	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,2,4-Trichlorobenzene	120-82-1	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.2	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,2,4-Trichlorobenzene	120-82-1	1.3	1.3	UG_KG	JL	JL		TRG					SO			4.2	1.2	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		1,2,3-Trichlorobenzene	87-61-6	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	0.99	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		1,2,3-Trichlorobenzene	87-61-6	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.1	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Bromochloromethane	74-97-5	3.8	3.8	UG_KG	U	U		TRG					SO			4.2	1.4	3.8	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Bromochloromethane	74-97-5	3.2	3.2	UG_KG	U	U		TRG					SO			4.2	1.2	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Methyl acetate	79-20-9	20	20	UG_KG				TRG					SO			4.2	3.5	3.9	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00	20170317	14:39:00	SK1680-1	2	1	34.371		Methyl acetate	79-20-9	16	16	UG_KG				TRG					SO			4.2	4.0	4.5	7.5	SK1680	WG201539		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	MS	S	4	03/03/201	03/06/2017			20170310	15:08:00	20170310	15:08:00	SK1680-1	1	1	34.371		Methylcyclohexane	108-87-2	120	120	UG_KG				TRG					SO			4.2	1.2	3.2	6.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	ME508-SB21-070BA-MS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	RA0	MS	S	4	03/03/201	03/06/2017			20170317	14:39:00

Contract_	DO_CTO_	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_(	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_I	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_F	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_Li	QC_Narrat	MDL	Detection	QSM_Vers	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Trichloroethene	79-01-6	76.	76.	UG_KG					TRG		MSA	125	75	20091101				4.2	0.88	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,2-Dichloropropane	78-87-5	74.	74.	UG_KG					TRG		MSA	120	70	20091101				4.2	2.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Bromodichloromethane	75-27-4	71.	71.	UG_KG					TRG		MSA	130	70	20091101				4.2	0.90	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		cis-1,3-Dichloropropene	10061-01-	63.	63.	UG_KG					TRG		MSA	125	70	20091101				4.2	1.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Toluene	108-88-3	62.	62.	UG_KG					TRG		MSA	125	70	20091101				4.2	2.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		4-Methyl-2-pentanone	108-10-1	60.	60.	UG_KG					TRG		MSA	145	45	20091101				4.2	8.8	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Tetrachloroethene	127-18-4	91.	91.	UG_KG					TRG		MSA	140	65	20091101				4.2	1.8	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		trans-1,3-Dichloropropene	10061-02-	58.	58.	UG_KG					TRG		MSA	125	65	20091101				4.2	1.3	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,1,2-Trichloroethane	79-00-5	65.	65.	UG_KG					TRG		MSA	125	60	20091101				4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Dibromochloromethane	124-48-1	83.	83.	UG_KG					TRG		MSA	130	65	20091101				4.2	1.5	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,2-Dibromoethane	106-93-4	57.	57.	UG_KG					TRG		MSA	125	70	20091101				4.2	1.8	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		2-Hexanone	591-78-6	73.	73.	UG_KG					TRG		MSA	145	45	20091101				4.2	7.2	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Chlorobenzene	108-90-7	72.	72.	UG_KG					TRG		MSA	125	75	20091101				4.2	0.76	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Ethylbenzene	100-41-4	74.	74.	UG_KG					TRG		MSA	125	75	20091101				4.2	0.98	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Xylene, total	1330-20-7	210	210	UG_KG					TRG		MSA	114	81	20091101				4.2	2.0	11.	22.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		m- and p-Xylene	m&pXYLEN	140	140	UG_KG					TRG		MSA	125	80	20091101				4.2	2.6	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		o-Xylene	95-47-6	67.	67.	UG_KG					TRG		MSA	125	75	20091101				4.2	2.0	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Styrene	100-42-5	44.	44.	UG_KG	*	*		TRG		MSA	125	75	20091101				4.2	0.76	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Bromoform	75-25-2	62.	62.	UG_KG					TRG		MSA	135	55	20091101				4.2	1.0	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Isopropylbenzene	98-82-8	140	140	UG_KG	*	*		TRG		MSA	130	75	20091101				4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,1,2,2-Tetrachloroethane	79-34-5	120	120	UG_KG	*	*		TRG		MSA	130	55	20091101				4.2	1.3	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,3-Dichlorobenzene	541-73-1	79.	79.	UG_KG					TRG		MSA	125	70	20091101				4.2	0.93	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,4-Dichlorobenzene	106-46-7	74.	74.	UG_KG					TRG		MSA	125	70	20091101				4.2	0.66	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,2-Dichlorobenzene	95-50-1	72.	72.	UG_KG					TRG		MSA	120	75	20091101				4.2	1.2	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,2-Dibromo-3-chloropropane	96-12-8	77.	77.	UG_KG					TRG		MSA	135	40	20091101				4.2	2.2	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,2,4-Trichlorobenzene	120-82-1	42.	42.	UG_KG	*	*		TRG		MSA	130	65	20091101				4.2	1.2	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		1,2,3-Trichlorobenzene	87-61-6	37.	37.	UG_KG	*	*		TRG		MSA	135	60	20091101				4.2	1.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Bromochloromethane	74-97-5	83.	83.	UG_KG					TRG		MSA	125	70	20091101				4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Methyl acetate	79-20-9	74.	74.	UG_KG					TRG		MSA	133	72	20091101				4.2	4.0	4.5	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-SD	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	MSD	S	4	03/03/201	03/06/2017			20170310	20:06:00	20170310	20:06:00	WG20112	1	1	24.344		Methylcyclohexane	108-87-2	85.	85.	UG_KG					TRG		MSA	127	71	20091101				4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Dichlorodifluoromethane (Freon-12)	75-71-8	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	1.4	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Chloromethane	74-87-3	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	2.1	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Vinyl chloride	75-01-4	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	1.3	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Bromomethane	74-83-9	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	1.6	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Chloroethane	75-00-3	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	2.0	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Trichlorofluoromethane (Freon-11)	75-69-4	7.5	7.5	UG_KG	U	U		TRG						SO			4.2	1.4	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,1-Dichloroethene	75-35-4	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Carbon disulfide	75-15-0	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.2	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	76-13-1	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Methylene chloride	75-09-2	19	19	UG_KG	U	U		TRG						SO			4.2	12.	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Acetone	67-64-1	120	120	UG_KG	MM	MM		TRG						SO			4.2	7.6	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		trans-1,2-Dichloroethene	156-60-5	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Methyl-tert-butyl ether (MTBE)	1634-04-4	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.6	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,1-Dichloroethane	75-34-3	9.4	9.4	UG_KG					TRG						SO			4.2	2.6	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		cis-1,2-Dichloroethene	156-59-2	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Chloroform	67-66-3	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	0.52	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Carbon tetrachloride	56-23-5	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	2.0	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,1,1-Trichloroethane	71-55-6	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	0.63	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		2-Butanone	78-93-3	19	19	UG_KG	U	U		TRG						SO			4.2	8.8	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Benzene	71-43-2	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Cyclohexane	110-82-7	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	2.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,2-Dichloroethane	107-06-2	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.5	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Trichloroethene	79-01-6	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	0.88	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,2-Dichloropropane	78-87-5	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	2.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Bromodichloromethane	75-27-4	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	0.90	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		cis-1,3-Dichloropropene	10061-01-	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Toluene	108-88-3	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	2.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		4-Methyl-2-pentanone	108-10-1	19	19	UG_KG	U	U		TRG						SO			4.2	8.8	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Tetrachloroethene	127-18-4	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.8	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		trans-1,3-Dichloropropene	10061-02-	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.3	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,1,2-Trichloroethane	79-00-5	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Dibromochloromethane	124-48-1	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.5	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,2-Dibromoethane	106-93-4	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.8	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		2-Hexanone	591-78-6	19	19	UG_KG	U	U		TRG						SO			4.2	7.2	19.	38.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Chlorobenzene	108-90-7	3.8	3.8	UG_KG	UM	UM		TRG						SO			4.2	0.76	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Ethylbenzene	100-41-4	3.8	3.8	UG_KG	UM	UM		TRG						SO			4.2	0.98	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Xylene, total	1330-20-7	11	11	UG_KG	UM	UM		TRG						SO			4.2	2.0	11.	22.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		m- and p-Xylene	m&pXYLEN	7.5	7.5	UG_KG	UM	UM		TRG						SO			4.2	2.6	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		o-Xylene	95-47-6	3.8	3.8	UG_KG	UM	UM		TRG						SO			4.2	2.0	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Styrene	100-42-5	3.8	3.8	UG_KG	UMM	UMM		TRG						SO			4.2	0.76	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Bromoform	75-25-2	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.0	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Isopropylbenzene	98-82-8	3.8	3.8	UG_KG	UM	UM		TRG						SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,1,2,2-Tetrachloroethane	79-34-5	3.8	3.8	UG_KG	UM	UM		TRG						SO			4.2	1.3	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,3-Dichlorobenzene	541-73-1	3.8	3.8	UG_KG	UM	UM		TRG						SO			4.2	0.93	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,4-Dichlorobenzene	106-46-7	3.8	3.8	UG_KG	UM	UM		TRG						SO			4.2	0.66	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,2-Dichlorobenzene	95-50-1	3.8	3.8	UG_KG	UM	UM		TRG						SO			4.2	1.2	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,2-Dibromo-3-chloropropane	96-12-8	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	2.2	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,2,4-Trichlorobenzene	120-82-1	3.8	3.8	UG_KG	UMM	UMM		TRG						SO			4.2	1.2	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		1,2,3-Trichlorobenzene	87-61-6	3.8	3.8	UG_KG	UMM	UMM		TRG						SO			4.2	1.1	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Bromochloromethane	74-97-5	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Methyl acetate	79-20-9	4.5	4.5	UG_KG	U	U		TRG						SO			4.2	4.0	4.5	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	16:22:00	20170310	16:22:00	SK1680-3	1	1	24.344		Methylcyclohexane	108-87-2	3.8	3.8	UG_KG	U	U		TRG						SO			4.2	1.4	3.8	7.5	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Dichlorodifluoromethane (Freon-12)	75-71-8	5.0	5.0	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.92	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Chloromethane	74-87-3	5.0	5.0	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.4	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Vinyl chloride	75-01-4	5.0	5.0	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.87	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Bromomethane	74-83-9	5.0	5.0	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.1	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Chloroethane	75-00-3	5.0	5.0	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.3	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Trichlorofluoromethane (Freon-11)	75-69-4	5.0	5.0	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.91	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,1-Dichloroethene	75-35-4	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.93	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Carbon disulfide	75-15-0	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.78	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	76-13-1	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.90	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Methylene chloride	75-09-2	12	12	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	7.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Acetone	67-64-1	12	12	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	5.1	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			trans-1,2-Dichloroethene	156-60-5	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.71	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Methyl-tert-butyl ether (MTBE)	1634-04-4	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.1	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,1-Dichloroethane	75-34-3	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.7	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			cis-1,2-Dichloroethene	156-59-2	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.91	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Chloroform	67-66-3	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.35	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Carbon tetrachloride	56-23-5	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.3	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,1,1-Trichloroethane	71-55-6	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.42	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			2-Butanone	78-93-3	12	12	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	5.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Benzene	71-43-2	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.92	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Cyclohexane	110-82-7	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,2-Dichloroethane	107-06-2	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.0	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Trichloroethene	79-01-6	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.59	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,2-Dichloropropane	78-87-5	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Bromodichloromethane	75-27-4	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.60	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			cis-1,3-Dichloropropene	10061-01-	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.72	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Toluene	108-88-3	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			4-Methyl-2-pentanone	108-10-1	12	12	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	5.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Tetrachloroethene	127-18-4	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.2	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			trans-1,3-Dichloropropene	10061-02-	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.86	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,1,2-Trichloroethane	79-00-5	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.97	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Dibromochloromethane	124-48-1	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.0	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,2-Dibromoethane	106-93-4	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.2	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			2-Hexanone	591-78-6	12	12	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	4.8	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Chlorobenzene	108-90-7	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.51	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Ethylbenzene	100-41-4	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.65	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Xylene, total	1330-20-7	7.5	7.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.3	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			m- and p-Xylene	m&pXYLEN	5.0	5.0	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.7	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			o-Xylene	95-47-6	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.3	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Styrene	100-42-5	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.51	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Bromoform	75-25-2	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.70	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Isopropylbenzene	98-82-8	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.92	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,1,2,2-Tetrachloroethane	79-34-5	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.84	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,3-Dichlorobenzene	541-73-1	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.62	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,4-Dichlorobenzene	106-46-7	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.44	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,2-Dichlorobenzene	95-50-1	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.78	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,2-Dibromo-3-chloropropane	96-12-8	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	1.5	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,2,4-Trichlorobenzene	120-82-1	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.79	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			1,2,3-Trichlorobenzene	87-61-6	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.76	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Bromochloromethane	74-97-5	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.91	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Methyl acetate	79-20-9	3.0	3.0	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	2.7	3.0	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-TB02-0317	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	REG	S	4	03/03/201	03/06/2017			20170310	12:02:00	20170310	12:02:00	SK1680-5	1	1			Methylcyclohexane	108-87-2	2.5	2.5	UG_KG	U	U		TRG						AQ (Field Blanks)			4.2	0.96	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Dichlorodifluoromethane (Freon-12)	75-71-8	5.0	5.0	UG_KG	U	U		TRG									4.2	0.92	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Chloromethane	74-87-3	5.0	5.0	UG_KG	U	U		TRG									4.2	1.4	5.0	10.	SK1680	WG201121		

