eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 | 717-656-2300 | Fax: 717-656-2681 | www.LancasterLabs.com

Type I Data Package

Prepared for:

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

Project: SSP-1428
Soil Samples
Collected on 09/29/15-09/30/15

SDG# SSX50

GROUP	SAMPLE NUMBERS
1676959	8450139-8450141

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

Authorized by: Dana M Kauffman **Date:** **08/10/2016**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Natalie Luciano at (717) 556-7258.

2425 New Holland Pike, Lancaster, PA 17601 | 717-656-2300 | Fax: 717-656-2681 | www.LancasterLabs.com

Table of Contents for SDG# SSX50

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Sample Reference List for SDG Number SSX50
with a Data Package Type of I

20613 - CenterPoint Properties

Project: SSP-1428

Lab Sample Number	Client Sample ID	Collection Date	Date Received
8450139	CP-3122-A(0-2)	09/29/2015 15:40	06/28/2016 14:30
8450140	CP-3124-A(0-2)	09/29/2015 14:45	06/28/2016 14:30
8450141	CP-3123-A(0-2)	09/30/2015 09:35	06/28/2016 14:30

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 · 717-656-2300 Fax: 717-656-2681 · www.lancasterlabs.com

14027 PFC s in Soil by LC/MS/MS
14090 PFC Solid Prep

This method is for determination of perfluorinated compounds in soil and sediment by liquid chromatography/ tandem mass spectrometry (LC/MS/MS). Solid samples are sonicated with an aqueous/acetonitrile solution and analyzed by LC/MS/MS.

Reference: Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LCMSMS), Version 1.1, September 2009.

Analysis Reports / Field Chain of Custody

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

Report Date: July 19, 2016

Project: SSP-1428

Submittal Date: 06/28/2016
Group Number: 1676959
SDG: SSX50
State of Sample Origin: MO

Client Sample Description	Lancaster Labs (LL) #
CP-3122-A(0-2) Grab Soil	8450139
CP-3124-A(0-2) Grab Soil	8450140
CP-3123-A(0-2) Grab Soil	8450141

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

Electronic Copy To	S.S. Papadopulos & Assoc Inc.	Attn: Don A. Trego
Electronic Copy To	S.S. Papadopulos & Assoc Inc.	Attn: Rachel Shannon
Electronic Copy To	S.S. Papadopulos & Assoc Inc.	Attn: Harvey A. Cohen

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: CP-3122-A(0-2) Grab Soil
SSP-1428

LL Sample # SW 8450139
LL Group # 1676959
Account # 20613

Project Name: SSP-1428

Collected: 09/29/2015 15:40

Submitted: 06/28/2016 14:30
Reported: 07/19/2016 13:18

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

3122A SDG#: SSX50-01

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Misc. Organics	**EPA 537 Rev. 1.1 modified**		**ng/g**		**ng/g**	**ng/g**	
14027	NEtFOSAA	2991-50-6	2.0	U	2.0	1.0	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
14027	NMeFOSAA	2355-31-9	2.0	U	2.0	0.90	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						
14027	Perfluorobutanesulfonate	375-73-5	1.6	U	1.6	0.50	1
14027	Perfluorodecanoic acid	335-76-2	0.40	U	0.40	0.20	1
14027	Perfluorododecanoic acid	307-55-1	0.80	U	0.80	0.40	1
14027	Perfluoroheptanoic acid	375-85-9	0.60	U	0.60	0.30	1
14027	Perfluorohexanesulfonate	355-46-4	1.6	U	1.6	0.50	1
14027	Perfluorohexanoic acid	307-24-4	0.40	U	0.40	0.20	1
14027	Perfluorononanoic acid	375-95-1	0.40	U	0.40	0.20	1
14027	Perfluoro-octanesulfonate	1763-23-1	1.6	U	1.6	0.70	1
14027	Perfluorooctanoic acid	335-67-1	0.60	U	0.60	0.30	1
14027	Perfluorotetradecanoic acid	376-06-7	0.80	U	0.80	0.30	1
14027	Perfluorotridecanoic acid	72629-94-8	1.2	U	1.2	0.60	1
14027	Perfluoroundecanoic acid	2058-94-8	0.60	U	0.60	0.30	1

The holding time was not met. The analysis was added after the holding time expired.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Sample Comments

This sample was originally submitted to the laboratory on 09/30/15 at 10:10. We received authorization for further testing on 06/28/16.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14027	PFC s in Soil by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16182005	07/12/2016 18:07	Jason W Knight	1
14090	PFC Solid Prep	EPA 537 Rev. 1.1 modified	1	16182005	06/30/2016 12:15	Robert Brown	1

*=This limit was used in the evaluation of the final result

Sample Description: CP-3124-A(0-2) Grab Soil
SSP-1428

LL Sample # SW 8450140
LL Group # 1676959
Account # 20613

Project Name: SSP-1428

Collected: 09/29/2015 14:45

Submitted: 06/28/2016 14:30
Reported: 07/19/2016 13:18

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

3124A SDG#: SSX50-02

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Misc. Organics	**EPA 537 Rev. 1.1 modified**		**ng/g**		**ng/g**	**ng/g**	
14027	NEtFOSAA	2991-50-6	2.0	U	2.0	1.0	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
14027	NMeFOSAA	2355-31-9	2.0	U	2.0	0.90	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						
14027	Perfluorobutanesulfonate	375-73-5	1.6	U	1.6	0.50	1
14027	Perfluorodecanoic acid	335-76-2	0.40	U	0.40	0.20	1
14027	Perfluorododecanoic acid	307-55-1	0.80	U	0.80	0.40	1
14027	Perfluoroheptanoic acid	375-85-9	0.60	U	0.60	0.30	1
14027	Perfluorohexanesulfonate	355-46-4	1.6	U	1.6	0.50	1
14027	Perfluorohexanoic acid	307-24-4	0.40	U	0.40	0.20	1
14027	Perfluorononanoic acid	375-95-1	0.40	U	0.40	0.20	1
14027	Perfluoro-octanesulfonate	1763-23-1	1.6	U	1.6	0.70	1
14027	Perfluorooctanoic acid	335-67-1	0.60	U	0.60	0.30	1
14027	Perfluorotetradecanoic acid	376-06-7	0.80	U	0.80	0.30	1
14027	Perfluorotridecanoic acid	72629-94-8	1.2	U	1.2	0.60	1
14027	Perfluoroundecanoic acid	2058-94-8	0.60	U	0.60	0.30	1

The holding time was not met. The analysis was added after the holding time expired.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Sample Comments

This sample was originally submitted to the laboratory on 09/30/15 at 10:10. We received authorization for further testing on 06/28/16.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14027	PFC s in Soil by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16182005	07/12/2016 18:24	Jason W Knight	1
14090	PFC Solid Prep	EPA 537 Rev. 1.1 modified	1	16182005	06/30/2016 12:15	Robert Brown	1

*=This limit was used in the evaluation of the final result

Sample Description: CP-3123-A(0-2) Grab Soil
SSP-1428

LL Sample # SW 8450141
LL Group # 1676959
Account # 20613

Project Name: SSP-1428

Collected: 09/30/2015 09:35

Submitted: 06/28/2016 14:30
Reported: 07/19/2016 13:18

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

3123A SDG#: SSX50-03

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Misc. Organics	**EPA 537 Rev. 1.1 modified**		**ng/g**		**ng/g**	**ng/g**	
14027	NEtFOSAA	2991-50-6	2.0	U	2.0	1.0	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
14027	NMeFOSAA	2355-31-9	2.0	U	2.0	0.90	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						
14027	Perfluorobutanesulfonate	375-73-5	1.6	U	1.6	0.50	1
14027	Perfluorodecanoic acid	335-76-2	0.40	U	0.40	0.20	1
14027	Perfluorododecanoic acid	307-55-1	0.80	U	0.80	0.40	1
14027	Perfluoroheptanoic acid	375-85-9	0.60	U	0.60	0.30	1
14027	Perfluorohexanesulfonate	355-46-4	1.6	U	1.6	0.50	1
14027	Perfluorohexanoic acid	307-24-4	0.40	U	0.40	0.20	1
14027	Perfluorononanoic acid	375-95-1	0.24	J	0.40	0.20	1
14027	Perfluoro-octanesulfonate	1763-23-1	1.6	U	1.6	0.70	1
14027	Perfluorooctanoic acid	335-67-1	0.60	U	0.60	0.30	1
14027	Perfluorotetradecanoic acid	376-06-7	0.80	U	0.80	0.30	1
14027	Perfluorotridecanoic acid	72629-94-8	1.2	U	1.2	0.60	1
14027	Perfluoroundecanoic acid	2058-94-8	0.60	U	0.60	0.30	1

The holding time was not met. The analysis was added after the holding time expired.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Sample Comments

This sample was originally submitted to the laboratory on 10/01/15 at 09:20. We received authorization for further testing on 06/28/16.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14027	PFC s in Soil by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16182005	07/12/2016 18:42	Jason W Knight	1
14090	PFC Solid Prep	EPA 537 Rev. 1.1 modified	1	16182005	06/30/2016 12:15	Robert Brown	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CenterPoint Properties
Reported: 07/19/2016 13:18

Group Number: 1676959

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result ng/g		LOQ** ng/g	MDL ng/g
Batch number: 16182005	Sample number(s): 8450139-8450141			
NEtFOSAA	2.0	U	2.0	1.0
NMeFOSAA	2.0	U	2.0	0.90
Perfluorobutanesulfonate	1.6	U	1.6	0.50
Perfluorodecanoic acid	0.40	U	0.40	0.20
Perfluorododecanoic acid	0.80	U	0.80	0.40
Perfluoroheptanoic acid	0.60	U	0.60	0.30
Perfluorohexanesulfonate	1.6	U	1.6	0.50
Perfluorohexanoic acid	0.40	U	0.40	0.20
Perfluorononanoic acid	0.40	U	0.40	0.20
Perfluoro-octanesulfonate	1.6	U	1.6	0.70
Perfluorooctanoic acid	0.60	U	0.60	0.30
Perfluorotetradecanoic acid	0.80	U	0.80	0.30
Perfluorotridecanoic acid	1.2	U	1.2	0.60
Perfluoroundecanoic acid	0.60	U	0.60	0.30

LCS/LCSD

Analysis Name	LCS Spike Added ng/g	LCS Conc ng/g	LCSD Spike Added ng/g	LCSD Conc ng/g	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 16182005	Sample number(s): 8450139-8450141								
NEtFOSAA	20	25.13	20	19.82	126	99	70-130	24	30
NMeFOSAA	20	32.52	20	28.77	163*	144*	70-130	12	30
Perfluorobutanesulfonate	17.68	17.28	17.68	14.41	98	81	70-130	18	30
Perfluorodecanoic acid	20	27.73	20	25.45	139*	127	70-130	9	30
Perfluorododecanoic acid	20	23.35	20	20.57	117	103	70-130	13	30
Perfluoroheptanoic acid	20	24.57	20	28.39	123	142*	70-130	14	30
Perfluorohexanesulfonate	18.92	18.07	18.92	14.98	96	79	70-130	19	30
Perfluorohexanoic acid	20	18.5	20	24.8	92	124	70-130	29	30
Perfluorononanoic acid	20	16.38	20	20.06	82	100	70-130	20	30
Perfluoro-octanesulfonate	19.12	21.91	19.1	33.12	115	173*	70-130	41*	30
Perfluorooctanoic acid	20	20.33	20	20.02	102	100	70-130	2	30
Perfluorotetradecanoic acid	20	50.96	20	34.93	255*	175*	70-130	37*	30
Perfluorotridecanoic acid	20	21.56	20	22.21	108	111	70-130	3	30
Perfluoroundecanoic acid	20	26.87	20	26.77	134*	134*	70-130	0	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CenterPoint Properties
Group Number: 1676959
Reported: 07/19/2016 13:18

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

1676959 8450139-41 (3) 6/28/16

Acct. # 20613 Group # ~~15-97085~~ Sample # ~~S-069930-65~~

Client:	S.S. Papadopulos & Associates, Inc.		
Project Name/#:	SSP-1428	Site ID #:	
Project Manager:	Harvey Cohen	P.O. #:	
Sampler:	SSPA	PWSID #:	
		Quote #:	
State where sample(s) were collected:			

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Matrix: Sediment	Matrix: Potable Water	Matrix: Ground Water	Matrix: NPDES	Matrix: Surface Water	Matrix: Other	Total # of Containers	8 RCRA Metals + U + Be	Lab Homogenization	PCBs (Aroclors)	TPH- DRO, and ORO	VOCs + 15 TICs, GRO	SVOCs + 15 TICs	Fingerprinting via Modified 8015	ORP (ASTM D1498)	pH (SW-846 9045D modified)	Chromium III (SW-846 6020)	Chromium VI (SW-846 7196A)	Fluoride	Cyanide (total and amendable)	Remarks
CP- 3122 - A(0-2)	9/29/15	15:40	X		X							5							X							4 VOAs + 1L
CP- 3122 - A(2-5)	9/29/15	15:50	X		X							5							X							4 VOAs + 1L
CP- 3122 - B	9/29/15	16:00	X		X							5	X	X	X	X	X	X	X							4 VOAs + 1L
CP- 3122 - C	9/29/15	16:10	X		X							5	X	X	X	X	X	X	X							4 VOAs + 1L
CP- 3122 - D	9/29/15	16:15	X		X							5	X	X	X	X	X	X	X							4 VOAs + 1L
BD- 12 - 09/29/15	9/29/15	15:40	X		X							5							X							4 VOAs + 1L
TB- 12 - 09/29/15	9/29/15						X					1					X									1 VOA

Analyses Requested — Preservation Codes

For Lab Use Only

SF #: _____

SCR #: _____

Preservation Codes

H = HCl T = Thiosulfate

N = HNO_3 B = NaOH

S = H_2SO_4 P = H_3PO_4

O = Other

Turnaround Time Requested (TAT) Standard ☐ Rush ☐

(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by: E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐

Type III (Reduced non-CLP) ☑ CT RCP ☐

Type IV (CLP SOW) ☐ TX TRRP-13 ☐

Type VI (Raw Data Only) ☐

EDD Req'd? ? Yes ☑ No ☐ If yes, format: _____

Relinquished by:	Date	Time	Received by:	Date	Time
Theodora Paulos	9/29/15	18:00	FedEx 801301829298	9/29/15	18:00
Theodora Rutter					

Relinquished by Commercial Carrier:

UPS _____ FedEx X Other _____

Temperature upon receipt 2.4 °C

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

7045 0713

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

1676959 8450139-41 (4) (3)

Acct. # 20613 Group # ~~LY97085~~ Sample # ~~8069930~~-65 6/28/16

Client:	S.S. Papadopulos & Associates, Inc.		
Project Name/#:	SSP-1428	Site ID #:	
Project Manager:	Harvey Cohen	P.O. #:	
Sampler:	SSPA	PWSID #:	
		Quote #:	

State where sample(s) were collected:

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Water: Potable	Water: Ground	Water: NPDES	Water: Surface	Air	Total # of Containers	8 RCRA Metals + U + Be	Lab Homogenization	PCBs (Aroclors)	TPH- DRO, and ORO	VOCs + 15 TICs, GRO	SVOCs + 15 TICs	Fingerprinting via Modified 8015	ORP (ASTM D1498)	pH (SW-846 9045D modified)	Chromium III (SW-846 6020)	Chromium VI (SW-846 7196A)	Fluoride	Cyanide (total and amendable)	Remarks
CP- 3124 - A(0-2)	9/29/15	14:45	X		X						5							X							4 VOAs + 1L
CP- 3122 - F	9/29/15	16:30	X		X						5	X	X	X	X	X	X	X							4 VOAs + 1L
CP- 3122 - E	9/29/15	16:25	X		X						5	X	X	X	X	X	X	X							4 VOAs + 1L
BD- 11 - 09/29/15	9/29/15	14:45	X		X						5							X							4 VOAs + 1L
TB- 13 - 09/29/15	9/29/15					X					1					X									1 VOA

Analyses Requested — Preservation Codes

Preservation Codes: H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; P = H_3PO_4; O = Other

For Lab Use Only: SF #: ____ SCR #: ____

Turnaround Time Requested (TAT) Standard ☐ Rush ☐

(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by: E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐

Type III (Reduced non-CLP) ☑ CT RCP ☐

Type IV (CLP SOW) ☐ TX TRRP-13 ☐

Type VI (Raw Data Only) ☐

EDD Req'd? Yes ☑ No ☐ If yes, format: ____

Relinquished by:	Date	Time	Received by:	Date	Time
Theodor Reuter	9/29/15	18:00	FedEx 801301829302	9/29/15	18:00
Relinquished by: Theodor Reuter	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
				9.30.15	1010

Relinquished by Commercial Carrier: UPS ____ FedEx X Other ____

Temperature upon receipt 2 3 °C

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 20613 Group # ~~1599492~~ 1676959 Sample # ~~807232-46~~ & 450139-41 (1)

Client:	S.S. Papadopulos & Associates, Inc.	Site ID #:
Project Name/#:	SSP-1428	P.O. #:
Project Manager:	Harvey Cohen	PWSID #:
Sampler:	SSPA	Quote #:
State where sample(s) were collected:		

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Water: Potable	Water: Ground	Water: NPDES	Water: Surface	Air	Sediment	Total # of Containers	8 RCRA Metals + U + Be	Lab Homogenization	PCBs (Aroclors)	TPH- DRO, and ORO	VOCs + 15 TICs, GRO	SVOCs + 15 TICs	Fingerprinting via Modified 8015	ORP (ASTM D1498)	pH (SW-846 9045D modified)	Chromium III (SW-846 6020)	Chromium VI (SW-846 7196A)	Remarks
CP- 3123 - A(0-2)	9/30/15	9:35	X		X							5							X					4 VOAs + 1L
CP- 3123 - A(2-5)	9/30/15	9:40	X		X							5							X					4 VOAs + 1L
CP- 3123 - B	9/30/15	9:55	X		X							5	X	X	X	X	X	X	X					4 VOAs + 1L
CP- 3123 - C	9/30/15	10:00	X		X							5	X	X	X	X	X	X	X					4 VOAs + 1L
CP- 3123 - D	9/30/15	10:15	X		X							5	X	X	X	X	X	X	X					4 VOAs + 1L
CP- 3123 - E	9/30/15	10:30	X		X							5	X	X	X	X	X	X	X					4 VOAs + 1L
TB- 10 09/30/15	9/30/15					X						1					X							1 VOA

Analyses Requested — Preservation Codes

For Lab Use Only
SF #: _____
SCR #: _____

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
O = Other

Turnaround Time Requested (TAT) Standard ☐ Rush ☐
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by: E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)
Type I (Validation/non-CLP) ☐ MA MCP ☐
Type III (Reduced non-CLP) ☑ CT RCP ☐
Type IV (CLP SOW) ☐ TX TRRP-13 ☐
Type VI (Raw Data Only) ☐

EDD Req'd? ? Yes ☑ No ☐ If yes, format: _____

	Relinquished by:	Date	Time	Received by:	Date	Time
1	[signature]	09/30/15	18:15	FedEx 801301829313	09/30/15	16:15
2	Theodore Reeter					
3						
4						
5				[signature]	10/1/15	920

Relinquished by Commercial Carrier: UPS _____ FedEx X Other _____

Temperature upon receipt 0.9 °C

Natalie Luciano

From: Natalie Luciano
Sent: Tuesday, June 28, 2016 2:39 PM
To: 'Donald A. Trego'
Cc: 'Harvey Cohen'
Subject: RE: Extracts from Bannister

Just a quick FYI that we don't offer 8:2 fluorotelomersulfonate in soil, so that would the only difference in the reporting list.

Natalie Luciano
Senior Specialist, Environmental Client Services
Phone: +1 717-556-7258

Look for Eurofins Lancaster Laboratories Environmental at these upcoming conferences and industry events.

From: Natalie Luciano
Sent: Tuesday, June 28, 2016 2:16 PM
To: 'Donald A. Trego'; Charles Neslund
Cc: Harvey Cohen; Jenifer Lewis
Subject: RE: Extracts from Bannister

Ok. I'll work on getting this re-entered.

Natalie Luciano
Senior Specialist, Environmental Client Services
Phone: +1 717-556-7258

Look for Eurofins Lancaster Laboratories Environmental at these upcoming conferences and industry events.

From: Donald A. Trego [mailto:Dtrego@sspa.com]
Sent: Tuesday, June 28, 2016 1:41 PM
To: Charles Neslund; Natalie Luciano
Cc: Harvey Cohen; Jenifer Lewis
Subject: RE: Extracts from Bannister

Thank you! Natalie, Please proceed with the PFC analyses for these three samples ASAP using the same analyte list as previously done for the water samples.

Sincerely,

Donald A. Trego, QEP

From: Natalie Luciano [mailto:NatalieLuciano@eurofinsUS.com]
Sent: Tuesday, June 28, 2016 12:22 PM
To: Donald A. Trego <Dtrego@sspa.com>
Cc: Charles Neslund <CharlesNeslund@eurofinsUS.com>
Subject: RE: Extracts from Bannister

These are the three:

CP-3122-A(0-2)
CP-3124-A(0-2)
CP-3123-A(0-2)

Natalie Luciano
Senior Specialist, Environmental Client Services
Phone: +1 717-556-7258

From: Donald A. Trego [mailto:Dtrego@sspa.com]
Sent: Tuesday, June 28, 2016 12:17 PM
To: Natalie Luciano
Cc: Charles Neslund
Subject: RE: Extracts from Bannister

Can you please provide me the sample ID for each of the samples you have on hand?

Sincerely,

Donald A. Trego, QEP

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Sample Administration Receipt Documentation Log

Doc Log ID: 109438

Group Number(s): ~~D-97085~~ 1676959 (B) CMC 6/28/16

Client: Papadopulos

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	09/30/2015 10:10
Number of Packages:	6	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	No
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	6
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Timothy Cubberley (6520) at 11:56 on 09/30/2015

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	3.2	DT	Wet	Y	Bagged	N
2	DT131	2.0	DT	Wet	Y	Bagged	N
3	DT131	2.4	DT	Wet	Y	Bagged	N
4	DT131	2.3	DT	Wet	Y	Bagged	N
5	DT131	1.5	DT	Wet	Y	Bagged	N
6	DT131	3.8	DT	Wet	Y	Bagged	N

Sample ID Discrepancy Details

Sample ID on COC	Sample ID on Label	Comments
BD-20-09/29/15	BD-21-09/29/15	On the CoC with TB-21

2425 New Holland Pike
Lancaster, PA 17605-2425

T 717-656-2300
F 717-656-2681
www.LancasterLabs.com

eurofins
Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 109958

Group Number(s): ~~159749~~ 2 1676959

Client: S.S. Papadopulos & Associates

QM 6/28/16 (3)

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	10/01/2015 9:20
Number of Packages:	10	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	No
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	10
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Brandy Barclay (2299) at 11:49 on 10/01/2015

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle)* *IR = Infrared (Surface Temp)* *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	0.9	DT	Wet	Y	Bagged	N
2	DT146	2.0	DT	Wet	Y	Bagged	N
3	DT146	1.9	DT	Wet	Y	Bagged	N
4	DT146	1.4	DT	Wet	Y	Bagged	N
5	DT146	1.2	DT	Wet	Y	Bagged	N
6	DT146	4.2	DT	Wet	Y	Bagged	N
7	DT146	3.1	DT	Wet	Y	Bagged	N
8	DT146	3.0	DT	Wet	Y	Bagged	N
9	DT146	4.6	DT	Wet	Y	Bagged	N
10	DT146	3.9	DT	Wet	Y	Bagged	N

Sample ID Discrepancy Details

Sample ID on COC	Sample ID on Label	Comments
CP-5008-A(2-5)	CP-5008-B	

2425 New Holland Pike
Lancaster, PA 17605-2425

T 717-656-2300
F 717-656-2681
www.LancasterLabs.com

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Miscellaneous LC/MS/MS Data

Case Narrative/Conformance Summary

Miscellaneous LC/MS/MS

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Case Narrative/Conformance Summary

CLIENT: CenterPoint Properties
SDG: SSX50

Specialty Services Group

Fraction: Miscellaneous LC/MS/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
8450139	CP-3122-A(0-2)		X	1	
8450140	CP-3124-A(0-2)		X	1	
8450141	CP-3123-A(0-2)		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

(Sample number(s): 8450139-8450141: Analysis: 14027)
The holding time was not met. The analysis was added after the holding time expired.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 8450139-8450141: Analysis: 14027)
The response for NMeFOSAA was outside acceptance limits in the CAL3 standard at 31.55% difference. Since the coefficient of determination for the calibration curve was >0.99, the data is reported.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Method Blank

(Sample number(s): 8450139-8450141: Analysis: 14027)
The internal standard responses for several compounds in the method blank were less than 50% of the average area measured during the initial calibration. Since the response is low, any result should be considered biased high.
Sufficient sample was not available to perform a re-extraction.

Case Narrative/Conformance Summary

CLIENT: CenterPoint Properties
SDG: SSX50

Specialty Services Group

Fraction: Miscellaneous LC/MS/MS

LCS/LCSD

(Sample number(s): 8450139-8450141: Analysis: 14027)
The internal standard responses for several compounds in the LCS and LCSD were less than 50% of the average area measured during the initial calibration. Since the response is low, any result should be considered biased high.
Sufficient sample was not available to perform a re-extraction.

(Sample number(s): 8450139-8450141: Analysis: 14027)
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Batch#: 16182005 (Sample number(s): 8450139-8450141)
The relative percent difference(s) for the following analyte(s) in the LCS/LCSD is outside the acceptance window: Perfluoro-octanesulfonate, Perfluorotetradecanoic acid

The recovery(ies) for the following analyte(s) in the LCS exceeds the acceptance window indicating a positive bias: Perfluorodecanoic acid
Since the recovery is high and no analytes are detected above the quantitation limit, the data is reported.

The recovery(ies) for the following analyte(s) in the LCSD exceeds the acceptance window indicating a positive bias: Perfluoroheptanoic acid, Perfluoro-octanesulfonate
Since the recovery is high and no analytes are detected above the quantitation limit, the data is reported.

The recovery(ies) for the following analyte(s) in the LCS and LCSD exceeds the acceptance window indicating a positive bias: NMeFOSAA, Perfluorotetradecanoic acid, Perfluoroundecanoic acid
Since the recovery is high and no analytes are detected above the quantitation limit, the data is reported. Refer to the QC Summary forms for more information.

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Case Narrative/Conformance Summary

CLIENT: CenterPoint Properties
SDG: SSX50

Specialty Services Group

Fraction: Miscellaneous LC/MS/MS

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Quality Control and Calibration Summary Forms

Miscellaneous LC/MS/MS

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Quality Control Reference List
Specialty Services Group

CLIENT: CenterPoint Properties
SDG: SSX50

Fraction: Miscellaneous LC/MS/MS

Analysis	Batch Number	Sample Number	Analysis Date
PFC s in Soil by LC/MS/MS	16182005	BLK	07/14/2016 20:11:00
		LCS	07/14/2016 20:28:00
		LCSD	07/14/2016 20:45:00
		8450139	07/12/2016 18:07:00
		8450140	07/12/2016 18:24:00
		8450141	07/12/2016 18:42:00

Quality Control Summary
Method Blank
Specialty Services Group
SDG: SSX50
Matrix: SOLID

Fraction: Miscellaneous LC/MS/MS

16182005 / BLK Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Perfluorooctanoic acid	07/14/16	N.D.	ng/g	0.30	0.60
Perfluorononanoic acid	07/14/16	N.D.	ng/g	0.20	0.40
Perfluorodecanoic acid	07/14/16	N.D.	ng/g	0.20	0.40
Perfluoroundecanoic acid	07/14/16	N.D.	ng/g	0.30	0.60
Perfluorododecanoic acid	07/14/16	N.D.	ng/g	0.40	0.80
Perfluorotridecanoic acid	07/14/16	N.D.	ng/g	0.60	1.2
Perfluorotetradecanoic acid	07/14/16	N.D.	ng/g	0.30	0.80
Perfluorohexanoic acid	07/14/16	N.D.	ng/g	0.20	0.40
Perfluoroheptanoic acid	07/14/16	N.D.	ng/g	0.30	0.60
Perfluorobutanesulfonate	07/14/16	N.D.	ng/g	0.50	1.6
Perfluorohexanesulfonate	07/14/16	N.D.	ng/g	0.50	1.6
Perfluoro-octanesulfonate	07/14/16	N.D.	ng/g	0.70	1.6
NEtFOSAA	07/14/16	N.D.	ng/g	1.0	2.0
NMeFOSAA	07/14/16	N.D.	ng/g	0.90	2.0

Specialty Services Group

Fraction: Miscellaneous LC/MS/MS

LCS: LCS LCSD: LCSD	Batch: **16182005** (Sample number(s): 8450139-8450141)							
Analyte	**Spike Added ng/g**	**LCS Conc ng/g**	**LCSD Conc ng/g**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Perfluorooctanoic acid	20	20.33	20.02	102	100	70-130	2	30
Perfluorononanoic acid	20	16.38	20.06	82	100	70-130	20	30
Perfluorodecanoic acid	20	27.73	25.45	139 *	127	70-130	9	30
Perfluoroundecanoic acid	20	26.87	26.77	134 *	134 *	70-130	0	30
Perfluorododecanoic acid	20	23.35	20.57	117	103	70-130	13	30
Perfluorotridecanoic acid	20	21.56	22.21	108	111	70-130	3	30
Perfluorotetradecanoic acid	20	50.96	34.93	255 *	175 *	70-130	37 *	30
Perfluorohexanoic acid	20	18.5	24.8	92	124	70-130	29	30
Perfluoroheptanoic acid	20	24.57	28.39	123	142 *	70-130	14	30
Perfluorobutanesulfonate	17.68	17.28	14.41	98	81	70-130	18	30
Perfluorohexanesulfonate	18.92	18.07	14.98	96	79	70-130	19	30
Perfluoro-octanesulfonate	19.12	21.91	33.12	115	173 *	70-130	41 *	30
NEtFOSAA	20	25.13	19.82	126	99	70-130	24	30
NMeFOSAA	20	32.52	28.77	163 *	144 *	70-130	12	30

Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881 Lab File ID: 16Jul11-25

Date/Time Analyzed: 07/11/2016 19:19 Lab Sample ID: CCV3

Init. Calib. Date/Times: 07/11/2016 14:15 07/11/2016 15:41

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	317604	711777	240.00	235.48	-1.88	±30
PFDA	313927	756566	60.00	68.14	13.57	±30
PFDoA	716264	1580373	120.00	112.94	10.02	±30
PFHxA	224846	509122	60.00	60.81	1.35	±30
PFHxS	227553	513794	240.00	237.27	-1.14	±30
PFNA	316495	728727	60.00	61.45	2.41	±30
PFOA	449887	1026579	60.00	55.42	-7.63	±30
PFOS	151877	342224	240.00	196.70	-18.04	±30
PFTeDA	552779	1274103	120.00	134.49	12.08	±30
PFTrDA	693924	1568732	120.00	115.78	-3.52	±30
PFUdA	353703	777355	60.00	64.47	7.45	±30
PFHpA	267475	559734	60.00	58.50	-2.51	±30
NEtFOSAA	1320106	3129091	240.00	224.53	-6.44	±30
NMeFOSAA	1461327	3397228	240.00	228.83	-4.65	±30

* Outside QC Limits.

Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881 Lab File ID: 16Jul12-34

Date/Time Analyzed: 07/12/2016 18:59 Lab Sample ID: CCV1

Init. Calib. Date/Times: 07/11/2016 14:15 07/11/2016 15:41

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	380363	71016	20.00	17.81	-10.94	±30
PFDA	383791	60865	5.00	4.34	-13.28	±30
PFDoA	792921	129486	10.00	9.54	-4.57	±30
PFHxA	341011	47178	5.00	4.94	-1.20	±30
PFHxS	279386	43517	20.00	15.63	-21.62	±30
PFNA	410665	76499	5.00	4.89	-2.28	±30
PFOA	617348	83551	5.00	4.38	-12.35	±30
PFOS	178139	32759	20.00	14.90	-25.48	±30
PFTeDA	671789	95893	10.00	8.30	-17.02	±30
PFTrDA	827018	127222	10.00	9.61	-3.95	±30
PFUdA	413103	69575	5.00	4.37	-12.64	±30
PFHpA	372324	61673	5.00	4.55	-9.00	±30
NEtFOSAA	772678	335966	20.00	16.62	-16.91	±30
NMeFOSAA	827784	377945	20.00	17.91	-10.45	±30

* Outside QC Limits.

Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881 Lab File ID: 16Jul14-17

Date/Time Analyzed: 07/14/2016 13:09 Lab Sample ID: CCV1

Init. Calib. Date/Times: 07/14/2016 09:23 07/14/2016 12:16

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	380363	88555	20.00	18.40	-7.99	±30
PFDA	383791	74647	5.00	5.53	10.66	±30
PFDoA	792921	168391	10.00	10.21	2.10	±30
PFHxA	341011	62542	5.00	5.23	4.54	±30
PFHxS	279386	67862	20.00	18.76	-6.19	±30
PFNA	410665	89845	5.00	4.73	-5.41	±30
PFOA	617348	112463	5.00	4.77	-4.65	±30
PFOS	178139	42293	20.00	22.81	14.07	±30
PFTeDA	671789	135574	10.00	11.07	10.72	±30
PFTrDA	827018	166986	10.00	9.74	-2.60	±30
PFUdA	413103	88145	5.00	5.93	18.54	±30
PFHpA	372324	89020	5.00	5.43	8.61	±30
NEtFOSAA	772678	172185	20.00	22.18	10.91	±30
NMeFOSAA	827784	173375	20.00	21.29	6.45	±30

* Outside QC Limits.

Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881 Lab File ID: 16Jul14-38

Date/Time Analyzed: 07/14/2016 19:19 Lab Sample ID: CCV3

Init. Calib. Date/Times: 07/14/2016 09:23 07/14/2016 12:16

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	380363	752810	240.00	190.82	-20.49	±30
PFDA	383791	754488	60.00	56.77	-5.36	±30
PFDoA	792921	1641537	120.00	119.83	-0.14	±30
PFHxA	341011	601442	60.00	61.13	1.88	±30
PFHxS	279386	593896	240.00	205.69	-14.29	±30
PFNA	410665	812873	60.00	53.47	-10.88	±30
PFOA	617348	1121018	60.00	61.58	2.63	±30
PFOS	178139	381208	240.00	297.07	23.78	±30
PFTeDA	671789	1309260	120.00	122.61	2.17	±30
PFTrDA	827018	1729459	120.00	121.01	0.84	±30
PFUdA	413103	861321	60.00	65.42	9.03	±30
PFHpA	372324	690763	60.00	59.15	-1.41	±30
NEtFOSAA	772678	1684413	240.00	236.13	-1.61	±30
NMeFOSAA	827784	1803368	240.00	223.83	-6.74	±30

* Outside QC Limits.

Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881 Lab File ID: 16Jul14-44

Date/Time Analyzed: 07/14/2016 21:03 Lab Sample ID: CCV2

Init. Calib. Date/Times: 07/14/2016 09:23 07/14/2016 12:16

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	380363	289300	80.00	68.25	-14.69	±30
PFDA	383791	269296	20.00	21.20	5.97	±30
PFDoA	792921	695373	40.00	49.08	22.69	±30
PFHxA	341011	198473	20.00	20.78	3.90	±30
PFHxS	279386	241702	80.00	77.48	-3.15	±30
PFNA	410665	282335	20.00	19.81	-0.93	±30
PFOA	617348	382335	20.00	21.01	5.05	±30
PFOS	178139	139170	80.00	86.34	7.93	±30
PFTeDA	671789	517070	40.00	42.32	5.81	±30
PFTrDA	827018	627811	40.00	42.50	6.26	±30
PFUdA	413103	347066	20.00	23.10	15.50	±30
PFHpA	372324	264471	20.00	19.06	-4.71	±30
NEtFOSAA	772678	711789	80.00	99.25	24.06	±30
NMeFOSAA	827784	672163	80.00	98.94	23.68	±30

* Outside QC Limits.

Fraction: Miscellaneous Specialty Services

16182005	13C-PFHxA	13C-PFHpA	13C-PFHxS	13C-PFOA
	Area	Area	Area	Area
Average ICAL Response	85873	130642	24679	149580
Upper Limit	128809	195962	37018	224369
Lower Limit	42936	65321	12339	74790
Sample				
8450139	98194	161733	37146	161147
8450140	86391	127012	27558	119141
8450141	96344	133826	31126	145720

UPPER LIMIT = + 50% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

```
# Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.
```

Fraction: Miscellaneous Specialty Services

16182005	13C-PFOS	13C-PFNA	13C-PFDA	13C-PFUdA
	Area	Area	Area	Area
Average ICAL Response	14676	202680	143721	153062
Upper Limit	22014	304020	215582	229594
Lower Limit	7338	101340	71861	76531
Sample				
8450139	18148	249762	158926	153522
8450140	14212	175604	78540	57746 *
8450141	14627	213800	128642	122848

UPPER LIMIT = + 50% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

```
# Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.
```

Fraction: Miscellaneous Specialty Services

16182005	13C-PFDoA	d3-NMeFOSAA	d3-NEtFOSAA
	Area	Area	Area
Average ICAL Response	150240	131712	95897
Upper Limit	225360	197567	143846
Lower Limit	75120	65856	47949
Sample			
8450139	156829	121374	112304
8450140	63019 *	39101 *	25515 *
8450141	97004	92391	79876

UPPER LIMIT = + 50% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

```
# Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.
```

Fraction: Miscellaneous Specialty Services

16182005	13C-PFHxA	13C-PFHpA	13C-PFHxS	13C-PFOA
	Area	Area	Area	Area
Average ICAL Response	124497	199630	28629	195608
Upper Limit	186745	299445	42944	293412
Lower Limit	62248	99815	14315	97804
Sample				
BLK16182005	89494	127424	30558	111782
LCS16182005	106419	117888	28508	81298 *
LCSD16182005	77913	98198 *	30459	63318 *

UPPER LIMIT = + 50% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

```
# Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.
```

Fraction: Miscellaneous Specialty Services

16182005	13C-PFOS	13C-PFNA	13C-PFDA	13C-PFUdA
	Area	Area	Area	Area
Average ICAL Response	17352	224366	181535	173134
Upper Limit	26028	336548	272302	259700
Lower Limit	8676	112183	90767	86567
Sample				
BLK16182005	13710	98223 *	48600 *	42763 *
LCS16182005	18010	71247 *	35330 *	33414 *
LCSD16182005	11589	53394 *	33622 *	30978 *

UPPER LIMIT = + 50% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

```
# Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.
```

Fraction: Miscellaneous Specialty Services

16182005	13C-PFDoA	d3-NMeFOSAA	d3-NEtFOSAA
	Area	Area	Area
Average ICAL Response	170170	59741	54776
Upper Limit	255254	89611	82164
Lower Limit	85085	29870	27388
Sample			
BLK16182005	46809 *	23379 *	24904 *
LCS16182005	50432 *	28260 *	25071 *
LCSD16182005	40620 *	31117	30363

UPPER LIMIT = + 50% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

```
# Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.
```

Sample Data

Miscellaneous LC/MS/MS

Fraction: Miscellaneous LC/MS/MS

14027: PFC s in Soil by LC/MS/MS Analyte Name	Default MDL	Default LOQ	Units
Perfluorooctanoic acid	0.30	0.60	ng/g
Perfluorononanoic acid	0.20	0.40	ng/g
Perfluorodecanoic acid	0.20	0.40	ng/g
Perfluoroundecanoic acid	0.30	0.60	ng/g
Perfluorododecanoic acid	0.40	0.80	ng/g
Perfluorotridecanoic acid	0.60	1.2	ng/g
Perfluorotetradecanoic acid	0.30	0.80	ng/g
Perfluorohexanoic acid	0.20	0.40	ng/g
Perfluoroheptanoic acid	0.30	0.60	ng/g
Perfluorobutanesulfonate	0.50	1.6	ng/g
Perfluorohexanesulfonate	0.50	1.6	ng/g
Perfluoro-octanesulfonate	0.70	1.6	ng/g
NEtFOSAA	1.0	2.0	ng/g
NMeFOSAA	0.90	2.0	ng/g

LCMSMS ANALYSIS REPORT

Component Name: **PFBS**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	742.13	22302.62	0.033	N/A	0.961098	N/A	N/A
CAL1	16JUL11-28	5107.94	25690.47	0.199	1.600000	2.226700	39.17	N/A
CAL2	16JUL11-29	7851.95	22610.12	0.347	4.000000	3.361566	-15.96	N/A
CAL3	16JUL11-30	61977.26	27541.67	2.250	20.000000	17.909853	-10.45	N/A
CAL4	16JUL11-31	253733.78	28798.74	8.811	80.000000	68.061789	-14.92	N/A
CAL5	16JUL11-32	698333.65	24493.26	28.511	240.000000	218.669268	-8.89	N/A
CAL6	16JUL11-33	878620.58	18938.68	46.393	320.000000	355.370825	11.05	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	66252.15	26942.94	2.459	20.000000	19.505098	-2.47	N/A
CCV3	16JUL12-25	711777.15	23177.27	30.710	240.000000	235.479282	-1.88	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	37192.68	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	68798.00	26815.49	2.566	N/A	20.320237	N/A	N/A
LCSD 16182005	16JUL12-30	63718.27	27657.41	2.304	N/A	18.319093	N/A	N/A
8450139	16JUL12-31	N/A	37145.95	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	27558.07	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	31126.41	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	71015.77	31737.06	2.238	20.000000	17.812920	-10.94	N/A
CCV2	16JUL13-03	280168.77	32040.15	8.744	80.000000	67.555064	-15.56	N/A
LCS 16182005	16JUL13-09	66737.59	27415.41	2.434	N/A	19.316502	N/A	N/A
CCV3	16JUL13-10	716502.67	21388.83	33.499	240.000000	256.798962	7.00	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFHxA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	378.44	78192.43	0.005	N/A	0.050965	N/A	N/A
CAL1	16JUL11-28	5320.84	91180.47	0.058	0.400000	0.598962	49.74	N/A
CAL2	16JUL11-29	5880.08	84822.85	0.069	1.000000	0.711264	-28.87	N/A
CAL3	16JUL11-30	33206.20	89149.57	0.372	5.000000	3.815587	-23.69	N/A
CAL4	16JUL11-31	169938.36	85625.36	1.985	20.000000	20.324530	1.62	N/A
CAL5	16JUL11-32	473692.16	80808.09	5.862	60.000000	60.027881	0.05	N/A
CAL6	16JUL11-33	661040.61	83651.12	7.902	80.000000	80.921776	1.15	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	200150.42	88446.85	2.263	20.000000	23.174050	15.87	N/A
CCV3	16JUL12-25	509121.54	85737.57	5.938	60.000000	60.808155	1.35	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	634.40	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	6165.54	Undefined	Undefined	N/A	0.000000	N/A	N/A
LCSD 16182005	16JUL12-30	2888.12	1907.46	1.514	N/A	15.506033	N/A	N/A
8450139	16JUL12-31	N/A	98194.38	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	86391.32	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	96344.32	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	47177.56	97819.69	0.482	5.000000	4.940083	-1.20	N/A
CCV2	16JUL13-03	185218.98	92218.28	2.008	20.000000	20.568358	2.84	N/A
LCS 16182005	16JUL13-09	4224.59	1482.75	2.849	N/A	29.176967	N/A	N/A
CCV3	16JUL13-10	482448.61	82468.88	5.850	60.000000	59.906316	-0.16	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFHxS**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	704.41	22302.62	0.032	N/A	1.354258	N/A	N/A
CAL1	16JUL11-28	2440.09	25690.47	0.095	1.600000	2.029883	26.87	N/A
CAL2	16JUL11-29	6582.93	22610.12	0.291	4.000000	4.120497	3.01	N/A
CAL3	16JUL11-30	37107.61	27541.67	1.347	20.000000	15.376364	-23.12	N/A
CAL4	16JUL11-31	197205.62	28798.74	6.848	80.000000	73.995035	-7.51	N/A
CAL5	16JUL11-32	496183.71	24493.26	20.258	240.000000	216.910546	-9.62	N/A
CAL6	16JUL11-33	625799.09	18938.68	33.043	320.000000	353.167675	10.36	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	53626.56	26942.94	1.990	20.000000	22.229455	11.15	N/A
CCV3	16JUL12-25	513793.84	23177.27	22.168	240.000000	237.266190	-1.14	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	37192.68	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	50889.35	26815.49	1.898	N/A	21.242432	N/A	N/A
LCSD 16182005	16JUL12-30	46904.32	27657.41	1.696	N/A	19.091225	N/A	N/A
8450139	16JUL12-31	N/A	37145.95	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	27558.07	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	31126.41	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	43516.83	31737.06	1.371	20.000000	15.630450	-21.85	N/A
CCV2	16JUL13-03	207105.67	32040.15	6.464	80.000000	69.905072	-12.62	N/A
LCS 16182005	16JUL13-09	51541.11	27415.41	1.880	N/A	21.053226	N/A	N/A
CCV3	16JUL13-10	482324.05	21388.83	22.550	240.000000	241.340171	0.56	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFhpA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	1564.48	139826.06	0.011	N/A	0.141754	N/A	N/A
CAL1	16JUL11-28	6561.40	153139.87	0.043	0.400000	0.497382	24.35	N/A
CAL2	16JUL11-29	10416.35	145114.23	0.072	1.000000	0.822426	-17.76	N/A
CAL3	16JUL11-30	57148.99	145438.91	0.393	5.000000	4.430273	-11.39	N/A
CAL4	16JUL11-31	244835.75	129643.86	1.889	20.000000	21.231307	6.16	N/A
CAL5	16JUL11-32	600475.65	115333.66	5.206	60.000000	58.503754	-2.49	N/A
CAL6	16JUL11-33	685412.09	95177.62	7.201	80.000000	80.914858	1.14	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	303185.66	144444.64	2.099	20.000000	23.595442	17.98	N/A
CCV3	16JUL12-25	559732.78	107524.09	5.206	60.000000	58.495087	-2.51	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	3589.42	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	10059.39	6087.43	1.652	N/A	18.579687	N/A	N/A
LCSD 16182005	16JUL12-30	5086.09	1546.76	3.288	N/A	36.955097	N/A	N/A
8450139	16JUL12-31	N/A	161732.89	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	127012.26	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	133825.91	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	61672.85	152813.56	0.404	5.000000	4.549809	-9.00	N/A
CCV2	16JUL13-03	242051.68	132036.09	1.833	20.000000	20.610056	3.05	N/A
LCS 16182005	16JUL13-09	8623.39	5285.55	1.632	N/A	18.343970	N/A	N/A
CCV3	16JUL13-10	609284.05	108419.56	5.620	60.000000	63.146286	5.24	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFOA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	2643.33	132848.81	0.020	N/A	0.250343	N/A	N/A
CAL1	16JUL11-28	8778.44	166091.88	0.053	0.400000	0.531130	32.78	N/A
CAL2	16JUL11-29	14471.68	146625.80	0.099	1.000000	0.921737	-7.83	N/A
CAL3	16JUL11-30	72458.15	158539.02	0.457	5.000000	3.974836	-20.50	N/A
CAL4	16JUL11-31	325769.43	152235.70	2.140	20.000000	18.313097	-8.43	N/A
CAL5	16JUL11-32	1000850.22	138662.31	7.218	60.000000	61.578371	2.63	N/A
CAL6	16JUL11-33	1276993.98	134323.18	9.507	80.000000	81.080829	1.35	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	393585.15	141454.31	2.782	20.000000	23.787440	18.94	N/A
CCV3	16JUL12-25	1026579.00	158048.11	6.495	60.000000	55.422232	-7.63	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	3756.92	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	20819.18	7605.50	2.737	N/A	23.403735	N/A	N/A
LCSD 16182005	16JUL12-30	7511.58	2661.25	2.823	N/A	24.129607	N/A	N/A
8450139	16JUL12-31	N/A	161147.31	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	119141.13	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	145719.65	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	83550.57	165480.68	0.505	5.000000	4.382606	-12.35	N/A
CCV2	16JUL13-03	367116.61	173860.89	2.112	20.000000	18.071568	-9.64	N/A
LCS 16182005	16JUL13-09	20668.60	9763.18	2.117	N/A	18.117931	N/A	N/A
CCV3	16JUL13-10	935547.99	134963.48	6.932	60.000000	59.141301	-1.43	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFOS**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	369.00	11246.98	0.033	N/A	1.442455	N/A	N/A
CAL1	16JUL11-28	2034.31	17486.40	0.116	1.600000	2.152192	34.51	N/A
CAL2	16JUL11-29	4053.03	16046.37	0.253	4.000000	3.309866	-17.25	N/A
CAL3	16JUL11-30	31268.74	16199.31	1.930	20.000000	17.565008	-12.17	N/A
CAL4	16JUL11-31	125672.26	16067.21	7.822	80.000000	67.624235	-15.47	N/A
CAL5	16JUL11-32	350399.84	10137.51	34.565	240.000000	294.859596	22.86	N/A
CAL6	16JUL11-33	397833.14	12119.31	32.826	320.000000	280.089103	-12.47	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	28987.73	14111.16	2.054	20.000000	18.618549	-6.91	N/A
CCV3	16JUL12-25	342223.54	14871.22	23.012	240.000000	196.700446	-18.04	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	16425.38	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	40042.60	24431.32	1.639	N/A	15.090131	N/A	N/A
LCSD 16182005	16JUL12-30	31685.29	14593.24	2.171	N/A	19.612608	N/A	N/A
8450139	16JUL12-31	N/A	18148.19	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	14211.83	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	14627.30	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	32758.94	20258.13	1.617	20.000000	14.903960	-25.48	N/A
CCV2	16JUL13-03	124447.08	16674.63	7.463	80.000000	64.578926	-19.28	N/A
LCS 16182005	16JUL13-09	36808.56	21193.02	1.737	N/A	15.921460	N/A	N/A
CCV3	16JUL13-10	331976.50	10340.67	32.104	240.000000	273.950834	14.15	N/A

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Senior Chemist

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LCMSMS ANALYSIS REPORT

Component Name: **PFNA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	1979.73	178845.10	0.011	N/A	0.285214	N/A	N/A
CAL1	16JUL11-28	6142.53	232321.30	0.026	0.400000	0.513829	28.46	N/A
CAL2	16JUL11-29	10039.83	220149.98	0.046	1.000000	0.798882	-20.11	N/A
CAL3	16JUL11-30	68728.10	224479.64	0.306	5.000000	4.674440	-6.51	N/A
CAL4	16JUL11-31	271106.94	213087.83	1.272	20.000000	19.044242	-4.78	N/A
CAL5	16JUL11-32	704320.58	166706.63	4.225	60.000000	62.961268	4.94	N/A
CAL6	16JUL11-33	838633.06	159333.50	5.263	80.000000	78.407339	-1.99	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	318145.47	218387.94	1.457	20.000000	21.788656	8.94	N/A
CCV3	16JUL12-25	728726.53	176740.06	4.123	60.000000	61.447762	2.41	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	9919.59	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	26171.65	16758.18	1.562	N/A	23.349418	N/A	N/A
LCSD 16182005	16JUL12-30	10593.07	7849.17	1.350	N/A	20.193988	N/A	N/A
8450139	16JUL12-31	N/A	249761.73	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	175604.21	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	474.45	213800.07	0.002	N/A	0.241111	N/A	N/A
CCV1	16JUL12-34	76498.57	238760.18	0.320	5.000000	4.886138	-2.28	N/A
CCV2	16JUL13-03	302735.53	213159.57	1.420	20.000000	21.244854	6.22	N/A
LCS 16182005	16JUL13-09	25285.16	16001.17	1.580	N/A	23.624341	N/A	N/A
CCV3	16JUL13-10	688839.45	162779.45	4.232	60.000000	63.062772	5.10	N/A

Jason W. Knight
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LCMSMS ANALYSIS REPORT