Contract_	DO_CTO_	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_N	Percent_L	Chem_Name	Analyte_I	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_F	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_Li	QC_Narrat	MDL	Detection	QSM_Vers	DL	LOD	LOQ	SDG	Analysis_E	Validator_	Val_Date
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Vinyl chloride	75-01-4	5.0	5.0	UG_KG	U	U		TRG									4.2	0.87	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Bromomethane	74-83-9	5.0	5.0	UG_KG	U	U		TRG									4.2	1.1	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Chloroethane	75-00-3	5.0	5.0	UG_KG	U	U		TRG									4.2	1.3	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Trichlorofluoromethane (Freon-11)	75-69-4	5.0	5.0	UG_KG	U	U		TRG									4.2	0.91	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,1-Dichloroethene	75-35-4	2.5	2.5	UG_KG	U	U		TRG									4.2	0.93	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Carbon disulfide	75-15-0	2.5	2.5	UG_KG	U	U		TRG									4.2	0.78	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	76-13-1	2.5	2.5	UG_KG	U	U		TRG									4.2	0.90	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Methylene chloride	75-09-2	12	12	UG_KG	U	U		TRG									4.2	7.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Acetone	67-64-1	12	12	UG_KG	U	U		TRG									4.2	5.1	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			trans-1,2-Dichloroethene	156-60-5	2.5	2.5	UG_KG	U	U		TRG									4.2	0.71	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Methyl-tert-butyl ether (MTBE)	1634-04-4	2.5	2.5	UG_KG	U	U		TRG									4.2	1.1	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,1-Dichloroethane	75-34-3	2.5	2.5	UG_KG	U	U		TRG									4.2	1.7	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			cis-1,2-Dichloroethene	156-59-2	2.5	2.5	UG_KG	U	U		TRG									4.2	0.91	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Chloroform	67-66-3	2.5	2.5	UG_KG	U	U		TRG									4.2	0.35	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Carbon tetrachloride	56-23-5	2.5	2.5	UG_KG	U	U		TRG									4.2	1.3	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,1,1-Trichloroethane	71-55-6	2.5	2.5	UG_KG	U	U		TRG									4.2	0.42	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			2-Butanone	78-93-3	12	12	UG_KG	U	U		TRG									4.2	5.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Benzene	71-43-2	2.5	2.5	UG_KG	U	U		TRG									4.2	0.92	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Cyclohexane	110-82-7	2.5	2.5	UG_KG	U	U		TRG									4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,2-Dichloroethane	107-06-2	2.5	2.5	UG_KG	U	U		TRG									4.2	1.0	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Trichloroethene	79-01-6	2.5	2.5	UG_KG	U	U		TRG									4.2	0.59	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,2-Dichloropropane	78-87-5	2.5	2.5	UG_KG	U	U		TRG									4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Bromodichloromethane	75-27-4	2.5	2.5	UG_KG	U	U		TRG									4.2	0.60	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			cis-1,3-Dichloropropene	10061-01-	2.5	2.5	UG_KG	U	U		TRG									4.2	0.72	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Toluene	108-88-3	2.5	2.5	UG_KG	U	U		TRG									4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			4-Methyl-2-pentanone	108-10-1	12	12	UG_KG	U	U		TRG									4.2	5.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Tetrachloroethene	127-18-4	2.5	2.5	UG_KG	U	U		TRG									4.2	1.2	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			trans-1,3-Dichloropropene	10061-02-	2.5	2.5	UG_KG	U	U		TRG									4.2	0.86	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,1,2-Trichloroethane	79-00-5	2.5	2.5	UG_KG	U	U		TRG									4.2	0.97	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Dibromochloromethane	124-48-1	2.5	2.5	UG_KG	U	U		TRG									4.2	1.0	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,2-Dibromoethane	106-93-4	2.5	2.5	UG_KG	U	U		TRG									4.2	1.2	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			2-Hexanone	591-78-6	12	12	UG_KG	U	U		TRG									4.2	4.8	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Chlorobenzene	108-90-7	2.5	2.5	UG_KG	U	U		TRG									4.2	0.51	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Ethylbenzene	100-41-4	2.5	2.5	UG_KG	U	U		TRG									4.2	0.65	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Xylene, total	1330-20-7	7.5	7.5	UG_KG	U	U		TRG									4.2	1.3	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			m- and p-Xylene	m&pXYLEN	5.0	5.0	UG_KG	U	U		TRG									4.2	1.7	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			o-Xylene	95-47-6	2.5	2.5	UG_KG	U	U		TRG									4.2	1.3	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Styrene	100-42-5	2.5	2.5	UG_KG	U	U		TRG									4.2	0.51	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Bromoform	75-25-2	2.5	2.5	UG_KG	U	U		TRG									4.2	0.70	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Isopropylbenzene	98-82-8	2.5	2.5	UG_KG	U	U		TRG									4.2	0.92	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,1,2,2-Tetrachloroethane	79-34-5	2.5	2.5	UG_KG	U	U		TRG									4.2	0.84	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,3-Dichlorobenzene	541-73-1	2.5	2.5	UG_KG	U	U		TRG									4.2	0.62	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,4-Dichlorobenzene	106-46-7	2.5	2.5	UG_KG	U	U		TRG									4.2	0.44	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,2-Dichlorobenzene	95-50-1	2.5	2.5	UG_KG	U	U		TRG									4.2	0.78	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,2-Dibromo-3-chloropropane	96-12-8	2.5	2.5	UG_KG	U	U		TRG									4.2	1.5	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,2,4-Trichlorobenzene	120-82-1	2.5	2.5	UG_KG	U	U		TRG									4.2	0.79	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			1,2,3-Trichlorobenzene	87-61-6	2.5	2.5	UG_KG	U	U		TRG									4.2	0.76	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Bromochloromethane	74-97-5	2.5	2.5	UG_KG	U	U		TRG									4.2	0.91	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Methyl acetate	79-20-9	3.0	3.0	UG_KG	U	U		TRG									4.2	2.7	3.0	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-BLANK	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BLK	S	4	03/10/201	03/10/2017			20170310	11:16:00	20170310	11:16:00	WG20112	1	1			Methylcyclohexane	108-87-2	2.5	2.5	UG_KG	U	U		TRG									4.2	0.96	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Dichlorodifluoromethane (Freon-12)	75-71-8	36.2	36.2	UG_KG				TRG		LSA	135	35	20091101				4.2	0.92	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Chloromethane	74-87-3	38.4	38.4	UG_KG				TRG		LSA	130	50	20091101				4.2	1.4	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Vinyl chloride	75-01-4	39.9	39.9	UG_KG				TRG		LSA	125	60	20091101				4.2	0.87	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Bromomethane	74-83-9	44.1	44.1	UG_KG				TRG		LSA	160	30	20091101				4.2	1.1	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Chloroethane	75-00-3	40.8	40.8	UG_KG				TRG		LSA	155	40	20091101				4.2	1.3	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Trichlorofluoromethane (Freon-11)	75-69-4	40.1	40.1	UG_KG				TRG		LSA	185	25	20091101				4.2	0.91	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,1-Dichloroethene	75-35-4	50.5	50.5	UG_KG				TRG		LSA	135	65	20091101				4.2	0.93	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Carbon disulfide	75-15-0	58.0	58.0	UG_KG				TRG		LSA	160	45	20091101				4.2	0.78	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	76-13-1	50.8	50.8	UG_KG				TRG		LSA	135	67	20091101				4.2	0.90	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Methylene chloride	75-09-2	50.8	50.8	UG_KG				TRG		LSA	140	55	20091101				4.2	7.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Acetone	67-64-1	65.4	65.4	UG_KG				TRG		LSA	160	20	20091101				4.2	5.1	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			trans-1,2-Dichloroethene	156-60-5	53.4	53.4	UG_KG				TRG		LSA	135	65	20091101				4.2	0.71	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Methyl-tert-butyl ether (MTBE)	1634-04-4	103.	103.	UG_KG				TRG		LSA	125	81	20091101				4.2	1.1	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,1-Dichloroethane	75-34-3	50.4	50.4	UG_KG				TRG		LSA	125	75	20091101				4.2	1.7	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			cis-1,2-Dichloroethene	156-59-2	48.2	48.2	UG_KG				TRG		LSA	125	65	20091101				4.2	0.91	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Chloroform	67-66-3	50.6	50.6	UG_KG				TRG		LSA	125	70	20091101				4.2	0.35	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Carbon tetrachloride	56-23-5	54.3	54.3	UG_KG				TRG		LSA	135	65	20091101				4.2	1.3	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,1,1-Trichloroethane	71-55-6	49.2	49.2	UG_KG				TRG		LSA	135	70	20091101				4.2	0.42	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			2-Butanone	78-93-3	53.5	53.5	UG_KG				TRG		LSA	160	30	20091101				4.2	5.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Benzene	71-43-2	51.1	51.1	UG_KG				TRG		LSA	125	75	20091101				4.2	0.92	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Cyclohexane	110-82-7	49.4	49.4	UG_KG				TRG		LSA	128	75	20091101				4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,2-Dichloroethane	107-06-2	51.9	51.9	UG_KG				TRG		LSA	135	70	20091101				4.2	1.0	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Trichloroethene	79-01-6	53.9	53.9	UG_KG				TRG		LSA	125	75	20091101				4.2	0.59	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,2-Dichloropropane	78-87-5	51.1	51.1	UG_KG				TRG		LSA	120	70	20091101				4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Bromodichloromethane	75-27-4	52.1	52.1	UG_KG				TRG		LSA	130	70	20091101				4.2	0.60	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			cis-1,3-Dichloropropene	10061-01-	52.2	52.2	UG_KG				TRG		LSA	125	70	20091101				4.2	0.72	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Toluene	108-88-3	49.8	49.8	UG_KG				TRG		LSA	125	70	20091101				4.2	1.4	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			4-Methyl-2-pentanone	108-10-1	52.5	52.5	UG_KG				TRG		LSA	145	45	20091101				4.2	5.9	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Tetrachloroethene	127-18-4	55.6	55.6	UG_KG				TRG		LSA	140	65	20091101				4.2	1.2	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			trans-1,3-Dichloropropene	10061-02-	55.4	55.4	UG_KG				TRG		LSA	125	65	20091101				4.2	0.86	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,1,2-Trichloroethane	79-00-5	53.2	53.2	UG_KG				TRG		LSA	125	60	20091101				4.2	0.97	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Dibromochloromethane	124-48-1	57.2	57.2	UG_KG				TRG		LSA	130	65	20091101				4.2	1.0	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,2-Dibromoethane	106-93-4	52.8	52.8	UG_KG				TRG		LSA	125	70	20091101				4.2	1.2	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			2-Hexanone	591-78-6	55.8	55.8	UG_KG				TRG		LSA	145	45	20091101				4.2	4.8	12.	25.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Chlorobenzene	108-90-7	53.9	53.9	UG_KG				TRG		LSA	125	75	20091101				4.2	0.51	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Ethylbenzene	100-41-4	52.1	52.1	UG_KG				TRG		LSA	125	75	20091101				4.2	0.65	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Xylene, total	1330-20-7	159.	159.	UG_KG				TRG		LSA	114	81	20091101				4.2	1.3	7.5	15.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			m- and p-Xylene	m&pXYLEN	105.	105.	UG_KG				TRG		LSA	125	80	20091101				4.2	1.7	5.0	10.	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			o-Xylene	95-47-6	53.5	53.5	UG_KG				TRG		LSA	125	75	20091101				4.2	1.3	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Styrene	100-42-5	53.6	53.6	UG_KG				TRG		LSA	125	75	20091101				4.2	0.51	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Bromoform	75-25-2	58.1	58.1	UG_KG				TRG		LSA	135	55	20091101				4.2	0.70	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Isopropylbenzene	98-82-8	54.7	54.7	UG_KG				TRG		LSA	130	75	20091101				4.2	0.92	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,1,2,2-Tetrachloroethane	79-34-5	54.6	54.6	UG_KG				TRG		LSA	130	55	20091101				4.2	0.84	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,3-Dichlorobenzene	541-73-1	53.8	53.8	UG_KG				TRG		LSA	125	70	20091101				4.2	0.62	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,4-Dichlorobenzene	106-46-7	54.0	54.0	UG_KG				TRG		LSA	125	70	20091101				4.2	0.44	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,2-Dichlorobenzene	95-50-1	54.2	54.2	UG_KG				TRG		LSA	120	75	20091101				4.2	0.78	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,2-Dibromo-3-chloropropane	96-12-8	56.3	56.3	UG_KG				TRG		LSA	135	40	20091101				4.2	1.5	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,2,4-Trichlorobenzene	120-82-1	54.6	54.6	UG_KG				TRG		LSA	130	65	20091101				4.2	0.79	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			1,2,3-Trichlorobenzene	87-61-6	55.0	55.0	UG_KG				TRG		LSA	135	60	20091101				4.2	0.76	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Bromochloromethane	74-97-5	51.5	51.5	UG_KG				TRG		LSA	125	70	20091101				4.2	0.91	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Methyl acetate	79-20-9	45.5	45.5	UG_KG				TRG		LSA	133	72	20091101				4.2	2.7	3.0	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	WG201121-LCS	NONE	VOA	8260C	VOA	KAS	KATAHDIN ANALYTIC		DRY	SW5035	000	BS	S	4	03/10/201	03/10/2017			20170310	09:44:00	20170310	09:44:00	WG20112	1	1			Methylcyclohexane	108-87-2	50.8	50.8	UG_KG				TRG		LSA	127	71	20091101				4.2	0.96	2.5	5.0	SK1680	WG201121		
N6247016	JM01		MERIDIAN	MES08-FD04-0217A	NONE	WCHEM	2540G	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	03/03/201	03/06/2017			20170322	15:02:00	20170323	16:57:00	SK1680-2	1	1	34.445		% Solids	%SOLIDS	66.	66.	PCT				TRG						SO			4.2	1	1	1	SK1680	WG201818		
N6247016	JM01		MERIDIAN	MES08-SB20-0708A	NONE	WCHEM	2540G	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	03/03/201	03/06/2017			20170322	15:01:00	20170323	16:57:00	SK1680-1	1	1	34.371		% Solids	%SOLIDS	66.	66.	PCT				TRG						SO			4.2	1	1	1	SK1680	WG201818		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A-LR	NONE	WCHEM	2540G	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	LR	S	4	03/03/201	03/06/2017			20170322	15:06:00	20170323	17:00:00	WG20181	1	1	24.344		% Solids	%SOLIDS	75.	75.	PCT				TRG									4.2	1	1	1	SK1680	WG201818		
N6247016	JM01		MERIDIAN	MES08-SB21-0708A	NONE	WCHEM	2540G	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	03/03/201	03/06/2017			20170322	15:03:00	20170323	16:58:00	SK1680-3	1	1	24.344		% Solids	%SOLIDS	76.	76.	PCT				TRG						SO			4.2	1	1	1	SK1680	WG201818		
N6247016	JM01		MERIDIAN	WG201818-BLANK	NONE	WCHEM	2540G	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	BLK	S	4	03/22/201	03/22/2017			20170322	15:04:00	20170323	17:00:00	WG20181	1	1			% Solids	%SOLIDS	100	100	PCT				TRG									4.2	1	1	1	SK1680	WG201818		
N6247016	JM01		MERIDIAN	WG201818-LCS	NONE	WCHEM	2540G	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	BS	S	4	03/22/201	03/22/2017			20170322	15:05:00	20170323	17:00:00	WG20181	1	1			% Solids	%SOLIDS	89.	89.	PCT				TRG		LSA	110	90	20091101				4.2	1	1	1	SK1680	WG201818		
N6247016	JM01		MERIDIAN	GroutTruck_Blank_2	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:05:00	320-28800	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0021	UG_L	U		PR	TRG					00000000	AQ (Weird)			5.0	0.00077	0.0021	0.0026	320-28800	320-168683		
N6247016	JM01		MERIDIAN	GroutTruck_Blank_2	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:05:00	320-28800	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0031	UG_L	U		PR	TRG					00000000	AQ (Weird)			5.0	0.0013	0.0031	0.0041	320-28800	320-168683		
N6247016	JM01		MERIDIAN	GroutTruck_Blank_2	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:05:00	320-28800	1	1			13C4 PFOA	13C4 PFOA		91	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Weird)			5.0	51	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	GroutTruck_Blank_2	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:05:00	320-28800	1	1			13C4 PFOS	13C4 PFOS		108	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Weird)			5.0	51	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	GroutTruck_Blank_2	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:05:00	320-28800	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0021	UG_L	U		PR	TRG					00000000	AQ (Weird)			5.0	0.00094	0.0021	0.0026	320-28800	320-168683		
N6247016	JM01		MERIDIAN	GroutTruck_Blank_2	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:05:00	320-28800	1	1			18O2 PFHXS	18O2 PFHXS		127	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Weird)			5.0	51	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	ATVRig_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:13:00	320-28800	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0012	UG_L	JM		PR	TRG					00000000	AQ (Weird)			5.0	0.00077	0.0021	0.0026	320-28800	320-168683		
N6247016	JM01		MERIDIAN	ATVRig_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:13:00	320-28800	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0031	UG_L	UM		PR	TRG					00000000	AQ (Weird)			5.0	0.0013	0.0031	0.0041	320-28800	320-168683		
N6247016	JM01		MERIDIAN	ATVRig_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:13:00	320-28800	1	1			13C4 PFOA	13C4 PFOA		69	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Weird)			5.0	52	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	ATVRig_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:13:00	320-28800	1	1			13C4 PFOS	13C4 PFOS		110	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Weird)			5.0	52	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	ATVRig_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:13:00	320-28800	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0021	UG_L	UM		PR	TRG					00000000	AQ (Weird)			5.0	0.00095	0.0021	0.0026	320-28800	320-168683		
N6247016	JM01		MERIDIAN	ATVRig_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/02/201	06/05/2017			20170609	10:13:00	20170611	07:13:00	320-28800	1	1			18O2 PFHXS	18O2 PFHXS		124	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Weird)			5.0	52	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	LCS 320-168463/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170611	05:17:00	LCS 320-16	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		103	PCT_REC			PR	TRG		LSA	140	60	00000000				5.0	0.75	2.0	2.5	320-28800	320-168683		
N6247016	JM01		MERIDIAN	LCS 320-168463/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170611	05:17:00	LCS 320-16	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		107	PCT_REC			PR	TRG		LSA	140	60	00000000				5.0	1.3	3.0	4.0	320-28800	320-168683		
N6247016	JM01		MERIDIAN	LCS 320-168463/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170611	05:17:00	LCS 320-16	1	1			13C4 PFOA	13C4 PFOA		136	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	LCS 320-168463/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170611	05:17:00	LCS 320-16	1	1			13C4 PFOS	13C4 PFOS		94	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	LCS 320-168463/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170611	05:17:00	LCS 320-16	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		121	PCT_REC			PR	TRG		LSA	150	50	00000000				5.0	0.92	2.0	2.5	320-28800	320-168683		
N6247016	JM01		MERIDIAN	LCS 320-168463/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170611	05:17:00	LCS 320-16	1	1			18O2 PFHXS	18O2 PFHXS		109	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28800	320-168683		
N6247016	JM01		MERIDIAN	LCSD 320-168463/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:54:00	LCSD 320-	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		100	PCT_REC			PR	TRG		LSP	140	60	00000000				5.0	0.75	2.0	2.5	320-28800	320-169055		
N6247016	JM01		MERIDIAN	LCSD 320-168463/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:54:00	LCSD 320-	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		100	PCT_REC			PR	TRG		LSP	140	60	00000000				5.0	1.3	3.0	4.0	320-28800	320-169055		
N6247016	JM01		MERIDIAN	LCSD 320-168463/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:54:00	LCSD 320-	1	1			13C4 PFOA	13C4 PFOA		125	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28800	320-169055		
N6247016	JM01		MERIDIAN	LCSD 320-168463/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:54:00	LCSD 320-	1	1			13C4 PFOS	13C4 PFOS		114	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28800	320-169055		
N6247016	JM01		MERIDIAN	LCSD 320-168463/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:54:00	LCSD 320-	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		111	PCT_REC			PR	TRG		LSP	150	50	00000000				5.0	0.92	2.0	2.5	320-28800	320-169055		
N6247016	JM01		MERIDIAN	LCSD 320-168463/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:54:00	LCSD 320-	1	1			18O2 PFHXS	18O2 PFHXS		118	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28800	320-169055		
N6247016	JM01		MERIDIAN	MB 320-168463/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:46:00	MB 320-16	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.002	UG_L	U		PR	TRG					00000000				5.0	0.00075	0.002	0.0025	320-28800	320-169055		
N6247016	JM01		MERIDIAN	MB 320-168463/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:46:00	MB 320-16	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.003	UG_L	U		PR	TRG					00000000				5.0	0.0013	0.003	0.004	320-28800	320-169055		
N6247016	JM01		MERIDIAN	MB 320-168463/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:46:00	MB 320-16	1	1			13C4 PFOA	13C4 PFOA		129	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-28800	320-169055		
N6247016	JM01		MERIDIAN	MB 320-168463/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/09/201	06/09/2017			20170609	10:13:00	20170613	11:46:00	MB 320-16	1	1			13C4 PFOS	13C4 PFOS		110	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-28800	320-169055		

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_I	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N624701	6JM01		MERIDIAN	MB 320-168463/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/09/201	06/09/2017		20170609	10:13:00	20170613	11:46:00	MB 320-16	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.002	UG_L	U		PR	TRG					00000000				5.0	0.00092	0.002	0.0025	320-2880	320-169055		
N624701	6JM01		MERIDIAN	MB 320-168463/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/09/201	06/09/2017		20170609	10:13:00	20170613	11:46:00	MB 320-16	1	1			1802 PFHXS	119	PCT_REC					PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-2880	320-169055		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:09:00	320-28275	1	13.9			Perfluorooctanoic acid (PFOA)	335-67-1		0.21	UG_KG	J		PR	TRG					00000000	SO			5.0	0.12	0.35	0.58	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:09:00	320-28275	1	13.9			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.68	UG_KG	M		PR	TRG					00000000	SO			5.0	0.15	0.35	0.58	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:09:00	320-28275	1	13.9			13C4 PFOA	87	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.8	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:09:00	320-28275	1	13.9			13C4 PFOS	40	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.8	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:09:00	320-28275	1	13.9			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.35	UG_KG	U		PR	TRG					00000000	SO			5.0	0.12	0.35	0.46	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:09:00	320-28275	1	13.9			18O2 PFHXS	66	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.8	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:16:00	320-28275	1	18.8			Perfluorooctanoic acid (PFOA)	335-67-1		0.37	UG_KG	U		PR	TRG					00000000	SO			5.0	0.13	0.37	0.62	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:16:00	320-28275	1	18.8			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.37	UG_KG	U		PR	TRG					00000000	SO			5.0	0.16	0.37	0.62	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:16:00	320-28275	1	18.8			13C4 PFHXS	75	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.2	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:16:00	320-28275	1	18.8			13C4 PFOS	40	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.2	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:16:00	320-28275	1	18.8			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.37	UG_KG	U		PR	TRG					00000000	SO			5.0	0.13	0.37	0.50	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:16:00	320-28275	1	18.8			18O2 PFHXS	72	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.2	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:39:00	320-28275	1	11.0			Perfluorooctanoic acid (PFOA)	335-67-1		0.34	UG_KG	U		PR	TRG					00000000	SO			5.0	0.11	0.34	0.56	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:39:00	320-28275	1	11.0			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.34	UG_KG	U		PR	TRG					00000000	SO			5.0	0.14	0.34	0.56	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:39:00	320-28275	1	11.0			13C4 PFOA	101	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:39:00	320-28275	1	11.0			13C4 PFOS	71	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:39:00	320-28275	1	11.0			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.34	UG_KG	U		PR	TRG					00000000	SO			5.0	0.12	0.34	0.45	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:39:00	320-28275	1	11.0			18O2 PFHXS	85	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:46:00	320-28275	1	10.7			Perfluorooctanoic acid (PFOA)	335-67-1		0.34	UG_KG	U		PR	TRG					00000000	SO			5.0	0.11	0.34	0.56	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:46:00	320-28275	1	10.7			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.34	UG_KG	UM		PR	TRG					00000000	SO			5.0	0.14	0.34	0.56	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:46:00	320-28275	1	10.7			13C4 PFHXS	95	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:46:00	320-28275	1	10.7			13C4 PFOS	69	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:46:00	320-28275	1	10.7			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.34	UG_KG	U		PR	TRG					00000000	SO			5.0	0.12	0.34	0.45	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-TA-4_SOUTH-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:46:00	320-28275	1	10.7			18O2 PFHXS	83	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-FD05-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:54:00	320-28275	1	18.1			Perfluorooctanoic acid (PFOA)	335-67-1		0.37	UG_KG	U		PR	TRG					00000000	SO			5.0	0.13	0.37	0.62	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-FD05-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:54:00	320-28275	1	18.1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.37	UG_KG	U		PR	TRG					00000000	SO			5.0	0.16	0.37	0.62	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-FD05-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:54:00	320-28275	1	18.1			13C4 PFOA	78	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.2	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-FD05-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:54:00	320-28275	1	18.1			13C4 PFOS	31	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.2	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-FD05-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:54:00	320-28275	1	18.1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.37	UG_KG	U		PR	TRG					00000000	SO			5.0	0.13	0.37	0.49	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-FD05-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	22:54:00	320-28275	1	18.1			18O2 PFHXS	72	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.2	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0406	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:01:00	320-28275	1	18.2			Perfluorooctanoic acid (PFOA)	335-67-1		0.36	UG_KG	UM		PR	TRG					00000000	SO			5.0	0.12	0.36	0.60	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0406	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:01:00	320-28275	1	18.2			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.36	UG_KG	U		PR	TRG					00000000	SO			5.0	0.15	0.36	0.60	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0406	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:01:00	320-28275	1	18.2			13C4 PFHXS	86	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.0	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0406	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:01:00	320-28275	1	18.2			13C4 PFOS	46	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.0	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0406	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:01:00	320-28275	1	18.2			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.36	UG_KG	U		PR	TRG					00000000	SO			5.0	0.12	0.36	0.48	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0406	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:01:00	320-28275	1	18.2			18O2 PFHXS	74	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.0	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:16:00	320-28275	1	16.1			Perfluorooctanoic acid (PFOA)	335-67-1		0.17	UG_KG	JM		PR	TRG					00000000	SO			5.0	0.12	0.35	0.59	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:16:00	320-28275	1	16.1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.35	UG_KG	U		PR	TRG					00000000	SO			5.0	0.15	0.35	0.59	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:16:00	320-28275	1	16.1			13C4 PFOA	95	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.9	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:16:00	320-28275	1	16.1			13C4 PFOS	51	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.9	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:16:00	320-28275	1	16.1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.35	UG_KG	U		PR	TRG					00000000	SO			5.0	0.12	0.35	0.47	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45C_05_2008-SB01-0608	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:16:00	320-28275	1	16.1			18O2 PFHXS	76	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.9	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:24:00	320-28275	1	15.1			Perfluorooctanoic acid (PFOA)	335-67-1		0.87	UG_KG	M		PR	TRG					00000000	SO			5.0	0.12	0.35	0.58	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:24:00	320-28275	1	15.1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.80	UG_KG	M		PR	TRG					00000000	SO			5.0	0.15	0.35	0.58	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:24:00	320-28275	1	15.1			13C4 PFHXS	79	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.8	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:24:00	320-28275	1	15.1			13C4 PFOS	69	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.8	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:24:00	320-28275	1	15.1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.35	UG_KG	UM		PR	TRG					00000000	SO			5.0	0.12	0.35	0.47	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:24:00	320-28275	1	15.1			18O2 PFHXS	74	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	5.8	12	12	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:31:00	320-28275	1	20.4			Perfluorooctanoic acid (PFOA)	335-67-1		0.14	UG_KG	JM		PR	TRG					00000000	SO			5.0	0.13	0.38	0.63	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:31:00	320-28275	1	20.4			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.38	UG_KG	U		PR	TRG					00000000	SO			5.0	0.16	0.38	0.63	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:31:00	320-28275	1	20.4			13C4 PFOA	77	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.3	13	13	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:31:00	320-28275	1	20.4			13C4 PFOS	32	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.3	13	13	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:31:00	320-28275	1	20.4			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.38	UG_KG	U		PR	TRG					00000000	SO			5.0	0.13	0.38	0.50	320-2827	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-T45_2003-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/11/201	05/15/2017		20170518	10:15:00	20170525	23:31:00	320-28275	1	20.4			18O2 PFHXS	64	PCT_REC					PR	SURR		SLSA	150	25	00000000	SO			5.0	6.3	13	13	320-2827	320-166365		
N624701	6JM01		MERIDIAN	DPTTankBlank-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/11/201	05/15/2017		20170517	14:18:00	20170519	07:14:00	320-28275	1				Perfluorooctanoic acid (PFOA)	335-67-1		0.0016	UG_L	U		PR	TRG					00000000	AQ (Weird)			5.0	0.0006	0.0016	0.002	320-2827	320-165301		
N624701	6JM01		MERIDIAN	DPTTankBlank-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/11/201	05/15/2017		20170517	14:18:00	20170519	07:14:00	320-28275	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0024	UG_L	U		PR	TRG					00000000	AQ (Weird)			5.0	0.001	0.0024	0.0032	320-2827	320-165301		
N624701	6JM01		MERIDIAN	DPTTankBlank-051117	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/11/201	05/15/

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_I	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_R	Validator_	Val_Date
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:24:00	320-28275	1	18.8		13C4 PFOA	13C4 PFOA	75	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	6.1	12	12	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:24:00	320-28275	1	18.8		13C4 PFOS	13C4 PFOS	41	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	6.1	12	12	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:24:00	320-28275	1	18.8		Perfluorobutanesulfonic acid (PFBS)	375-73-5	101	PCT_REC			PR	TRG	MSA	150	50	00000000				5.0	0.13	0.37	0.49	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-MS	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MS	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:24:00	320-28275	1	18.8		18O2 PFHXS	18O2 PFHXS	70	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	6.1	12	12	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:31:00	320-28275	1	18.8		Perfluorooctanoic acid (PFOA)	335-67-1	95	PCT_REC			PR	TRG	MSP	140	60	00000000				5.0	0.12	0.36	0.61	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:31:00	320-28275	1	18.8		Perfluorooctane Sulfonate (PFOS)	1763-23-1	98	PCT_REC			PR	TRG	MSP	140	60	00000000				5.0	0.15	0.36	0.61	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:31:00	320-28275	1	18.8		13C4 PFOA	13C4 PFOA	75	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	6.1	12	12	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:31:00	320-28275	1	18.8		13C4 PFOS	13C4 PFOS	45	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	6.1	12	12	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:31:00	320-28275	1	18.8		Perfluorobutanesulfonic acid (PFBS)	375-73-5	109	PCT_REC			PR	TRG	MSP	150	50	00000000				5.0	0.13	0.36	0.49	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MEAFF-Unknown5-SB01-0204-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	05/11/201	05/15/2017			20170518	10:15:00	20170525	22:31:00	320-28275	1	18.8		18O2 PFHXS	18O2 PFHXS	73	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	6.1	12	12	320-28275	320-166365		
N624701	6JM01		MERIDIAN	LCS 320-164983/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:59:00	LCS 320-16	1			Perfluorooctanoic acid (PFOA)	335-67-1	94	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	0.75	2.0	2.5	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCS 320-164983/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:59:00	LCS 320-16	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	92	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	1.3	3.0	4.0	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCS 320-164983/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:59:00	LCS 320-16	1			13C4 PFOA	13C4 PFOA	117	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCS 320-164983/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:59:00	LCS 320-16	1			13C4 PFOS	13C4 PFOS	106	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCS 320-164983/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:59:00	LCS 320-16	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	103	PCT_REC			PR	TRG	LSA	150	50	00000000				5.0	0.92	2.0	2.5	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCS 320-164983/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:59:00	LCS 320-16	1			18O2 PFHXS	18O2 PFHXS	102	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCS 320-165098/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	22:01:00	LCS 320-16	1			Perfluorooctanoic acid (PFOA)	335-67-1	95	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	0.10	0.30	0.50	320-28275	320-166365		
N624701	6JM01		MERIDIAN	LCS 320-165098/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	22:01:00	LCS 320-16	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	94	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	0.13	0.30	0.50	320-28275	320-166365		
N624701	6JM01		MERIDIAN	LCS 320-165098/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	22:01:00	LCS 320-16	1			13C4 PFOA	13C4 PFOA	96	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-28275	320-166365		
N624701	6JM01		MERIDIAN	LCS 320-165098/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	22:01:00	LCS 320-16	1			13C4 PFOS	13C4 PFOS	83	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	5.0	10	10	320-28275	320-166365		
N624701	6JM01		MERIDIAN	LCS 320-165098/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	22:01:00	LCS 320-16	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	102	PCT_REC			PR	TRG	LSA	150	50	00000000				5.0	0.10	0.30	0.40	320-28275	320-166365		
N624701	6JM01		MERIDIAN	LCS 320-165098/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	22:01:00	LCS 320-16	1			18O2 PFHXS	18O2 PFHXS	83	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	5.0	10	10	320-28275	320-166365		
N624701	6JM01		MERIDIAN	LCSD 320-164983/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	07:06:00	LCSD 320-1	1			Perfluorooctanoic acid (PFOA)	335-67-1	94	PCT_REC			PR	TRG	LSP	140	60	00000000				5.0	0.75	2.0	2.5	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCSD 320-164983/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	07:06:00	LCSD 320-1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	94	PCT_REC			PR	TRG	LSP	140	60	00000000				5.0	1.3	3.0	4.0	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCSD 320-164983/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	07:06:00	LCSD 320-1	1			13C4 PFOA	13C4 PFOA	116	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCSD 320-164983/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	07:06:00	LCSD 320-1	1			13C4 PFOS	13C4 PFOS	104	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCSD 320-164983/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	07:06:00	LCSD 320-1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	104	PCT_REC			PR	TRG	LSP	150	50	00000000				5.0	0.92	2.0	2.5	320-28275	320-165301		
N624701	6JM01		MERIDIAN	LCSD 320-164983/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	07:06:00	LCSD 320-1	1			18O2 PFHXS	18O2 PFHXS	101	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	MB 320-164983/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:51:00	MB 320-16	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.002	UG_L	U		PR	TRG				00000000				5.0	0.00075	0.002	0.0025	320-28275	320-165301		
N624701	6JM01		MERIDIAN	MB 320-164983/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:51:00	MB 320-16	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.003	UG_L	U		PR	TRG				00000000				5.0	0.0013	0.003	0.004	320-28275	320-165301		
N624701	6JM01		MERIDIAN	MB 320-164983/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:51:00	MB 320-16	1			13C4 PFOA	13C4 PFOA	123	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	MB 320-164983/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:51:00	MB 320-16	1			13C4 PFOS	13C4 PFOS	106	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	MB 320-164983/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:51:00	MB 320-16	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.002	UG_L	U		PR	TRG				00000000				5.0	0.00092	0.002	0.0025	320-28275	320-165301		
N624701	6JM01		MERIDIAN	MB 320-164983/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/17/201	05/17/2017			20170517	14:18:00	20170519	06:51:00	MB 320-16	1			18O2 PFHXS	18O2 PFHXS	108	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-28275	320-165301		
N624701	6JM01		MERIDIAN	MB 320-165098/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	21:53:00	MB 320-16	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.30	UG_KG	U		PR	TRG				00000000				5.0	0.10	0.30	0.50	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MB 320-165098/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	21:53:00	MB 320-16	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.30	UG_KG	U		PR	TRG				00000000				5.0	0.13	0.30	0.50	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MB 320-165098/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	21:53:00	MB 320-16	1			13C4 PFOA	13C4 PFOA	96	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	5.0	10	10	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MB 320-165098/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	21:53:00	MB 320-16	1			13C4 PFOS	13C4 PFOS	82	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	5.0	10	10	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MB 320-165098/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	21:53:00	MB 320-16	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.30	UG_KG	U		PR	TRG				00000000				5.0	0.10	0.30	0.40	320-28275	320-166365		
N624701	6JM01		MERIDIAN	MB 320-165098/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/18/201	05/18/2017			20170518	10:15:00	20170525	21:53:00	MB 320-16	1			18O2 PFHXS	18O2 PFHXS	84	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	5.0	10	10	320-28275	320-166365		
N624701	6JM01		MERIDIAN	Rig1_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:40:00	320-28427	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.002	UG_L	U		PR	TRG				00000000	AQ (Weird)			5.0	0.00073	0.002	0.0024	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig1_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:40:00	320-28427	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0029	UG_L	U		PR	TRG				00000000	AQ (Weird)			5.0	0.0012	0.0029	0.0039	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig1_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:40:00	320-28427	1			13C4 PFOA	13C4 PFOA	80	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	49	98	98	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig1_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:40:00	320-28427	1			13C4 PFOS	13C4 PFOS	99	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	49	98	98	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig1_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:40:00	320-28427	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.002	UG_L	UM		PR	TRG				00000000	AQ (Weird)			5.0	0.0009	0.002	0.0024	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig1_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:40:00	320-28427	1			18O2 PFHXS	18O2 PFHXS	111	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	49	98	98	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig2_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:47:00	320-28427	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.0034	UG_L	M		PR	TRG				00000000	AQ (Weird)			5.0	0.00073	0.002	0.0024	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig2_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:47:00	320-28427	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0038	UG_L	J		PR	TRG				00000000	AQ (Weird)			5.0	0.0012	0.0029	0.0039	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig2_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:47:00	320-28427	1			13C4 PFOA	13C4 PFOA	79	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	49	98	98	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig2_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:47:00	320-28427	1			13C4 PFOS	13C4 PFOS	86	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	49	98	98	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig2_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:47:00	320-28427	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.002	UG_L	UM		PR	TRG				00000000	AQ (Weird)			5.0	0.0009	0.002	0.0024	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Rig2_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:47:00	320-28427	1			18O2 PFHXS	18O2 PFHXS	101	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	49	98	98	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Grout Truck_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:55:00	320-28427	1			Perfluorooctanoic acid (PFOA)	335-67-1	0.0018	UG_L	U		PR	TRG				00000000	AQ (Weird)			5.0	0.00066	0.0018	0.0022	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Grout Truck_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:55:00	320-28427	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0011	UG_L	JM		PR	TRG				00000000	AQ (Weird)			5.0	0.0011	0.0027	0.0036	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Grout Truck_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:55:00	320-28427	1			13C4 PFOA	13C4 PFOA	77	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	44	89	0.089	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Grout Truck_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:55:00	320-28427	1			13C4 PFOS	13C4 PFOS	102	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	44	89	0.089	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Grout Truck_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:55:00	320-28427	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.0018	UG_L	UM		PR	TRG				00000000	AQ (Weird)			5.0	0.00082	0.0018	0.0022	320-28427	320-168409		
N624701	6JM01		MERIDIAN	Grout Truck_Blank	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	05/18/201	05/20/2017			20170525	15:37:00	20170609	01:55:00	320-28427	1			18O2 PFHXS	18O2 PFHXS	112	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Weird)			5.0	44	89	89	320-28427	320-168409		
N624701	6JM01		MERIDIAN	LCS 320-166258/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	05/25/201	05/25/2017			20170525	15:37:00	20170609	01:01:00	LCS 320-16	1			Perfluorooctanoic acid (PFOA)	335-67-1	98	PCT_REC			PR	TRG	LSA	140	60	00000000	GW			5.0	0.75	2.0	2.5	320-28427	320-171594		
N624701	6JM01		MERIDIAN	LCS 320-166258/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	05/25/201	05/25/2017			20170525	15:37:00	20170609	01:01:00	LCS 320-16	1			Perfluorooctane Sulfonate (PFOS

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_ID	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_I	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_R	Validator_	Val_Date
N6247016	JM01		MERIDIAN	MEAFF-UNKN5MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	00:56:00	320-29267	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0062	UG_L	M		PR	TRG									5.0	0.00074	0.002	0.0025	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-UNKN5MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	00:56:00	320-29267	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0068	UG_L			PR	TRG									5.0	0.0013	0.003	0.004	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-UNKN5MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	00:56:00	320-29267	1	1			13C4 PFOA	13C4 PFOA		83	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	49	99	99	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-UNKN5MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	00:56:00	320-29267	1	1			13C4 PFOS	13C4 PFOS		112	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	49	99	99	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-UNKN5MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	00:56:00	320-29267	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.03	UG_L			PR	TRG									5.0	0.00091	0.002	0.0025	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-UNKN5MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	00:56:00	320-29267	1	1			18O2 PFHXS	18O2 PFHXS		115	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	49	99	99	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:03:00	320-29267	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		1.3	UG_L	ME		PR	TRG									5.0	0.00071	0.0019	0.0024	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:03:00	320-29267	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.19	UG_L			PR	TRG									5.0	0.0012	0.0029	0.0038	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:03:00	320-29267	1	1			13C4 PFOA	13C4 PFOA		67	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	48	95	95	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:03:00	320-29267	1	1			13C4 PFOS	13C4 PFOS		96	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	48	95	95	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:03:00	320-29267	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		2.6	UG_L	E		PR	TRG									5.0	0.0088	0.0019	0.0024	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:03:00	320-29267	1	1			18O2 PFHXS	18O2 PFHXS		18	PCT_REC	Q		PR	SURR	SLSA	150	25	00000000	GW			5.0	48	95	95	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	18:25:00	320-29267	2	2			Perfluorooctanoic acid (PFOA)	335-67-1		1.9	UG_L	DM		PR	TRG									5.0	0.014	0.038	0.048	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	18:25:00	320-29267	2	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.19	UG_L	D		PR	TRG									5.0	0.024	0.057	0.076	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	18:25:00	320-29267	2	2			13C4 PFOA	13C4 PFOA		117	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	950	1900	1900	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	18:25:00	320-29267	2	2			13C4 PFOS	13C4 PFOS		102	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	950	1900	1900	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	18:25:00	320-29267	2	2			18O2 PFHXS	18O2 PFHXS		74	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	950	1900	1900	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170630	12:20:00	320-29267	3	3			Perfluorooctanoic acid (PFOA)	335-67-1		1.8	UG_L	DM		PR	TRG									5.0	0.036	0.095	0.12	320-29267	320-171948		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170630	12:20:00	320-29267	3	3			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.19	UG_L	D		PR	TRG									5.0	0.061	0.14	0.19	320-29267	320-171948		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170630	12:20:00	320-29267	3	3			13C4 PFOA	13C4 PFOA		96	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	2400	4800	4800	320-29267	320-171948		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170630	12:20:00	320-29267	3	3			13C4 PFOS	13C4 PFOS		86	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	2400	4800	4800	320-29267	320-171948		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170630	12:20:00	320-29267	3	3			Perfluorobutanesulfonic acid (PFBS)	375-73-5		8.2	UG_L	D		PR	TRG									5.0	0.044	0.095	0.12	320-29267	320-171948		
N6247016	JM01		MERIDIAN	MEAFF-T4SC-05-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL2	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170630	12:20:00	320-29267	3	3			18O2 PFHXS	18O2 PFHXS		65	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	2400	4800	4800	320-29267	320-171948		
N6247016	JM01		MERIDIAN	MEAFF-FD06-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170623	16:59:00	20170628	09:39:00	320-29267	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0045	UG_L	M		PR	TRG									5.0	0.00066	0.0018	0.0022	320-29267	320-171335		
N6247016	JM01		MERIDIAN	MEAFF-FD06-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170623	16:59:00	20170628	09:39:00	320-29267	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0027	UG_L	UM		PR	TRG									5.0	0.0011	0.0027	0.0035	320-29267	320-171335		
N6247016	JM01		MERIDIAN	MEAFF-FD06-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170623	16:59:00	20170628	09:39:00	320-29267	1	1			13C4 PFOA	13C4 PFOA		43	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	44	88	88	320-29267	320-171335		
N6247016	JM01		MERIDIAN	MEAFF-FD06-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170623	16:59:00	20170628	09:39:00	320-29267	1	1			13C4 PFOS	13C4 PFOS		105	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	44	88	88	320-29267	320-171335		
N6247016	JM01		MERIDIAN	MEAFF-FD06-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170623	16:59:00	20170628	09:39:00	320-29267	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0016	UG_L	J		PR	TRG									5.0	0.00081	0.0018	0.0022	320-29267	320-171335		
N6247016	JM01		MERIDIAN	MEAFF-FD06-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170623	16:59:00	20170628	09:39:00	320-29267	1	1			18O2 PFHXS	18O2 PFHXS		99	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	44	88	88	320-29267	320-171335		
N6247016	JM01		MERIDIAN	MEAFF-TA-4-SOUTHMW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:10:00	320-29267	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0025	UG_L	M		PR	TRG									5.0	0.00073	0.0019	0.0024	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-TA-4-SOUTHMW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:10:00	320-29267	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0029	UG_L	UM		PR	TRG									5.0	0.0012	0.0029	0.0039	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-TA-4-SOUTHMW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:10:00	320-29267	1	1			13C4 PFOA	13C4 PFOA		99	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	49	97	97	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-TA-4-SOUTHMW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:10:00	320-29267	1	1			13C4 PFOS	13C4 PFOS		107	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	49	97	97	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-TA-4-SOUTHMW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:10:00	320-29267	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.002	UG_L	JM		PR	TRG									5.0	0.00089	0.0019	0.0024	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-TA-4-SOUTHMW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:10:00	320-29267	1	1			18O2 PFHXS	18O2 PFHXS		103	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	49	97	97	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB08-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:17:00	320-29267	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0018	UG_L	U		PR	TRG									00000000	AQ (Field Blanks)		5.0	0.00067	0.0018	0.0022	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB08-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:17:00	320-29267	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0027	UG_L	U		PR	TRG									00000000	AQ (Field Blanks)		5.0	0.0011	0.0027	0.0036	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB08-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:17:00	320-29267	1	1			13C4 PFOA	13C4 PFOA		124	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0	45	89	89	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB08-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:17:00	320-29267	1	1			13C4 PFOS	13C4 PFOS		102	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0	45	89	89	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB08-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:17:00	320-29267	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0018	UG_L	UM		PR	TRG									00000000	AQ (Field Blanks)		5.0	0.00082	0.0018	0.0022	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB08-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:17:00	320-29267	1	1			18O2 PFHXS	18O2 PFHXS		107	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0	45	89	89	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB09-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:24:00	320-29267	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0018	UG_L	UM		PR	TRG									00000000	AQ (Field Blanks)		5.0	0.00068	0.0018	0.0023	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB09-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:24:00	320-29267	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0046	UG_L			PR	TRG									00000000	AQ (Field Blanks)		5.0	0.0012	0.0027	0.0036	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB09-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:24:00	320-29267	1	1			13C4 PFOA	13C4 PFOA		143	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0	46	91	91	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB09-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:24:00	320-29267	1	1			13C4 PFOS	13C4 PFOS		106	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0	46	91	91	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB09-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:24:00	320-29267	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0018	UG_L	U		PR	TRG									00000000	AQ (Field Blanks)		5.0	0.00084	0.0018	0.0023	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-EB09-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/17/201	06/20/2017			20170624	12:27:00	20170629	01:24:00	320-29267	1	1			18O2 PFHXS	18O2 PFHXS		116	PCT_REC			PR	SURR	SLSA	150	25	00000000	AQ (Field Blanks)			5.0	46	91	91	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	01:30:00	320-29267	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.009	UG_L	M		PR	TRG									5.0	0.00071	0.0019	0.0024	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	01:30:00	320-29267	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.72	UG_L	E		PR	TRG									5.0	0.0012	0.0029	0.0038	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	01:30:00	320-29267	1	1			13C4 PFOA	13C4 PFOA		108	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	48	95	95	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	01:30:00	320-29267	1	1			13C4 PFOS	13C4 PFOS		92	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	48	95	95	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	01:30:00	320-29267	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0028	UG_L			PR	TRG									5.0	0.00087	0.0019	0.0024	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	01:30:00	320-29267	1	1			18O2 PFHXS	18O2 PFHXS		119	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	48	95	95	320-29267	320-171594		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	18:32:00	320-29267	2	2			Perfluorooctanoic acid (PFOA)	335-67-1		0.0096	UG_L	JDM		PR	TRG									5.0	0.0036	0.0095	0.012	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	18:32:00	320-29267	2	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.77	UG_L	D		PR	TRG									5.0	0.061	0.014	0.019	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	18:32:00	320-29267	2	2			13C4 PFOA	13C4 PFOA		119	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	240	480	480	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	18:32:00	320-29267	2	2			13C4 PFOS	13C4 PFOS		122	PCT_REC			PR	SURR	SLSA	150	25	00000000	GW			5.0	240	480	480	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	DL1	REG	W	4	06/18/201	06/20/2017			20170624	12:27:00	20170629	18:32:00	320-29267	2	2			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0095	UG_L	U		PR	TRG									5.0	0.0044	0.0095	0.012	320-29267	320-171828		
N6247016	JM01		MERIDIAN	MEAFF-T2C-1996MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Am