Component Name: **PFDA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	2667.69	122048.08	0.022	N/A	0.259340	N/A	N/A
CAL1	16JUL11-28	4716.95	129639.81	0.036	0.400000	0.447159	11.79	N/A
CAL2	16JUL11-29	11538.41	146615.11	0.079	1.000000	0.994216	-0.58	N/A
CAL3	16JUL11-30	49124.28	148343.49	0.331	5.000000	4.258097	-14.84	N/A
CAL4	16JUL11-31	232882.64	145016.53	1.606	20.000000	20.738899	3.69	N/A
CAL5	16JUL11-32	677880.81	146127.04	4.639	60.000000	59.952467	-0.08	N/A
CAL6	16JUL11-33	907420.73	146587.01	6.190	80.000000	80.009162	0.01	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	318060.27	158167.36	2.011	20.000000	25.975068	29.88	N/A
CCV3	16JUL12-25	756565.96	143500.33	5.272	60.000000	68.139421	13.57	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	13655.39	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	33872.39	16450.11	2.059	N/A	26.598079	N/A	N/A
LCSD 16182005	16JUL12-30	13630.24	6767.62	2.014	N/A	26.015521	N/A	N/A
8450139	16JUL12-31	N/A	158926.17	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	78539.63	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	128642.18	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	60865.14	180510.88	0.337	5.000000	4.336062	-13.28	N/A
CCV2	16JUL13-03	242911.67	151013.21	1.609	20.000000	20.773053	3.87	N/A
LCS 16182005	16JUL13-09	34361.62	15333.44	2.241	N/A	28.949294	N/A	N/A
CCV3	16JUL13-10	668457.92	137566.75	4.859	60.000000	62.798971	4.66	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **NMeFOSAA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	8878.55	114668.02	0.077	N/A	1.197069	N/A	N/A
CAL1	16JUL11-28	25342.21	162693.85	0.156	1.600000	1.796570	12.29	N/A
CAL2	16JUL11-29	65502.35	155569.08	0.421	4.000000	3.826719	-4.33	N/A
CAL3	16JUL11-30	340661.33	155602.48	2.189	20.000000	17.358733	-13.21	N/A
CAL4	16JUL11-31	1332328.37	120945.75	11.016	80.000000	84.906577	6.13	N/A
CAL5	16JUL11-32	3338774.93	107442.70	31.075	240.000000	238.413199	-0.66	N/A
CAL6	16JUL11-33	3665352.86	88015.63	41.644	320.000000	319.298202	-0.22	N/A
solvent	16JUL11-34	34653.03	857.93	40.392	N/A	309.711593	N/A	N/A
ICV1	16JUL11-35	507101.72	127401.73	3.980	20.000000	31.065042	55.33	N/A
CCV3	16JUL12-25	3397227.70	113912.57	29.823	240.000000	228.833334	-4.65	N/A
solvent	16JUL12-26	58247.41	957.28	60.847	N/A	466.249522	N/A	N/A
solvent	16JUL12-27	4627.89	Undefined	Undefined	N/A	0.000000	N/A	N/A
MB 16182005	16JUL12-28	N/A	33042.13	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	110582.06	24042.99	4.599	N/A	35.802184	N/A	N/A
LCSD 16182005	16JUL12-30	83246.97	22161.42	3.756	N/A	29.351250	N/A	N/A
8450139	16JUL12-31	N/A	121373.57	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	39101.01	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	92391.38	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	377944.98	167128.76	2.261	20.000000	17.910456	-10.45	N/A
CCV2	16JUL13-03	1212254.03	109284.42	11.093	80.000000	85.493810	6.87	N/A
LCS 16182005	16JUL13-09	82752.07	20371.62	4.062	N/A	31.690952	N/A	N/A
CCV3	16JUL13-10	2869200.62	98775.35	29.048	240.000000	222.899577	-7.13	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFUdA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	2144.85	143535.38	0.015	N/A	0.236590	N/A	N/A
CAL1	16JUL11-28	5600.64	173189.41	0.032	0.400000	0.432738	8.18	N/A
CAL2	16JUL11-29	11123.41	149321.21	0.074	1.000000	0.908075	-9.19	N/A
CAL3	16JUL11-30	64251.34	171630.19	0.374	5.000000	4.289353	-14.21	N/A
CAL4	16JUL11-31	281074.12	133871.88	2.100	20.000000	23.742824	18.71	N/A
CAL5	16JUL11-32	787392.18	146832.92	5.363	60.000000	60.535487	0.89	N/A
CAL6	16JUL11-33	972777.32	143529.28	6.778	80.000000	76.491523	-4.39	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	342735.51	153984.90	2.226	20.000000	25.165828	25.83	N/A
CCV3	16JUL12-25	777354.85	136100.45	5.712	60.000000	64.472168	7.45	N/A
solvent	16JUL12-26	470.36	Undefined	Undefined	N/A	0.000000	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	22928.37	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	50400.07	26769.32	1.883	N/A	21.297964	N/A	N/A
LCSD 16182005	16JUL12-30	26141.89	11967.07	2.184	N/A	24.700260	N/A	N/A
8450139	16JUL12-31	N/A	153522.40	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	57746.40	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	122847.67	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	69574.88	182457.23	0.381	5.000000	4.367861	-12.64	N/A
CCV2	16JUL13-03	275014.09	167367.17	1.643	20.000000	18.596508	-7.02	N/A
LCS 16182005	16JUL13-09	47093.16	19778.33	2.381	N/A	26.916699	N/A	N/A
CCV3	16JUL13-10	742292.42	140572.31	5.281	60.000000	59.610833	-0.65	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **NEtFOSAA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	13124.79	85513.45	0.153	N/A	1.058599	N/A	N/A
CAL1	16JUL11-28	23620.53	113083.49	0.209	1.600000	1.419522	-11.28	N/A
CAL2	16JUL11-29	70489.05	99930.70	0.705	4.000000	4.654463	16.36	N/A
CAL3	16JUL11-30	338677.79	120029.66	2.822	20.000000	18.442729	-7.79	N/A
CAL4	16JUL11-31	1179084.40	92371.16	12.765	80.000000	83.226077	4.03	N/A
CAL5	16JUL11-32	2972839.32	82909.30	35.857	240.000000	233.680337	-2.63	N/A
CAL6	16JUL11-33	3335927.89	67059.18	49.746	320.000000	324.176872	1.31	N/A
solvent	16JUL11-34	40947.98	Undefined	Undefined	N/A	0.000000	N/A	N/A
ICV1	16JUL11-35	326326.89	107330.77	3.040	20.000000	19.868102	-0.66	N/A
CCV3	16JUL12-25	3129090.90	90823.06	34.453	240.000000	224.533147	-6.44	N/A
solvent	16JUL12-26	81044.11	2114.33	38.331	N/A	249.802078	N/A	N/A
solvent	16JUL12-27	6854.24	Undefined	Undefined	N/A	0.000000	N/A	N/A
MB 16182005	16JUL12-28	3884.36	34203.89	0.114	N/A	0.798519	N/A	N/A
LCS 16182005	16JUL12-29	70804.80	23414.84	3.024	N/A	19.760882	N/A	N/A
LCSD 16182005	16JUL12-30	51434.40	13797.73	3.728	N/A	24.346562	N/A	N/A
8450139	16JUL12-31	N/A	112303.60	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	25514.51	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	79876.34	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	335965.72	132187.02	2.542	20.000000	16.618245	-16.91	N/A
CCV2	16JUL13-03	1175939.38	93807.28	12.536	80.000000	81.734409	2.17	N/A
LCS 16182005	16JUL13-09	60087.77	15070.62	3.987	N/A	26.036256	N/A	N/A
CCV3	16JUL13-10	2741289.72	73809.63	37.140	240.000000	242.042785	0.85	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFDoA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	3849.53	129103.45	0.030	N/A	0.643049	N/A	N/A
CAL1	16JUL11-28	8252.01	154751.37	0.053	0.800000	0.907291	13.41	N/A
CAL2	16JUL11-29	23147.56	147502.82	0.157	2.000000	2.071924	3.60	N/A
CAL3	16JUL11-30	118047.56	148735.44	0.794	10.000000	9.229609	-7.70	N/A
CAL4	16JUL11-31	486074.81	152358.96	3.190	40.000000	36.170494	-9.57	N/A
CAL5	16JUL11-32	1587433.29	165645.81	9.583	120.000000	108.034230	-9.97	N/A
CAL6	16JUL11-33	2074627.79	132446.54	15.664	160.000000	176.386452	10.24	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	301430.37	148071.32	2.036	20.000000	23.191399	15.96	N/A
CCV3	16JUL12-25	1580373.22	157730.77	10.019	120.000000	112.936860	-5.89	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	36657.51	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	56998.07	28550.95	1.996	N/A	22.749095	N/A	N/A
LCSD 16182005	16JUL12-30	26403.18	14334.89	1.842	N/A	21.012559	N/A	N/A
8450139	16JUL12-31	N/A	156828.55	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	63019.13	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	97004.32	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	129485.96	157615.57	0.822	10.000000	9.542734	-4.57	N/A
CCV2	16JUL13-03	520590.22	155950.89	3.338	40.000000	37.832386	-5.42	N/A
LCS 16182005	16JUL13-09	50667.45	22756.76	2.226	N/A	25.335840	N/A	N/A
CCV3	16JUL13-10	1503900.19	136421.73	11.024	120.000000	124.228162	3.52	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFTrDA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	5430.29	129103.45	0.042	N/A	0.716406	N/A	N/A
CAL1	16JUL11-28	6990.76	154751.37	0.045	0.800000	0.752568	-5.93	N/A
CAL2	16JUL11-29	25136.99	147502.82	0.170	2.000000	2.207627	10.38	N/A
CAL3	16JUL11-30	121247.81	148735.44	0.815	10.000000	9.698545	-3.01	N/A
CAL4	16JUL11-31	533173.39	152358.96	3.499	40.000000	40.884048	2.21	N/A
CAL5	16JUL11-32	1489808.51	165645.81	8.994	120.000000	104.718400	-12.73	N/A
CAL6	16JUL11-33	1987184.16	132446.54	15.004	160.000000	174.538813	9.09	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	250213.33	148071.32	1.690	20.000000	19.859849	-0.70	N/A
CCV3	16JUL12-25	1568731.60	157730.77	9.946	120.000000	115.775011	-3.52	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	36657.51	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	48592.83	28550.95	1.702	N/A	20.001039	N/A	N/A
LCSD 16182005	16JUL12-30	35871.26	14334.89	2.502	N/A	29.300061	N/A	N/A
8450139	16JUL12-31	N/A	156828.55	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	63019.13	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	97004.32	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	127221.61	157615.57	0.807	10.000000	9.605286	-3.95	N/A
CCV2	16JUL13-03	508795.70	155950.89	3.263	40.000000	38.131566	-4.67	N/A
LCS 16182005	16JUL13-09	49541.87	22756.76	2.177	N/A	25.520106	N/A	N/A
CCV3	16JUL13-10	1489406.01	136421.73	10.918	120.000000	127.067975	5.89	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFTeDA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL11-27	2658.95	143535.38	0.019	N/A	0.832731	N/A	N/A
CAL1	16JUL11-28	2060.24	173189.41	0.012	0.800000	0.737899	-7.76	N/A
CAL2	16JUL11-29	19490.10	149321.21	0.131	2.000000	2.435009	21.75	N/A
CAL3	16JUL11-30	84467.44	171630.19	0.492	10.000000	7.608413	-23.92	N/A
CAL4	16JUL11-31	415089.77	133871.88	3.101	40.000000	44.925789	12.31	N/A
CAL5	16JUL11-32	1197761.82	146832.92	8.157	120.000000	117.266696	-2.28	N/A
CAL6	16JUL11-33	1597802.28	143529.28	11.132	160.000000	159.826195	-0.11	N/A
solvent	16JUL11-34	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
ICV1	16JUL11-35	225374.43	153984.90	1.464	20.000000	21.506261	7.53	N/A
CCV3	16JUL12-25	1274103.38	136100.45	9.361	120.000000	134.493788	12.08	N/A
solvent	16JUL12-26	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL12-27	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL12-28	N/A	22928.37	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL12-29	61965.81	26769.32	2.315	N/A	33.683485	N/A	N/A
LCSD 16182005	16JUL12-30	41999.51	11967.07	3.510	N/A	50.776103	N/A	N/A
8450139	16JUL12-31	N/A	153522.40	N/A	N/A	N/A	N/A	N/A
8450140	16JUL12-32	N/A	57746.40	N/A	N/A	N/A	N/A	N/A
8450141	16JUL12-33	N/A	122847.67	N/A	N/A	N/A	N/A	N/A
CCV1	16JUL12-34	98592.89	182457.23	0.540	10.000000	8.298161	-17.02	N/A
CCV2	16JUL13-03	408893.94	167367.17	2.443	40.000000	35.518782	-11.20	N/A
LCS 16182005	16JUL13-09	52462.70	19778.33	2.653	N/A	38.515023	N/A	N/A
CCV3	16JUL13-10	1161038.77	140572.31	8.259	120.000000	118.726756	-1.06	N/A

Lynn Dodd

JUL 19 2016

Lynn Dodd
Principal Specialist

Jason W. Knight
Senior Chemist

JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **PFBS**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	2241.10	38029.96	0.059	N/A	1.379386	N/A	N/A
CAL1	16JUL14-04	4811.12	35181.64	0.137	1.600000	1.887959	18.00	N/A
CAL2	16JUL14-05	13077.91	29478.97	0.444	4.000000	3.893504	-2.66	N/A
CAL3	16JUL14-09	85851.64	33266.54	2.581	20.000000	17.859729	-10.70	N/A
CAL6	16JUL14-11	993059.71	18432.30	53.876	320.000000	353.083793	10.34	N/A
CAL5	16JUL14-12	842877.85	26194.70	32.177	240.000000	211.279375	-11.97	N/A
CAL4	16JUL14-14	342502.32	29220.27	11.721	80.000000	77.595639	-3.01	N/A
CCV1	16JUL14-17	88554.67	33243.42	2.664	20.000000	18.402833	-7.99	N/A
ICV1	16JUL14-19	62137.85	29194.99	2.128	20.000000	14.903564	-25.48	N/A
CCV3	16JUL14-38	752809.62	25916.79	29.047	240.000000	190.822658	-20.49	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	30557.75	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	71034.69	28507.79	2.492	N/A	17.278386	N/A	N/A
LCSD 16182005	16JUL14-43	62520.90	30459.06	2.053	N/A	14.408505	N/A	N/A
CCV2	16JUL14-44	289300.24	28110.98	10.291	80.000000	68.250111	-14.69	N/A

Jason W. Knight
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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **PFHxA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	2641.02	122333.50	0.022	N/A	0.207728	N/A	N/A
CAL1	16JUL14-04	5395.91	128045.65	0.042	0.400000	0.411750	2.94	N/A
CAL2	16JUL14-05	12246.97	129869.42	0.094	1.000000	0.929569	-7.04	N/A
CAL3	16JUL14-09	62484.48	128080.33	0.488	5.000000	4.836433	-3.27	N/A
CAL6	16JUL14-11	937317.86	124880.60	7.506	80.000000	74.504082	-6.87	N/A
CAL5	16JUL14-12	778440.85	120164.14	6.478	60.000000	64.303233	7.17	N/A
CAL4	16JUL14-14	250180.20	115938.91	2.158	20.000000	21.414932	7.07	N/A
CCV1	16JUL14-17	62542.00	118636.57	0.527	5.000000	5.226762	4.54	N/A
ICV1	16JUL14-19	220022.81	137739.29	1.597	20.000000	15.850975	-20.75	N/A
CCV3	16JUL14-38	601441.87	97664.82	6.158	60.000000	61.127311	1.88	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	89493.89	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	198368.43	106419.15	1.864	N/A	18.497997	N/A	N/A
LCSD 16182005	16JUL14-43	194675.75	77912.54	2.499	N/A	24.797947	N/A	N/A
CCV2	16JUL14-44	198473.48	94786.91	2.094	20.000000	20.779880	3.90	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFhpA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	3324.23	229709.18	0.014	N/A	0.293516	N/A	N/A
CAL1	16JUL14-04	5886.08	224985.66	0.026	0.400000	0.434459	8.61	N/A
CAL2	16JUL14-05	14035.60	244065.90	0.058	1.000000	0.812362	-18.76	N/A
CAL3	16JUL14-09	89271.98	217862.12	0.410	5.000000	5.059199	1.18	N/A
CAL6	16JUL14-11	909338.98	145784.54	6.238	80.000000	75.319633	-5.85	N/A
CAL5	16JUL14-12	848418.54	163402.26	5.192	60.000000	62.716835	4.53	N/A
CAL4	16JUL14-14	366994.77	201678.93	1.820	20.000000	22.057512	10.29	N/A
CCV1	16JUL14-17	89019.76	202060.69	0.441	5.000000	5.430477	8.61	N/A
ICV1	16JUL14-19	292126.93	167721.46	1.742	20.000000	21.117623	5.59	N/A
CCV3	16JUL14-38	690762.92	141068.72	4.897	60.000000	59.153452	-1.41	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	127424.36	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	239095.03	117887.80	2.028	N/A	24.570721	N/A	N/A
LCSD 16182005	16JUL14-43	230281.79	98198.27	2.345	N/A	28.391445	N/A	N/A
CCV2	16JUL14-44	264471.36	168360.10	1.571	20.000000	19.057581	-4.71	N/A

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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **PFHxS**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	2589.83	38029.96	0.068	N/A	1.091073	N/A	N/A
CAL1	16JUL14-04	5008.18	35181.64	0.142	1.600000	1.756015	9.75	N/A
CAL2	16JUL14-05	11679.06	29478.97	0.396	4.000000	4.029105	0.73	N/A
CAL3	16JUL14-09	66033.88	33266.54	1.985	20.000000	18.257143	-8.71	N/A
CAL6	16JUL14-11	726872.68	18432.30	39.435	320.000000	353.625014	10.51	N/A
CAL5	16JUL14-12	602992.76	26194.70	23.020	240.000000	206.625586	-13.91	N/A
CAL4	16JUL14-14	263731.55	29220.27	9.026	80.000000	81.307137	1.63	N/A
CCV1	16JUL14-17	67861.99	33243.42	2.041	20.000000	18.761962	-6.19	N/A
ICV1	16JUL14-19	51588.70	29194.99	1.767	20.000000	16.305330	-18.47	N/A
CCV3	16JUL14-38	593895.88	25916.79	22.915	240.000000	205.692774	-14.29	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	30557.75	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	55991.19	28507.79	1.964	N/A	18.069734	N/A	N/A
LCSD 16182005	16JUL14-43	49299.24	30459.06	1.619	N/A	14.975503	N/A	N/A
CCV2	16JUL14-44	241701.81	28110.98	8.598	80.000000	77.478725	-3.15	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFOA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	5232.81	226101.69	0.023	N/A	0.251302	N/A	N/A
CAL1	16JUL14-04	7362.76	212107.95	0.035	0.400000	0.343825	-14.04	N/A
CAL2	16JUL14-05	25335.43	216400.46	0.117	1.000000	1.002547	0.25	N/A
CAL3	16JUL14-09	142098.19	207129.54	0.686	5.000000	5.552887	11.06	N/A
CAL6	16JUL14-11	1646342.31	170447.97	9.659	80.000000	77.314934	-3.36	N/A
CAL5	16JUL14-12	1406717.27	183273.16	7.676	60.000000	61.452439	2.42	N/A
CAL4	16JUL14-14	476231.27	184289.30	2.584	20.000000	20.733368	3.67	N/A
CCV1	16JUL14-17	112463.33	191315.95	0.588	5.000000	4.767560	-4.65	N/A
ICV1	16JUL14-19	372446.05	183650.31	2.028	20.000000	16.285606	-18.57	N/A
CCV3	16JUL14-38	1121017.61	145747.48	7.692	60.000000	61.580269	2.63	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	111782.01	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	205978.40	81298.26	2.534	N/A	20.329194	N/A	N/A
LCSD 16182005	16JUL14-43	157954.32	63318.11	2.495	N/A	20.017297	N/A	N/A
CCV2	16JUL14-44	382335.11	145998.42	2.619	20.000000	21.010180	5.05	N/A

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Senior Chemist

JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **PFOS**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	1588.41	16763.22	0.095	N/A	1.138255	N/A	N/A
CAL1	16JUL14-04	1990.29	16931.36	0.118	1.600000	1.375226	-14.05	N/A
CAL2	16JUL14-05	6517.52	19088.34	0.341	4.000000	3.702704	-7.43	N/A
CAL3	16JUL14-09	35475.09	18662.80	1.901	20.000000	19.913763	-0.43	N/A
CAL6	16JUL14-11	466067.44	15984.37	29.158	320.000000	303.266892	-5.23	N/A
CAL5	16JUL14-12	405197.77	18056.10	22.441	240.000000	233.442829	-2.73	N/A
CAL4	16JUL14-14	153587.30	15390.01	9.980	80.000000	103.898585	29.87	N/A
CCV1	16JUL14-17	42292.50	19401.47	2.180	20.000000	22.814316	14.07	N/A
ICV1	16JUL14-19	26915.23	17676.24	1.523	20.000000	15.982465	-20.09	N/A
CCV3	16JUL14-38	381207.61	13347.10	28.561	240.000000	297.064683	23.78	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	13710.02	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	37692.49	18009.91	2.093	N/A	21.910036	N/A	N/A
LCSD 16182005	16JUL14-43	36749.37	11589.08	3.171	N/A	33.118218	N/A	N/A
CCV2	16JUL14-44	139169.81	16786.21	8.291	80.000000	86.340789	7.93	N/A

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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **PFNA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	3545.20	270826.13	0.013	N/A	0.281119	N/A	N/A
CAL1	16JUL14-04	7378.66	301477.26	0.024	0.400000	0.418122	4.53	N/A
CAL2	16JUL14-05	14811.13	272353.68	0.054	1.000000	0.778022	-22.20	N/A
CAL3	16JUL14-09	98398.97	224484.36	0.438	5.000000	5.398490	7.97	N/A
CAL6	16JUL14-11	1047617.14	165305.61	6.337	80.000000	76.388502	-4.51	N/A
CAL5	16JUL14-12	923857.07	183043.00	5.047	60.000000	60.861721	1.44	N/A
CAL4	16JUL14-14	371926.95	199529.94	1.864	20.000000	22.555144	12.78	N/A
CCV1	16JUL14-17	89845.28	234740.48	0.383	5.000000	4.729517	-5.41	N/A
ICV1	16JUL14-19	278471.93	240846.38	1.156	20.000000	14.037560	-29.81	N/A
CCV3	16JUL14-38	812873.01	183356.14	4.433	60.000000	53.473908	-10.88	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	98222.62	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	96266.54	71247.36	1.351	N/A	16.383432	N/A	N/A
LCSD 16182005	16JUL14-43	88461.91	53393.64	1.657	N/A	20.061357	N/A	N/A
CCV2	16JUL14-44	282334.71	172557.51	1.636	20.000000	19.813339	-0.93	N/A

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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **PFDA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	4483.71	211895.24	0.021	N/A	0.321743	N/A	N/A
CAL1	16JUL14-04	5294.71	199769.15	0.027	0.400000	0.388992	-2.75	N/A
CAL2	16JUL14-05	12796.59	173265.95	0.074	1.000000	0.984849	-1.52	N/A
CAL3	16JUL14-09	72159.56	196784.77	0.367	5.000000	4.669870	-6.60	N/A
CAL6	16JUL14-11	1093889.96	185886.07	5.885	80.000000	74.107974	-7.37	N/A
CAL5	16JUL14-12	810987.67	159841.42	5.074	60.000000	63.902084	6.50	N/A
CAL4	16JUL14-14	307618.00	173660.00	1.771	20.000000	22.346231	11.73	N/A
CCV1	16JUL14-17	74646.93	171483.72	0.435	5.000000	5.533216	10.66	N/A
ICV1	16JUL14-19	275605.63	165351.18	1.667	20.000000	21.030071	5.15	N/A
CCV3	16JUL14-38	754487.79	167414.00	4.507	60.000000	56.767266	-5.39	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	48599.78	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	77690.61	35330.05	2.199	N/A	27.727260	N/A	N/A
LCSD 16182005	16JUL14-43	67857.11	33622.48	2.018	N/A	25.452245	N/A	N/A
CCV2	16JUL14-44	269296.06	160307.61	1.680	20.000000	21.194681	5.97	N/A

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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **NMeFOSAA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	10784.51	67660.76	0.159	N/A	0.687494	N/A	N/A
CAL1	16JUL14-04	16956.74	73350.36	0.231	1.600000	1.226041	-23.37	N/A
CAL2	16JUL14-05	37362.33	70387.08	0.531	4.000000	3.474031	-13.15	N/A
CAL3	16JUL14-09	172322.54	48206.52	3.575	20.000000	26.310178	31.55	N/A
CAL6	16JUL14-11	2321257.18	57283.57	40.522	320.000000	303.504065	-5.15	N/A
CAL5	16JUL14-12	1785516.75	54679.03	32.655	240.000000	244.477653	1.87	N/A
CAL4	16JUL14-14	633286.78	54537.96	11.612	80.000000	86.608032	8.26	N/A
CCV1	16JUL14-17	173375.28	59673.55	2.905	20.000000	21.289019	6.45	N/A
ICV1	16JUL14-19	131626.30	61381.75	2.144	20.000000	15.579663	-22.10	N/A
CCV3	16JUL14-38	1803368.08	60308.85	29.902	240.000000	223.828964	-6.74	N/A
solvent	16JUL14-39	17863.72	Undefined	Undefined	N/A	0.000000	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	23378.93	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	124408.32	28259.91	4.402	N/A	32.519259	N/A	N/A
LCSD 16182005	16JUL14-43	121424.97	31117.15	3.902	N/A	28.767321	N/A	N/A
CCV2	16JUL14-44	672162.55	50706.60	13.256	80.000000	98.942393	23.68	N/A

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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **PFUdA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	1738.74	188369.48	0.009	N/A	0.251884	N/A	N/A
CAL1	16JUL14-04	5633.99	193956.02	0.029	0.400000	0.469078	17.27	N/A
CAL2	16JUL14-05	13433.33	191684.67	0.070	1.000000	0.918787	-8.12	N/A
CAL3	16JUL14-09	56961.38	163204.64	0.349	5.000000	3.975892	-20.48	N/A
CAL6	16JUL14-11	1170914.82	161994.79	7.228	80.000000	79.369335	-0.79	N/A
CAL5	16JUL14-12	901719.17	168321.86	5.357	60.000000	58.863651	-1.89	N/A
CAL4	16JUL14-14	329955.16	159639.75	2.067	20.000000	22.803258	14.02	N/A
CCV1	16JUL14-17	88145.30	167243.01	0.527	5.000000	5.927078	18.54	N/A
ICV1	16JUL14-19	318172.34	192714.36	1.651	20.000000	18.245417	-8.77	N/A
CCV3	16JUL14-38	861320.99	144638.61	5.955	60.000000	65.416234	9.03	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	42763.17	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	81448.72	33413.61	2.438	N/A	26.866251	N/A	N/A
LCSD 16182005	16JUL14-43	75240.63	30977.51	2.429	N/A	26.770774	N/A	N/A
CCV2	16JUL14-44	347065.79	165741.93	2.094	20.000000	23.100704	15.50	N/A

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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **NEtFOSAA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	6561.63	79872.17	0.082	N/A	0.447727	N/A	N/A
CAL1	16JUL14-04	13465.80	70767.63	0.190	1.600000	1.224541	-23.47	N/A
CAL2	16JUL14-05	36203.50	68499.78	0.529	4.000000	3.654465	-8.64	N/A
CAL3	16JUL14-09	138555.76	40257.41	3.442	20.000000	24.583263	22.92	N/A
CAL6	16JUL14-11	2151526.34	50828.90	42.329	320.000000	303.950393	-5.02	N/A
CAL5	16JUL14-12	1686227.60	50186.50	33.599	240.000000	241.236541	0.52	N/A
CAL4	16JUL14-14	610090.72	48114.77	12.680	80.000000	90.950797	13.69	N/A
CCV1	16JUL14-17	172184.71	55411.76	3.107	20.000000	22.181075	10.91	N/A
ICV1	16JUL14-19	154020.46	43988.58	3.501	20.000000	25.011639	25.06	N/A
CCV3	16JUL14-38	1684413.38	51215.32	32.889	240.000000	236.133233	-1.61	N/A
solvent	16JUL14-39	22459.28	Undefined	Undefined	N/A	0.000000	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	24904.39	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	88204.74	25071.19	3.518	N/A	25.132315	N/A	N/A
LCSD 16182005	16JUL14-43	84363.05	30363.09	2.778	N/A	19.818282	N/A	N/A
CCV2	16JUL14-44	711789.08	51448.25	13.835	80.000000	99.249434	24.06	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFDoA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	7100.83	193240.88	0.037	N/A	0.386088	N/A	N/A
CAL1	16JUL14-04	14212.75	177574.49	0.080	0.800000	0.860559	7.57	N/A
CAL2	16JUL14-05	29410.24	181760.51	0.162	2.000000	1.756727	-12.16	N/A
CAL3	16JUL14-09	163446.59	187579.05	0.871	10.000000	9.533082	-4.67	N/A
CAL6	16JUL14-11	2166583.63	150125.98	14.432	160.000000	158.151392	-1.16	N/A
CAL5	16JUL14-12	1707046.04	159205.64	10.722	120.000000	117.496356	-2.09	N/A
CAL4	16JUL14-14	676828.02	164773.06	4.108	40.000000	45.001883	12.50	N/A
CCV1	16JUL14-17	168691.46	180776.14	0.933	10.000000	10.210429	2.10	N/A
ICV1	16JUL14-19	271017.08	172447.88	1.572	20.000000	17.207516	-13.96	N/A
CCV3	16JUL14-38	1641537.03	150119.49	10.935	120.000000	119.826367	-0.14	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	46809.36	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	107535.44	50431.74	2.132	N/A	23.352720	N/A	N/A
LCSD 16182005	16JUL14-43	76302.54	40620.08	1.878	N/A	20.570566	N/A	N/A
CCV2	16JUL14-44	695373.30	155233.28	4.480	40.000000	49.077798	22.69	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFTrDA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	6166.64	193240.88	0.032	N/A	0.370360	N/A	N/A
CAL1	16JUL14-04	13042.65	177574.49	0.073	0.800000	0.806524	0.82	N/A
CAL2	16JUL14-05	31265.50	181760.51	0.172	2.000000	1.841521	-7.92	N/A
CAL3	16JUL14-09	181692.65	187579.05	0.969	10.000000	10.206310	2.06	N/A
CAL6	16JUL14-11	2245401.34	150125.98	14.957	160.000000	157.089805	-1.82	N/A
CAL5	16JUL14-12	1821366.99	159205.64	11.440	120.000000	120.165241	0.14	N/A
CAL4	16JUL14-14	669340.58	164773.06	4.062	40.000000	42.690599	6.73	N/A
CCV1	16JUL14-17	N/A	180776.14	N/A	10.000000	N/A	N/A	N/A
ICV1	16JUL14-19	212668.63	172447.88	1.233	20.000000	12.984916	-35.08	N/A
CCV3	16JUL14-38	1729458.84	150119.49	11.521	120.000000	121.007445	0.84	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	46809.36	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	103383.99	50431.74	2.050	N/A	21.561189	N/A	N/A
LCSD 16182005	16JUL14-43	85790.67	40620.08	2.112	N/A	22.212722	N/A	N/A
CCV2	16JUL14-44	627811.01	155233.28	4.044	40.000000	42.502745	6.26	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **PFTeDA**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
MDL	16JUL14-03	4777.37	188369.48	0.025	N/A	0.443683	N/A	N/A
CAL1	16JUL14-04	8801.85	193956.02	0.045	0.800000	0.714616	-10.67	N/A
CAL2	16JUL14-05	25629.65	191684.67	0.134	2.000000	1.910016	-4.50	N/A
CAL3	16JUL14-09	119963.28	163204.64	0.735	10.000000	10.048469	0.48	N/A
CAL6	16JUL14-11	1813529.58	161994.79	11.195	160.000000	151.611650	-5.24	N/A
CAL5	16JUL14-12	1501337.03	168321.86	8.919	120.000000	120.814772	0.68	N/A
CAL4	16JUL14-14	561470.75	159639.75	3.517	40.000000	47.700476	19.25	N/A
CCV1	16JUL14-17	135573.96	167243.01	0.811	10.000000	11.071523	10.72	N/A
ICV1	16JUL14-19	219277.84	192714.36	1.138	20.000000	15.499772	-22.50	N/A
CCV3	16JUL14-38	1309259.85	144638.61	9.052	120.000000	122.607966	2.17	N/A
solvent	16JUL14-39	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
solvent	16JUL14-40	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
MB 16182005	16JUL14-41	N/A	42763.17	N/A	N/A	N/A	N/A	N/A
LCS 16182005	16JUL14-42	125565.12	33413.61	3.758	N/A	50.959317	N/A	N/A
LCSD 16182005	16JUL14-43	79731.02	30977.51	2.574	N/A	34.934338	N/A	N/A
CCV2	16JUL14-44	517070.09	165741.93	3.120	40.000000	42.322381	5.81	N/A

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Lynn Dodd
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Lynn Dodd
Principal Specialist

Jason W. Knight
Senior Chemist

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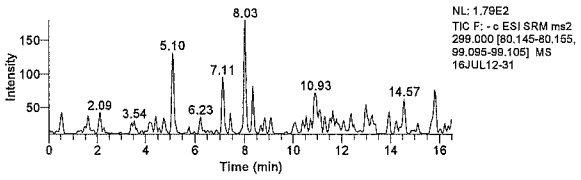
LCMSMS ANALYSIS REPORT

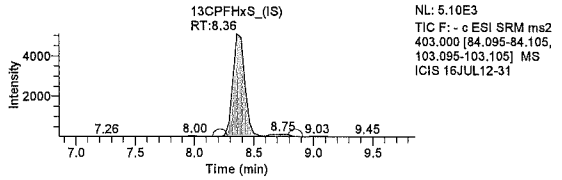
Sample Name:	8450139	Original Data Path:	C:\Xcalibur\PFC\2016\16JUL12
Sample ID:	8450139	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL12-31		
Acquisition Date:	07/12/16 06:07:43 PM	Dilution Factor:	1.85
Sample Type:	Unknown	Instrument Model:	TSQ Quantum Access
Vial:	a:4	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

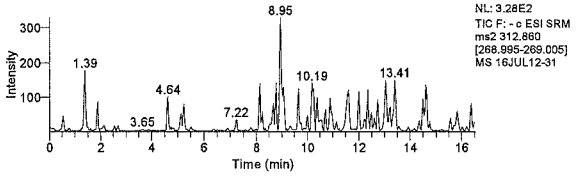
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.90	249761.73	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.64	161147.31	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.15	158926.17	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.80	156828.55	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.39	161732.89	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.11	98194.38	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.36	37145.95	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.86	18148.19	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.44	153522.40	N/A	N/A	N/A
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/g
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/g
PFBS	N/A	N/A	N/A	N/A	N/A	ng/g
PFDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/g
PFHxA	N/A	N/A	N/A	N/A	N/A	ng/g
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/g
PFNA	N/A	N/A	N/A	N/A	N/A	ng/g
PFOA	N/A	N/A	N/A	N/A	N/A	ng/g
PFOS	N/A	N/A	N/A	N/A	N/A	ng/g
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/g
PFhpA	N/A	N/A	N/A	N/A	N/A	ng/g
d3-NMeFOSAA	N/A	9.30	121373.57	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.48	112303.60	N/A	N/A	N/A

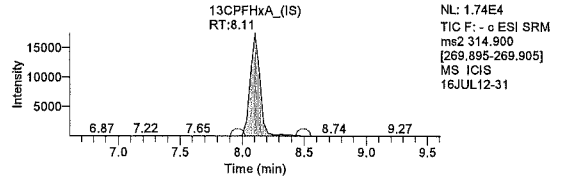
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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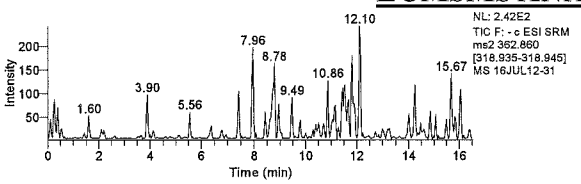
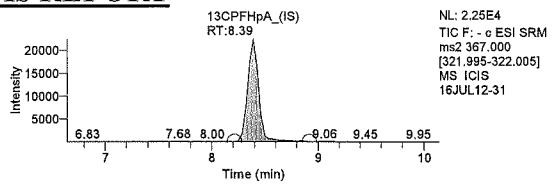
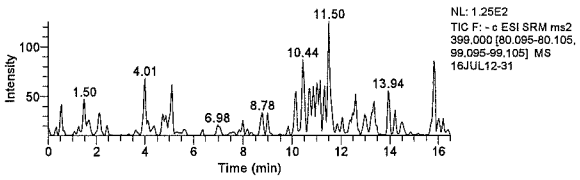
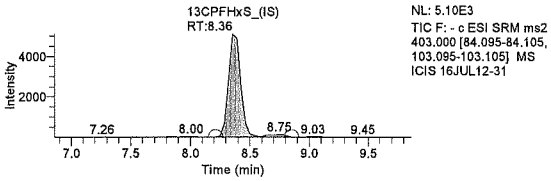


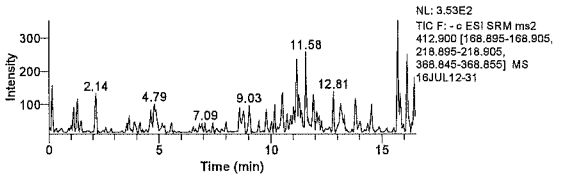


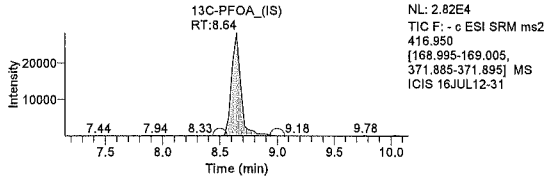
Component Name: PFHxS



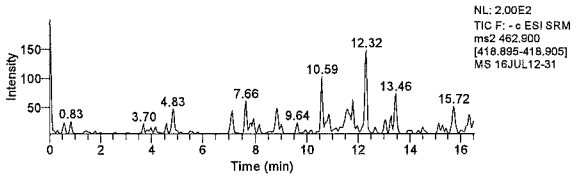


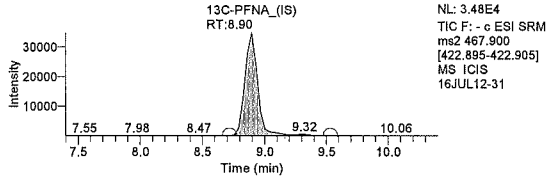
Component Name: PFOA



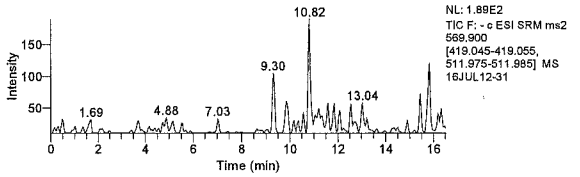


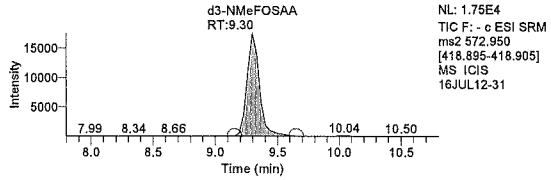
Component Name: PFNA



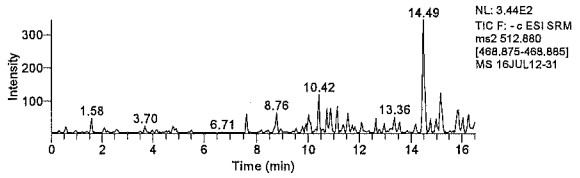


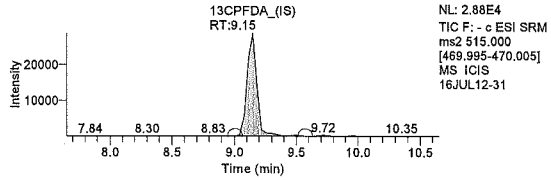
Component Name: NMeFOSAA





Component Name: PFDA





Component Name: PFOS

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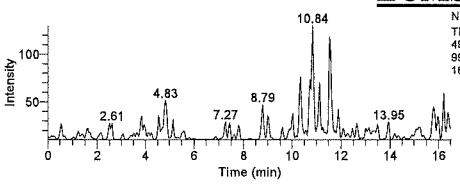
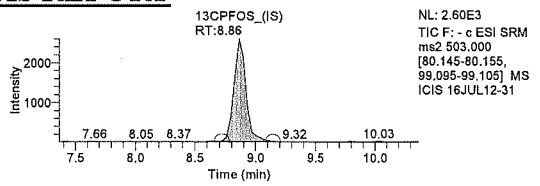
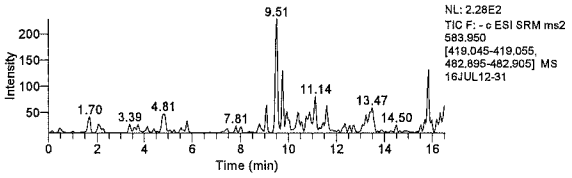
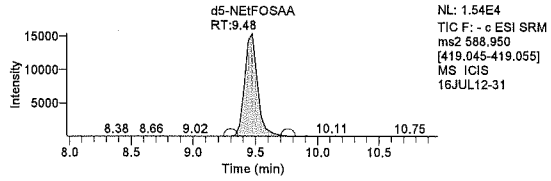


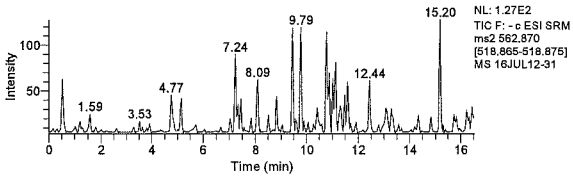


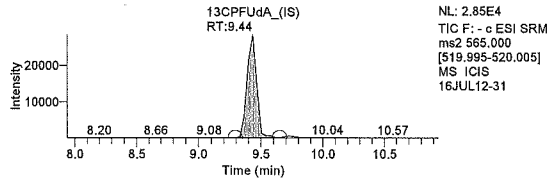
Component Name: NEtFOSAA



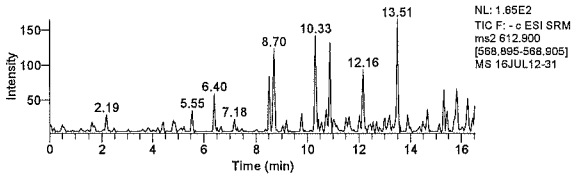


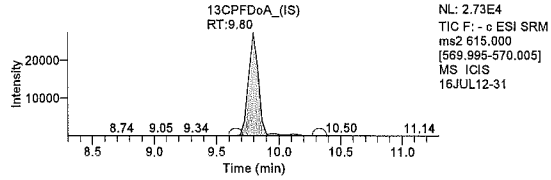
Component Name: PFUdA



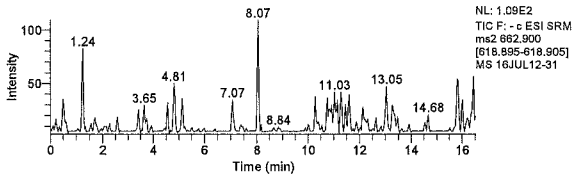


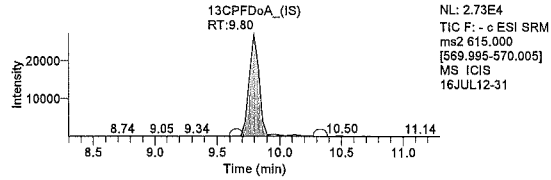
Component Name: PFDoA



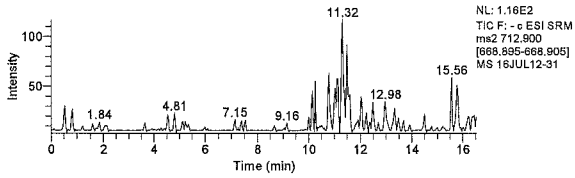


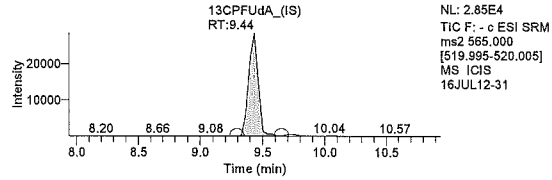
Component Name: PFTrDA





Component Name: PFTeDA





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JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

Wednesday, July 13, 2016, 11:13:30

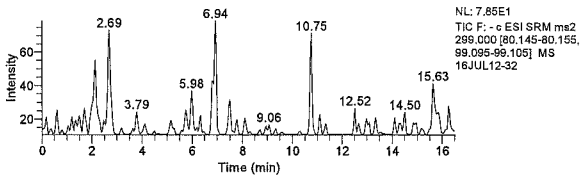
LCMSMS ANALYSIS REPORT

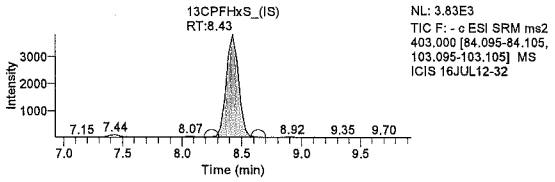
Sample Name:	8450140	Original Data Path:	C:\Xcalibur\PFC\2016\16JUL12
Sample ID:	8450140	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL12-32		
Acquisition Date:	07/12/16 06:24:58 PM	Dilution Factor:	1.74
Sample Type:	Unknown	Instrument Model:	TSQ Quantum Access
Vial:	a:5	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

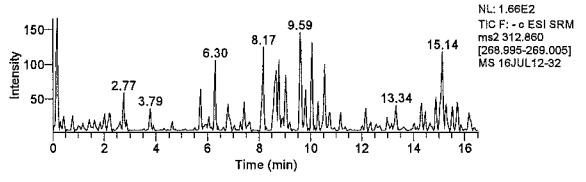
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.93	175604.21	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.79	119141.13	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.15	78539.63	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.80	63019.13	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.46	127012.26	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.07	86391.32	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.43	27558.07	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.93	14211.83	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.44	57746.40	N/A	N/A	N/A
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/g
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/g
PFBS	N/A	N/A	N/A	N/A	N/A	ng/g
PFDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/g
PFHxA	N/A	N/A	N/A	N/A	N/A	ng/g
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/g
PFNA	N/A	N/A	N/A	N/A	N/A	ng/g
PFOA	N/A	N/A	N/A	N/A	N/A	ng/g
PFOS	N/A	N/A	N/A	N/A	N/A	ng/g
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/g
PFhpA	N/A	N/A	N/A	N/A	N/A	ng/g
d3-NMeFOSAA	N/A	9.33	39101.01	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.48	25514.51	N/A	N/A	N/A

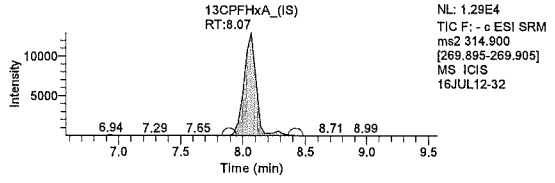
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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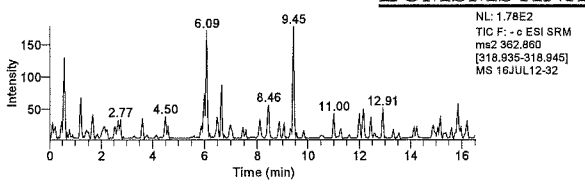
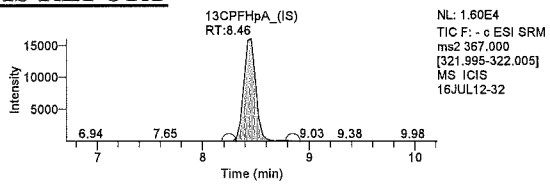
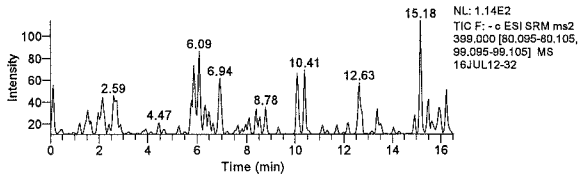
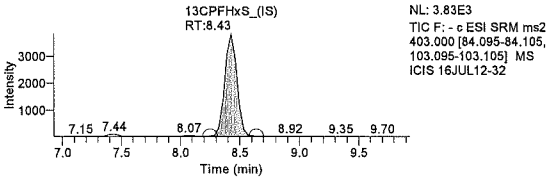


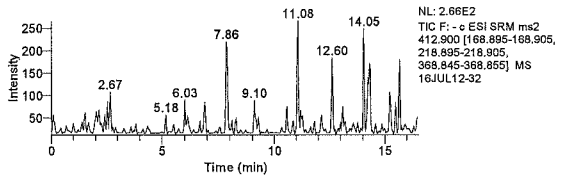


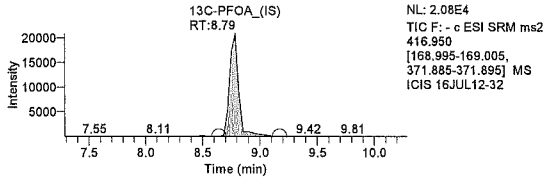
Component Name: PFHxS



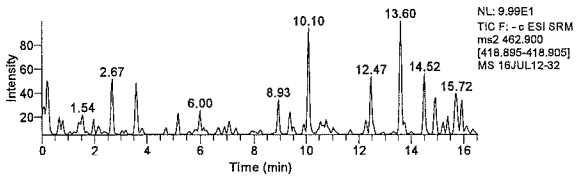


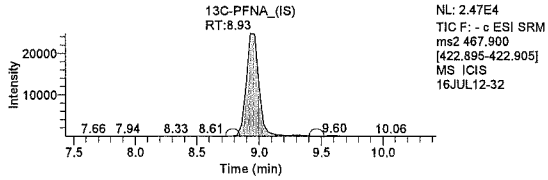
Component Name: PFOA



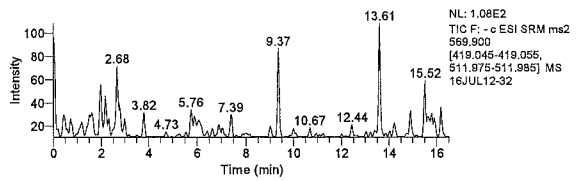


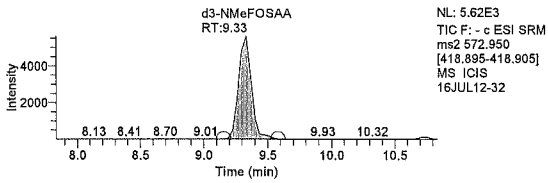
Component Name: PFNA



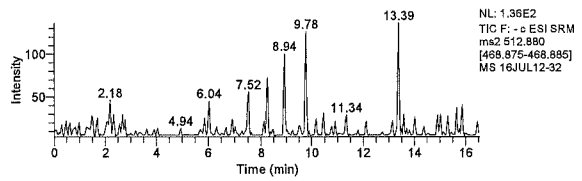


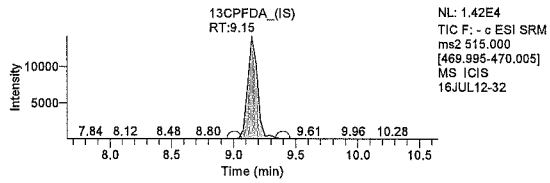
Component Name: NMeFOSAA





Component Name: PFDA





Component Name: PFOS

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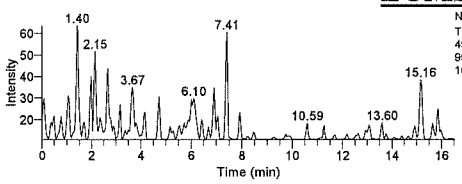
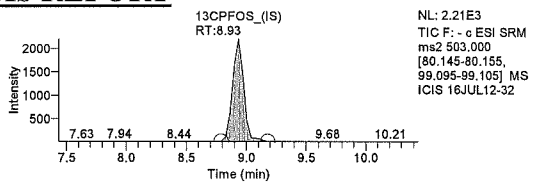
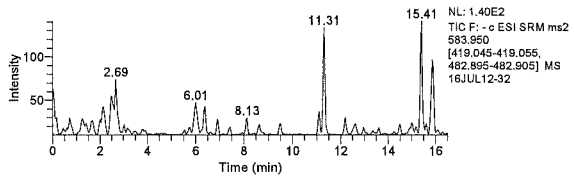
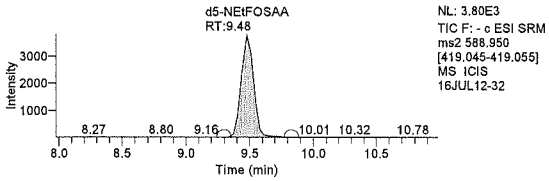




Component Name: NEtFOSAA





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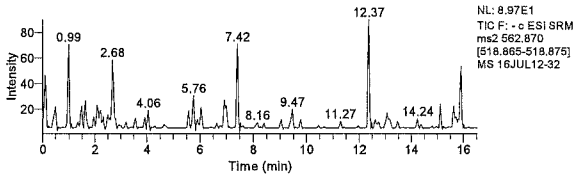
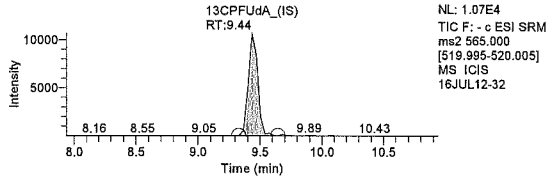
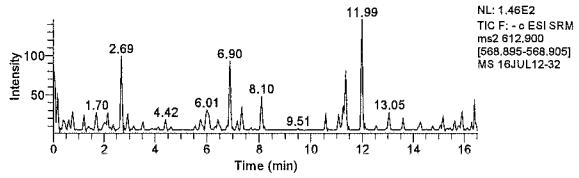
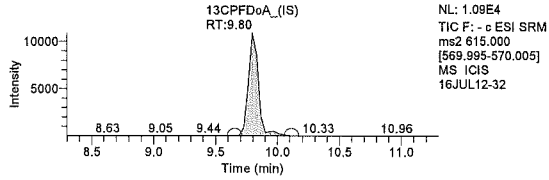


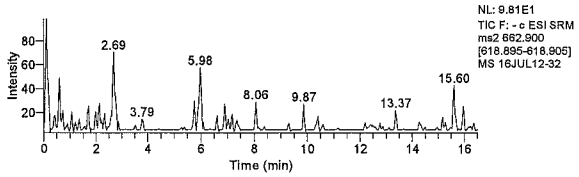


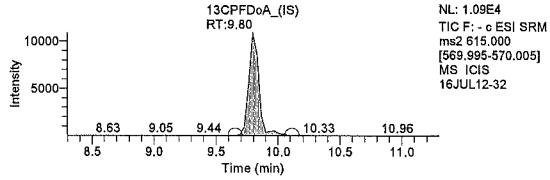
Component Name: PFDoA



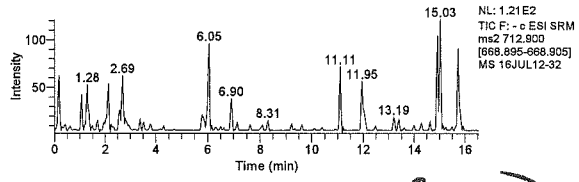


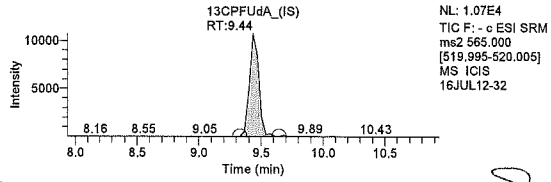
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd

JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

Wednesday, July 13, 2016, 11:13:31

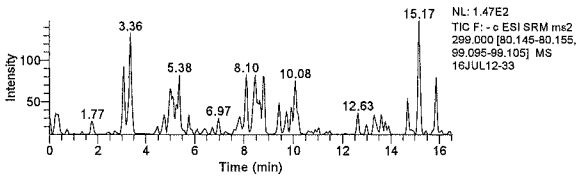
LCMSMS ANALYSIS REPORT

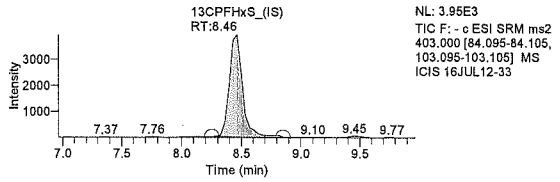
Sample Name:	8450141	Original Data Path:	C:\Xcalibur\PFC\2016\16JUL12
Sample ID:	8450141	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL12-33		
Acquisition Date:	07/12/16 06:42:12 PM	Dilution Factor:	1.57
Sample Type:	Unknown	Instrument Model:	TSQ Quantum Access
Vial:	a:6	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

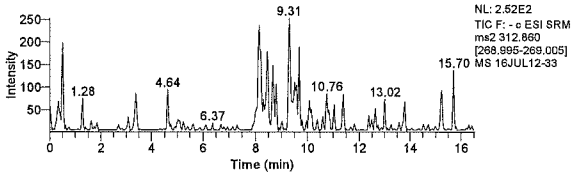
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.97	213800.07	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.72	145719.65	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.22	128642.18	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.94	97004.32	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.46	133825.91	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.11	96344.32	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.46	31126.41	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.94	14627.30	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.51	122847.67	N/A	N/A	N/A
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/g
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/g
PFBS	N/A	N/A	N/A	N/A	N/A	ng/g
PFDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/g
PFHxA	N/A	N/A	N/A	N/A	N/A	ng/g
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/g
PFNA	0.241	8.93	474.45	213800.07	0.002	ng/g
PFOA	N/A	N/A	N/A	N/A	N/A	ng/g
PFOS	N/A	N/A	N/A	N/A	N/A	ng/g
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/g
PFhpA	N/A	N/A	N/A	N/A	N/A	ng/g
d3-NMeFOSAA	N/A	9.37	92391.38	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.55	79876.34	N/A	N/A	N/A

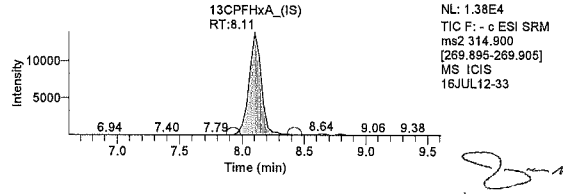
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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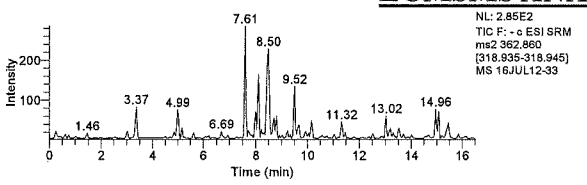
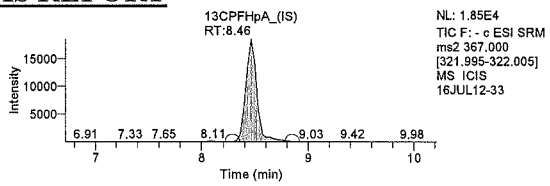
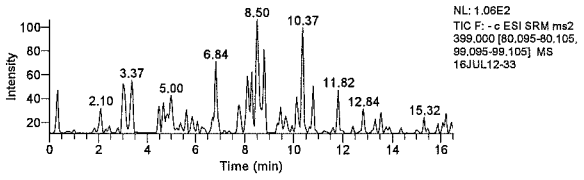
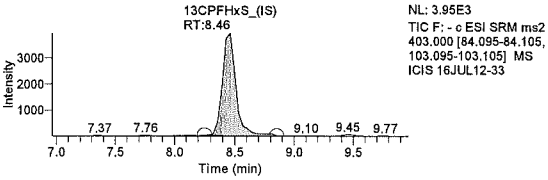


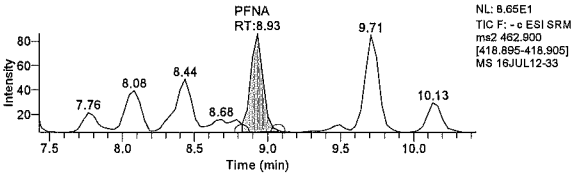


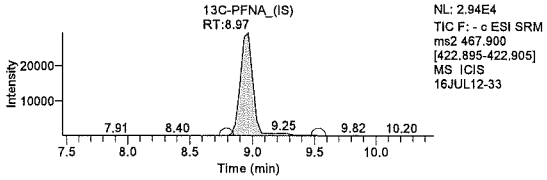
Component Name: PFHxS



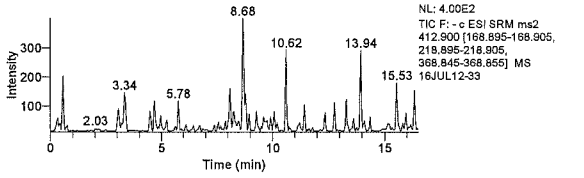


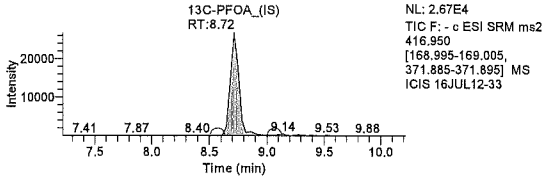
Component Name: PFNA



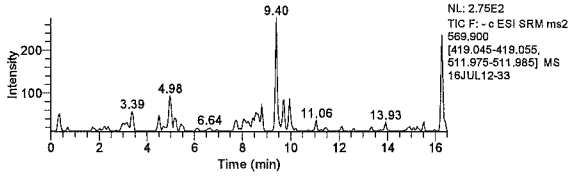


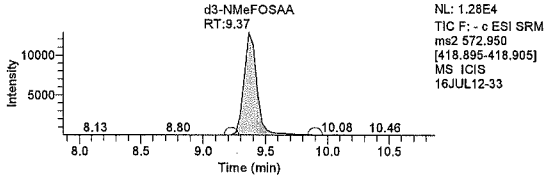
Component Name: PFOA



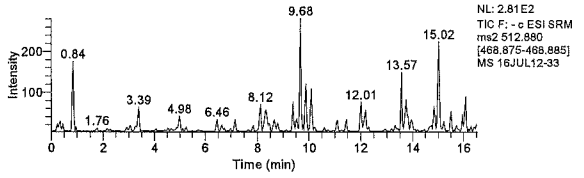


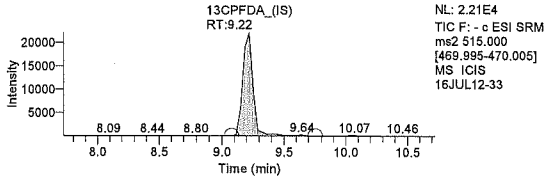
Component Name: NMeFOSAA





Component Name: PFDA





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Component Name: PFOS

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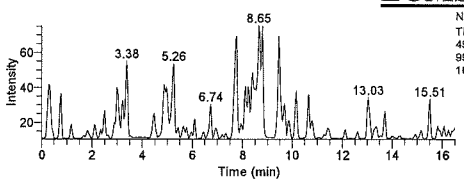
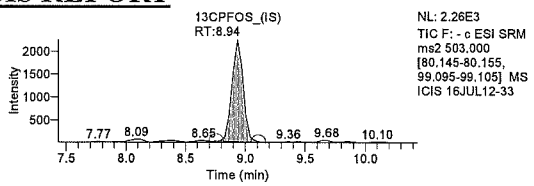
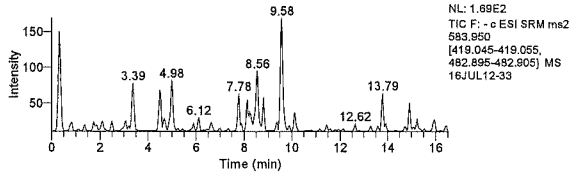
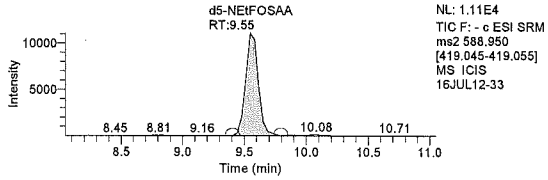