Contract_ID	O_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_B	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_L	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N624706	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	MSD	S	4	06/18/201	06/20/2017			20170701	09:40:00	20170719	00:57:00	320-29267	1	1	7.3		18O2 PFHXS	18O2 PFHXS		PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	5.4	11	11	320-29267	320-174824		
N624706	JM01		MERIDIAN	LCS 320-170766/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:25:00	LCS 320-11	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		104	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	0.75	2.0	2.5	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCS 320-170766/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:25:00	LCS 320-11	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		112	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	1.3	3.0	4.0	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCS 320-170766/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:25:00	LCS 320-11	1	1			13C4 PFOA	13C4 PFOA		117	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCS 320-170766/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:25:00	LCS 320-11	1	1			13C4 PFOS	13C4 PFOS		101	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCS 320-170766/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:25:00	LCS 320-11	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		113	PCT_REC			PR	TRG	LSA	150	50	00000000				5.0	0.92	2.0	2.5	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCS 320-170766/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:25:00	LCS 320-11	1	1			18O2 PFHXS	18O2 PFHXS		103	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCS 320-170805/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:40:00	LCS 320-11	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		103	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	0.75	2.0	2.5	320-29267	320-171594		
N624706	JM01		MERIDIAN	LCS 320-170805/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:40:00	LCS 320-11	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		111	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	1.3	3.0	4.0	320-29267	320-171594		
N624706	JM01		MERIDIAN	LCS 320-170805/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:40:00	LCS 320-11	1	1			13C4 PFOA	13C4 PFOA		125	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171594		
N624706	JM01		MERIDIAN	LCS 320-170805/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:40:00	LCS 320-11	1	1			13C4 PFOS	13C4 PFOS		107	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171594		
N624706	JM01		MERIDIAN	LCS 320-170805/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:40:00	LCS 320-11	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		107	PCT_REC			PR	TRG	LSA	150	50	00000000				5.0	0.92	2.0	2.5	320-29267	320-171594		
N624706	JM01		MERIDIAN	LCS 320-170805/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BS	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:40:00	LCS 320-11	1	1			18O2 PFHXS	18O2 PFHXS		116	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171594		
N624706	JM01		MERIDIAN	LCS 320-172026/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:08:00	LCS 320-11	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		98	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	0.10	0.30	0.50	320-29267	320-174824		
N624706	JM01		MERIDIAN	LCS 320-172026/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:08:00	LCS 320-11	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		112	PCT_REC			PR	TRG	LSA	140	60	00000000				5.0	0.13	0.30	0.50	320-29267	320-174824		
N624706	JM01		MERIDIAN	LCS 320-172026/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:08:00	LCS 320-11	1	1			13C4 PFOA	13C4 PFOA		118	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	5.0	10	10	320-29267	320-174824		
N624706	JM01		MERIDIAN	LCS 320-172026/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:08:00	LCS 320-11	1	1			13C4 PFOS	13C4 PFOS		90	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	5.0	10	10	320-29267	320-174824		
N624706	JM01		MERIDIAN	LCS 320-172026/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:08:00	LCS 320-11	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		115	PCT_REC			PR	TRG	LSA	150	50	00000000				5.0	0.10	0.30	0.40	320-29267	320-174824		
N624706	JM01		MERIDIAN	LCS 320-172026/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:08:00	LCS 320-11	1	1			18O2 PFHXS	18O2 PFHXS		96	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	5.0	10	10	320-29267	320-174824		
N624706	JM01		MERIDIAN	LCSD 320-170766/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:32:00	LCSD 320-1	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		102	PCT_REC			PR	TRG	LSP	140	60	00000000				5.0	0.75	2.0	2.5	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCSD 320-170766/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:32:00	LCSD 320-1	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		115	PCT_REC			PR	TRG	LSP	140	60	00000000				5.0	1.3	3.0	4.0	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCSD 320-170766/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:32:00	LCSD 320-1	1	1			13C4 PFOA	13C4 PFOA		117	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCSD 320-170766/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:32:00	LCSD 320-1	1	1			13C4 PFOS	13C4 PFOS		98	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCSD 320-170766/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:32:00	LCSD 320-1	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		115	PCT_REC			PR	TRG	LSP	150	50	00000000				5.0	0.92	2.0	2.5	320-29267	320-171335		
N624706	JM01		MERIDIAN	LCSD 320-170766/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:32:00	LCSD 320-1	1	1			18O2 PFHXS	18O2 PFHXS		101	PCT_REC			PR	SURR	SLSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	MB 320-170766/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:18:00	MB 320-11	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		104	PCT_REC			PR	TRG				00000000				5.0	0.00075	0.002	0.0025	320-29267	320-171335		
N624706	JM01		MERIDIAN	MB 320-170766/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:18:00	MB 320-11	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		103	PCT_REC			PR	TRG				00000000				5.0	0.0013	0.003	0.004	320-29267	320-171335		
N624706	JM01		MERIDIAN	MB 320-170766/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:18:00	MB 320-11	1	1			13C4 PFOA	13C4 PFOA		124	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	MB 320-170766/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:18:00	MB 320-11	1	1			13C4 PFOS	13C4 PFOS		104	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	MB 320-170766/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:18:00	MB 320-11	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		104	PCT_REC			PR	TRG				00000000				5.0	0.00092	0.002	0.0025	320-29267	320-171335		
N624706	JM01		MERIDIAN	MB 320-170766/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	16:59:00	20170628	09:18:00	MB 320-11	1	1			18O2 PFHXS	18O2 PFHXS		102	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-29267	320-171335		
N624706	JM01		MERIDIAN	MB 320-170805/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:33:00	MB 320-11	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.002	UG_L	U		PR	TRG				00000000				5.0	0.00075	0.002	0.0025	320-29267	320-171594		
N624706	JM01		MERIDIAN	MB 320-170805/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:33:00	MB 320-11	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.003	UG_L	U		PR	TRG				00000000				5.0	0.0013	0.003	0.004	320-29267	320-171594		
N624706	JM01		MERIDIAN	MB 320-170805/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:33:00	MB 320-11	1	1			13C4 PFOA	13C4 PFOA		133	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-29267	320-171594		
N624706	JM01		MERIDIAN	MB 320-170805/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:33:00	MB 320-11	1	1			13C4 PFOS	13C4 PFOS		108	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-29267	320-171594		
N624706	JM01		MERIDIAN	MB 320-170805/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:33:00	MB 320-11	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.002	UG_L	U		PR	TRG				00000000				5.0	0.00092	0.002	0.0025	320-29267	320-171594		
N624706	JM01		MERIDIAN	MB 320-170805/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/24/201	06/24/2017			20170624	12:27:00	20170628	23:33:00	MB 320-11	1	1			18O2 PFHXS	18O2 PFHXS		114	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	50	100	100	320-29267	320-171594		
N624706	JM01		MERIDIAN	MB 320-172026/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:01:00	MB 320-11	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.30	UG_KG	U		PR	TRG				00000000				5.0	0.10	0.30	0.50	320-29267	320-174824		
N624706	JM01		MERIDIAN	MB 320-172026/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:01:00	MB 320-11	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.30	UG_KG	U		PR	TRG				00000000				5.0	0.13	0.30	0.50	320-29267	320-174824		
N624706	JM01		MERIDIAN	MB 320-172026/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:01:00	MB 320-11	1	1			13C4 PFOA	13C4 PFOA		128	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	5.0	10	10	320-29267	320-174824		
N624706	JM01		MERIDIAN	MB 320-172026/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:01:00	MB 320-11	1	1			13C4 PFOS	13C4 PFOS		93	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	5.0	10	10	320-29267	320-174824		
N624706	JM01		MERIDIAN	MB 320-172026/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:01:00	MB 320-11	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.30	UG_KG	U		PR	TRG				00000000				5.0	0.10	0.30	0.40	320-29267	320-174824		
N624706	JM01		MERIDIAN	MB 320-172026/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	07/01/201	07/01/2017			20170701	09:40:00	20170719	00:01:00	MB 320-11	1	1			18O2 PFHXS	18O2 PFHXS		93	PCT_REC			PR	SURR	SMSA	150	25	00000000				5.0	5.0	10	10	320-29267	320-174824		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:01:00	320-28286	1	1	11.1		Perfluorooctanoic acid (PFOA)	335-67-1		0.33	UG_KG	U		PR	TRG				00000000	SO			5.0	0.11	0.33	0.56	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:01:00	320-28286	1	1	11.1		Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.33	UG_KG	U		PR	TRG				00000000	SO			5.0	0.14	0.33	0.56	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:01:00	320-28286	1	1	11.1		13C4 PFOA	13C4 PFOA		92	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:01:00	320-28286	1	1	11.1		13C4 PFOS	13C4 PFOS		45	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:01:00	320-28286	1	1	11.1		Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.33	UG_KG	UM		PR	TRG				00000000	SO			5.0	0.11	0.33	0.45	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:01:00	320-28286	1	1	11.1		18O2 PFHXS	18O2 PFHXS		72	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0	5.6	11	11	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:09:00	320-28286	1	1	13.5		Perfluorooctanoic acid (PFOA)	335-67-1		0.34	UG_KG	U		PR	TRG				00000000	SO			5.0	0.12	0.34	0.57	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:09:00	320-28286	1	1	13.5		Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.34	UG_KG	U		PR	TRG				00000000	SO			5.0	0.14	0.34	0.57	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:09:00	320-28286	1	1	13.5		13C4 PFOA	13C4 PFOA		84	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0	5.7	11	11	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:09:00	320-28286	1	1	13.5		13C4 PFOS	13C4 PFOS		39	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0	5.7	11	11	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:09:00	320-28286	1	1	13.5		Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.34	UG_KG	U		PR	TRG				00000000	SO			5.0	0.12	0.34	0.45	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-T-4SC_2005-SB01-0204	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:09:00	320-28286	1	1	13.5		18O2 PFHXS	18O2 PFHXS		68	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0	5.7	11	11	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-Unknown11-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:16:00	320-28286	1	1	11.8		Perfluorooctanoic acid (PFOA)	335-67-1		0.34	UG_KG	UM		PR	TRG				00000000	SO			5.0	0.12	0.34	0.57	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-Unknown11-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:16:00	320-28286	1	1	11.8		Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.24	UG_KG	J		PR	TRG				00000000	SO			5.0	0.14	0.34	0.57	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-Unknown11-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:16:00	320-28286	1	1	11.8		13C4 PFOA	13C4 PFOA		88	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0	5.7	11	11	320-28286	320-168107		
N624706	JM01		MERIDIAN	MEAFF-Unknown11-SB01-0001	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	DRY	METHOD	000	REG	S	4	05/13/201	05/16/2017			20170519	08:07:00	20170607	17:16:00	320-28286	1	1	11.8		13C4 PFOS	13C4 PFOS		51	PCT_REC			PR	SURR	SLSA	150	25	00000000	SO			5.0

| Contract_ID | DO_CTO_I | Phase | Installatio | Sample_Name | CH2M_Co | Analysis_G | Analytical | PRC_Code | Lab_Code | Lab_Name | Leachate_ | Sample_B | Extraction | Result_Ty | Lab_QC_T | Sample_M | QC_Level | DateTime | Date_Rec | Leachate_ | Leachate_ | Extraction | Extraction | Analysis_D | Analysis_T | Lab_Samp | Dilution | Run_Num | Percent_M | Percent_L | Chem_Name | Analyte_I | Analyte_V | Original_A | Result_Un | Lab_Quali | Validator_ | GC_Colum | Analysis_R | Result_Na | QC_Contr | QC_Accur | QC_Accur | Control_LI | QC_Narra | MDL | Detection | QSM_Ver | DL | LOD | LOQ | SDG | Analysis_R | Validator_ | Val_Date |
|---|---|---

Contract_ID	DO_CTO_I	Phase	Lab_Sample_	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_L	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N624706	JM01		MERIDIAN	LCS 320-165234/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:53:00	LCS 320-16	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		110	PCT_REC			PR	TRG		LSA	140	60	00000000				5.0	0.13	0.30	0.50	320-28282	320-168107		
N624706	JM01		MERIDIAN	LCS 320-165234/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:53:00	LCS 320-16	1	1			13C4 PFOA	13C4 PFOA		95	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-168107		
N624706	JM01		MERIDIAN	LCS 320-165234/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:53:00	LCS 320-16	1	1			13C4 PFOS	13C4 PFOS		74	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-168107		
N624706	JM01		MERIDIAN	LCS 320-165234/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:53:00	LCS 320-16	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		113	PCT_REC			PR	TRG		LSA	150	50	00000000				5.0	0.10	0.30	0.40	320-28282	320-168107		
N624706	JM01		MERIDIAN	LCS 320-165234/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:53:00	LCS 320-16	1	1			18O2 PFHXS	18O2 PFHXS		87	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-168107		
N624706	JM01		MERIDIAN	LCS 320-165287/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:50:00	LCS 320-16	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		100	PCT_REC			PR	TRG		LSA	140	60	00000000				5.0	0.10	0.30	0.50	320-28282	320-166071		
N624706	JM01		MERIDIAN	LCS 320-165287/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:50:00	LCS 320-16	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		93	PCT_REC			PR	TRG		LSA	140	60	00000000				5.0	0.13	0.30	0.50	320-28282	320-166071		
N624706	JM01		MERIDIAN	LCS 320-165287/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:50:00	LCS 320-16	1	1			13C4 PFOA	13C4 PFOA		95	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-166071		
N624706	JM01		MERIDIAN	LCS 320-165287/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:50:00	LCS 320-16	1	1			13C4 PFOS	13C4 PFOS		86	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-166071		
N624706	JM01		MERIDIAN	LCS 320-165287/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:50:00	LCS 320-16	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		102	PCT_REC			PR	TRG		LSA	150	50	00000000				5.0	0.10	0.30	0.40	320-28282	320-166071		
N624706	JM01		MERIDIAN	LCS 320-165287/2-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	BS	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:50:00	LCS 320-16	1	1			18O2 PFHXS	18O2 PFHXS		83	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-166071		
N624706	JM01		MERIDIAN	LCSD 320-165207/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	06:04:00	LCSD 320-1	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		95	PCT_REC			PR	TRG		LSP	140	60	00000000				5.0	0.75	2.0	2.5	320-28282	320-165487		
N624706	JM01		MERIDIAN	LCSD 320-165207/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	06:04:00	LCSD 320-1	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		93	PCT_REC			PR	TRG		LSP	140	60	00000000				5.0	1.3	3.0	4.0	320-28282	320-165487		
N624706	JM01		MERIDIAN	LCSD 320-165207/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	06:04:00	LCSD 320-1	1	1			13C4 PFOA	13C4 PFOA		114	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28282	320-165487		
N624706	JM01		MERIDIAN	LCSD 320-165207/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	06:04:00	LCSD 320-1	1	1			13C4 PFOS	13C4 PFOS		102	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28282	320-165487		
N624706	JM01		MERIDIAN	LCSD 320-165207/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	06:04:00	LCSD 320-1	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		105	PCT_REC			PR	TRG		LSP	150	50	00000000				5.0	0.92	2.0	2.5	320-28282	320-165487		
N624706	JM01		MERIDIAN	LCSD 320-165207/3-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	BSD	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	06:04:00	LCSD 320-1	1	1			18O2 PFHXS	18O2 PFHXS		101	PCT_REC			PR	SURR		SLSA	150	25	00000000				5.0	50	100	100	320-28282	320-165487		
N624706	JM01		MERIDIAN	MB 320-165207/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	05:49:00	MB 320-16	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.002	UG_L	U		PR	TRG					00000000				5.0	0.00075	0.002	0.0025	320-28282	320-165487		
N624706	JM01		MERIDIAN	MB 320-165207/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	05:49:00	MB 320-16	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.003	UG_L	U		PR	TRG					00000000				5.0	0.0013	0.003	0.004	320-28282	320-165487		
N624706	JM01		MERIDIAN	MB 320-165207/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	05:49:00	MB 320-16	1	1			13C4 PFOA	13C4 PFOA		124	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-28282	320-165487		
N624706	JM01		MERIDIAN	MB 320-165207/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	05:49:00	MB 320-16	1	1			13C4 PFOS	13C4 PFOS		114	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-28282	320-165487		
N624706	JM01		MERIDIAN	MB 320-165207/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	05:49:00	MB 320-16	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.002	UG_L	U		PR	TRG					00000000				5.0	0.00092	0.002	0.0025	320-28282	320-165487		
N624706	JM01		MERIDIAN	MB 320-165207/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	05/18/201	05/18/2017			20170518	17:41:00	20170520	05:49:00	MB 320-16	1	1			18O2 PFHXS	18O2 PFHXS		110	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-28282	320-165487		
N624706	JM01		MERIDIAN	MB 320-165234/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:45:00	MB 320-16	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.30	UG_KG	U		PR	TRG					00000000				5.0	0.10	0.30	0.50	320-28282	320-168107		
N624706	JM01		MERIDIAN	MB 320-165234/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:45:00	MB 320-16	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.30	UG_KG	U		PR	TRG					00000000				5.0	0.13	0.30	0.50	320-28282	320-168107		
N624706	JM01		MERIDIAN	MB 320-165234/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:45:00	MB 320-16	1	1			13C4 PFOA	13C4 PFOA		99	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-168107		
N624706	JM01		MERIDIAN	MB 320-165234/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:45:00	MB 320-16	1	1			13C4 PFOS	13C4 PFOS		75	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-168107		
N624706	JM01		MERIDIAN	MB 320-165234/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:45:00	MB 320-16	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.30	UG_KG	U		PR	TRG					00000000				5.0	0.10	0.30	0.40	320-28282	320-168107		
N624706	JM01		MERIDIAN	MB 320-165234/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	08:07:00	20170607	16:45:00	MB 320-16	1	1			18O2 PFHXS	18O2 PFHXS		91	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-168107		
N624706	JM01		MERIDIAN	MB 320-165287/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:43:00	MB 320-16	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.30	UG_KG	U		PR	TRG					00000000				5.0	0.10	0.30	0.50	320-28282	320-166071		
N624706	JM01		MERIDIAN	MB 320-165287/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:43:00	MB 320-16	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.30	UG_KG	U		PR	TRG					00000000				5.0	0.13	0.30	0.50	320-28282	320-166071		
N624706	JM01		MERIDIAN	MB 320-165287/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:43:00	MB 320-16	1	1			13C4 PFOA	13C4 PFOA		103	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-166071		
N624706	JM01		MERIDIAN	MB 320-165287/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:43:00	MB 320-16	1	1			13C4 PFOS	13C4 PFOS		83	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-166071		
N624706	JM01		MERIDIAN	MB 320-165287/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:43:00	MB 320-16	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.30	UG_KG	U		PR	TRG					00000000				5.0	0.10	0.30	0.40	320-28282	320-166071		
N624706	JM01		MERIDIAN	MB 320-165287/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	WET	METHOD	000	LB1	S	4	05/19/201	05/19/2017			20170519	09:45:00	20170524	21:43:00	MB 320-16	1	1			18O2 PFHXS	18O2 PFHXS		84	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	5.0	10	10	320-28282	320-166071		
N624706	JM01		MERIDIAN	MEAFF-T45C-2004MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/15/201	06/17/2017			20170622	08:27:00	20170628	01:56:00	320-29198	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0058	UG_L	M		PR	TRG					00000000	GW			5.0	0.00073	0.0019	0.0024	320-29198	320-171325		
N624706	JM01		MERIDIAN	MEAFF-T45C-2004MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/15/201	06/17/2017			20170622	08:27:00	20170628	01:56:00	320-29198	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.01	UG_L			PR	TRG					00000000	GW			5.0	0.0012	0.0029	0.0039	320-29198	320-171325		
N624706	JM01		MERIDIAN	MEAFF-T45C-2004MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/15/201	06/17/2017			20170622	08:27:00	20170628	01:56:00	320-29198	1	1			13C4 PFOA	13C4 PFOA		43	PCT_REC			PR	SURR		SLSA	150	25	00000000	GW			5.0	49	97	97	320-29198	320-171325		
N624706	JM01		MERIDIAN	MEAFF-T45C-2004MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/15/201	06/17/2017			20170622	08:27:00	20170628	01:56:00	320-29198	1	1			13C4 PFOS	13C4 PFOS		92	PCT_REC			PR	SURR		SLSA	150	25	00000000	GW			5.0	49	97	97	320-29198	320-171325		
N624706	JM01		MERIDIAN	MEAFF-T45C-2004MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/15/201	06/17/2017			20170622	08:27:00	20170628	01:56:00	320-29198	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.002	UG_L	J		PR	TRG					00000000	GW			5.0	0.00089	0.0019	0.0024	320-29198	320-171325		
N624706	JM01		MERIDIAN	MEAFF-T45C-2004MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/15/201	06/17/2017			20170622	08:27:00	20170628	01:56:00	320-29198	1	1			18O2 PFHXS	18O2 PFHXS		95	PCT_REC			PR	SURR		SLSA	150	25	00000000	GW			5.0	49	97	97	320-29198	320-171325		
N624706	JM01		MERIDIAN	MEAFF-E80S-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:46:00	320-29198	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0019	UG_L	U		PR	TRG					00000000	AQ (Field Blanks)			5.0	0.00072	0.0019	0.0024	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-E80S-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:46:00	320-29198	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0029	UG_L	UQ		PR	TRG					00000000	AQ (Field Blanks)			5.0	0.0012	0.0029	0.0038	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-E80S-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:46:00	320-29198	1	1			13C4 PFOA	13C4 PFOA		129	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Field Blanks)			5.0	48	96	96	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-E80S-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:46:00	320-29198	1	1			13C4 PFOS	13C4 PFOS		104	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Field Blanks)			5.0	48	96	96	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-E80S-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:46:00	320-29198	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0019	UG_L	UM		PR	TRG					00000000	AQ (Field Blanks)			5.0	0.00088	0.0019	0.0024	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-E80S-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:46:00	320-29198	1	1			18O2 PFHXS	18O2 PFHXS		106	PCT_REC			PR	SURR		SLSA	150	25	00000000	AQ (Field Blanks)			5.0	48	96	96	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-T45C-03-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:53:00	320-29198	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.002	UG_L	U		PR	TRG					00000000	GW			5.0	0.00075	0.002	0.0025	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-T45C-03-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:53:00	320-29198	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.002	UG_L	JQ		PR	TRG					00000000	GW			5.0	0.0013	0.003	0.004	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-T45C-03-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:53:00	320-29198	1	1			13C4 PFOA	13C4 PFOA		91	PCT_REC			PR	SURR		SLSA	150	25	00000000	GW			5.0	50	100	100	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-T45C-03-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:53:00	320-29198	1	1			13C4 PFOS	13C4 PFOS		107	PCT_REC			PR	SURR		SLSA	150	25	00000000	GW			5.0	50	100	100	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-T45C-03-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:53:00	320-29198	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.002	UG_L	UM		PR	TRG					00000000	GW			5.0	0.00092	0.002	0.0025	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-T45C-03-2008MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	02:53:00	320-29198	1	1			18O2 PFHXS	18O2 PFHXS		109	PCT_REC			PR	SURR		SLSA	150	25	00000000	GW			5.0	50	100	100	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-UNKN16MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	03:00:00	320-29198	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.0019	UG_L	UM		PR	TRG					00000000	GW			5.0	0.00072	0.0019	0.0024	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-UNKN16MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	03:00:00	320-29198	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		0.0029	UG_L	UMQ		PR	TRG					00000000	GW			5.0	0.0012	0.0029	0.0039	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-UNKN16MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	03:00:00	320-29198	1	1			13C4 PFOA	13C4 PFOA		63	PCT_REC			PR	SURR		SLSA	150	25	00000000	GW			5.0	48	96	96	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-UNKN16MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	03:00:00	320-29198	1	1			13C4 PFOS	13C4 PFOS		103	PCT_REC			PR	SURR		SLSA	150	25	00000000	GW			5.0	48	96	96	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-UNKN16MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	03:00:00	320-29198	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.0019	UG_L	U		PR	TRG					00000000	GW			5.0	0.00088	0.0019	0.0024	320-29198	320-171596		
N624706	JM01		MERIDIAN	MEAFF-UNKN16MW01-0617	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	REG	W	4	06/16/201	06/17/2017			20170623	08:10:00	20170629	03:00:00	320-29198	1	1			18O2 PFHXS	18O2 PFHXS		107	PCT_REC			PR	SURR		SLSA	150	25	00000000