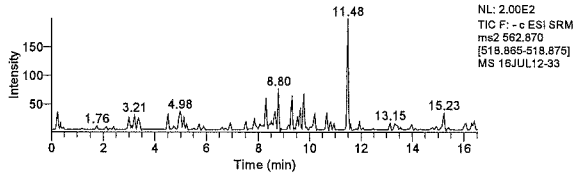


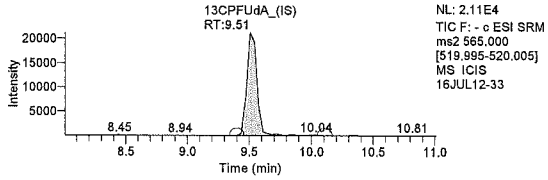
Component Name: NEtFOSAA



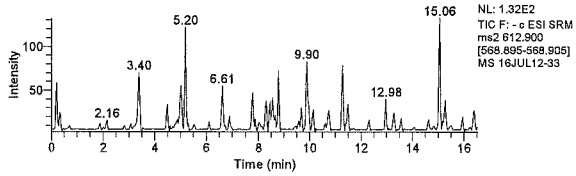


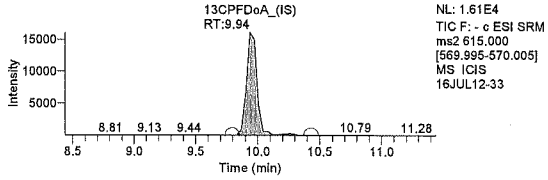
Component Name: PFUdA



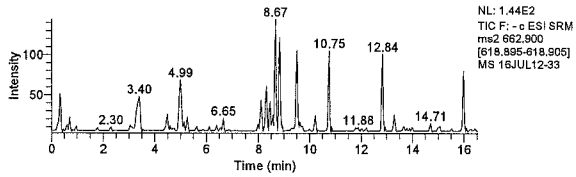


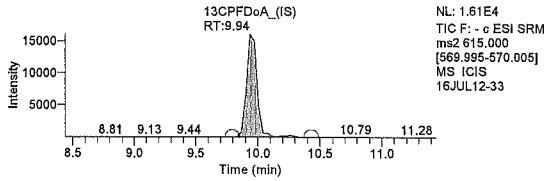
Component Name: PFDoA



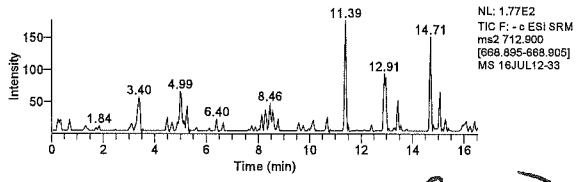


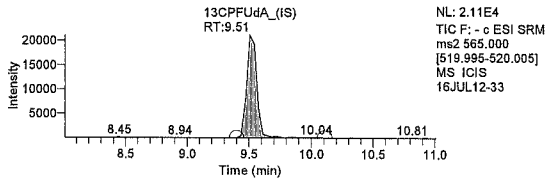
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd

JUL 19 2016

Jason W. Knight
Senior Chemist

Lynn Dodd
Principal Specialist

JUL 18 2016

Standards Data

Miscellaneous LC/MS/MS

Sequence Table

File Name	Sample ID	Sample Type	Level	Vial	Inj Vol	Dil Factor	Path	Inst Method	Proc Method
16JUL11-27	MDL	N/A	N/A	c:2	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL11-28	CAL1	N/A	1	c:3	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL11-29	CAL2	N/A	2	c:4	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL11-30	CAL3	N/A	3	c:5	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL11-31	CAL4	N/A	4	c:6	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL11-32	CAL5	N/A	5	c:7	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL11-33	CAL6	N/A	6	c:8	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL11-34	solvent	N/A	N/A	c:1	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL11-35	ICV1	N/A	ICV1	c:9	10.0	1.000	C:\XCALIBUR\PFC\2016\16JUL11	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-25	CCV3	N/A	3	c:7	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-26	solvent	N/A	N/A	c:1	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-27	solvent	N/A	N/A	c:1	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-28	MB 16182005	N/A	N/A	a:1	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-29	LCS 16182005	N/A	N/A	a:2	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-30	LCSD 16182005	N/A	N/A	a:3	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-31	8450139	N/A	N/A	a:4	10.0	1.850	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-32	8450140	N/A	N/A	a:5	10.0	1.740	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-33	8450141	N/A	N/A	a:6	10.0	1.570	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL12-34	CCV1	N/A	1	c:5	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL13-03	CCV2	N/A	2	c:6	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL13	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL13-09	LCS 16182005	N/A	N/A	a:2	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL13-10	CCV3	N/A	3	c:7	10.0	1.000	C:\Xcalibur\PFC\2016\16JUL12	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils

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Sequence Table

File Name	Sample ID	Sample Type	Level	Vial	Inj Vol	Dil Factor	Path	Inst Method	Proc Method
16JUL14-03	MDL	N/A	N/A	c:2	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-04	CAL1	N/A	1	c:3	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-05	CAL2	N/A	2	c:4	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-09	CAL3	N/A	3	c:5	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-11	CAL6	N/A	6	c:8	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-12	CAL5	N/A	5	c:7	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-14	CAL4	N/A	4	c:6	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-17	CCV1	N/A	1	c:5	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-19	ICV1	N/A	ICV1	c:9	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-38	CCV3	N/A	3	c:7	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-39	solvent	N/A	N/A	c:1	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-40	solvent	N/A	N/A	c:1	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-41	MB 16182005	N/A	N/A	d:13	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-42	LCS 16182005	N/A	N/A	d:14	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-43	LCSD 16182005	N/A	N/A	d:15	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils
16JUL14-44	CCV2	N/A	2	c:6	10.0	1.000	C:\Xcalibur\PFC\2016\Raw PFC DATA	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes	C:\Xcalibur\PFC\Quan M\PFC_14_Soils

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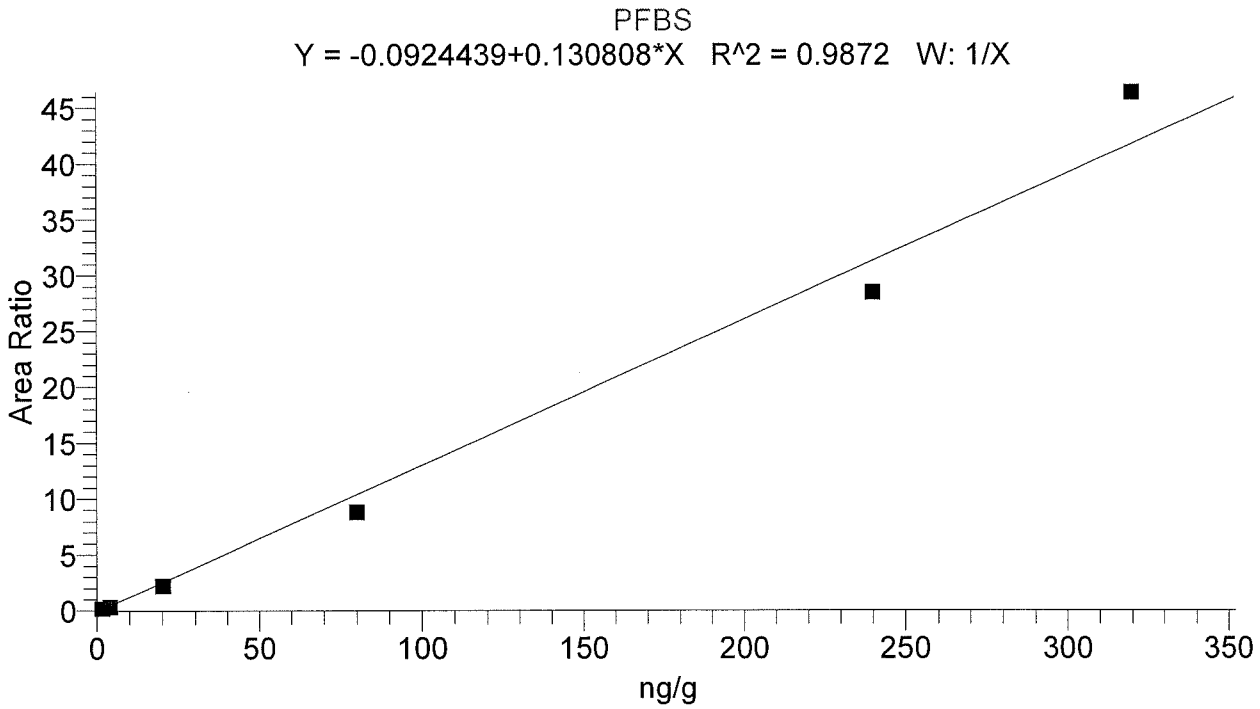
LCMSMS ANALYSIS REPORT

Component Name: **PFBS**



Identification		Component Name:	PFBS
Filter:	- c ESI SRM ms2 299.00 [80.14-80.16, 99.09-99.11]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	8.17000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	25
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	20.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFHxS_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV1	20.000
ICV2	40.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	2.227	5107.94	25690.47	0.199	39.17
CAL2	16JUL11-29	3.362	7851.95	22610.12	0.347	-15.96
CAL3	16JUL11-30	17.910	61977.26	27541.67	2.250	-10.45
CAL4	16JUL11-31	68.062	253733.78	28798.74	8.811	-14.92
CAL5	16JUL11-32	218.669	698333.65	24493.26	28.511	-8.89
CAL6	16JUL11-33	355.371	878620.58	18938.68	46.393	11.05
ICV1	16JUL11-35	19.505	66252.15	26942.94	2.459	-2.47
CCV3	16JUL12-25	235.479	711777.15	23177.27	30.710	-1.88
CCV1	16JUL12-34	17.813	71015.77	31737.06	2.238	-10.94
CCV2	16JUL13-03	67.555	280168.77	32040.15	8.744	-15.56
CCV3	16JUL13-10	256.799	716502.67	21388.83	33.499	7.00

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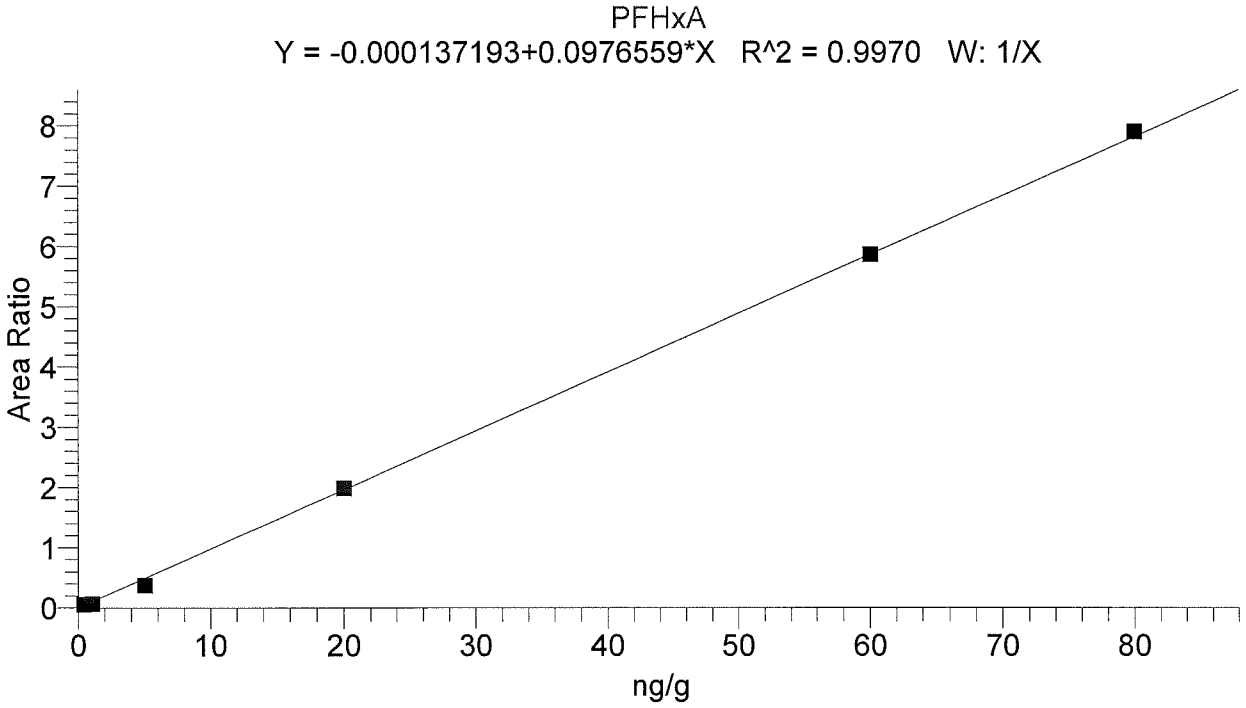
LCMSMS ANALYSIS REPORT

Component Name: **PFHxA**



Identification		Component Name:	PFHxA
Filter:	- c ESI SRM ms2 312.86 [269.00-269.01]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	8.49000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFHxA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.599	5320.84	91180.47	0.058	49.74
CAL2	16JUL11-29	0.711	5880.08	84822.85	0.069	-28.87
CAL3	16JUL11-30	3.816	33206.20	89149.57	0.372	-23.69
CAL4	16JUL11-31	20.325	169938.36	85625.36	1.985	1.62
CAL5	16JUL11-32	60.028	473692.16	80808.09	5.862	0.05
CAL6	16JUL11-33	80.922	661040.61	83651.12	7.902	1.15
ICV1	16JUL11-35	23.174	200150.42	88446.85	2.263	15.87
CCV3	16JUL12-25	60.808	509121.54	85737.57	5.938	1.35
CCV1	16JUL12-34	4.940	47177.56	97819.69	0.482	-1.20
CCV2	16JUL13-03	20.568	185218.98	92218.28	2.008	2.84
CCV3	16JUL13-10	59.906	482448.61	82468.88	5.850	-0.16

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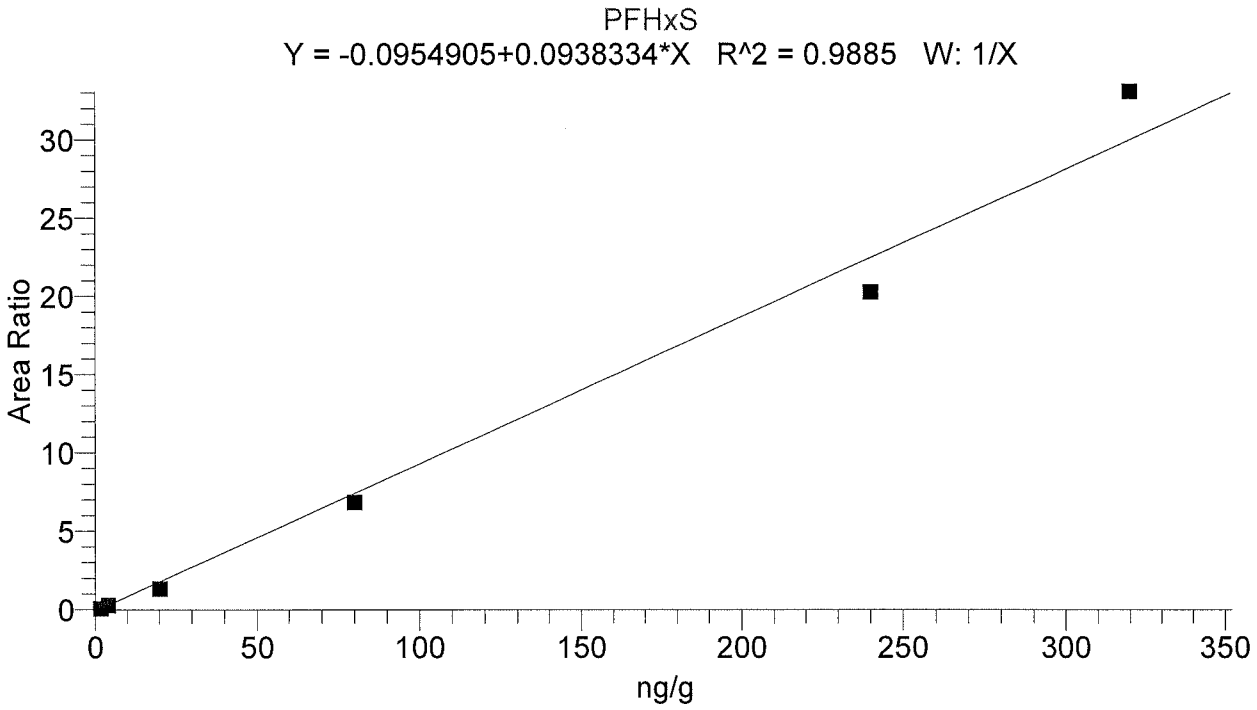
LCMSMS ANALYSIS REPORT

Component Name: **PFHxS**



Identification		Component Name:	PFHxS
Filter:	- c ESI SRM ms2 399.00 [80.09-80.11, 99.09-99.11]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	8.54000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	25
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	20.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFHxS_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	2.030	2440.09	25690.47	0.095	26.87
CAL2	16JUL11-29	4.120	6582.93	22610.12	0.291	3.01
CAL3	16JUL11-30	15.376	37107.61	27541.67	1.347	-23.12
CAL4	16JUL11-31	73.995	197205.62	28798.74	6.848	-7.51
CAL5	16JUL11-32	216.911	496183.71	24493.26	20.258	-9.62
CAL6	16JUL11-33	353.168	625799.09	18938.68	33.043	10.36
ICV1	16JUL11-35	22.229	53626.56	26942.94	1.990	11.15
CCV3	16JUL12-25	237.266	513793.84	23177.27	22.168	-1.14
CCV1	16JUL12-34	15.630	43516.83	31737.06	1.371	-21.85
CCV2	16JUL13-03	69.905	207105.67	32040.15	6.464	-12.62
CCV3	16JUL13-10	241.340	482324.05	21388.83	22.550	0.56

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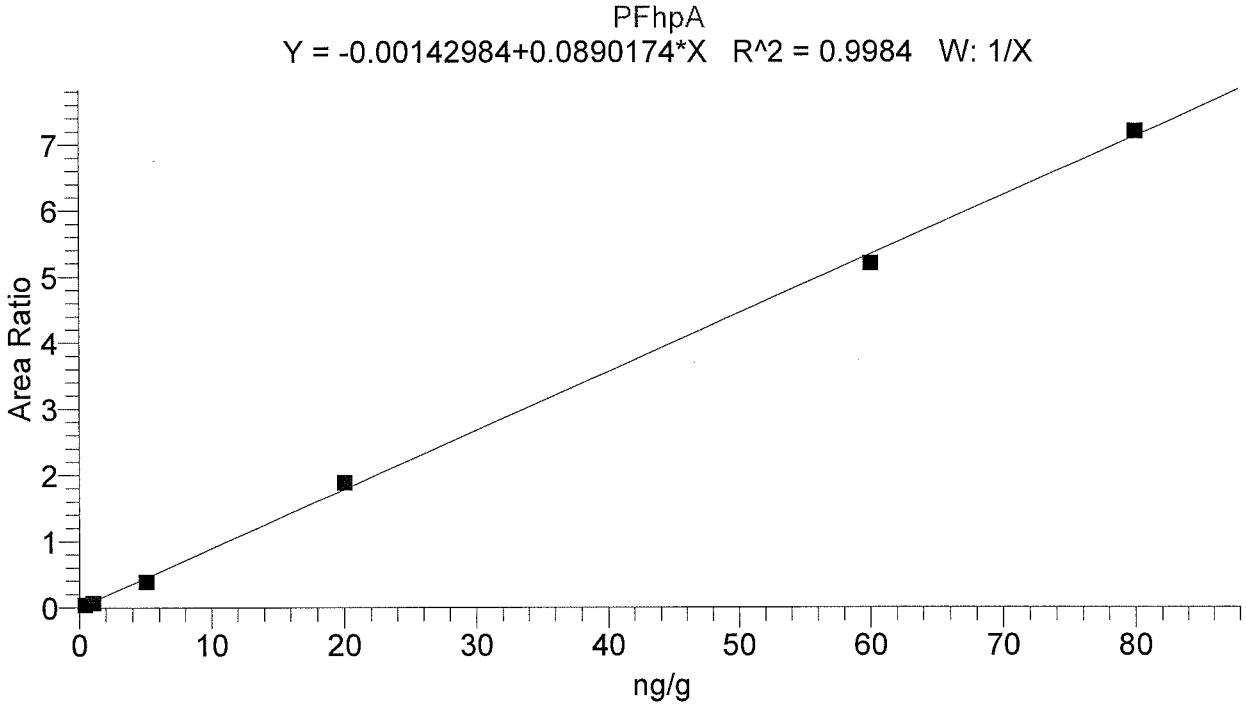
LCMSMS ANALYSIS REPORT

Component Name: **PFhpA**



Identification		Component Name:	PFhpA
Filter:	- c ESI SRM ms2 362.86 [318.94-318.94]	1st Trace Type:	TIC
2nd Trace Type:	N/A		
Mass Range 2 (m/z):		Mass Range 1 (m/z):	
Base Peak(BP):		Wavelength Range 2 (nm):	N/A
Retention Time			
Window (sec):	50.00000	Expected RT (min):	8.50000
RT Reference:	No	View Width (min):	3.00000
Adjust Using:	N/A	Adjust Expected RT:	No
Detection Options			
		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFHpA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.497	6561.40	153139.87	0.043	24.35
CAL2	16JUL11-29	0.822	10416.35	145114.23	0.072	-17.76
CAL3	16JUL11-30	4.430	57148.99	145438.91	0.393	-11.39
CAL4	16JUL11-31	21.231	244835.75	129643.86	1.889	6.16
CAL5	16JUL11-32	58.504	600475.65	115333.66	5.206	-2.49
CAL6	16JUL11-33	80.915	685412.09	95177.62	7.201	1.14
ICV1	16JUL11-35	23.595	303185.66	144444.64	2.099	17.98
CCV3	16JUL12-25	58.495	559732.78	107524.09	5.206	-2.51
CCV1	16JUL12-34	4.550	61672.85	152813.56	0.404	-9.00
CCV2	16JUL13-03	20.610	242051.68	132036.09	1.833	3.05
CCV3	16JUL13-10	63.146	609284.05	108419.56	5.620	5.24

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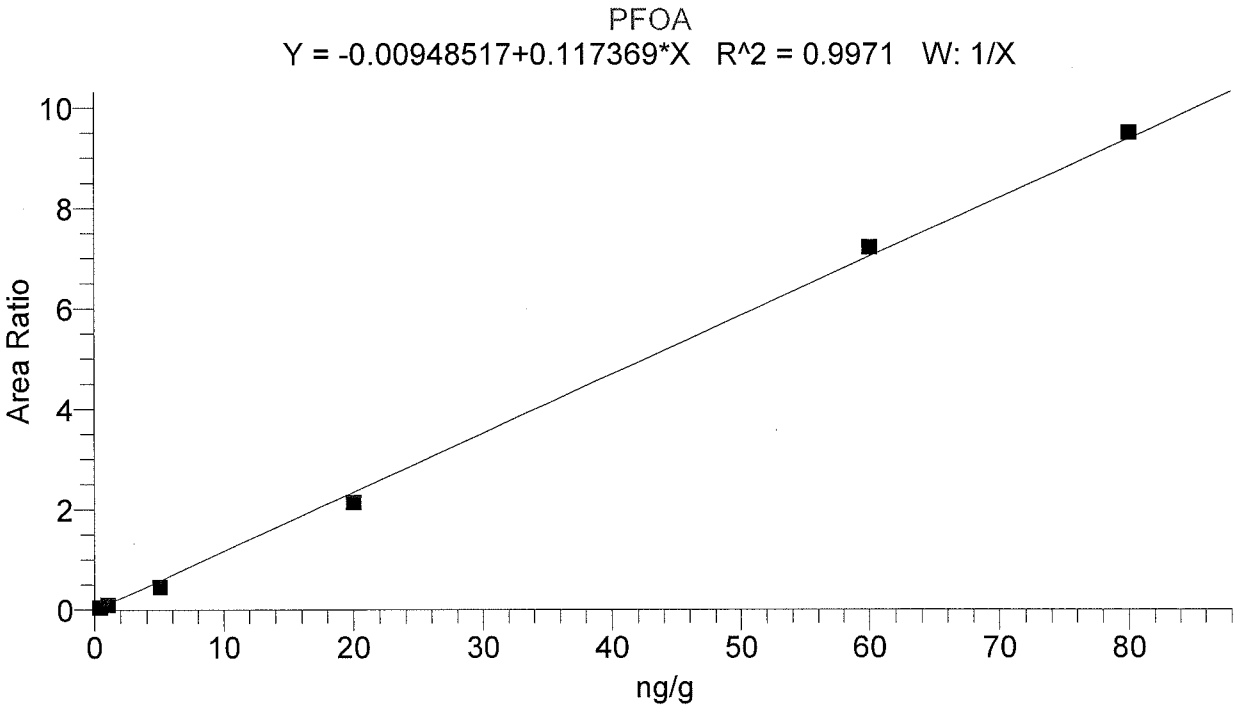
LCMSMS ANALYSIS REPORT

Component Name: **PFOA**



Identification		Component Name:	PFOA
Filter:	- c ESI SRM ms2 412.90 [168.90-168.91, 218.90-218.91, 368.85-368.86]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.13000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	15
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13C-PFOA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.531	8778.44	166091.88	0.053	32.78
CAL2	16JUL11-29	0.922	14471.68	146625.80	0.099	-7.83
CAL3	16JUL11-30	3.975	72458.15	158539.02	0.457	-20.50
CAL4	16JUL11-31	18.313	325769.43	152235.70	2.140	-8.43
CAL5	16JUL11-32	61.578	1000850.22	138662.31	7.218	2.63
CAL6	16JUL11-33	81.081	1276993.98	134323.18	9.507	1.35
ICV1	16JUL11-35	23.787	393585.15	141454.31	2.782	18.94
CCV3	16JUL12-25	55.422	1026579.00	158048.11	6.495	-7.63
CCV1	16JUL12-34	4.383	83550.57	165480.68	0.505	-12.35
CCV2	16JUL13-03	18.072	367116.61	173860.89	2.112	-9.64
CCV3	16JUL13-10	59.141	935547.99	134963.48	6.932	-1.43

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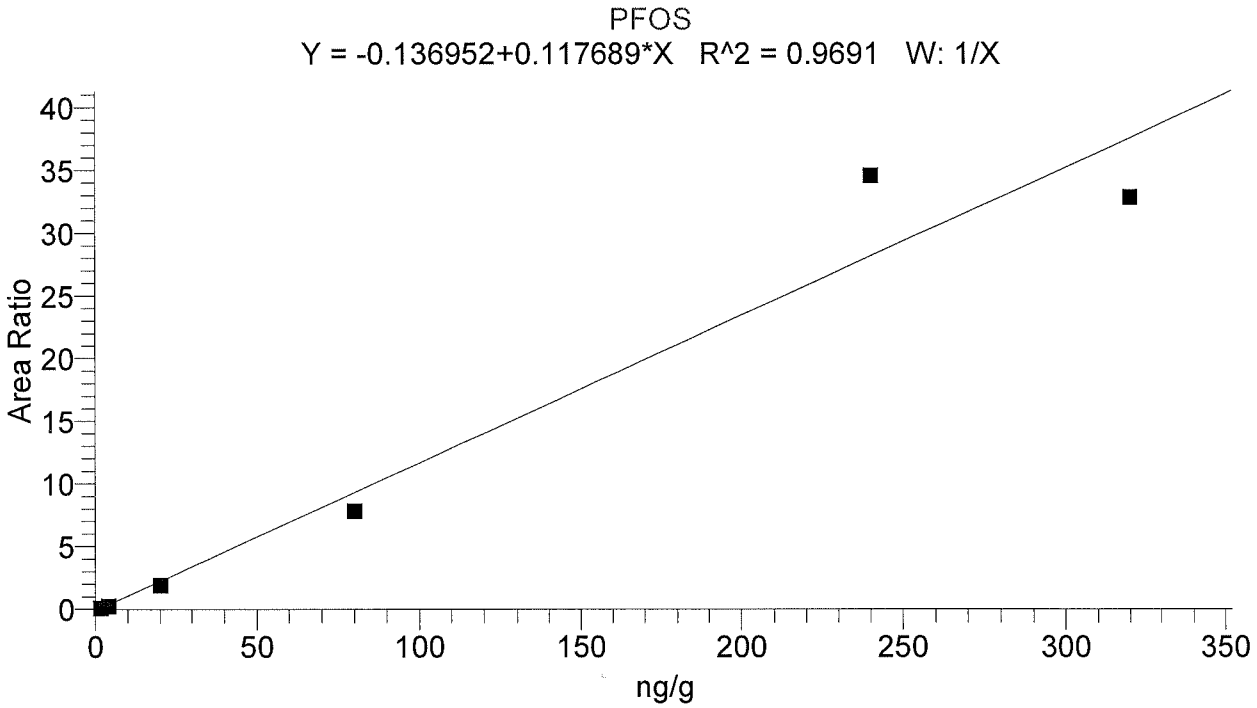
LCMSMS ANALYSIS REPORT