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_B	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N624701	JM01		MERIDIAN	MB 320-170434/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/22/201	06/22/2017			20170622	08:27:00	20170628	11:29:00	MB 320-11	1				1BO2 PFHXS	1BO2 PFHXS	102	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-29198	320-171405		
N624701	JM01		MERIDIAN	MB 320-170613/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	08:10:00	20170629	02:26:00	MB 320-11	1				Perfluorooctanoic acid (PFOA)	335-67-1	0.002	UG_L	U		PR	TRG				00000000				5.0	0.00075	0.002	0.0025	320-29198	320-171596		
N624701	JM01		MERIDIAN	MB 320-170613/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	08:10:00	20170629	02:26:00	MB 320-11	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.003	UG_L	U		PR	TRG				00000000				5.0	0.0013	0.003	0.004	320-29198	320-171596		
N624701	JM01		MERIDIAN	MB 320-170613/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	08:10:00	20170629	02:26:00	MB 320-11	1				13C4 PFOA	13C4 PFOA	122	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-29198	320-171596		
N624701	JM01		MERIDIAN	MB 320-170613/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	08:10:00	20170629	02:26:00	MB 320-11	1				13C4 PFOS	13C4 PFOS	100	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-29198	320-171596		
N624701	JM01		MERIDIAN	MB 320-170613/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	08:10:00	20170629	02:26:00	MB 320-11	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.002	UG_L	UM		PR	TRG				00000000				5.0	0.00092	0.002	0.0025	320-29198	320-171596		
N624701	JM01		MERIDIAN	MB 320-170613/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	06/23/201	06/23/2017			20170623	08:10:00	20170629	02:26:00	MB 320-11	1				1BO2 PFHXS	1BO2 PFHXS	103	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-29198	320-171596		
N624701	JM01		MERIDIAN	MB 320-173923/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	07/13/201	07/13/2017			20170713	09:26:00	20170715	03:05:00	MB 320-11	1				Perfluorooctanoic acid (PFOA)	335-67-1	0.002	UG_L	UM		PR	TRG				00000000				5.0	0.00075	0.002	0.0025	320-29198	320-174335		
N624701	JM01		MERIDIAN	MB 320-173923/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	07/13/201	07/13/2017			20170713	09:26:00	20170715	03:05:00	MB 320-11	1				Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.003	UG_L	U		PR	TRG				00000000				5.0	0.0013	0.003	0.004	320-29198	320-174335		
N624701	JM01		MERIDIAN	MB 320-173923/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	07/13/201	07/13/2017			20170713	09:26:00	20170715	03:05:00	MB 320-11	1				13C4 PFOA	13C4 PFOA	136	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-29198	320-174335		
N624701	JM01		MERIDIAN	MB 320-173923/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	07/13/201	07/13/2017			20170713	09:26:00	20170715	03:05:00	MB 320-11	1				13C4 PFOS	13C4 PFOS	123	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-29198	320-174335		
N624701	JM01		MERIDIAN	MB 320-173923/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	07/13/201	07/13/2017			20170713	09:26:00	20170715	03:05:00	MB 320-11	1				Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.002	UG_L	UM		PR	TRG				00000000				5.0	0.00092	0.002	0.0025	320-29198	320-174335		
N624701	JM01		MERIDIAN	MB 320-173923/1-A	NONS	SVOA	537_MOD	ORG	TAMER	Test Amer	NONE	NA	SW3535	000	LB1	W	4	07/13/201	07/13/2017			20170713	09:26:00	20170715	03:05:00	MB 320-11	1				1BO2 PFHXS	1BO2 PFHXS	125	PCT_REC			PR	SURR		SMSA	150	25	00000000				5.0	50	100	100	320-29198	320-174335		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Dichlorodifluoromethane (Freon-12)	75-71-8	5.0	5.0	UG_KG	U	U		TRG							4.2	0.92	5.0	10.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Chloromethane	74-87-3	5.0	5.0	UG_KG	U	U		TRG							4.2	1.4	5.0	10.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Vinyl chloride	75-01-4	5.0	5.0	UG_KG	U	U		TRG							4.2	0.87	5.0	10.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Bromomethane	74-83-9	5.0	5.0	UG_KG	U	U		TRG							4.2	1.1	5.0	10.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Chloroethane	75-00-3	5.0	5.0	UG_KG	U	U		TRG							4.2	1.3	5.0	10.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Trichlorofluoromethane (Freon-11)	75-69-4	5.0	5.0	UG_KG	U	U		TRG							4.2	0.91	5.0	10.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,1-Dichloroethene	75-35-4	2.5	2.5	UG_KG	U	U		TRG							4.2	0.93	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Carbon disulfide	75-15-0	2.5	2.5	UG_KG	U	U		TRG							4.2	0.78	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	76-13-1	2.5	2.5	UG_KG	U	U		TRG							4.2	0.90	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Methylene chloride	75-09-2	12	12	UG_KG	U	U		TRG							4.2	7.9	12.	25.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Acetone	67-64-1	12	12	UG_KG	U	U		TRG							4.2	5.1	12.	25.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			trans-1,2-Dichloroethene	156-60-5	2.5	2.5	UG_KG	U	U		TRG							4.2	0.71	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Methyl-tert-butyl ether (MTBE)	1634-04-4	2.5	2.5	UG_KG	U	U		TRG							4.2	1.1	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,1-Dichloroethane	75-34-3	2.5	2.5	UG_KG	U	U		TRG							4.2	1.7	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			cis-1,2-Dichloroethene	156-59-2	2.5	2.5	UG_KG	U	U		TRG							4.2	0.91	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Chloroform	67-66-3	2.5	2.5	UG_KG	U	U		TRG							4.2	0.35	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Carbon tetrachloride	56-23-5	2.5	2.5	UG_KG	U	U		TRG							4.2	1.3	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,1,1-Trichloroethane	71-55-6	2.5	2.5	UG_KG	U	U		TRG							4.2	0.42	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			2-Butanone	78-93-3	12	12	UG_KG	U	U		TRG							4.2	5.9	12.	25.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Benzene	71-43-2	2.5	2.5	UG_KG	U	U		TRG							4.2	0.92	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Cyclohexane	110-82-7	2.5	2.5	UG_KG	U	U		TRG							4.2	1.4	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,2-Dichloroethane	107-06-2	2.5	2.5	UG_KG	U	U		TRG							4.2	1.0	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Trichloroethene	79-01-6	2.5	2.5	UG_KG	U	U		TRG							4.2	0.59	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,2-Dichloropropane	78-87-5	2.5	2.5	UG_KG	U	U		TRG							4.2	1.4	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Bromodichloromethane	75-27-4	2.5	2.5	UG_KG	U	U		TRG							4.2	0.60	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			cis-1,3-Dichloropropene	10061-01	2.5	2.5	UG_KG	U	U		TRG							4.2	0.72	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Toluene	108-88-3	2.5	2.5	UG_KG	U	U		TRG							4.2	0.58	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			4-Methyl-2-pentanone	108-10-1	12	12	UG_KG	U	U		TRG							4.2	5.9	12.	25.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Tetrachloroethene	127-18-4	2.5	2.5	UG_KG	U	U		TRG							4.2	1.2	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			trans-1,3-Dichloropropene	10061-02	2.5	2.5	UG_KG	U	U		TRG							4.2	0.86	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,1,2-Trichloroethane	79-00-5	2.5	2.5	UG_KG	U	U		TRG							4.2	0.97	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Dibromochloromethane	124-48-1	2.5	2.5	UG_KG	U	U		TRG							4.2	1.0	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,2-Dibromoethane	106-93-4	2.5	2.5	UG_KG	U	U		TRG							4.2	1.2	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			2-Hexanone	591-78-6	5.0	5.0	UG_KG	U	U		TRG							4.2	4.8	12.	25.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Chlorobenzene	108-90-7	2.5	2.5	UG_KG	U	U		TRG							4.2	0.51	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Ethylbenzene	100-41-4	2.5	2.5	UG_KG	U	U		TRG							4.2	0.65	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Xylene, total	1330-20-7	7.5	7.5	UG_KG	U	U		TRG							4.2	1.3	7.5	15.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			m- and p-Xylene	m&pXYLE	5.0	5.0	UG_KG	U	U		TRG							4.2	1.7	5.0	10.	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			o-Xylene	95-47-6	2.5	2.5	UG_KG	U	U		TRG							4.2	1.3	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Styrene	100-42-5	2.5	2.5	UG_KG	U	U		TRG							4.2	0.51	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Bromoform	75-25-2	2.5	2.5	UG_KG	U	U		TRG							4.2	0.70	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Isopropylbenzene	98-82-8	2.5	2.5	UG_KG	U	U		TRG							4.2	0.92	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,1,2,2-Tetrachloroethane	79-34-5	2.5	2.5	UG_KG	U	U		TRG							4.2	0.84	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,3-Dichlorobenzene	541-73-1	2.5	2.5	UG_KG	U	U		TRG							4.2	0.62	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,4-Dichlorobenzene	106-46-7	2.5	2.5	UG_KG	U	U		TRG							4.2	0.44	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,2-Dichlorobenzene	95-50-1	2.5	2.5	UG_KG	U	U		TRG							4.2	0.78	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,2-Dibromo-3-chloropropane	96-12-8	2.5	2.5	UG_KG	U	U		TRG							4.2	1.5	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,2,4-Trichlorobenzene	120-82-1	2.5	2.5	UG_KG	U	U		TRG							4.2	0.79	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			1,2,3-Trichlorobenzene	87-61-6	2.5	2.5	UG_KG	U	U		TRG							4.2	0.76	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035	000	BLK	S	4	03/17/201	03/17/2017			20170317	11:45:00	20170317	11:45:00	WG20153	1	1			Bromochloromethane	74-97-5	5.0	5.0	UG_KG	U	U		TRG							4.2	0.91	2.5	5.0	SK1680	WG201539		
N624701	JM01		MERIDIAN	WG201539-BLANK	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	DRY	SW5035

| Contract_ID | CTO_ID | Phase | Installation | Sample_Name | CH2M_Code | Analysis_Group | Analytical_Method | PRC_Code | Lab_Code | Lab_Name | Leachate_ID | Sample_Batch | Extraction_Method | Result_Type | Lab_QC_Type | Sample_Matrix | QC_Level | DateTime_Collected | Date_Received | Leachate_Leached | Leachate_Received | Extraction_Started | Extraction_Completed | Analysis_Batch | Analysis_Started | Analysis_Completed | Dilution_Factor | Run_Number | Percent_Moisture | Percent_Lipid | Chem_Name | Analyte_ID | Analyte_Version | Original_Result | Result_Unit | Lab_Qualifiers | Validator_Qualifiers | GC_Column | Analysis_Method | Result_Narrative | QC_Control_Limit_Source | QC_Accuracy_Bias | QC_Accuracy_Precision | Control_Limit_Source | QC_Narrative | MDL | Detection_Limit | QSM_Version | DL | LOD | LOQ | SDG | Analysis_Batch | Validator_Version | Val_Date |
|---|---|---

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_G	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N6247016	JM01		MERIDIAN	WG201342-LCS	NONE	VOA	B260C	VOA	KAS	KATAHDIN ANALYTIC	NA	SW5030	000	BS	W	4		03/14/201	03/14/2017			20170314	09:21:00	20170314	09:21:00	WG20134	1	1			Xylene, total	1330-20-7	133.	133.	UG_L	*	*		TRG		LSA	116	89	20091101				4.2	0.25	1.5	3.0	SK1680	WG201342		
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	SK1681-2	1	1			gamma-BHC (Lindane)	58-89-9	0.12	0.12	UG_L	U			TRG					IDW				4.2	0.036	0.12	0.25	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	SK1681-2	1	1			Heptachlor	76-44-8	0.12	0.12	UG_L	U			TRG					IDW				4.2	0.040	0.12	0.25	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	SK1681-2	1	1			Heptachlor epoxide	1024-57-3	0.12	0.12	UG_L	U			TRG					IDW				4.2	0.037	0.12	0.25	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	SK1681-2	1	1			Endrin	72-20-8	0.25	0.25	UG_L	U			TRG					IDW				4.2	0.042	0.25	0.50	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	SK1681-2	1	1			Methoxychlor	72-43-5	1.2	1.2	UG_L	U			TRG					IDW				4.2	0.042	1.2	2.5	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	SK1681-2	1	1			technical-Chlordane	12789-03-	1.2	1.2	UG_L	U			TRG					IDW				4.2	0.042	1.2	2.5	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:55:00	SK1681-2	1	1			Toxaphene	8001-35-2	2.5	2.5	UG_L	U			TRG					IDW				4.2	0.85	2.5	5.0	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681-1	1	1			gamma-BHC (Lindane)	58-89-9	0.12	0.12	UG_L	U			TRG					IDW				4.2	0.036	0.12	0.25	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681-1	1	1			Heptachlor	76-44-8	0.12	0.12	UG_L	U			TRG					IDW				4.2	0.040	0.12	0.25	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681-1	1	1			Heptachlor epoxide	1024-57-3	0.12	0.12	UG_L	U			TRG					IDW				4.2	0.037	0.12	0.25	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681-1	1	1			Endrin	72-20-8	0.25	0.25	UG_L	U			TRG					IDW				4.2	0.042	0.25	0.50	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681-1	1	1			Methoxychlor	72-43-5	1.2	1.2	UG_L	U			TRG					IDW				4.2	0.042	1.2	2.5	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681-1	1	1			technical-Chlordane	12789-03-	1.2	1.2	UG_L	U			TRG					IDW				4.2	0.42	1.2	2.5	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	11:00:00	20170314	16:36:00	SK1681-1	1	1			Toxaphene	8001-35-2	2.5	2.5	UG_L	U			TRG					IDW				4.2	0.85	2.5	5.0	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			gamma-BHC (Lindane)	58-89-9	0.025	0.025	UG_L	U			TRG									4.2	0.0072	0.025	0.050	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			Heptachlor	76-44-8	0.025	0.025	UG_L	U			TRG									4.2	0.0080	0.025	0.050	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			Heptachlor epoxide	1024-57-3	0.025	0.025	UG_L	U			TRG									4.2	0.0074	0.025	0.050	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			Endrin	72-20-8	0.050	0.050	UG_L	U			TRG									4.2	0.0084	0.050	0.10	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			Methoxychlor	72-43-5	0.25	0.25	UG_L	U			TRG									4.2	0.0084	0.25	0.50	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			technical-Chlordane	12789-03-	0.25	0.25	UG_L	U			TRG									4.2	0.083	0.25	0.50	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-BLANK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:20:00	WG20135	1	1			Toxaphene	8001-35-2	0.50	0.50	UG_L	U			TRG									4.2	0.17	0.50	1.0	SK1681	WG201358	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:39:00	WG20135	1	1			gamma-BHC (Lindane)	58-89-9	0.464	0.464	UG_L				TRG		LSA	135	25	20091101				4.2	0.0072	0.025	0.050	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:39:00	WG20135	1	1			Heptachlor	76-44-8	0.436	0.436	UG_L				TRG		LSA	130	40	20091101				4.2	0.0080	0.025	0.050	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:39:00	WG20135	1	1			Heptachlor epoxide	1024-57-3	0.465	0.465	UG_L				TRG		LSA	130	60	20091101				4.2	0.0074	0.025	0.050	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:39:00	WG20135	1	1			Endrin	72-20-8	0.467	0.467	UG_L				TRG		LSA	135	55	20091101				4.2	0.0084	0.050	0.10	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:39:00	WG20135	1	1			Methoxychlor	72-43-5	0.398	0.398	UG_L				TRG		LSA	130	55	20091101				4.2	0.0084	0.25	0.50	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS1	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	15:18:00	WG20135	1	1			Toxaphene	8001-35-2	8.19	8.19	UG_L				TRG		LSA	110	32	20091103				4.2	0.17	0.50	1.0	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCS2	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170315	15:10:00	WG20135	1	1			technical-Chlordane	12789-03-	11.6	11.6	UG_L	*			TRG		LSA	115	47	20091101				4.2	0.083	0.25	0.50	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCSD	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:59:00	WG20135	1	1			gamma-BHC (Lindane)	58-89-9	0.485	0.485	UG_L				TRG		LSA	135	25	20091101				4.2	0.0072	0.025	0.050	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCSD	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:59:00	WG20135	1	1			Heptachlor	76-44-8	0.454	0.454	UG_L				TRG		LSA	130	40	20091101				4.2	0.0080	0.025	0.050	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCSD	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:59:00	WG20135	1	1			Heptachlor epoxide	1024-57-3	0.481	0.481	UG_L				TRG		LSA	130	60	20091103				4.2	0.0074	0.025	0.050	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCSD	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:59:00	WG20135	1	1			Endrin	72-20-8	0.473	0.473	UG_L				TRG		LSA	135	55	20091101				4.2	0.0084	0.050	0.10	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201356-LCSD	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4		03/14/201	03/14/2017			20170314	11:00:00	20170314	14:59:00	WG20135	1	1			Methoxychlor	72-43-5	0.422	0.422	UG_L				TRG		LSA	150	55	20091101				4.2	0.0084	0.25	0.50	SK1681	WG201356	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG20103	1	1			gamma-BHC (Lindane)	58-89-9	0.12	0.12	UG_L	U			TRG									4.2	0.036	0.12	0.25	SK1681	WG201038	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG20103	1	1			Heptachlor	76-44-8	0.12	0.12	UG_L	U			TRG									4.2	0.040	0.12	0.25	SK1681	WG201038	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG20103	1	1			Heptachlor epoxide	1024-57-3	0.12	0.12	UG_L	U			TRG									4.2	0.037	0.12	0.25	SK1681	WG201038	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG20103	1	1			Endrin	72-20-8	0.25	0.25	UG_L	U			TRG									4.2	0.042	0.25	0.50	SK1681	WG201038	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG20103	1	1			Methoxychlor	72-43-5	1.2	1.2	UG_L	U			TRG									4.2	0.042	1.2	2.5	SK1681	WG201038	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG20103	1	1			technical-Chlordane	12789-03-	1.2	1.2	UG_L	U			TRG									4.2	0.42	1.2	2.5	SK1681	WG201038	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201038-TCLP BLK	TCLP	TCLPP	1311-808	P_A	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170309	13:00:00	20170310	10:52:00	WG20103	1	1			Toxaphene	8001-35-2	2.5	2.5	UG_L	U			TRG									4.2	0.85	2.5	5.0	SK1681	WG201038	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201405-BLANK	TCLP	TCLPP	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/15/201	03/15/2017			20170315	10:45:00	20170316	17:43:00	WG20140	1	1			2,4-D	94-75-7	1.4	1.4	UG_L	U			TRG									4.2	0.28	1.4	2.8	SK1681	WG201405	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201405-BLANK	TCLP	TCLPP	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BLK	W	4		03/15/201	03/15/2017			20170315	10:45:00	20170316	17:43:00	WG20140	1	1			2,4,5-TP (Silvex)	93-72-1	1.4	1.4	UG_L	U			TRG									4.2	0.19	1.4	2.8	SK1681	WG201405	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201405-LCS	TCLP	TCLPP	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BS	W	4		03/15/201	03/15/2017			20170315	10:45:00	20170316	18:07:00	WG20140	1	1			2,4-D	94-75-7	3.84	3.84	UG_L				TRG		LSA	115	35	20091101				4.2	0.28	1.4	2.8	SK1681	WG201405	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201405-LCSD	TCLP	TCLPP	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4		03/15/201	03/15/2017			20170315	10:45:00	20170316	18:07:00	WG20140	1	1			2,4,5-TP (Silvex)	93-72-1	4.28	4.28	UG_L				TRG		LSA	115	55	20091101				4.2	0.19	1.4	2.8	SK1681	WG201405	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201405-LCSD	TCLP	TCLPP	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4		03/15/201	03/15/2017			20170315	10:45:00	20170316	18:30:00	WG20140	1	1			2,4-D	94-75-7	3.95	3.95	UG_L				TRG		LSA	115	35	20091101				4.2	0.28	1.4	2.8	SK1681	WG201405	Preload Cl	20170331
N6247016	JM01		MERIDIAN	WG201405-LCSD	TCLP	TCLPP	1311-815	HERB	KAS	KATAHDIN	ANALYTIC	NA	SW3510C	000	BSD	W	4		03/15/201	03/15/2017			20170315	10:45:00	20170316	18:30:00	WG20140	1	1			2,4,5-TP (Silvex)	93-72-1	4.41	4.41	UG_L				TRG		LSA	115	50	20091101				4.2	0.19	1.4	2.8	SK1681	WG201405	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBWKC15ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	ANALYTIC	NA	SW3010A	000	BLK	W	4		03/15/201	03/15/2017			20170315	00:27:00	20170316	00:27:00	PBWKC15	1	1			Arsenic	7440-38-2	5.0	5.0	UG_L	U			TRG		LSA	120	80	20091101				4.2	1.4	5.0	8.0	SK1681	KC15ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBWKC10ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	ANALYTIC	NA	SW3010A	000	BLK	W	4		03/10/201	03/10/2017			20170310	09:03:00	20170310	21:57:00	PBWKC10	1	1			Arsenic	7440-38-2	5.0	5.0	UG_L	U			TRG		LSA	120	80	20091101				4.2	1.4	5.0	8.0	SK1681	KC10ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBT1370A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170310	09:04:00	20170310	22:09:00	PBT1370A	1	1			Arsenic	7440-38-2	8.4	8.4	UG_L	J			TRG		LSA	120	80	20091101				4.2	7.1	25	40	SK1681	KC10ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBWKC10ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	ANALYTIC	NA	SW3010A	000	BLK	W	4		03/10/201	03/10/2017			20170310	09:03:00	20170310	21:57:00	PBWKC10	1	1			Barium	7440-39-3	0.38	0.38	UG_L	J			TRG		LSA	120	80	20091101				4.2	0.23	3.0	5.0	SK1681	KC10ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBT1370A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170310	09:04:00	20170310	22:09:00	PBT1370A	1	1			Barium	7440-39-3	203	203	UG_L	B			TRG		LSA	120	80	20091101				4.2	1.2	15	25	SK1681	KC10ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBWKC15ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	ANALYTIC	NA	SW3010A	000	BLK	W	4		03/15/201	03/15/2017			20170315	00:27:00	20170316	00:27:00	PBWKC15	1	1			Barium	7440-39-3	3.0	3.0	UG_L	U			TRG		LSA	120	80	20091101				4.2	0.23	3.0	5.0	SK1681	KC15ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBWKC15ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	ANALYTIC	NA	SW3010A	000	BLK	W	4		03/15/201	03/15/2017			20170315	00:27:00	20170316	00:27:00	PBWKC15	1	1			Cadmium	7440-43-9	0.089	0.089	UG_L	J			TRG		LSA	120	80	20091101				4.2	0.049	3.0	5.0	SK1681	KC15ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBWKC10ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	ANALYTIC	NA	SW3010A	000	BLK	W	4		03/10/201	03/10/2017			20170310	09:03:00	20170310	21:57:00	PBWKC10	1	1			Cadmium	7440-43-9	3.0	3.0	UG_L	U			TRG		LSA	120	80	20091101				4.2	0.049	3.0	5.0	SK1681	KC10ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBT1370A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170310	09:04:00	20170310	22:09:00	PBT1370A	1	1			Cadmium	7440-43-9	15	15	UG_L	U			TRG		LSA	120	80	20091101				4.2	0.24	15	25	SK1681	KC10ICW2	Preload Cl	20170331
N6247016	JM01		MERIDIAN	PBWKC15ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	ANALYTIC	NA	SW3010A	000	BLK	W	4		03/15/201	03/15/2017			20170315	00:27:00	20170316	00:27:00	PBWKC15	1	1			Chromium	7440-47-3	4.0	4.0	UG_L	U			TRG		LSA	120	80	20091101				4.2	0.36

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_ID	Analyte_V	Original_R	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_R	Validator_	Val_Date
N6247016	JM01		MERIDIAN	WG200937-BLANK	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC	DRY	METHOD	000	BLK	S	4		03/07/201	03/07/2017			20170307	14:03:00	20170307	14:50:00	WG200937	1	1			Reactive sulfide	REACT-S	25.	25.	MG_KG	U			TRG										4.2	16.39	25.	50.	SK1681	WG20093	Preload C	20170331
N6247016	JM01		MERIDIAN	WG200937-LCS	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC	DRY	METHOD	000	BS	S	4		03/07/201	03/07/2017			20170307	14:04:00	20170307	14:50:00	WG200937	1	1			Reactive sulfide	REACT-S	880	880	MG_KG				TRG		LSA	120	30	20091101					4.2	16.39	25.	50.	SK1681	WG20093	Preload C	20170331
N6247016	JM01		MERIDIAN	WG200937 -LCSD	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC	DRY	METHOD	000	BSD	S	4		03/07/201	03/07/2017			20170307	14:05:00	20170307	14:50:00	WG200937	1	1			Reactive sulfide	REACT-S	860	860	MG_KG				TRG		LSA	120	30	20091101					4.2	16.39	25.	50.	SK1681	WG20093	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC	NA	NONE	000	REG	W	4		03/03/201	03/04/2017					20170309	16:57:00	SK1681-2	1	1			Ignitability	IGN	71.	71.	DEG_C	NI			TRG	>					IDW			4.2	71.	71.	71.	SK1681	WG20109	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC	DRY	NONE	000	REG	S	4		03/03/201	03/04/2017					20170309	16:57:00	SK1681-1	1	1			Ignitability	IGN	71.	71.	DEG_C	NI			TRG	>					IDW			4.2	71.	71.	71.	SK1681	WG20109	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201095-BLANK	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC	DRY	NONE	000	BLK	S	4		03/09/201	03/09/2017					20170309	16:57:00	WG201095	1	1			Ignitability	IGN	71.	71.	DEG_C	NI			TRG	>								4.2	71.	71.	71.	SK1681	WG20109	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201095-LCS	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC	DRY	NONE	000	BS	S	4		03/09/201	03/09/2017					20170309	16:57:00	WG201095	1	1			Ignitability	IGN	29.	29.	DEG_C				TRG		LSA	120	80	20091101					4.2	71.	71.	71.	SK1681	WG20109	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201095-LCSD	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC	DRY	NONE	000	BSD	S	4		03/09/201	03/09/2017					20170309	16:57:00	WG201095	1	1			Ignitability	IGN	27.	27.	DEG_C				TRG		LSA	120	80	20091101					4.2	71.	71.	71.	SK1681	WG20109	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IDW-GW-0317-LR	NONE	CORR	9040C	PCHAR	KAS	KATAHDIN ANALYTIC	NA	NONE	000	LR	W	4		03/03/201	03/04/2017					20170306	18:14:00	WG20105	1	1			Corrosivity (pH units)	CORR	6.1	6.1	PH				TRG									4.2	0.10	0.10	0.10	SK1681	WG20105	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	NONE	CORR	9040C	PCHAR	KAS	KATAHDIN ANALYTIC	NA	NONE	000	REG	W	4		03/03/201	03/04/2017					20170306	18:10:00	SK1681-2	1	1			Corrosivity (pH units)	CORR	6.0	6.0	PH				TRG						IDW			4.2	0.10	0.10	0.10	SK1681	WG20105	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201057-LCS	NONE	CORR	9040C	PCHAR	KAS	KATAHDIN ANALYTIC	NA	NONE	000	BS	W	4		03/06/201	03/04/2017					20170306	18:05:00	WG20105	1	1			Corrosivity (pH units)	CORR	7.0	7.0	PH				TRG		LSA	110	90	20091101					4.2	0.10	0.10	0.10	SK1681	WG20105	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC	DRY	METHOD	000	REG	S	4		03/03/201	03/04/2017			20170309	11:01:00	20170309	18:51:00	SK1681-1	1	1			Corrosivity (pH units)	CORR	5.6	5.6	PH				TRG						IDW			4.2	0.10	0.10	0.10	SK1681	WG20113	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201134-LCS	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC	DRY	METHOD	000	BS	S	4		03/09/201	03/09/2017			20170309	11:02:00	20170309	18:37:00	WG20113	1	1			Corrosivity (pH units)	CORR	7.1	7.1	PH				TRG		LSA	110	90	20091101					4.2	0.10	0.10	0.10	SK1681	WG20113	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201134-LCSD	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC	DRY	METHOD	000	BSD	S	4		03/09/201	03/09/2017			20170309	11:03:00	20170309	18:42:00	WG20113	1	1			Corrosivity (pH units)	CORR	7.1	7.1	PH				TRG		LSA	110	90	20091101					4.2	0.10	0.10	0.10	SK1681	WG20113	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201353-LCS	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN ANALYTIC	NA	SW3510C	000	BS	W	4		03/14/201	03/14/2017			20170314	15:00:00	20170316	18:05:00	WG20135	1	1			Hexachlorobenzene	118-74-1	45.7	45.7	UG_L				TRG		LSA	110	50	20091101					4.2	2.1	7.5	10.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201353-LCSD	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN ANALYTIC	NA	SW3510C	000	BSD	W	4		03/14/201	03/14/2017			20170314	15:00:00	20170316	18:05:00	WG20135	1	1			Pentachlorophenol	87-86-5	107.	107.	UG_L				TRG		LSA	115	40	20091101					4.2	2.3	19.	25.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201127-TCLP BLK	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170310	12:00:00	20170316	00:57:00	WG20112	1	1			2,4-D	94-75-7	7.0	7.0	UG_L	U			TRG									4.2	1.4	7.0	14.	SK1681	WG20112	Preload C	20170331
N6247016	JM01		MERIDIAN	WG201127-TCLP BLK	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4		03/08/201	03/08/201	20170308	08:05:00	20170310	12:00:00	20170316	00:57:00	WG20112	1	1			2,4,5-TP (Silvex)	93-72-1	7.1	7.1	UG_L	U			TRG									4.2	0.95	7.1	14.	SK1681	WG20112	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	10:45:00	20170316	19:42:00	SK1681-2	1	1			2,4-D	94-75-7	7.0	7.0	UG_L	U			TRG						IDW			4.2	1.4	7.0	14.	SK1681	WG20140	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	10:45:00	20170316	19:42:00	SK1681-2	1	1			2,4,5-TP (Silvex)	93-72-1	7.1	7.1	UG_L	U			TRG						IDW			4.2	0.95	7.1	14.	SK1681	WG20140	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	10:45:00	20170316	19:18:00	SK1681-1	1	1			2,4-D	94-75-7	7.0	7.0	UG_L	U			TRG						IDW			4.2	1.4	7.0	14.	SK1681	WG20140	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPH	1311-815	HERB	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	10:45:00	20170316	19:18:00	SK1681-1	1	1			2,4,5-TP (Silvex)	93-72-1	7.1	7.1	UG_L	U			TRG						IDW			4.2	0.95	7.1	14.	SK1681	WG20140	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	01:39:00	20170316	01:39:00	SK1681-00	1	1			Chromium	7440-47-3	20	20	UG_L	U			TRG						IDW			4.2	1.8	20	50	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	01:39:00	20170316	01:39:00	SK1681-00	1	1			Lead	7439-92-1	20	20	UG_L	U			TRG						IDW			4.2	5.5	20	25	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	01:39:00	20170316	01:39:00	SK1681-00	1	1			Silver	7440-22-4	20	20	UG_L	U			TRG						IDW			4.2	1.4	20	50	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	01:39:00	20170316	01:39:00	SK1681-00	1	1			Cadmium	7440-43-9	15	15	UG_L	U			TRG						IDW			4.2	0.25	15	25	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	01:39:00	20170316	01:39:00	SK1681-00	1	1			Selenium	7782-49-2	35	35	UG_L	U			TRG						IDW			4.2	1.2	35	50	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	01:39:00	20170316	01:39:00	SK1681-00	1	1			Arsenic	7440-38-2	25	25	UG_L	U			TRG						IDW			4.2	7.0	25	40	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170315	01:39:00	20170316	01:39:00	SK1681-00	1	1			Barium	7440-39-3	245	245	UG_L				TRG						IDW			4.2	1.2	15	25	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170315	08:04:00	20170315	01:34:00	20170316	01:34:00	SK1681-00	1	1			Silver	7440-22-4	20	20	UG_L	U			TRG						IDW			4.2	1.4	20	50	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170315	08:04:00	20170315	01:34:00	20170316	01:34:00	SK1681-00	1	1			Selenium	7782-49-2	35	35	UG_L	U			TRG						IDW			4.2	1.2	35	50	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170315	08:04:00	20170315	01:34:00	20170316	01:34:00	SK1681-00	1	1			Arsenic	7440-38-2	25	25	UG_L	U			TRG						IDW			4.2	7.0	25	40	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170315	08:04:00	20170315	01:34:00	20170316	01:34:00	SK1681-00	1	1			Barium	7440-39-3	628	628	UG_L				TRG						IDW			4.2	1.2	15	25	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170315	08:04:00	20170315	01:34:00	20170316	01:34:00	SK1681-00	1	1			Lead	7439-92-1	120	20	UG_L	U			TRG						IDW			4.2	5.5	20	25	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170315	08:04:00	20170315	01:34:00	20170316	01:34:00	SK1681-00	1	1			Chromium	7440-47-3	20	20	UG_L	U			TRG						IDW			4.2	1.8	20	50	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4		03/03/201	03/04/201	20170315	08:04:00	20170315	01:34:00	20170316	01:34:00	SK1681-00	1	1			Cadmium	7440-43-9	1.8	1.8	UG_L	J			TRG						IDW			4.2	0.25	15	25	SK1681	KC15ICW2	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-747	METHOD	KAS	KATAHDIN	SW1311	NA	METHOD	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	09:04:00	20170314	12:47:00	SK1681-00	1	1			Mercury	7439-97-6	0.10	0.10	UG_L	U			TRG						IDW			4.2	0.013	0.10	0.20	SK1681	KC14HGW	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPS	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	09:03:00	20170314	12:45:00	SK1681-00	1	1			Mercury	7439-97-6	0.10	0.10	UG_L	U			TRG						IDW			4.2	0.013	0.10	0.20	SK1681	KC14HGW	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			Pyridine	110-86-1	190	190	UG_L	U			TRG						IDW			4.2	7.5	190	250	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW01-SO-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			Pyridine	110-86-1	190	190	UG_L	U			TRG						IDW			4.2	7.5	190	250	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			1,4-Dichlorobenzene	106-46-7	38	38	UG_L	U			TRG						IDW			4.2	11.	38.	50.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			1,4-Dichlorobenzene	106-46-7	38	38	UG_L	U			TRG						IDW			4.2	11.	38.	50.	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			2-Methylphenol	95-48-7	38	38	UG_L	U			TRG						IDW			4.2	19.	38.	50.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			2-Methylphenol	95-48-7	38	38	UG_L	U			TRG						IDW			4.2	19.	38.	50.	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			3- and 4-Methylphenol	m&pCRES	38	38	UG_L	U			TRG						IDW			4.2	28.	38.	50.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			3- and 4-Methylphenol	m&pCRES	38	38	UG_L	U			TRG						IDW			4.2	28.	38.	50.	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			Hexachloroethane	67-72-1	38	38	UG_L	U			TRG						IDW			4.2	12.	38.	50.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			Hexachloroethane	67-72-1	38	38	UG_L	U			TRG						IDW			4.2	12.	38.	50.	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			Nitrobenzene	98-95-3	38	38	UG_L	U			TRG						IDW			4.2	16.	38.	50.	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			Nitrobenzene	98-95-3	38	38	UG_L	U			TRG						IDW			4.2	16.	38.	50.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			Hexachlorobutadiene	87-68-3	38	38	UG_L	U			TRG						IDW			4.2	9.0	38.	50.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			Hexachlorobutadiene	87-68-3	38	38	UG_L	U			TRG						IDW			4.2	9.0	38.	50.	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			2,4,6-Trichlorophenol	88-06-2	38	38	UG_L	U			TRG						IDW			4.2	14.	38.	50.	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			2,4,6-Trichlorophenol	88-06-2	38	38	UG_L	U			TRG						IDW			4.2	14.	38.	50.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			2,4,5-Trichlorophenol	95-95-4	94	94	UG_L	U			TRG						IDW			4.2	18.	94.	120	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			2,4,5-Trichlorophenol	95-95-4	94	94	UG_L	U			TRG						IDW			4.2	18.	94.	120	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	E1	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170324	11:30:00	20170327	16:38:00	SK1681-2R	1	2			2,4-Dinitrotoluene	121-14-2	38	38	UG_L	U			TRG						IDW			4.2	11.	38.	50.	SK1681	WG20193	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/03/201	03/04/201	20170310	08:04:00	20170314	15:00:00	20170317	00:26:00	SK1681-2	1	1			2,4-Dinitrotoluene	121-14-2	38	38	UG_L	U			TRG						IDW			4.2	11.	38.	50.	SK1681	WG20135	Preload C	20170331
N6247016	JM01		MERIDIAN	MEAFF-IW02-GW-0317	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	REG	W	4		03/

| Contract_ID | DO_CTO_I | Phase | Installatio | Sample_Name | CH2M_Co | Analysis_ | Analytical | PRC_Code | Lab_Code | Lab_Name | Leachate_ | Sample_B | Extraction | Result_Ty | Lab_QC_T | Sample_M | QC_Level | Date_Time | Date_Rec | Leachate_ | Leachate_ | Extraction | Extraction | Analysis_I | Analysis_ | Lab_Sampl | Dilution | Run_Num | Percent_M | Percent_L | Chem_Name | Analyte_ID | Analyte_V | Original_A | Result_Un | Lab_Quali | Validator_ | GC_Colum | Analysis_ | Result_Na | QC_Contr | QC_Accur | QC_Accur | Control_LI | QC_Narra | MDL | Detection | QSM_Ver | DL | LOD | LOQ | SDG | Analysis_B | Validator_ | Val_Date |
|---|---|---