Component Name: **PFOS**



Identification		Component Name:	PFOS
Filter:	- c ESI SRM ms2 499.00 [80.00-80.00, 99.09-99.11]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.46000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	25
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	20.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFOS_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	2.152	2034.31	17486.40	0.116	34.51
CAL2	16JUL11-29	3.310	4053.03	16046.37	0.253	-17.25
CAL3	16JUL11-30	17.565	31268.74	16199.31	1.930	-12.17
CAL4	16JUL11-31	67.624	125672.26	16067.21	7.822	-15.47
CAL5	16JUL11-32	294.860	350399.84	10137.51	34.565	22.86
CAL6	16JUL11-33	280.089	397833.14	12119.31	32.826	-12.47
ICV1	16JUL11-35	18.619	28987.73	14111.16	2.054	-6.91
CCV3	16JUL12-25	196.700	342223.54	14871.22	23.012	-18.04
CCV1	16JUL12-34	14.904	32758.94	20258.13	1.617	-25.48
CCV2	16JUL13-03	64.579	124447.08	16674.63	7.463	-19.28
CCV3	16JUL13-10	273.951	331976.50	10340.67	32.104	14.15

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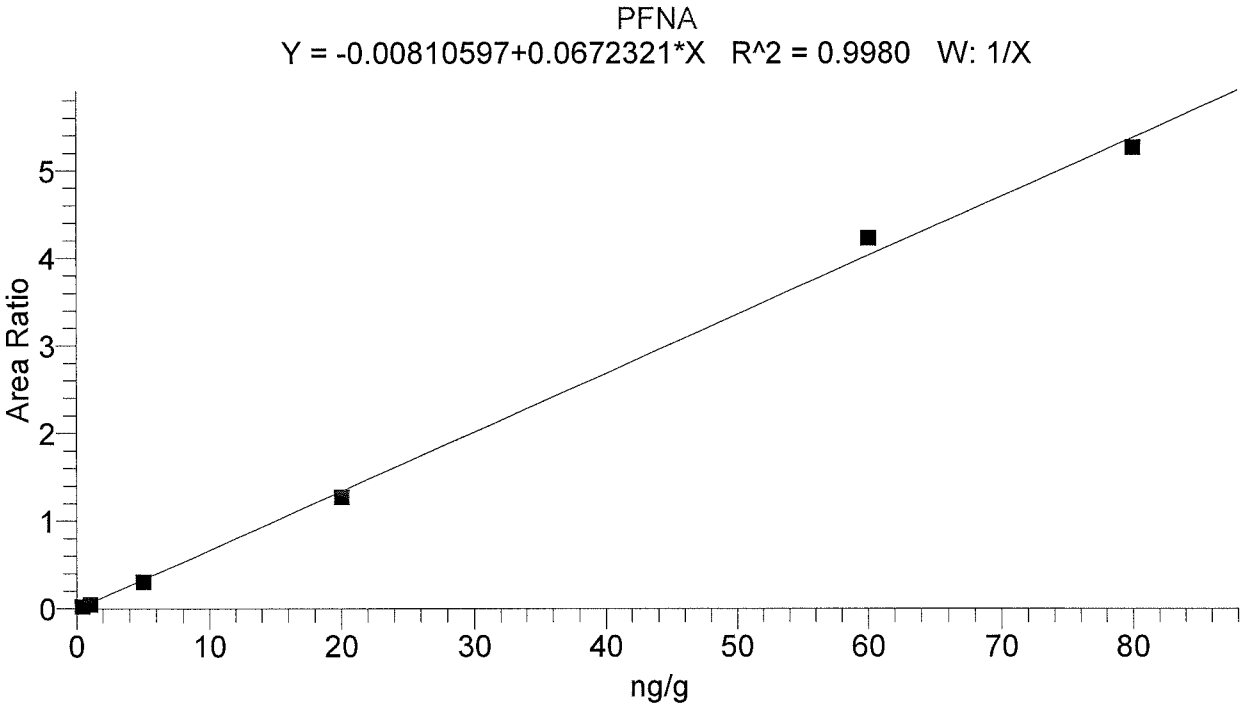
Component Name: **PFNA**



Identification		Component Name:	PFNA
Filter:	- c ESI SRM ms2 462.90 [418.89-418.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.15000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13C-PFNA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.514	6142.53	232321.30	0.026	28.46
CAL2	16JUL11-29	0.799	10039.83	220149.98	0.046	-20.11
CAL3	16JUL11-30	4.674	68728.10	224479.64	0.306	-6.51
CAL4	16JUL11-31	19.044	271106.94	213087.83	1.272	-4.78
CAL5	16JUL11-32	62.961	704320.58	166706.63	4.225	4.94
CAL6	16JUL11-33	78.407	838633.06	159333.50	5.263	-1.99
ICV1	16JUL11-35	21.789	318145.47	218387.94	1.457	8.94
CCV3	16JUL12-25	61.448	728726.53	176740.06	4.123	2.41
CCV1	16JUL12-34	4.886	76498.57	238760.18	0.320	-2.28
CCV2	16JUL13-03	21.245	302735.53	213159.57	1.420	6.22
CCV3	16JUL13-10	63.063	688839.45	162779.45	4.232	5.10

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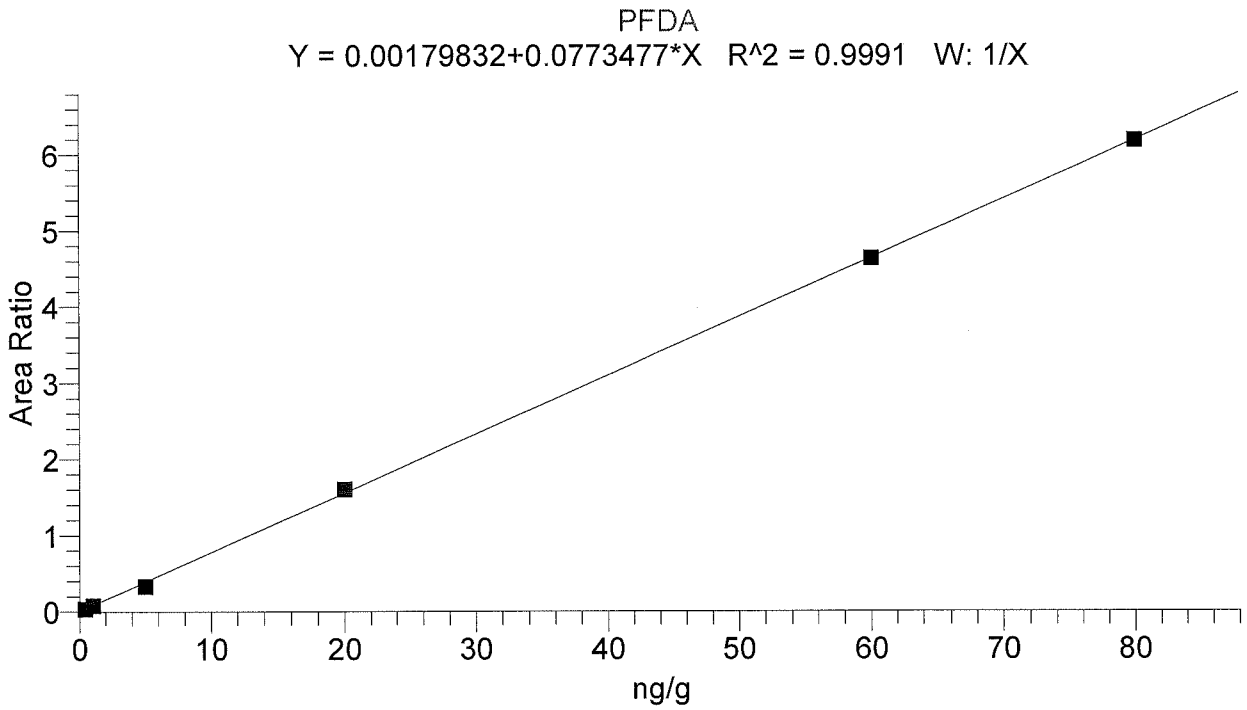
LCMSMS ANALYSIS REPORT

Component Name: **PFDA**



Identification		Component Name:	PFDA
Filter:	- c ESI SRM ms2 512.88 [468.88-468.88]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.41000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFDA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.447	4716.95	129639.81	0.036	11.79
CAL2	16JUL11-29	0.994	11538.41	146615.11	0.079	-0.58
CAL3	16JUL11-30	4.258	49124.28	148343.49	0.331	-14.84
CAL4	16JUL11-31	20.739	232882.64	145016.53	1.606	3.69
CAL5	16JUL11-32	59.952	677880.81	146127.04	4.639	-0.08
CAL6	16JUL11-33	80.009	907420.73	146587.01	6.190	0.01
ICV1	16JUL11-35	25.975	318060.27	158167.36	2.011	29.88
CCV3	16JUL12-25	68.139	756565.96	143500.33	5.272	13.57
CCV1	16JUL12-34	4.336	60865.14	180510.88	0.337	-13.28
CCV2	16JUL13-03	20.773	242911.67	151013.21	1.609	3.87
CCV3	16JUL13-10	62.799	668457.92	137566.75	4.859	4.66

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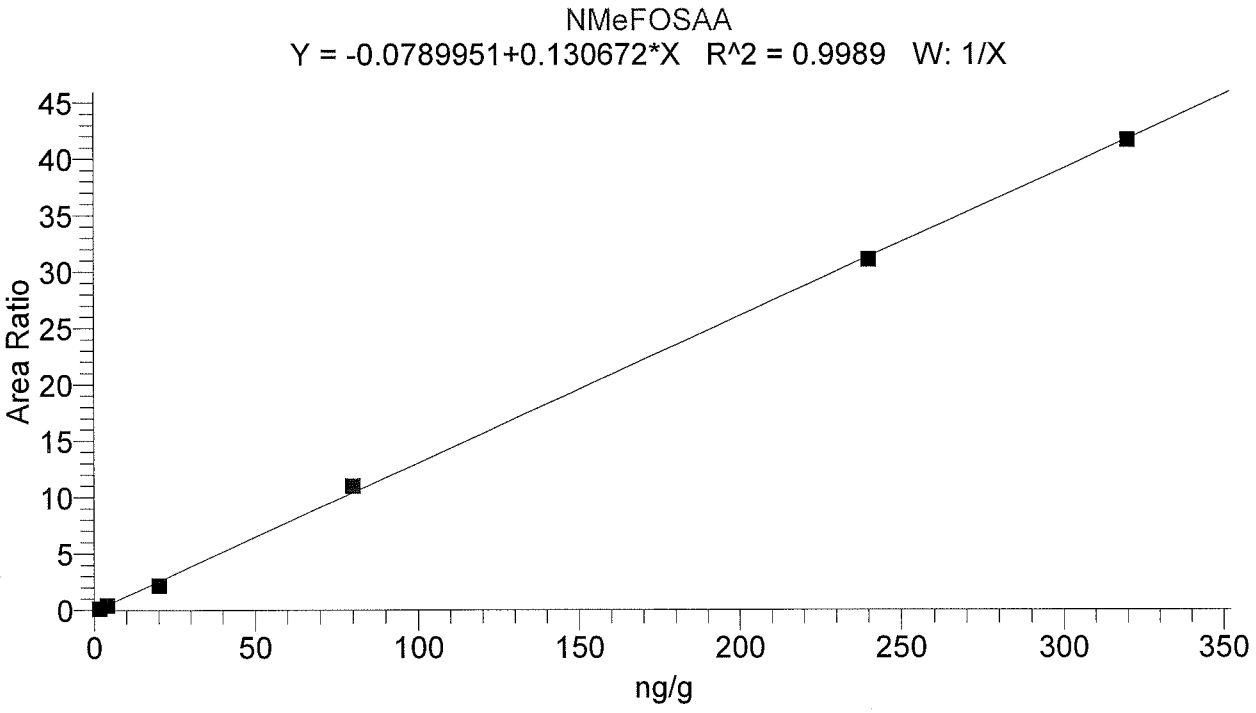
LCMSMS ANALYSIS REPORT

Component Name: **NMeFOSAA**



Identification		Component Name:	NMeFOSAA
Filter:	- c ESI SRM ms2 569.90 [419.05-419.06, 511.98-511.99]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.37000
Window (sec):	60.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Highest Peak
ICIS Minimum Peak Height (S/N):	100.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	d3-NMeFOSAA	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV1	20.000
ICV2	40.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	1.797	25342.21	162693.85	0.156	12.29
CAL2	16JUL11-29	3.827	65502.35	155569.08	0.421	-4.33
CAL3	16JUL11-30	17.359	340661.33	155602.48	2.189	-13.21
CAL4	16JUL11-31	84.907	1332328.37	120945.75	11.016	6.13
CAL5	16JUL11-32	238.413	3338774.93	107442.70	31.075	-0.66
CAL6	16JUL11-33	319.298	3665352.86	88015.63	41.644	-0.22
ICV1	16JUL11-35	31.065	507101.72	127401.73	3.980	55.33
CCV3	16JUL12-25	228.833	3397227.70	113912.57	29.823	-4.65
CCV1	16JUL12-34	17.910	377944.98	167128.76	2.261	-10.45
CCV2	16JUL13-03	85.494	1212254.03	109284.42	11.093	6.87
CCV3	16JUL13-10	222.900	2869200.62	98775.35	29.048	-7.13

Jason W. Knight
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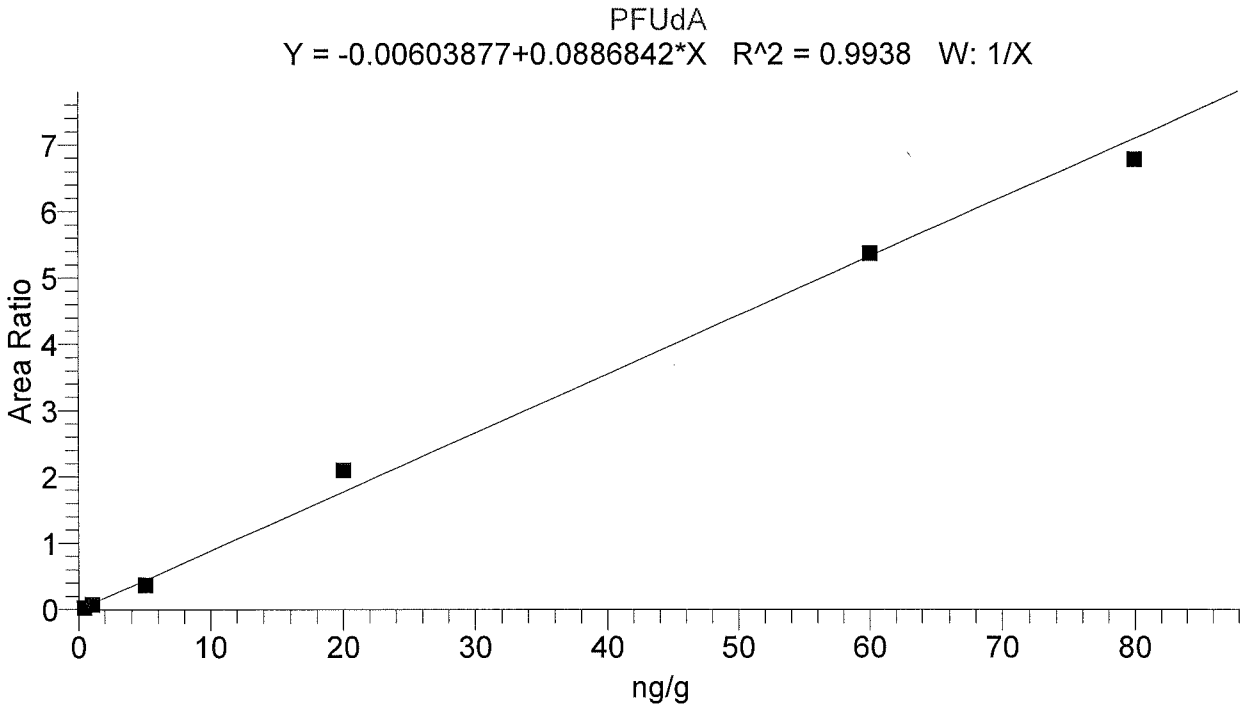
JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Name: **PFUdA**



Identification		Component Name:	PFUdA
Filter:	- c ESI SRM ms2 562.87 [518.87-518.88]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.95000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFUdA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

Jason W. Knight
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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.433	5600.64	173189.41	0.032	8.18
CAL2	16JUL11-29	0.908	11123.41	149321.21	0.074	-9.19
CAL3	16JUL11-30	4.289	64251.34	171630.19	0.374	-14.21
CAL4	16JUL11-31	23.743	281074.12	133871.88	2.100	18.71
CAL5	16JUL11-32	60.535	787392.18	146832.92	5.363	0.89
CAL6	16JUL11-33	76.492	972777.32	143529.28	6.778	-4.39
ICV1	16JUL11-35	25.166	342735.51	153984.90	2.226	25.83
CCV3	16JUL12-25	64.472	777354.85	136100.45	5.712	7.45
CCV1	16JUL12-34	4.368	69574.88	182457.23	0.381	-12.64
CCV2	16JUL13-03	18.597	275014.09	167367.17	1.643	-7.02
CCV3	16JUL13-10	59.611	742292.42	140572.31	5.281	-0.65

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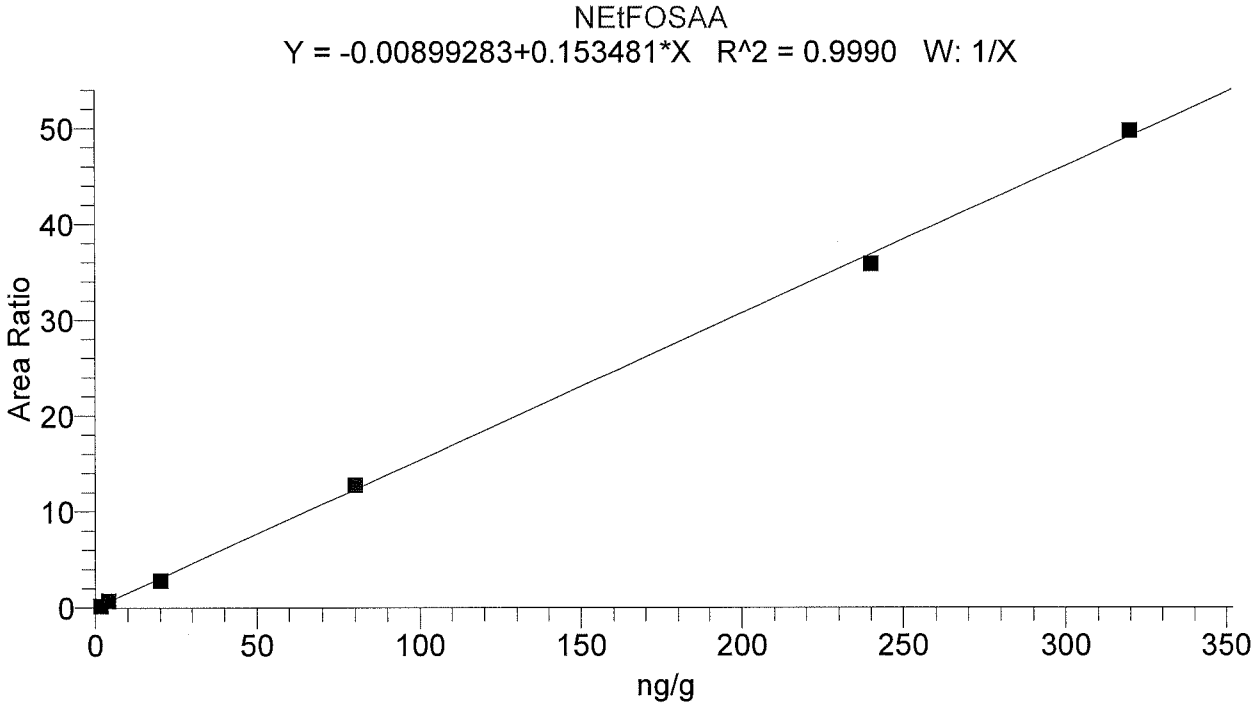
LCMSMS ANALYSIS REPORT

Component Name: **NEtFOSAA**



Identification		Component Name:	NEtFOSAA
Filter:	- c ESI SRM ms2 583.95 [419.00-5419.06, 482.89-482.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.58000
Window (sec):	60.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	25
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Highest Peak
ICIS Minimum Peak Height (S/N):	100.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	d5-NEtFOSAA	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV1	20.000
ICV2	40.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	1.420	23620.53	113083.49	0.209	-11.28
CAL2	16JUL11-29	4.654	70489.05	99930.70	0.705	16.36
CAL3	16JUL11-30	18.443	338677.79	120029.66	2.822	-7.79
CAL4	16JUL11-31	83.226	1179084.40	92371.16	12.765	4.03
CAL5	16JUL11-32	233.680	2972839.32	82909.30	35.857	-2.63
CAL6	16JUL11-33	324.177	3335927.89	67059.18	49.746	1.31
ICV1	16JUL11-35	19.868	326326.89	107330.77	3.040	-0.66
CCV3	16JUL12-25	224.533	3129090.90	90823.06	34.453	-6.44
CCV1	16JUL12-34	16.618	335965.72	132187.02	2.542	-16.91
CCV2	16JUL13-03	81.734	1175939.38	93807.28	12.536	2.17
CCV3	16JUL13-10	242.043	2741289.72	73809.63	37.140	0.85

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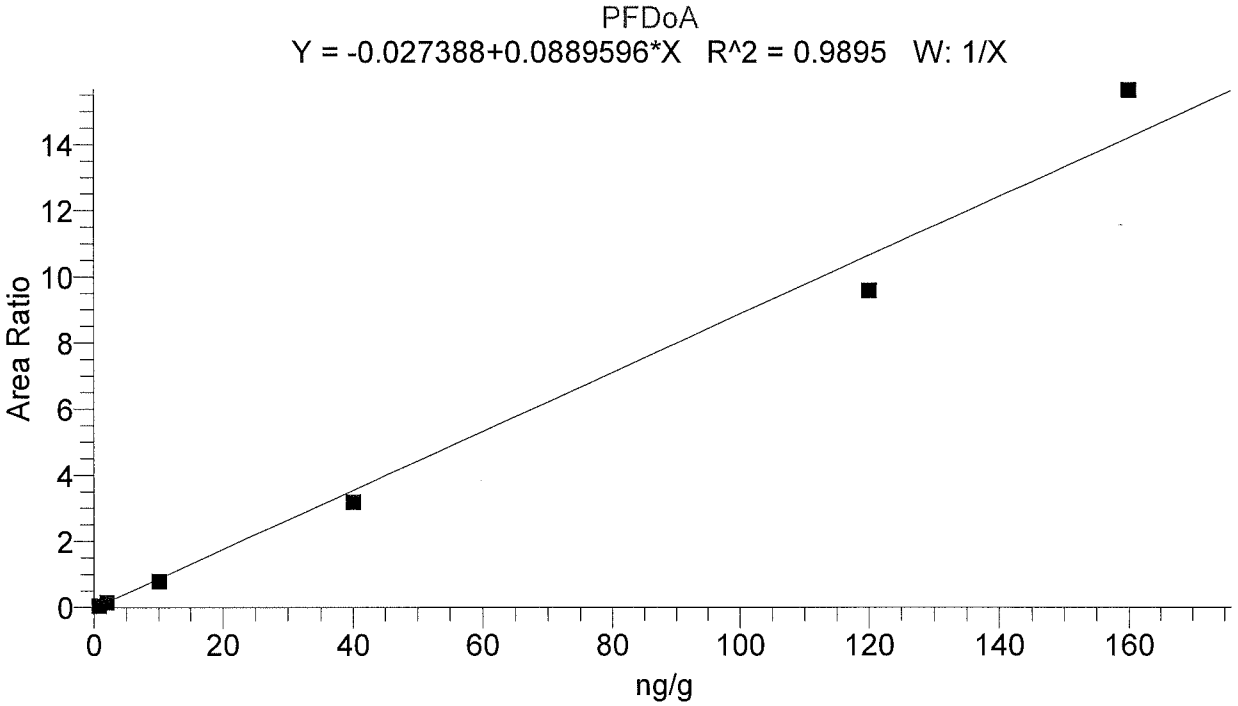
LCMSMS ANALYSIS REPORT

Component Name: **PFDoA**



Identification		Component Name:	PFDoA
Filter:	- c ESI SRM ms2 612.90 [568.89-568.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	10.60000
Window (sec):	60.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFDoA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.800
2	2.000
3	10.000
4	40.000
5	120.000
6	160.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	10.000
2	40.000
3	120.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.907	8252.01	154751.37	0.053	13.41
CAL2	16JUL11-29	2.072	23147.56	147502.82	0.157	3.60
CAL3	16JUL11-30	9.230	118047.56	148735.44	0.794	-7.70
CAL4	16JUL11-31	36.170	486074.81	152358.96	3.190	-9.57
CAL5	16JUL11-32	108.034	1587433.29	165645.81	9.583	-9.97
CAL6	16JUL11-33	176.386	2074627.79	132446.54	15.664	10.24
ICV1	16JUL11-35	23.191	301430.37	148071.32	2.036	15.96
CCV3	16JUL12-25	112.937	1580373.22	157730.77	10.019	-5.89
CCV1	16JUL12-34	9.543	129485.96	157615.57	0.822	-4.57
CCV2	16JUL13-03	37.832	520590.22	155950.89	3.338	-5.42
CCV3	16JUL13-10	124.228	1503900.19	136421.73	11.024	3.52

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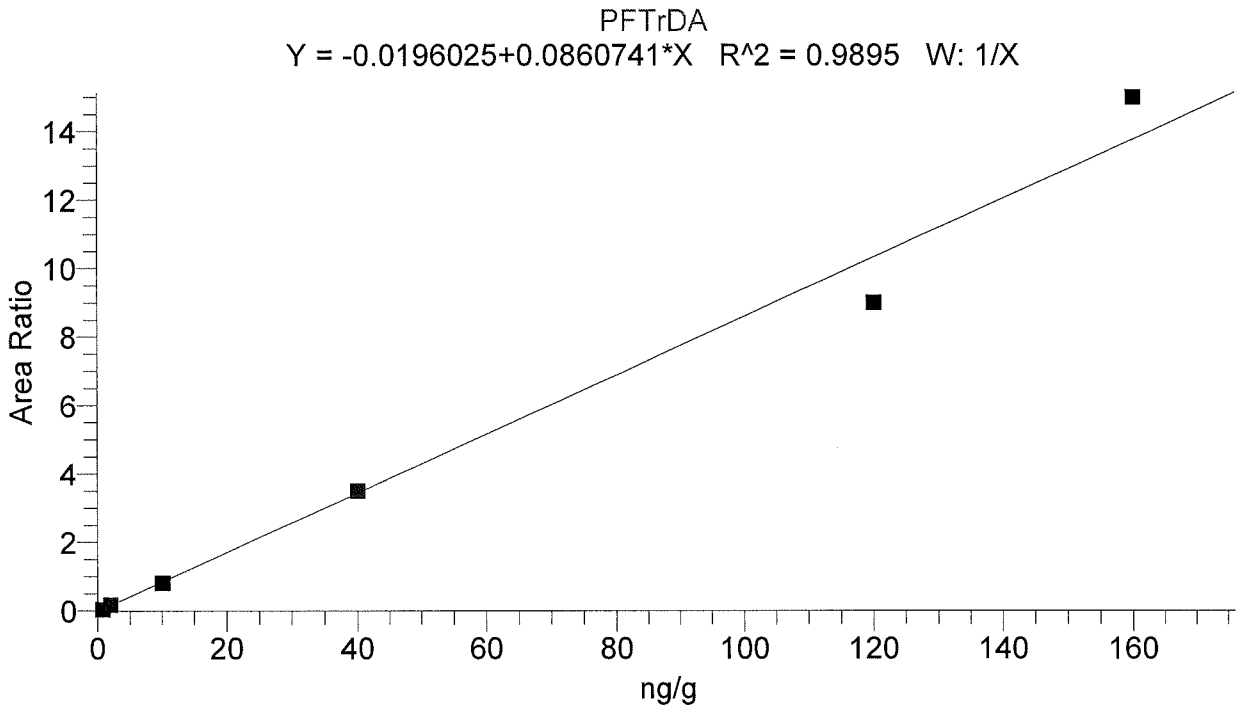
LCMSMS ANALYSIS REPORT