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_G	Analysis_T	Lab_Sampl	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_Id	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_Li	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N6247016	JM01		MERIDIAN	PBWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	10:02:00	20170630	23:11:00	PBWKF30I	1	1			Cadmium	7440-43-9	3.0	UG_L	U			TRG								4.2	0.049	3.0	5.0	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	09:02:00	20170630	17:49:00	PBWKF30I	1	1			Cadmium	7440-43-9	3.0	UG_L	U			TRG								4.2	0.049	3.0	5.0	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1402A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/06/201	06/06/20	20170606	07:52:00	20170619	08:04:00	PBT1402A	1	1			Cadmium	7440-43-9	0.44	UG_L	J			TRG								4.2	0.24	1.5	25	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1403A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/27/201	06/27/20	20170627	08:56:00	20170630	10:03:00	PBT1403A	1	1			Chromium	7440-47-3	20	UG_L	U			TRG								4.2	1.8	20	50	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	09:02:00	20170630	17:49:00	PBWKF30I	1	1			Chromium	7440-47-3	4.0	UG_L	U			TRG								4.2	0.36	4.0	10	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1402A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/06/201	06/06/20	20170606	07:52:00	20170619	08:04:00	PBT1402A	1	1			Chromium	7440-47-3	2.6	UG_L	J			TRG								4.2	1.8	20	50	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	10:02:00	20170630	23:11:00	PBWKF30I	1	1			Chromium	7440-47-3	4.0	UG_L	U			TRG								4.2	0.36	4.0	10	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/19/201	06/19/2017		20170619	08:03:00	20170619	18:58:00	PBWKF19I	1	1			Chromium	7440-47-3	20	UG_L	U			TRG								4.2	1.8	20	50	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1402A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/06/201	06/06/20	20170606	07:52:00	20170619	08:04:00	PBT1402A	1	1			Lead	7439-92-1	20	UG_L	U			TRG								4.2	5.4	20	25	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	10:02:00	20170630	23:11:00	PBWKF30I	1	1			Lead	7439-92-1	4.0	UG_L	U			TRG								4.2	1.1	4.0	5.0	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1403A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/27/201	06/27/20	20170627	08:56:00	20170630	10:03:00	PBT1403A	1	1			Lead	7439-92-1	5.5	UG_L	J			TRG								4.2	5.4	20	25	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	09:02:00	20170630	17:49:00	PBWKF30I	1	1			Lead	7439-92-1	4.0	UG_L	U			TRG								4.2	1.1	4.0	5.0	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/19/201	06/19/2017		20170619	08:03:00	20170619	18:58:00	PBWKF19I	1	1			Lead	7439-92-1	20	UG_L	U			TRG								4.2	5.4	20	25	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1403A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/27/201	06/27/20	20170627	08:56:00	20170630	10:03:00	PBT1403A	1	1			Selenium	7782-49-2	35	UG_L	U			TRG								4.2	12	35	50	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	09:02:00	20170630	17:49:00	PBWKF30I	1	1			Selenium	7782-49-2	7.0	UG_L	U			TRG								4.2	2.4	7.0	10	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/19/201	06/19/2017		20170619	08:03:00	20170619	18:58:00	PBWKF19I	1	1			Selenium	7782-49-2	35	UG_L	U			TRG								4.2	12	35	50	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1402A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/06/201	06/06/20	20170606	07:52:00	20170619	08:04:00	PBT1402A	1	1			Selenium	7782-49-2	35	UG_L	U			TRG								4.2	12	35	50	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	10:02:00	20170630	23:11:00	PBWKF30I	1	1			Selenium	7782-49-2	7.0	UG_L	U			TRG								4.2	2.4	7.0	10	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1402A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/06/201	06/06/20	20170606	07:52:00	20170619	08:04:00	PBT1402A	1	1			Silver	7440-22-4	4.0	UG_L	U			TRG								4.2	0.27	4.0	10	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	10:02:00	20170630	23:11:00	PBWKF30I	1	1			Silver	7440-22-4	4.0	UG_L	U			TRG								4.2	0.27	4.0	10	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/19/201	06/19/2017		20170619	08:03:00	20170619	18:58:00	PBWKF19I	1	1			Silver	7440-22-4	20	UG_L	U			TRG								4.2	1.3	20	50	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1403A	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	BLK	W	4		06/27/201	06/27/20	20170627	08:56:00	20170630	10:03:00	PBT1403A	1	1			Silver	7440-22-4	20	UG_L	U			TRG								4.2	1.3	20	50	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BLK	W	4		06/30/201	06/30/2017		20170630	09:02:00	20170630	17:49:00	PBWKF30I	1	1			Silver	7440-22-4	4.0	UG_L	U			TRG								4.2	0.27	4.0	10	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	09:01:00	20170630	17:53:00	LCSWKF30	1	1			Arsenic	7440-38-2	103	UG_L				TRG	LSA	120	80	20091101					4.2	1.4	5.0	8.0	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	10:01:00	20170630	23:15:00	LCSWKF30	1	1			Arsenic	7440-38-2	104	UG_L				TRG	LSA	120	80	20091101					4.2	1.4	5.0	8.0	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/19/201	06/19/2017		20170619	08:02:00	20170619	19:02:00	LCSWKF19	1	1			Arsenic	7440-38-2	112	UG_L				TRG	LSA	120	80	20091101					4.2	1.4	5.0	8.0	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/19/201	06/19/2017		20170619	08:02:00	20170619	19:02:00	LCSWKF19	1	1			Barium	7440-39-3	2010	UG_L				TRG	LSA	120	80	20091101					4.2	0.23	5.0	5.0	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	10:01:00	20170630	23:15:00	LCSWKF30	1	1			Barium	7440-39-3	1990	UG_L				TRG	LSA	120	80	20091101					4.2	0.23	3.0	5.0	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	09:01:00	20170630	17:53:00	LCSWKF30	1	1			Barium	7440-39-3	2130	UG_L				TRG	LSA	120	80	20091101					4.2	0.23	3.0	5.0	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	09:01:00	20170630	17:53:00	LCSWKF30	1	1			Cadmium	7440-43-9	258	UG_L				TRG	LSA	120	80	20091101					4.2	0.049	3.0	5.0	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	10:01:00	20170630	23:15:00	LCSWKF30	1	1			Cadmium	7440-43-9	266	UG_L				TRG	LSA	120	80	20091101					4.2	0.049	3.0	5.0	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/19/201	06/19/2017		20170619	08:02:00	20170619	19:02:00	LCSWKF19	1	1			Cadmium	7440-43-9	266	UG_L				TRG	LSA	120	80	20091101					4.2	0.049	3.0	5.0	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/19/201	06/19/2017		20170619	08:02:00	20170619	19:02:00	LCSWKF19	1	1			Chromium	7440-47-3	200	UG_L				TRG	LSA	120	80	20091101					4.2	0.36	4.0	10	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	09:01:00	20170630	17:53:00	LCSWKF30	1	1			Chromium	7440-47-3	208	UG_L				TRG	LSA	120	80	20091101					4.2	0.36	4.0	10	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	10:01:00	20170630	23:15:00	LCSWKF30	1	1			Chromium	7440-47-3	209	UG_L				TRG	LSA	120	80	20091101					4.2	0.36	4.0	10	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/19/201	06/19/2017		20170619	08:02:00	20170619	19:02:00	LCSWKF19	1	1			Lead	7439-92-1	111	UG_L				TRG	LSA	120	80	20091101					4.2	1.1	4.0	5.0	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	09:01:00	20170630	17:53:00	LCSWKF30	1	1			Lead	7439-92-1	105	UG_L				TRG	LSA	120	80	20091101					4.2	1.1	4.0	5.0	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	10:01:00	20170630	23:15:00	LCSWKF30	1	1			Lead	7439-92-1	108	UG_L				TRG	LSA	120	80	20091101					4.2	1.1	4.0	5.0	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	09:01:00	20170630	17:53:00	LCSWKF30	1	1			Selenium	7782-49-2	105	UG_L				TRG	LSA	120	80	20091101					4.2	2.4	7.0	10	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/19/201	06/19/2017		20170619	08:02:00	20170619	19:02:00	LCSWKF19	1	1			Selenium	7782-49-2	119	UG_L				TRG	LSA	120	80	20091101					4.2	2.4	7.0	10	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	09:01:00	20170630	17:53:00	LCSWKF30	1	1			Selenium	7782-49-2	101	UG_L				TRG	LSA	120	80	20091101					4.2	2.4	7.0	10	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/19/201	06/19/2017		20170619	08:02:00	20170619	19:02:00	LCSWKF19	1	1			Silver	7440-22-4	49.5	UG_L				TRG	LSA	120	80	20091101					4.2	0.27	4.0	10	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW2	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	09:01:00	20170630	17:53:00	LCSWKF30	1	1			Silver	7440-22-4	49.0	UG_L				TRG	LSA	120	80	20091101					4.2	0.27	4.0	10	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF30ICW3	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BS	W	4		06/30/201	06/30/2017		20170630	10:01:00	20170630	23:15:00	LCSWKF30	1	1			Silver	7440-22-4	50.0	UG_L				TRG	LSA	120	80	20091101					4.2	0.27	4.0	10	SK5275	KF30ICW3	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BSD	W	4		06/19/201	06/19/2017		20170619	08:01:00	20170619	19:06:00	LC2WKF19	1	1			Arsenic	7440-38-2	111	UG_L				TRG	LSA	120	80	20091101					4.2	1.4	5.0	8.0	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BSD	W	4		06/19/201	06/19/2017		20170619	08:01:00	20170619	19:06:00	LC2WKF19	1	1			Barium	7440-39-3	1970	UG_L				TRG	LSA	120	80	20091101					4.2	0.23	3.0	5.0	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BSD	W	4		06/19/201	06/19/2017		20170619	08:01:00	20170619	19:06:00	LC2WKF19	1	1			Cadmium	7440-43-9	263	UG_L				TRG	LSA	120	80	20091101					4.2	0.049	3.0	5.0	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BSD	W	4		06/19/201	06/19/2017		20170619	08:01:00	20170619	19:06:00	LC2WKF19	1	1			Chromium	7440-47-3	199	UG_L				TRG	LSA	120	80	20091101					4.2	0.36	4.0	10	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BSD	W	4		06/19/201	06/19/2017		20170619	08:01:00	20170619	19:06:00	LC2WKF19	1	1			Lead	7439-92-1	109	UG_L				TRG	LSA	120	80	20091101					4.2	1.1	4.0	5.0	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BSD	W	4		06/19/201	06/19/2017		20170619	08:01:00	20170619	19:06:00	LC2WKF19	1	1			Selenium	7782-49-2	118	UG_L				TRG	LSA	120	80	20091101					4.2	2.4	7.0	10	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF19ICW1	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN ANALYTIC	NA	SW3010A	000	BSD	W	4		06/19/201	06/19/2017		20170619	08:01:00	20170619	19:06:00	LC2WKF19	1	1			Silver	7440-22-4	48.8	UG_L				TRG	LSA	120	80	20091101					4.2	0.27	4.0	10	SK5275	KF19ICW1	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF27HGW1	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN ANALYTIC	NA	METHOD	000	BLK	W	4		06/27/201	06/27/2017		20170627	08:02:00	20170627	15:59:00	PBWKF27H	1	1			Mercury	7439-97-6	0.10	UG_L	U			TRG								4.2	0.013	0.10	0.20	SK5275	KF27HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF21HGW2	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN ANALYTIC	NA	METHOD	000	BLK	W	4		06/21/201	06/21/2017		20170621	09:03:00	20170621	14:34:00	PBWKF21H	1	1			Mercury	7439-97-6	0.10	UG_L	U			TRG								4.2	0.013	0.10	0.20	SK5275	KF21HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1403A	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	BLK	W	4		06/27/201	06/27/20	20170627	08:56:00	20170627	08:03:00	PBT1403A	1	1			Mercury	7439-97-6	0.10	UG_L	U			TRG								4.2	0.013	0.10	0.20	SK5275	KF27HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBWKF28HGW2	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN ANALYTIC	NA	METHOD	000	BS	W	4		06/28/201	06/28/2017		20170628	09:03:00	20170628	12:41:00	PBWKF28H	1	1			Mercury	7439-97-6	0.10	UG_L	U			TRG								4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	PBT1402A	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	BLK	W	4		06/06/201	06/06/20	20170606	07:52:00	20170621	09:04:00	PBT1402A	1	1			Mercury	7439-97-6	0.10	UG_L	U			TRG								4.2	0.013	0.10	0.20	SK5275	KF21HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF27HGW1	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN ANALYTIC	NA	METHOD	000	BS	W	4		06/27/201	06/27/2017		20170627	08:01:00	20170627	16:01:00	LCSWKF27H	1	1			Mercury	7439-97-6	5.11	UG_L				TRG	LSA	120	80	20091101					4.2	0.013	0.10	0.20	SK5275	KF27HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF28HGW2	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN ANALYTIC	NA	METHOD	000	BS	W	4		06/28/201	06/28/2017		20170628	09:02:00	20170630	12:43:00	LCSWKF28H	1	1			Mercury	7439-97-6	4.90	UG_L				TRG	LSA	120	80	20091101					4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LCSWKF21HGW2	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN ANALYTIC	NA	METHOD	000	BS	W	4		06/21/201	06/21/2017		20170621	09:01:00	20170621	14:37:00	LCSWKF21H	1	1			Mercury	7439-97-6	4.93	UG_L				TRG	LSA	120	80	20091101					4.2	0.013	0.10	0.20	SK5275	KF21HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF21HGW2	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN ANALYTIC	NA	METHOD	000	BSD	W	4		06/21/201	06/21/2017		20170621	09:01:00	20170621	14:39:00	LC2WKF21H	1	1			Mercury	7439-97-6	5.00	UG_L				TRG	LSA	120	80	20091101					4.2	0.013	0.10	0.20	SK5275	KF21HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	LC2WKF28HGW2	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN ANALYTIC	NA	METHOD	000	BSD	W

Contract_ID	DO_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_G	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime_	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_R	Percent_L	Chem_Name	Analyte_I	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_L	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N6247016	JM01		MERIDIAN	MEAFF-WW04-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:04:00	20170630	18:01:00	SK5275-001	1				Silver	7440-22-4	20	UG_L	U			TRG						IDW			4.2	1.4	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW04-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:04:00	20170630	18:01:00	SK5275-001	1				Selenium	7782-49-2	35	UG_L	U			TRG						IDW			4.2	12	35	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW04-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:04:00	20170630	18:01:00	SK5275-001	1				Lead	7439-92-1	20	UG_L	U			TRG						IDW			4.2	5.5	20	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW05-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:05:00	20170630	18:06:00	SK5275-001	1				Silver	7440-22-4	20	UG_L	U			TRG						IDW			4.2	1.4	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW05-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:05:00	20170630	18:06:00	SK5275-001	1				Barium	7440-39-3	314	UG_L				TRG						IDW			4.2	1.2	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW05-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:05:00	20170630	18:06:00	SK5275-001	1				Arsenic	7440-38-2	25	UG_L	U			TRG						IDW			4.2	7.0	25	40	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW05-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:05:00	20170630	18:06:00	SK5275-001	1				Chromium	7440-47-3	20	UG_L	U			TRG						IDW			4.2	1.8	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW05-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:05:00	20170630	18:06:00	SK5275-001	1				Selenium	7782-49-2	35	UG_L	U			TRG						IDW			4.2	12	35	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW05-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:05:00	20170630	18:06:00	SK5275-001	1				Cadmium	7440-43-9	15	UG_L	U			TRG						IDW			4.2	0.25	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW05-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:05:00	20170630	18:06:00	SK5275-001	1				Lead	7439-92-1	5.7	UG_L	J			TRG						IDW			4.2	5.5	20	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW06-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:06:00	20170630	18:11:00	SK5275-001	1				Arsenic	7440-38-2	7.0	UG_L	J			TRG						IDW			4.2	7.0	25	40	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW06-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:06:00	20170630	18:11:00	SK5275-001	1				Selenium	7782-49-2	35	UG_L	U			TRG						IDW			4.2	12	35	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW06-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:06:00	20170630	18:11:00	SK5275-001	1				Barium	7440-39-3	684	UG_L				TRG						IDW			4.2	1.2	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW06-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:06:00	20170630	18:11:00	SK5275-001	1				Cadmium	7440-43-9	15	UG_L	U			TRG						IDW			4.2	0.25	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW06-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:06:00	20170630	18:11:00	SK5275-001	1				Lead	7439-92-1	20	UG_L	U			TRG						IDW			4.2	5.5	20	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW06-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:06:00	20170630	18:11:00	SK5275-001	1				Silver	7440-22-4	20	UG_L	U			TRG						IDW			4.2	1.4	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW06-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:06:00	20170630	18:11:00	SK5275-001	1				Chromium	7440-47-3	2.4	UG_L	J			TRG						IDW			4.2	1.8	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW07-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:07:00	20170630	18:16:00	SK5275-001	1				Cadmium	7440-43-9	15	UG_L	U			TRG						IDW			4.2	0.25	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW07-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:07:00	20170630	18:16:00	SK5275-001	1				Barium	7440-39-3	186	UG_L	J			TRG						IDW			4.2	1.2	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW07-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:07:00	20170630	18:16:00	SK5275-001	1				Arsenic	7440-38-2	25	UG_L	U			TRG						IDW			4.2	7.0	25	40	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW07-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:07:00	20170630	18:16:00	SK5275-001	1				Chromium	7440-47-3	2.7	UG_L	J			TRG						IDW			4.2	1.8	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW07-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:07:00	20170630	18:16:00	SK5275-001	1				Lead	7439-92-1	11	UG_L	J			TRG						IDW			4.2	5.5	20	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW07-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:07:00	20170630	18:16:00	SK5275-001	1				Selenium	7782-49-2	35	UG_L	U			TRG						IDW			4.2	12	35	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW07-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:07:00	20170630	18:16:00	SK5275-001	1				Silver	7440-22-4	20	UG_L	U			TRG						IDW			4.2	1.4	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-MS	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MS	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:10:00	20170630	18:43:00	SK5275-001	1				Arsenic	7440-38-2	206	UG_L				TRG		MSA	120	80	20091101				4.2	7.1	25	40	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-MS	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MS	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:10:00	20170630	18:43:00	SK5275-001	1				Cadmium	7440-43-9	514	UG_L				TRG		MSA	120	80	20091101				4.2	0.24	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-MS	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MS	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:10:00	20170630	18:43:00	SK5275-001	1				Chromium	7440-47-3	420	UG_L				TRG		MSA	120	80	20091101				4.2	1.8	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-MS	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MS	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:10:00	20170630	18:43:00	SK5275-001	1				Lead	7439-92-1	296	UG_L				TRG		MSA	120	80	20091101				4.2	5.4	20	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-MS	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MS	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:10:00	20170630	18:43:00	SK5275-001	1				Selenium	7782-49-2	209	UG_L				TRG		MSA	120	80	20091101				4.2	12	35	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-MS	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MS	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:10:00	20170630	18:43:00	SK5275-001	1				Barium	7440-39-3	4200	UG_L				TRG		MSA	120	80	20091101				4.2	1.2	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-MS	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MS	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:10:00	20170630	18:43:00	SK5275-001	1				Silver	7440-22-4	70.8	UG_L	J			TRG		MSA	120	80	20091101				4.2	1.3	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MSD	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:09:00	20170630	18:48:00	SK5275-001	1				Silver	7440-22-4	59.2	UG_L				TRG		MSA	120	80	20091101				4.2	1.3	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MSD	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:09:00	20170630	18:48:00	SK5275-001	1				Arsenic	7440-38-2	190	UG_L				TRG		MSA	120	80	20091101				4.2	7.1	25	40	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MSD	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:09:00	20170630	18:48:00	SK5275-001	1				Barium	7440-39-3	4160	UG_L				TRG		MSA	120	80	20091101				4.2	1.2	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MSD	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:09:00	20170630	18:48:00	SK5275-001	1				Cadmium	7440-43-9	476	UG_L				TRG		MSA	120	80	20091101				4.2	0.24	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MSD	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:09:00	20170630	18:48:00	SK5275-001	1				Chromium	7440-47-3	393	UG_L				TRG		MSA	120	80	20091101				4.2	1.8	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MSD	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:09:00	20170630	18:48:00	SK5275-001	1				Lead	7439-92-1	276	UG_L				TRG		MSA	120	80	20091101				4.2	5.4	20	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	MSD	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:09:00	20170630	18:48:00	SK5275-001	1				Selenium	7782-49-2	182	UG_L				TRG		MSA	120	80	20091101				4.2	12	35	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:08:00	20170630	18:21:00	SK5275-001	1				Barium	7440-39-3	107	UG_L				TRG						IDW			4.2	1.2	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:08:00	20170630	18:21:00	SK5275-001	1				Silver	7440-22-4	20	UG_L	UN			TRG						IDW			4.2	1.4	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:08:00	20170630	18:21:00	SK5275-001	1				Selenium	7782-49-2	35	UG_L	U			TRG						IDW			4.2	12	35	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:08:00	20170630	18:21:00	SK5275-001	1				Lead	7439-92-1	81.0	UG_L				TRG						IDW			4.2	5.5	20	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:08:00	20170630	18:21:00	SK5275-001	1				Cadmium	7440-43-9	15	UG_L	U			TRG						IDW			4.2	0.25	15	25	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:08:00	20170630	18:21:00	SK5275-001	1				Arsenic	7440-38-2	25	UG_L	U			TRG						IDW			4.2	7.0	25	40	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617	TCLP	TCLPM	1311-601	MET	KAS	KATAHDIN	SW1311	NA	SW3010A	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170630	09:08:00	20170630	18:21:00	SK5275-001	1				Chromium	7440-47-3	1.9	UG_L	JA			TRG						IDW			4.2	1.8	20	50	SK5275	KF30ICW2	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW03-GW-0617	TCLP	TCLPS	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	REG	W	4	06/18/201	06/20/201	20170623	14:20:00	20170628	09:04:00	20170630	12:51:00	SK5275-001	1				Mercury	7439-97-6	0.10	UG_L	U			TRG						IDW			4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW04-SO-0617	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	09:05:00	20170630	12:53:00	SK5275-001	1				Mercury	7439-97-6	0.10	UG_L	U			TRG						IDW			4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW05-SO-0617	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	09:06:00	20170630	12:55:00	SK5275-001	1				Mercury	7439-97-6	0.10	UG_L	U			TRG						IDW			4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW06-SO-0617	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	09:07:00	20170630	12:58:00	SK5275-001	1				Mercury	7439-97-6	0.10	UG_L	U			TRG						IDW			4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW07-SO-0617	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	09:08:00	20170630	13:01:00	SK5275-001	1				Mercury	7439-97-6	0.10	UG_L	U			TRG						IDW			4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-MS	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	MS	MS	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	09:11:00	20170630	13:09:00	SK5275-001	1				Mercury	7439-97-6	2.30	UG_L				TRG		MSA	120	80	20091101				4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617-SD	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	MSD	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	09:10:00	20170630	13:11:00	SK5275-001	1				Mercury	7439-97-6	2.17	UG_L				TRG		MSA	120	80	20091101				4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	MEAFF-WW08-SO-0617	TCLP	TCLPM	1311-747	MET	KAS	KATAHDIN	SW1311	NA	METHOD	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	09:09:00	20170630	13:03:00	SK5275-001	1				Mercury	7439-97-6	0.10	UG_L	U			TRG						IDW			4.2	0.013	0.10	0.20	SK5275	KF28HGW	Preload Cl	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG207667-1	1				Pyridine	110-86-1	190	UG_L	U			TRG						IDW			4.2	7.5	190	250	SK5275	WG20766	Preload Cl	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG207667-1	1				1,4-Dichlorobenzene	106-46-7	38	UG_L	U			TRG						IDW			4.2	11.	38.	50.	SK5275	WG20766	Preload Cl	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG207667-1	1				2-Methylphenol	95-48-7	38	UG_L	U			TRG						IDW			4.2	19.	38.	50.	SK5275	WG20766	Preload Cl	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG207667-1	1				3- and 4-Methylphenol	m&pCRESOL	38	UG_L	U			TRG						IDW			4.2	28.	38.	50.	SK5275	WG20766	Preload Cl	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW3510C	000	BLK	W	4	06/06/201	06/06/201	20170606	07:52:00	20170621	14:01:00	20170621	19:25:00	WG207667-1	1				Hexachloroethane	67-72-1	38	UG_L	U			TRG						IDW			4.2	12.	38.	50.	SK5275	WG20766	Preload Cl	20170801
N6247016	JM01		MERIDIAN	WG207667-TCLPBLANK	TCLP	TCLPS	1311-827	S