Component Name: **PFTrDA**



Identification		Component Name:	PFTrDA
Filter:	- c ESI SRM ms2 662.90 [618.89-618.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A		
Mass Range 2 (m/z):		Mass Range 1 (m/z):	
Base Peak(BP):		Wavelength Range 2 (nm):	N/A
Retention Time			
Window (sec):	60.00000	Expected RT (min):	11.46000
RT Reference:	No	View Width (min):	3.00000
Adjust Using:	N/A	Adjust Expected RT:	No
Detection Options			
		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFDoA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

Jason W. Knight
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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.800
2	2.000
3	10.000
4	40.000
5	120.000
6	160.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	10.000
2	40.000
3	120.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.753	6990.76	154751.37	0.045	-5.93
CAL2	16JUL11-29	2.208	25136.99	147502.82	0.170	10.38
CAL3	16JUL11-30	9.699	121247.81	148735.44	0.815	-3.01
CAL4	16JUL11-31	40.884	533173.39	152358.96	3.499	2.21
CAL5	16JUL11-32	104.718	1489808.51	165645.81	8.994	-12.73
CAL6	16JUL11-33	174.539	1987184.16	132446.54	15.004	9.09
ICV1	16JUL11-35	19.860	250213.33	148071.32	1.690	-0.70
CCV3	16JUL12-25	115.775	1568731.60	157730.77	9.946	-3.52
CCV1	16JUL12-34	9.605	127221.61	157615.57	0.807	-3.95
CCV2	16JUL13-03	38.132	508795.70	155950.89	3.263	-4.67
CCV3	16JUL13-10	127.068	1489406.01	136421.73	10.918	5.89

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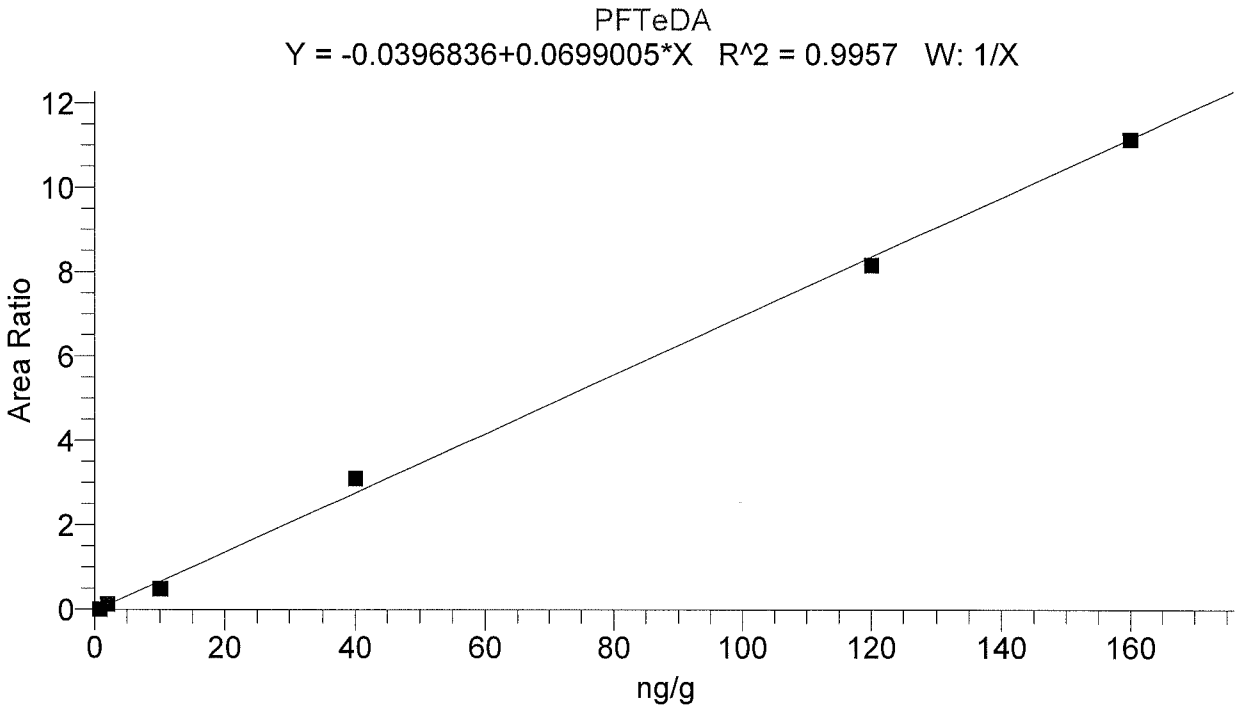
LCMSMS ANALYSIS REPORT

Component Name: **PFTeDA**



Identification		Component Name:	PFTeDA
Filter:	- c ESI SRM ms2 712.90 [668.89-668.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	12.63000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFUdA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

Jason W. Knight
Senior Chemist

JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.800
2	2.000
3	10.000
4	40.000
5	120.000
6	160.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	10.000
2	40.000
3	120.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL11-28	0.738	2060.24	173189.41	0.012	-7.76
CAL2	16JUL11-29	2.435	19490.10	149321.21	0.131	21.75
CAL3	16JUL11-30	7.608	84467.44	171630.19	0.492	-23.92
CAL4	16JUL11-31	44.926	415089.77	133871.88	3.101	12.31
CAL5	16JUL11-32	117.267	1197761.82	146832.92	8.157	-2.28
CAL6	16JUL11-33	159.826	1597802.28	143529.28	11.132	-0.11
ICV1	16JUL11-35	21.506	225374.43	153984.90	1.464	7.53
CCV3	16JUL12-25	134.494	1274103.38	136100.45	9.361	12.08
CCV1	16JUL12-34	8.298	98592.89	182457.23	0.540	-17.02
CCV2	16JUL13-03	35.519	408893.94	167367.17	2.443	-11.20
CCV3	16JUL13-10	118.727	1161038.77	140572.31	8.259	-1.06

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Senior Chemist

JUL 18 2016

JUL 19 2016

Lynn Dodd
Principal Specialist

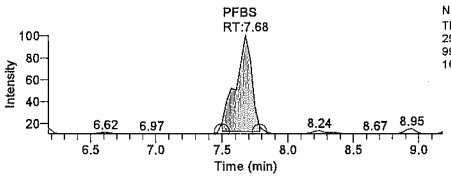
LCMSMS ANALYSIS REPORT

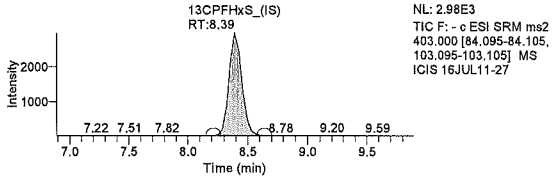
Sample Name:	MDL	Original Data Path:	C:\XCALIBUR\PFC\2016\16JUL11
Sample ID:	MDL	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL11-27		M\HWell_16.5minutes
Acquisition Date:	07/11/16 01:58:16 PM	Dilution Factor:	1.00
Sample Type:	Unknown	Instrument Model:	TSQ Quantum Access
Vial:	c:2	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

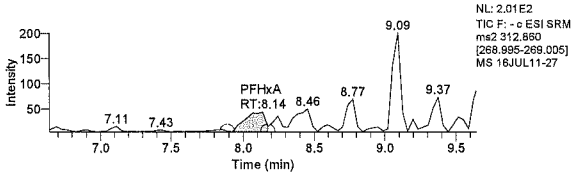
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.93	178845.10	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.71	132848.81	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.22	122048.08	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.01	129103.45	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.42	139826.06	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.07	78192.43	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.39	22302.62	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.93	11246.98	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.57	143535.38	N/A	N/A	N/A
NEtFOSAA	1.059	9.61	13124.79	85513.45	0.153	ng/g
NMeFOSAA	1.197	9.40	8878.55	114668.02	0.077	ng/g
PFBS	0.961	7.68	742.13	22302.62	0.033	ng/g
PFDA	0.259	9.22	2667.69	122048.08	0.022	ng/g
PFDoA	0.643	10.04	3849.53	129103.45	0.030	ng/g
PFHxA	0.051	8.14	378.44	78192.43	0.005	ng/g
PFHxS	1.354	8.46	704.41	22302.62	0.032	ng/g
PFNA	0.285	8.93	1979.73	178845.10	0.011	ng/g
PFOA	0.250	8.71	2643.33	132848.81	0.020	ng/g
PFOS	1.442	8.93	369.00	11246.98	0.033	ng/g
PFTeDA	0.833	11.56	2658.95	143535.38	0.019	ng/g
PFTrDA	0.716	10.64	5430.29	129103.45	0.042	ng/g
PFUdA	0.237	9.57	2144.85	143535.38	0.015	ng/g
PFhpA	0.142	8.46	1564.48	139826.06	0.011	ng/g
d3-NMeFOSAA	N/A	9.40	114668.02	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.58	85513.45	N/A	N/A	N/A

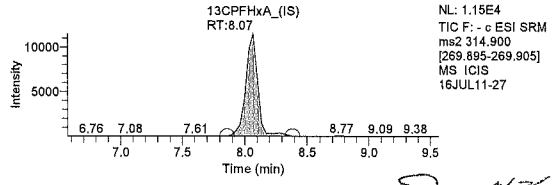
Component Name: PFBS





Component Name: PFHxA





Jason W. Knight
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Component Name: PFhpA

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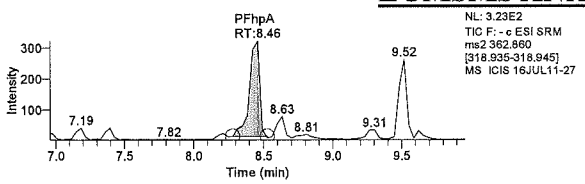

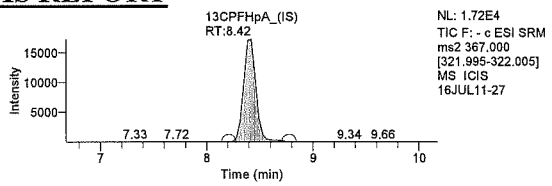

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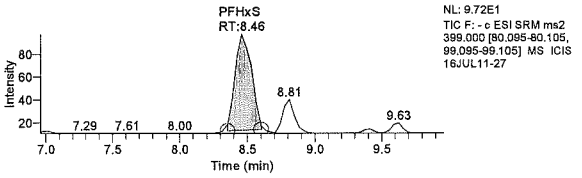
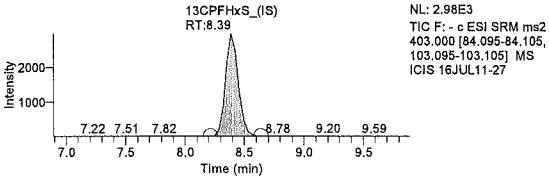
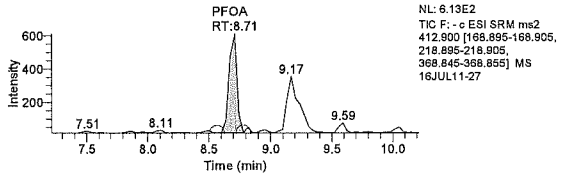
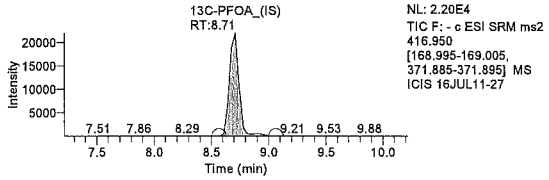




Component Name: PFOA





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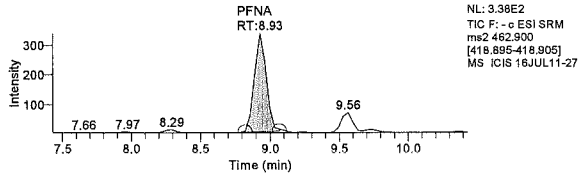
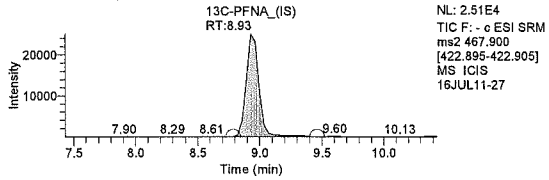
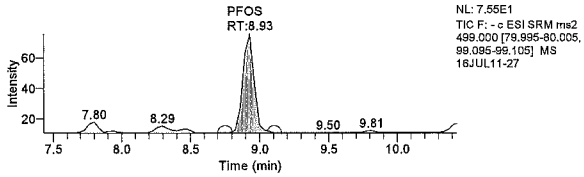
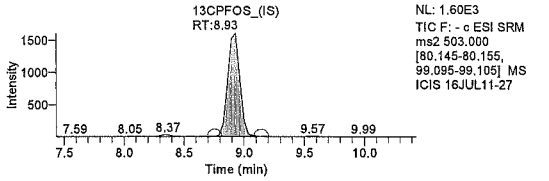




Component Name: PFOS





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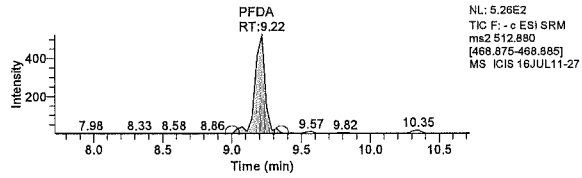

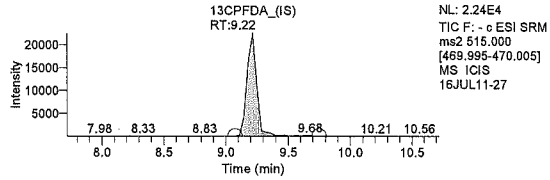

Component Name: NMeFOSAA

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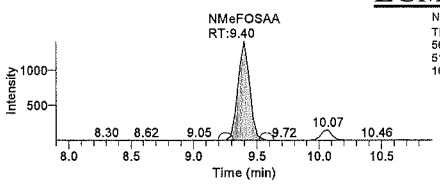
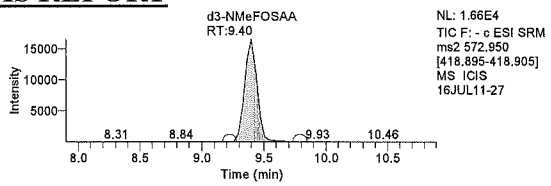
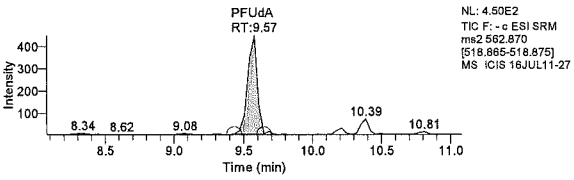
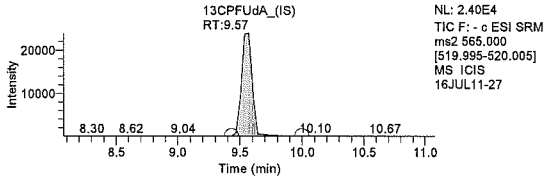


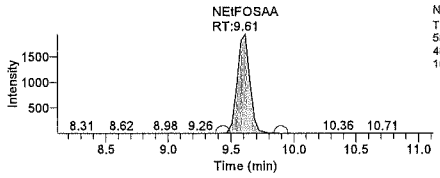


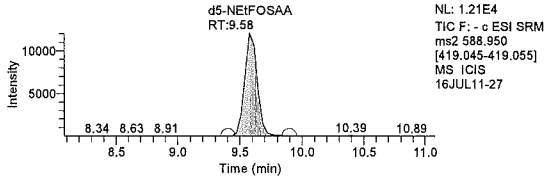
Component Name: PFUdA



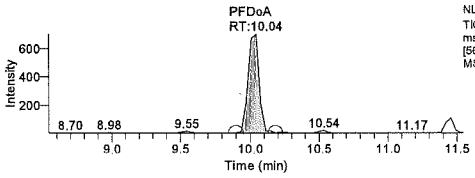


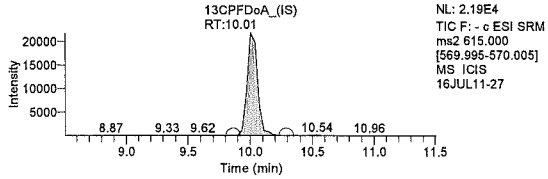
Component Name: NEtFOSAA



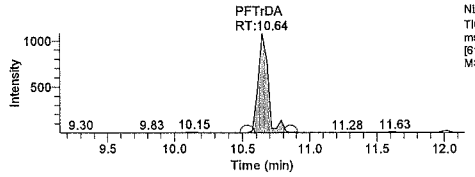


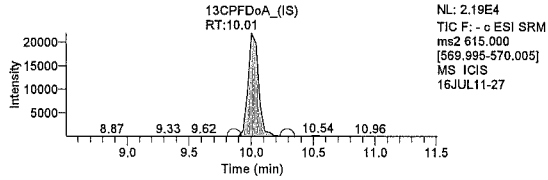
Component Name: PFDoA



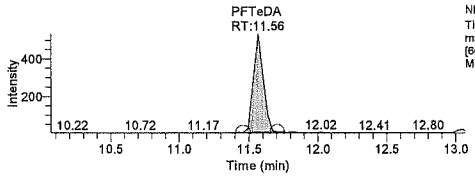


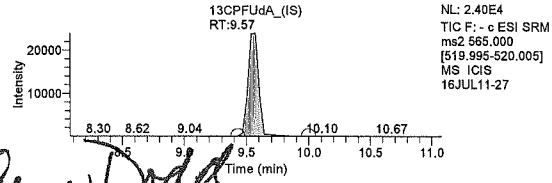
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

Lynn Dodd
Principal Specialist

JUL 18 2016

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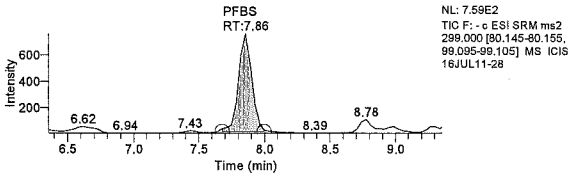
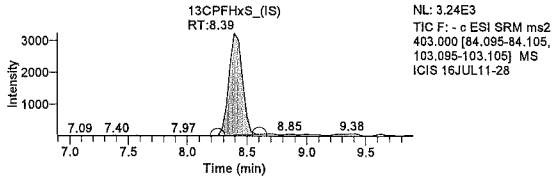
Sample Name:	CAL1	Original Data Path:	C:\XCALIBUR\PFC\2016\16JUL11
Sample ID:	CAL1	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL11-28		
Acquisition Date:	07/11/16 02:15:30 PM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:3	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

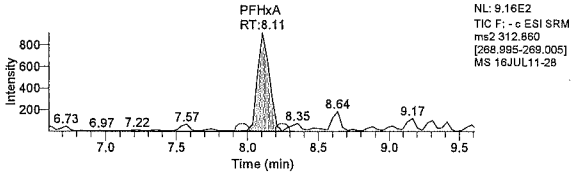
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.90	232321.30	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.65	166091.88	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.15	129639.81	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.90	154751.37	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.43	153139.87	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.11	91180.47	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.39	25690.47	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.86	17486.40	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.47	173189.41	N/A	N/A	N/A
NEtFOSAA	1.420	9.51	23620.53	113083.49	0.209	ng/g
NMeFOSAA	1.797	9.33	25342.21	162693.85	0.156	ng/g
PFBS	2.227	7.86	5107.94	25690.47	0.199	ng/g
PFDA	0.447	9.15	4716.95	129639.81	0.036	ng/g
PFDoA	0.907	9.90	8252.01	154751.37	0.053	ng/g
PFHxA	0.599	8.11	5320.84	91180.47	0.058	ng/g
PFHxS	2.030	8.39	2440.09	25690.47	0.095	ng/g
PFNA	0.514	8.90	6142.53	232321.30	0.026	ng/g
PFOA	0.531	8.68	8778.44	166091.88	0.053	ng/g
PFOS	2.152	8.86	2034.31	17486.40	0.116	ng/g
PFTeDA	0.738	11.32	2060.24	173189.41	0.012	ng/g
PFTrDA	0.753	10.51	6990.76	154751.37	0.045	ng/g
PFUdA	0.433	9.47	5600.64	173189.41	0.032	ng/g
PFhpA	0.497	8.43	6561.40	153139.87	0.043	ng/g
d3-NMeFOSAA	N/A	9.33	162693.85	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.51	113083.49	N/A	N/A	N/A

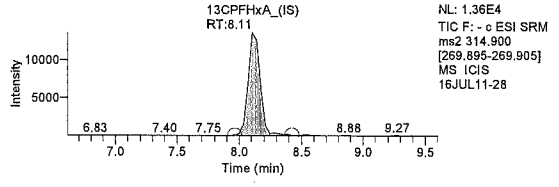
Component Name: PFBS





Component Name: PFHxA





Component Name: PFHxS

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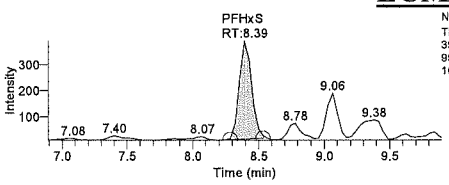
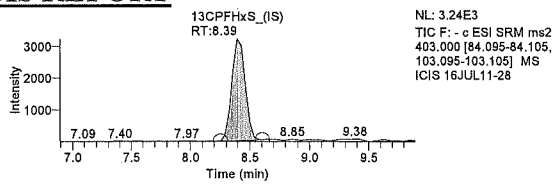
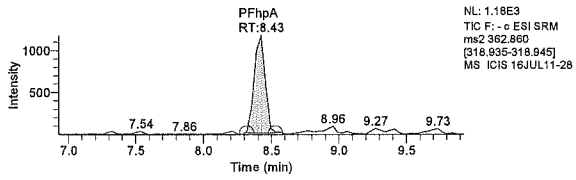
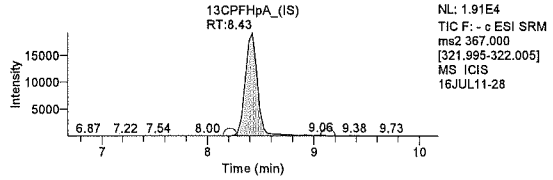


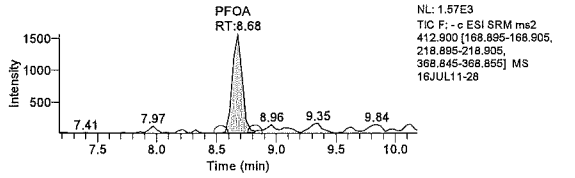


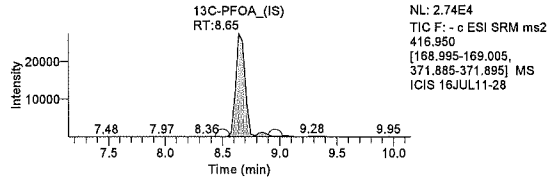
Component Name: PFhpA



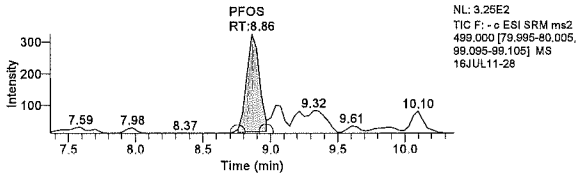


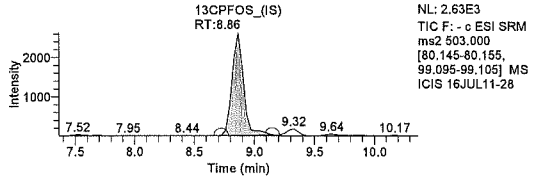
Component Name: PFOA



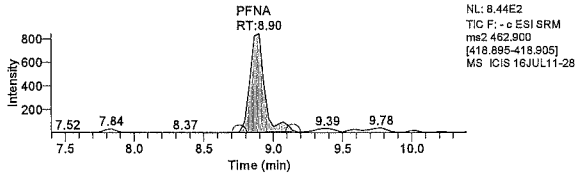


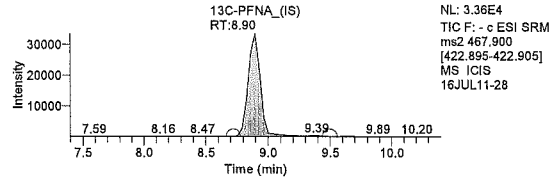
Component Name: PFOS



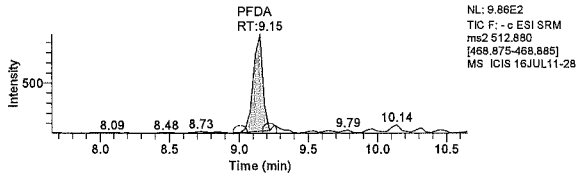


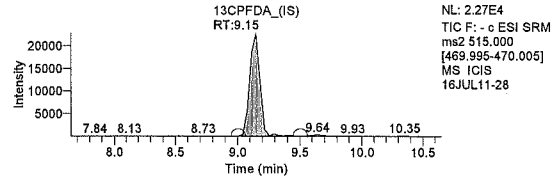
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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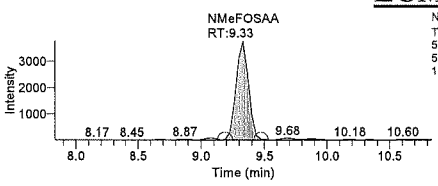
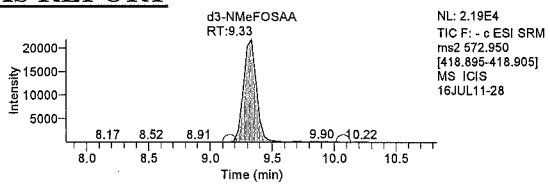
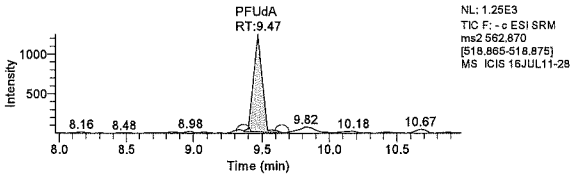
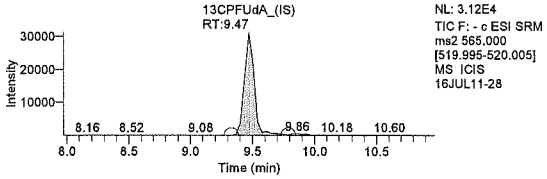


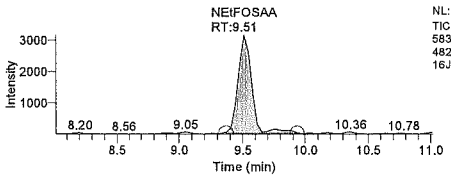


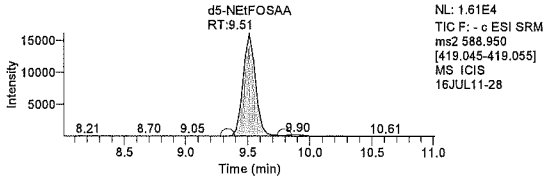
Component Name: PFUdA



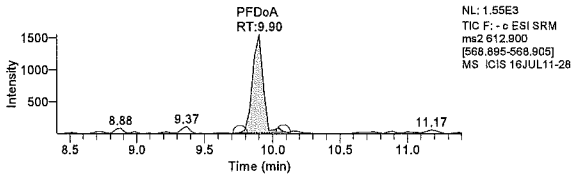


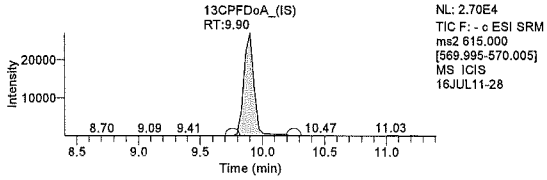
Component Name: NEtFOSAA



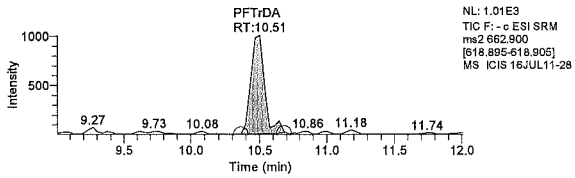


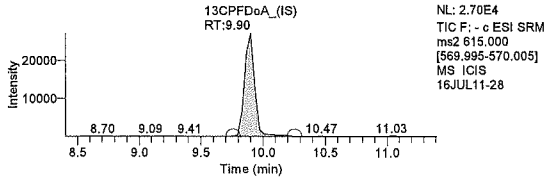
Component Name: PFDoA



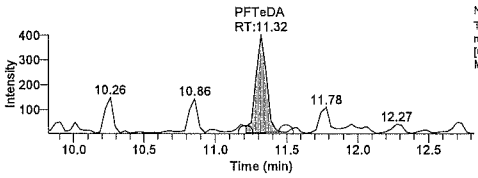


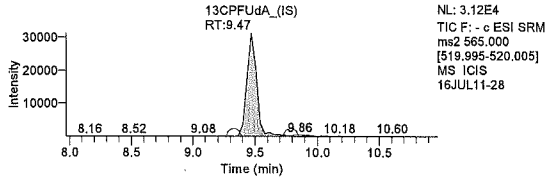
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