Contract_ID	O_CTO_I	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_	Analytical	PRC_Code	Lab_Code	Lab_Name	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_R	Percent_L	Chem_Name	Analyte_I	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contro	QC_Accur	QC_Accur	Control_LI	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N624701	6JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:04:00	20170629	14:48:00	SK5275-5	1	1			Pentachlorophenol	87-86-5	94	UG_L	U		TRG			IDW			4.2	12.	94.	120	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Pyridine	110-86-1	190	UG_L	U		TRG			IDW			4.2	7.5	190	250	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			1,4-Dichlorobenzene	106-46-7	38	UG_L	U		TRG			IDW			4.2	11.	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			2-Methylphenol	95-48-7	38	UG_L	U		TRG			IDW			4.2	19.	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			3- and 4-Methylphenol	m&pCRESOL	38	UG_L	U		TRG			IDW			4.2	28.	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Hexachloroethane	67-72-1	38	UG_L	U		TRG			IDW			4.2	12.	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Nitrobenzene	98-95-3	38	UG_L	U		TRG			IDW			4.2	16.	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Hexachlorobutadiene	87-68-3	38	UG_L	U		TRG			IDW			4.2	9.0	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			2,4,6-Trichlorophenol	88-06-2	38	UG_L	U		TRG			IDW			4.2	14.	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			2,4,5-Trichlorophenol	95-95-4	94	UG_L	U		TRG			IDW			4.2	18.	94.	120	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			2,4-Dinitrotoluene	121-14-2	38	UG_L	U		TRG			IDW			4.2	11.	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Hexachlorobenzene	118-74-1	38	UG_L	U		TRG			IDW			4.2	10.	38.	50.	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW08-SO-0617	TCLP	TCLPS	1311-827	SVOA	KAS	KATAHDIN	SW1311	NA	SW5510C	000	REG	W	4	06/18/201	06/20/201	20170627	08:56:00	20170628	07:05:00	20170629	15:19:00	SK5275-6	1	1			Pentachlorophenol	87-86-5	94	UG_L	U		TRG			IDW			4.2	12.	94.	120	SK5275	WG20816	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			Benzene	71-43-2	10	UG_L	U		TRG			IDW			4.2	5.2	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			Carbon tetrachloride	56-23-5	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			Chlorobenzene	108-90-7	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			Chloroform	67-66-3	10	UG_L	U		TRG			IDW			4.2	6.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			1,2-Dichloroethane	107-06-2	10	UG_L	U		TRG			IDW			4.2	4.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			1,1-Dichloroethene	75-35-4	10	UG_L	U		TRG			IDW			4.2	7.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			2-Butanone	78-93-3	50	UG_L	U		TRG			IDW			4.2	26.	50.	300	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			Tetrachloroethene	127-18-4	10	UG_L	U		TRG			IDW			4.2	8.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			Trichloroethene	79-01-6	10	UG_L	U		TRG			IDW			4.2	5.6	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW03-GW-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170627	09:00:00	20170630	14:21:00	20170630	14:21:00	SK5275-1	20	1			Vinyl chloride	75-01-4	20	UG_L	U		TRG			IDW			4.2	5.0	20.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			Benzene	71-43-2	10	UG_L	U		TRG			IDW			4.2	5.2	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			Carbon tetrachloride	56-23-5	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			Chlorobenzene	108-90-7	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			Chloroform	67-66-3	10	UG_L	U		TRG			IDW			4.2	6.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			1,2-Dichloroethane	107-06-2	10	UG_L	U		TRG			IDW			4.2	4.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			1,1-Dichloroethene	75-35-4	10	UG_L	U		TRG			IDW			4.2	7.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			2-Butanone	78-93-3	50	UG_L	U		TRG			IDW			4.2	26.	50.	300	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			Tetrachloroethene	127-18-4	10	UG_L	U		TRG			IDW			4.2	8.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			Trichloroethene	79-01-6	10	UG_L	U		TRG			IDW			4.2	5.6	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW04-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	14:54:00	20170630	14:54:00	SK5275-2	20	1			Vinyl chloride	75-01-4	20	UG_L	U		TRG			IDW			4.2	5.0	20.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			Benzene	71-43-2	10	UG_L	U		TRG			IDW			4.2	5.2	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			Carbon tetrachloride	56-23-5	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			Chlorobenzene	108-90-7	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			Chloroform	67-66-3	10	UG_L	U		TRG			IDW			4.2	6.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			1,2-Dichloroethane	107-06-2	10	UG_L	U		TRG			IDW			4.2	4.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			1,1-Dichloroethene	75-35-4	10	UG_L	U		TRG			IDW			4.2	7.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			2-Butanone	78-93-3	50	UG_L	U		TRG			IDW			4.2	26.	50.	300	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			Tetrachloroethene	127-18-4	10	UG_L	U		TRG			IDW			4.2	8.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			Trichloroethene	79-01-6	10	UG_L	U		TRG			IDW			4.2	5.6	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW05-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	15:28:00	20170630	15:28:00	SK5275-3	20	1			Vinyl chloride	75-01-4	20	UG_L	U		TRG			IDW			4.2	5.0	20.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			Benzene	71-43-2	10	UG_L	U		TRG			IDW			4.2	5.2	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			Carbon tetrachloride	56-23-5	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			Chlorobenzene	108-90-7	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			Chloroform	67-66-3	10	UG_L	U		TRG			IDW			4.2	6.4	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			1,2-Dichloroethane	107-06-2	10	UG_L	U		TRG			IDW			4.2	4.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			1,1-Dichloroethene	75-35-4	10	UG_L	U		TRG			IDW			4.2	7.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			2-Butanone	78-93-3	50	UG_L	U		TRG			IDW			4.2	26.	50.	300	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			Tetrachloroethene	127-18-4	10	UG_L	U		TRG			IDW			4.2	8.0	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			Trichloroethene	79-01-6	10	UG_L	U		TRG			IDW			4.2	5.6	10.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW06-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170630	16:01:00	20170630	16:01:00	SK5275-4	20	1			Vinyl chloride	75-01-4	20	UG_L	U		TRG			IDW			4.2	5.0	20.	100	SK5275	WG20829	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5	20	1			Benzene	71-43-2	10	UG_L	U		TRG			IDW			4.2	5.2	10.	100	SK5275	WG20860	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5	20	1			Carbon tetrachloride	56-23-5	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20860	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5	20	1			Chlorobenzene	108-90-7	10	UG_L	U		TRG			IDW			4.2	4.4	10.	100	SK5275	WG20860	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5	20	1			Chloroform	67-66-3	10	UG_L	U		TRG			IDW			4.2	6.4	10.	100	SK5275	WG20860	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5	20	1			1,2-Dichloroethane	107-06-2	10	UG_L	U		TRG			IDW			4.2	4.0	10.	100	SK5275	WG20860	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	TCLPV	1311-826	VOA	KAS	KATAHDIN	SW1311	NA	SW5030	000	REG	W	4	06/18/201	06/20/201	20170629	07:50:00	20170705	14:21:00	20170705	14:21:00	SK5275-5	20	1			1,1-Dichloroethene	75-35-4	10	UG_L	U		TRG			IDW			4.2	7.0	10.	100	SK5275	WG20860	Preload C	20170801
N624701	6JM01		MERIDIAN	MEAFF-IW07-SO-0617	TCLP	T

Contract_	DO_CTO_	Phase	Installatio	Sample_Name	CH2M_Co	Analysis_	Analytical	PRC_Code	Lab_Code	Lab_Nam	Leachate_	Sample_B	Extraction	Result_Ty	Lab_QC_T	Sample_M	QC_Level	DateTime	Date_Rec	Leachate_	Leachate_	Extraction	Extraction	Analysis_D	Analysis_T	Lab_Samp	Dilution	Run_Num	Percent_M	Percent_L	Chem_Name	Analyte_Id	Analyte_V	Original_A	Result_Un	Lab_Quali	Validator_	GC_Colum	Analysis_R	Result_Na	QC_Contr	QC_Accur	QC_Accur	Control_Li	QC_Narra	MDL	Detection	QSM_Ver	DL	LOD	LOQ	SDG	Analysis_B	Validator	Val_Date
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170623	12:02:00	20170623	17:33:00	SKS275-2	0.99	1			Reactive sulfide	REACT-S		25	MG_KG	U			TRG					IDW			4.2	16	25	50.	SKS275	WG20799	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170623	12:03:00	20170623	17:33:00	SKS275-3	0.98	1			Reactive sulfide	REACT-S		25	MG_KG	U			TRG					IDW			4.2	16	25	50	SKS275	WG20799	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170623	12:04:00	20170623	17:33:00	SKS275-4	0.98	1			Reactive sulfide	REACT-S		25	MG_KG	U			TRG					IDW			4.2	16	25	50	SKS275	WG20799	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170623	12:05:00	20170623	17:33:00	SKS275-5	0.95	1			Reactive sulfide	REACT-S		25	MG_KG	U			TRG					IDW			4.2	16	25	50	SKS275	WG20799	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170623	12:06:00	20170623	17:33:00	SKS275-6	0.93	1			Reactive sulfide	REACT-S		25	MG_KG	U			TRG					IDW			4.2	16	25	50	SKS275	WG20799	Preload C	20170801	
N6247016	JM01		MERIDIAN	WG207995-BLANK	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC		NA	METHOD	000	BLK	W	4	06/23/201	06/23/2017			20170623	12:07:00	20170623	17:33:00	WG207995	1	1			Reactive sulfide	REACT-S		25.	MG_KG	U			TRG								4.2	16.39	25.	50.	SKS275	WG20799	Preload C	20170801	
N6247016	JM01		MERIDIAN	WG207995-LCS	NONE	REACT	7.3.4.1	INO	KAS	KATAHDIN ANALYTIC		NA	METHOD	000	BS	W	4	06/23/201	06/23/2017			20170623	12:08:00	20170623	17:33:00	WG207995	1	1			Reactive sulfide	REACT-S		1000	MG_KG				TRG		LSA	120	30	20091101			4.2	16.39	25.	50.	SKS275	WG20799	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		NA	NONE	000	REG	W	4	06/18/201	06/20/2017					20170622	11:25:00	SKS275-1	1	1			Ignitability	IGN		71.	DEG_C	NI			TRG	>				IDW			4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	NONE	000	REG	S	4	06/18/201	06/20/2017					20170622	11:25:00	SKS275-2	1	1			Ignitability	IGN		71.	DEG_C	NI			TRG	>				IDW			4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	NONE	000	REG	S	4	06/18/201	06/20/2017					20170622	11:25:00	SKS275-3	1	1			Ignitability	IGN		71.	DEG_C	NI			TRG	>				IDW			4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	NONE	000	REG	S	4	06/18/201	06/20/2017					20170622	11:25:00	SKS275-4	1	1			Ignitability	IGN		71.	DEG_C	NI			TRG	>				IDW			4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	NONE	000	REG	S	4	06/18/201	06/20/2017					20170622	11:25:00	SKS275-5	1	1			Ignitability	IGN		71.	DEG_C	NI			TRG	>				IDW			4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	NONE	000	REG	S	4	06/18/201	06/20/2017					20170622	11:25:00	SKS275-6	1	1			Ignitability	IGN		71.	DEG_C	NI			TRG	>				IDW			4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	WG207763-BLANK	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		NA	NONE	000	BLK	W	4	06/22/201	06/22/2017					20170622	11:25:00	WG207763	1	1			Ignitability	IGN		71.	DEG_C	NI			TRG	>							4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	WG207763-LCS	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		NA	NONE	000	BS	W	4	06/22/201	06/22/2017					20170622	11:25:00	WG207763	1	1			Ignitability	IGN		27.	DEG_C				TRG		LSA	120	80	20091101			4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	WG207763-LCSD	NONE	IGN	1010A	PCHAR	KAS	KATAHDIN ANALYTIC		NA	NONE	000	BSD	W	4	06/22/201	06/22/2017					20170622	11:25:00	WG207763	1	1			Ignitability	IGN		27.	DEG_C				TRG		LSA	120	80	20091101			4.2	71.	71	71.	SKS275	WG20776	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617-LR	NONE	CORR	9040C	PCHAR	KAS	KATAHDIN ANALYTIC		NA	NONE	000	LR	W	4	06/18/201	06/20/2017					20170620	17:27:00	WG207691	1	1			Corrosivity (pH units)	CORR		6.4	PH				TRG								4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW03-GW-0617	NONE	CORR	9040C	PCHAR	KAS	KATAHDIN ANALYTIC		NA	NONE	000	REG	W	4	06/18/201	06/20/2017					20170620	17:23:00	SKS275-1	1	1			Corrosivity (pH units)	CORR		6.3	PH				TRG					IDW			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	WG207695-LCS	NONE	CORR	9040C	PCHAR	KAS	KATAHDIN ANALYTIC		NA	NONE	000	BS	W	4	06/20/201	06/20/2017					20170620	17:18:00	WG207691	1	1			Corrosivity (pH units)	CORR		7.0	PH				TRG		LSA	110	90	20091101			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW04-SO-0617	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170621	11:43:00	20170621	11:43:00	SKS275-2	1	1			Corrosivity (pH units)	CORR		5.6	PH				TRG					IDW			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW05-SO-0617	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170621	11:43:00	20170621	11:43:00	SKS275-3	1	1			Corrosivity (pH units)	CORR		5.3	PH				TRG					IDW			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW06-SO-0617	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170621	11:43:00	20170621	11:43:00	SKS275-4	1	1			Corrosivity (pH units)	CORR		6.2	PH				TRG					IDW			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW07-SO-0617	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170621	11:43:00	20170621	11:43:00	SKS275-5	1	1			Corrosivity (pH units)	CORR		5.1	PH				TRG					IDW			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	MEAFF-IW08-SO-0617	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	REG	S	4	06/18/201	06/20/2017			20170621	11:43:00	20170621	11:43:00	SKS275-6	1	1			Corrosivity (pH units)	CORR		5.2	PH				TRG					IDW			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	WG207698-LCS	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	BS	S	4	06/21/201	06/21/2017			20170621	11:43:00	20170621	11:43:00	WG207691	1	1			Corrosivity (pH units)	CORR		7.0	PH				TRG		LSA	110	90	20091101			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	
N6247016	JM01		MERIDIAN	WG207698-LCSD	NONE	CORR	9045D	PCHAR	KAS	KATAHDIN ANALYTIC		DRY	METHOD	000	BSD	S	4	06/21/201	06/21/2017			20170621	11:43:00	20170621	11:43:00	WG207691	1	1			Corrosivity (pH units)	CORR		7.0	PH				TRG		LSA	110	90	20091101			4.2	0.10	0.10	0.10	SKS275	WG20769	Preload C	20170801	

ENVIRONMENTAL
Data Services, Inc.

DATA VALIDATION SUMMARY REPORT
NAVAL AIR STATION MERIDIAN, MISSISSIPPI

Client: CH2M HILL, Inc., Virginia Beach, Virginia
SDG: 320-28427-1
Laboratory: Test America Laboratories, West Sacramento, California
Site: Naval Air Station Meridian, JM01, Meridian, Mississippi
Date: October 30, 2017

PFCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	RIG1_BLANK	320-28427-1	Water
2	RIG2_BLANK	320-28427-2	Water
3	GROUT TRUCK_BLANK	320-28427-3	Water

A full data validation was performed on the analytical data for three water samples collected on May 18, 2017 by CH2M HILL at the NAS Meridian site in Mississippi. The samples were analyzed under the EPA Method "Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)".

Specific method references are as follows:

Analysis	*Method References*
PFCs	USEPA Method 537 Modified

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods, the Draft Sampling and Analysis Plan, Perfluorinated Compounds Site Inspection, Naval Air Station Meridian, Task Order JM01, August 2016, and the USEPA National Functional Guidelines for Organic Data Review as follows:

- The USEPA "Contract Laboratories Program National Functional Guidelines for Superfund Organic Methods Data Review," January 2017;
- and the reviewer's professional judgment.

The following data quality indicators were reviewed for this report:

Organics

- Holding times and sample preservation
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries

- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

A full (Level IV) data validation was performed with this review including a recalculation of 10% of the detected results in the samples.

Data Usability Assessment

There were no rejections of data.

Overall the data is acceptable for the intended purposes. There were no qualifications.

Perfluorinated Compounds (PFCs)

Holding Times

- All samples were extracted within 14 days for water samples and analyzed within 28 days.

LC/MS Tuning

- All criteria were met.

Initial Calibration

- All relative standard deviation (%RSD) and/or correlation coefficients criteria were met.

Continuing Calibration

- All percent difference (%D) and RRF criteria were met.

Method Blank

- The method blanks were free of contamination.

Field QC Blank

- Field QC samples were not analyzed.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- MS/MSD samples were not analyzed.

Laboratory Control Sample/Laboratory Control Sample (LCS/LCSD)

- The LCS/LCSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- Several samples results were flagged (M) by the laboratory indicating manual integration. These flags were removed by the reviewer.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 11/3/17

Nancy Weaver
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-28427-1

SDG No.:

Client Sample ID: Rig1_Blank | Lab Sample ID: 320-28427-1

Matrix: Water | Lab File ID: 2017.06.08D_008.d

Analysis Method: 537 (Modified) | Date Collected: 05/18/2017 17:11

Extraction Method: 3535 | Date Extracted: 05/25/2017 15:37

Sample wt/vol: 255.3(mL) | Date Analyzed: 06/09/2017 01:40

Con. Extract Vol.: 0.5(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	2.0	U	2.4	2.0	0.73
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.9	U	3.9	2.9	1.2
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.0	U M	2.4	2.0	0.90

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	80		25-150
STL00991	13C4 PFOS	99		25-150
STL00994	18O2 PFHxS	111		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

2

Lab Name: TestAmerica Sacramento | Job No.: 320-28427-1

SDG No.:

Client Sample ID: Rig2_Blank | Lab Sample ID: 320-28427-2

Matrix: Water | Lab File ID: 2017.06.08D_009.d

Analysis Method: 537 (Modified) | Date Collected: 05/18/2017 17:25

Extraction Method: 3535 | Date Extracted: 05/25/2017 15:37

Sample wt/vol: 255.9(mL) | Date Analyzed: 06/09/2017 01:47

Con. Extract Vol.: 0.5(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	3.4	M	2.4	2.0	0.73
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.8	J	3.9	2.9	1.2
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.0	U M	2.4	2.0	0.90

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	79		25-150
STL00991	13C4 PFOS	86		25-150
STL00994	18O2 PFHxS	101		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

3

Lab Name: TestAmerica Sacramento | Job No.: 320-28427-1

SDG No.:

Client Sample ID: Grout Truck Blank | Lab Sample ID: 320-28427-3

Matrix: Water | Lab File ID: 2017.06.08D_010.d

Analysis Method: 537 (Modified) | Date Collected: 05/18/2017 17:35

Extraction Method: 3535 | Date Extracted: 05/25/2017 15:37

Sample wt/vol: 281.4(mL) | Date Analyzed: 06/09/2017 01:55

Con. Extract Vol.: 0.5(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 168409 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	1.8	U	2.2	1.8	0.66
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.1	J M	3.6	2.7	1.1
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.8	U M	2.2	1.8	0.82

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	77		25-150
STL00991	13C4 PFOS	102		25-150
STL00994	18O2 PFHxS	112		25-150