Lynn Dodd
Principal Specialist

Wednesday, July 13, 2016, 11:13:05

JUL 18 2016

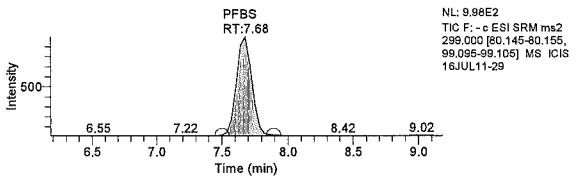
LCMSMS ANALYSIS REPORT

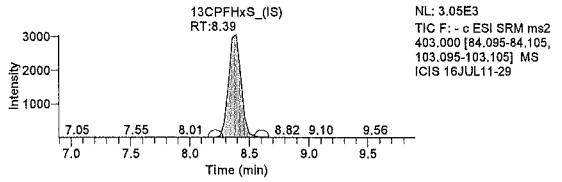
Sample Name:	CAL2	Original Data Path:	C:\XCALIBUR\PFC\2016\16JUL11
Sample ID:	CAL2	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL11-29		
Acquisition Date:	07/11/16 02:32:42 PM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:4	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

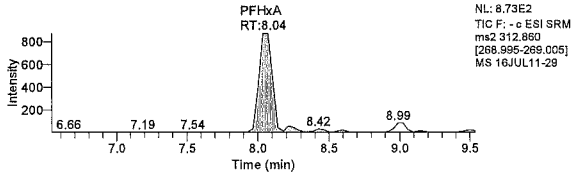
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.86	220149.98	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.65	146625.80	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.12	146615.11	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.83	147502.82	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.39	145114.23	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.07	84822.85	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.39	22610.12	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.83	16046.37	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.44	149321.21	N/A	N/A	N/A
NEtFOSAA	4.654	9.48	70489.05	99930.70	0.705	ng/g
NMeFOSAA	3.827	9.30	65502.35	155569.08	0.421	ng/g
PFBS	3.362	7.68	7851.95	22610.12	0.347	ng/g
PFDA	0.994	9.11	11538.41	146615.11	0.079	ng/g
PFDoA	2.072	9.83	23147.56	147502.82	0.157	ng/g
PFHxA	0.711	8.04	5880.08	84822.85	0.069	ng/g
PFHxS	4.120	8.36	6582.93	22610.12	0.291	ng/g
PFNA	0.799	8.86	10039.83	220149.98	0.046	ng/g
PFOA	0.922	8.64	14471.68	146625.80	0.099	ng/g
PFOS	3.310	8.83	4053.03	16046.37	0.253	ng/g
PFTeDA	2.435	11.14	19490.10	149321.21	0.131	ng/g
PFTrDA	2.208	10.36	25136.99	147502.82	0.170	ng/g
PFUdA	0.908	9.40	11123.41	149321.21	0.074	ng/g
PFhpA	0.822	8.39	10416.35	145114.23	0.072	ng/g
d3-NMeFOSAA	N/A	9.30	155569.08	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.44	99930.70	N/A	N/A	N/A

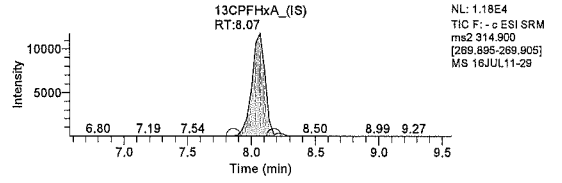
Component Name: PFBS





Component Name: PFHxA





Component Name: PFHxS

Jason W. Knight
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JUL 18 2016

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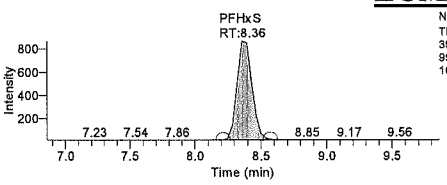
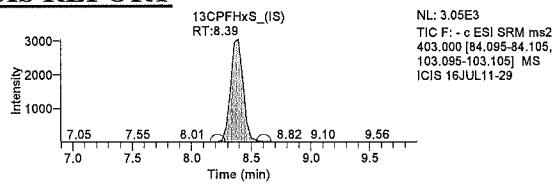
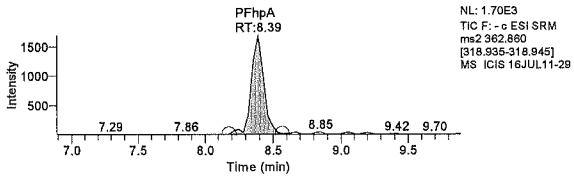
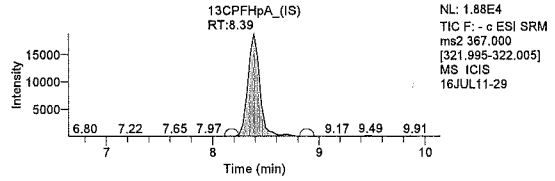


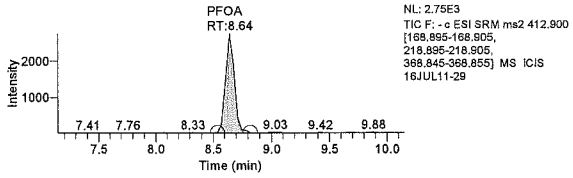


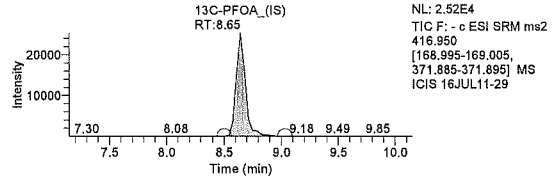
Component Name: PFhpA



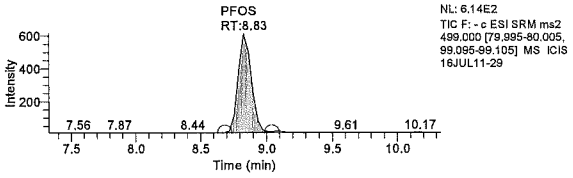


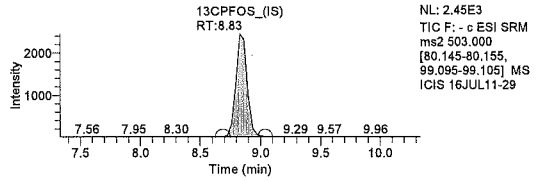
Component Name: PFOA



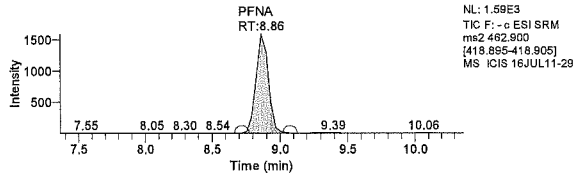


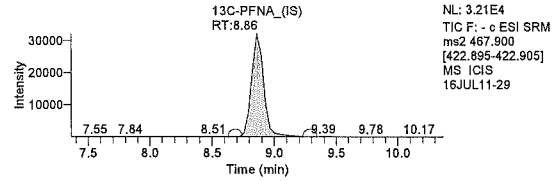
Component Name: PFOS



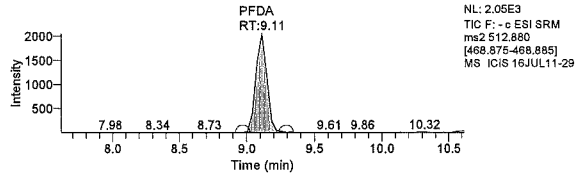


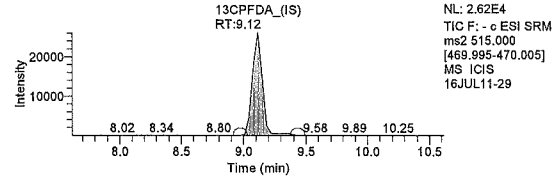
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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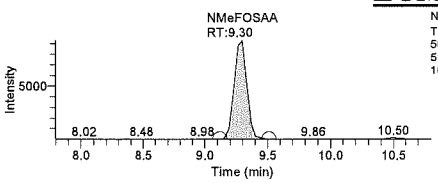
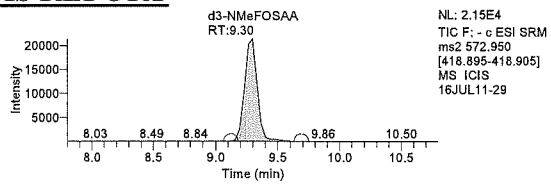
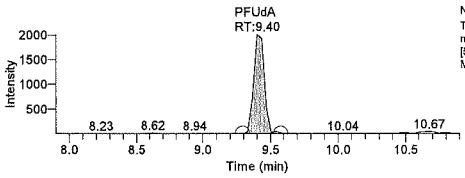
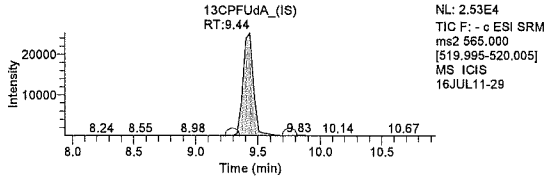
LCMSMS ANALYSIS REPORT



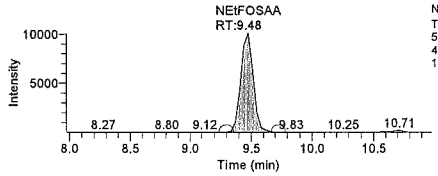


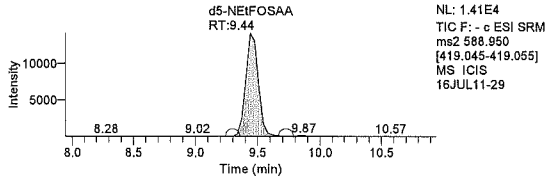
Component Name: PFUdA



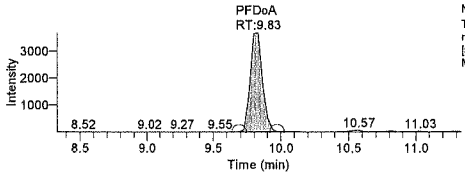


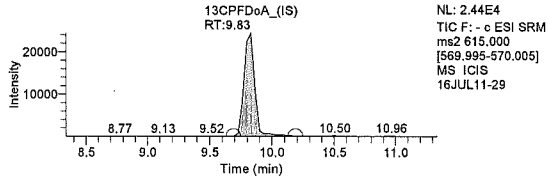
Component Name: NEtFOSAA



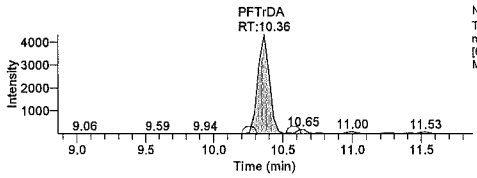


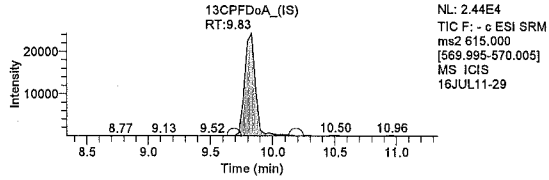
Component Name: PFDoA



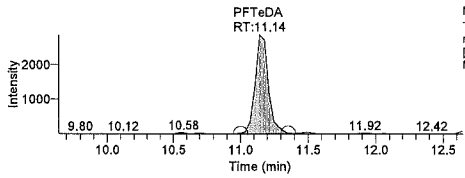


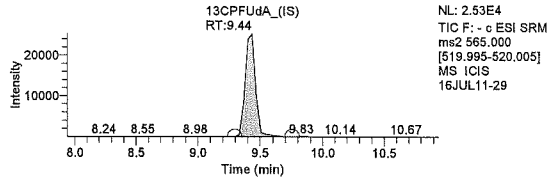
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

Lynn Dodd
Principal Specialist

Wednesday, July 13, 2016, 11:13:06

JUL 18 2016

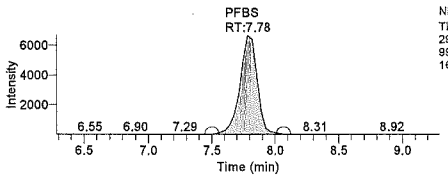
LCMSMS ANALYSIS REPORT

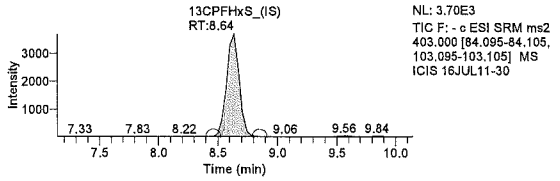
Sample Name:	CAL3	Original Data Path:	C:\XCALIBUR\PFC\2016\16JUL11
Sample ID:	CAL3	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL11-30		
Acquisition Date:	07/11/16 02:49:56 PM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:5	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

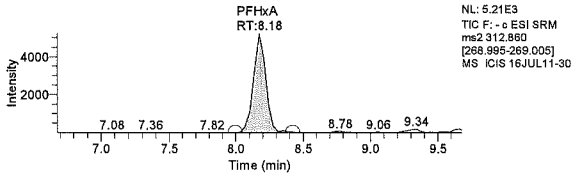
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.04	224479.64	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.86	158539.02	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.26	148343.49	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.94	148735.44	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.64	145438.91	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.18	89149.57	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.64	27541.67	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.04	16199.31	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.54	171630.19	N/A	N/A	N/A
NEtFOSAA	18.443	9.62	338677.79	120029.66	2.822	ng/g
NMeFOSAA	17.359	9.44	340661.33	155602.48	2.189	ng/g
PFBS	17.910	7.78	61977.26	27541.67	2.250	ng/g
PFDA	4.258	9.26	49124.28	148343.49	0.331	ng/g
PFDoA	9.230	9.97	118047.56	148735.44	0.794	ng/g
PFHxA	3.816	8.18	33206.20	89149.57	0.372	ng/g
PFHxS	15.376	8.64	37107.61	27541.67	1.347	ng/g
PFNA	4.674	9.04	68728.10	224479.64	0.306	ng/g
PFOA	3.975	8.85	72458.15	158539.02	0.457	ng/g
PFOS	17.565	9.04	31268.74	16199.31	1.930	ng/g
PFTeDA	7.608	11.25	84467.44	171630.19	0.492	ng/g
PFTrDA	9.699	10.50	121247.81	148735.44	0.815	ng/g
PFUdA	4.289	9.54	64251.34	171630.19	0.374	ng/g
PFHpA	4.430	8.64	57148.99	145438.91	0.393	ng/g
d3-NMeFOSAA	N/A	9.44	155602.48	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.58	120029.66	N/A	N/A	N/A

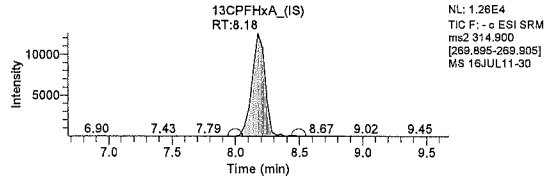
Component Name: PFBS





Component Name: PFHxA





Component Name: PFHpA

Jason W. Knight
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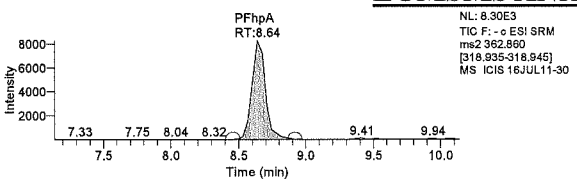
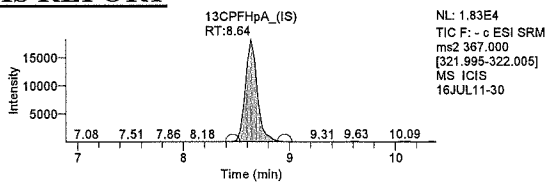
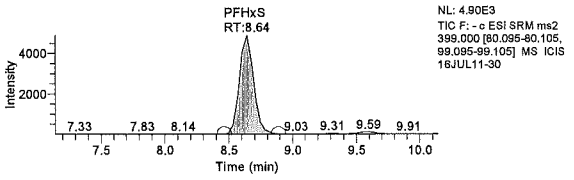
Wednesday, July 13, 2016, 11:13:07

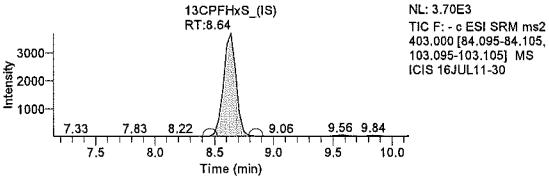
LCMSMS ANALYSIS REPORT



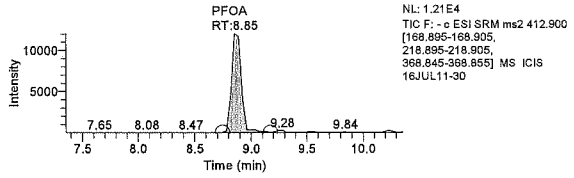


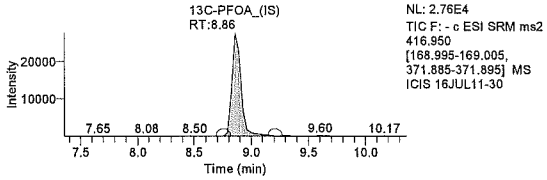
Component Name: PFHxS



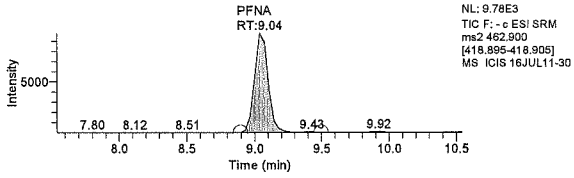


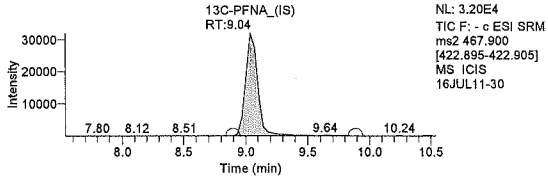
Component Name: PFOA



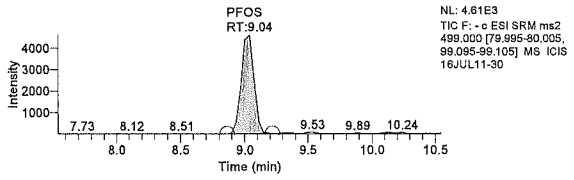


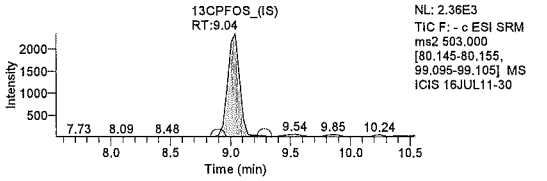
Component Name: PFNA



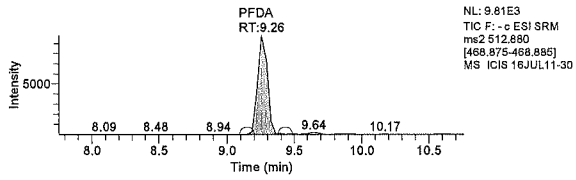


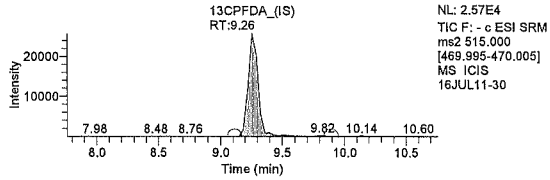
Component Name: PFOS





Component Name: PFDA





Component Name: NMeFOSAA

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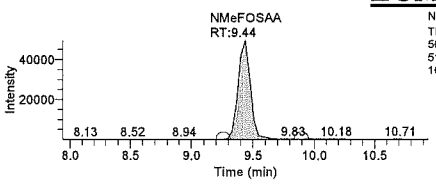

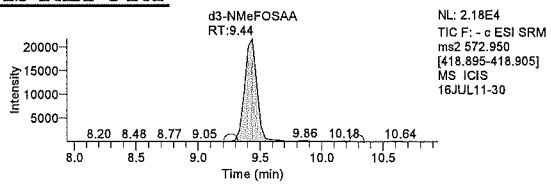

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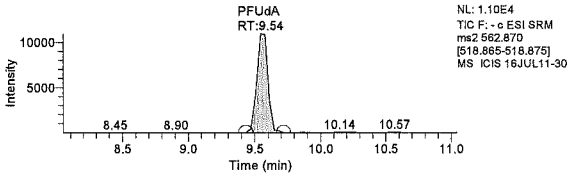
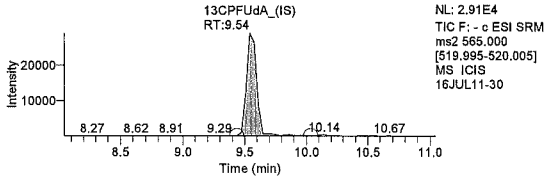
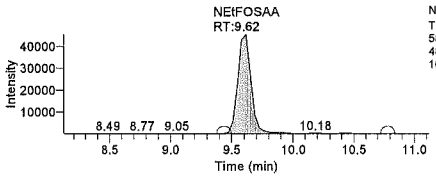
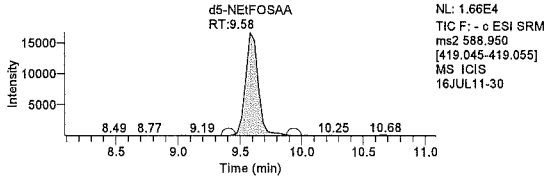


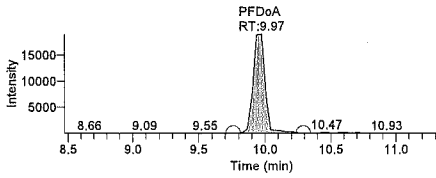


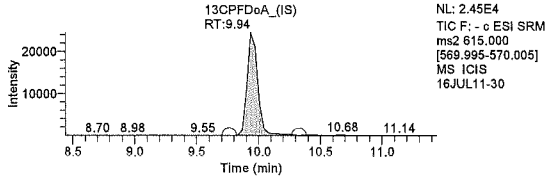
Component Name: NEtFOSAA



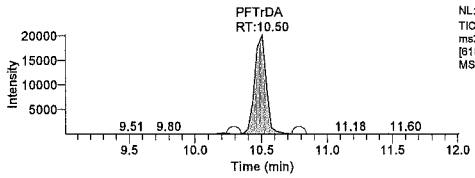


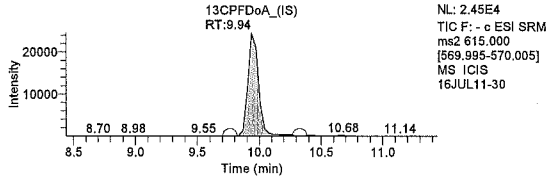
Component Name: PFDoA



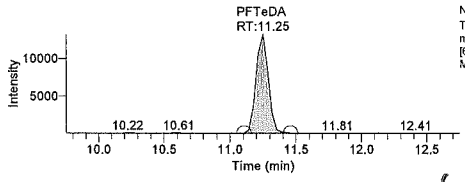


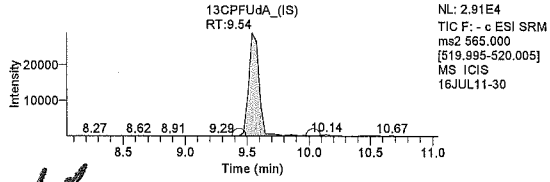
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd

JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

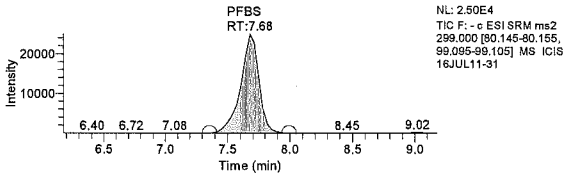
LCMSMS ANALYSIS REPORT

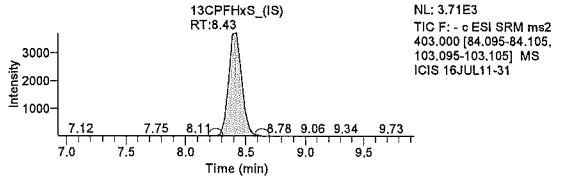
Sample Name:	CAL4	Original Data Path:	C:\XCALIBUR\PFC\2016\16JUL11
Sample ID:	CAL4	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL11-31		
Acquisition Date:	07/11/16 03:07:11 PM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:6	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

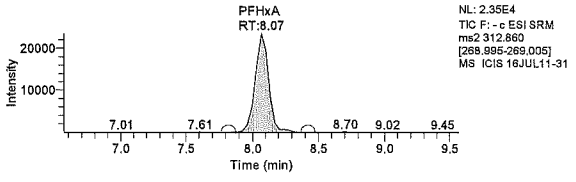
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.93	213087.83	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.68	152235.70	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.18	145016.53	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.94	152358.96	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.42	129643.86	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.07	85625.36	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.43	28798.74	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.90	16067.21	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.50	133871.88	N/A	N/A	N/A
NEtFOSAA	83.226	9.54	1179084.40	92371.16	12.765	ng/g
NMeFOSAA	84.907	9.36	1332328.37	120945.75	11.016	ng/g
PFBS	68.062	7.68	253733.78	28798.74	8.811	ng/g
PFDA	20.739	9.18	232882.64	145016.53	1.606	ng/g
PFDoA	36.170	9.93	486074.81	152358.96	3.190	ng/g
PFHxA	20.325	8.07	169938.36	85625.36	1.985	ng/g
PFHxS	73.995	8.42	197205.62	28798.74	6.848	ng/g
PFNA	19.044	8.93	271106.94	213087.83	1.272	ng/g
PFOA	18.313	8.68	325769.43	152235.70	2.140	ng/g
PFOS	67.624	8.90	125672.26	16067.21	7.822	ng/g
PFTeDA	44.926	11.39	415089.77	133871.88	3.101	ng/g
PFTrDA	40.884	10.54	533173.39	152358.96	3.499	ng/g
PFUdA	23.743	9.50	281074.12	133871.88	2.100	ng/g
PFhpA	21.231	8.42	244835.75	129643.86	1.889	ng/g
d3-NMeFOSAA	N/A	9.37	120945.75	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.54	92371.16	N/A	N/A	N/A

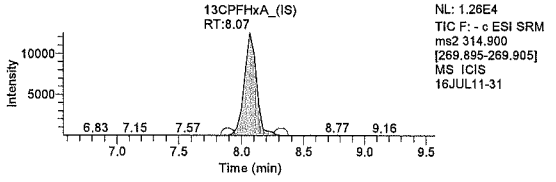
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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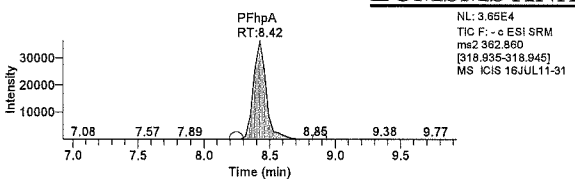
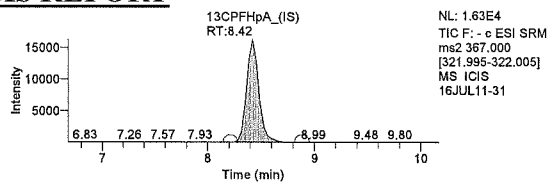
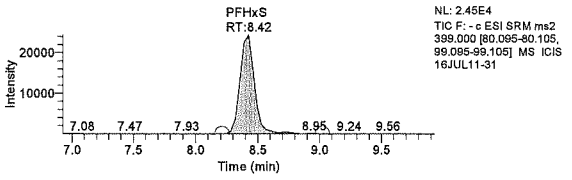
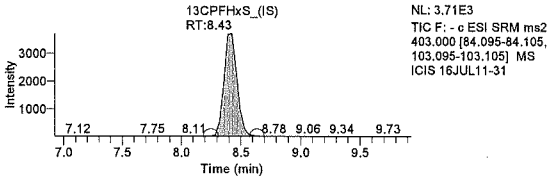


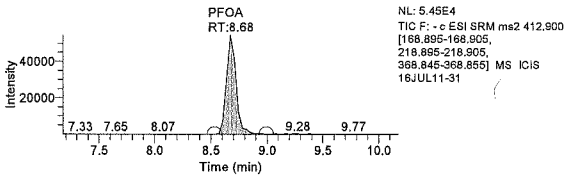


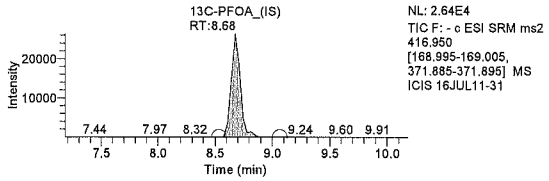
Component Name: PFHxS



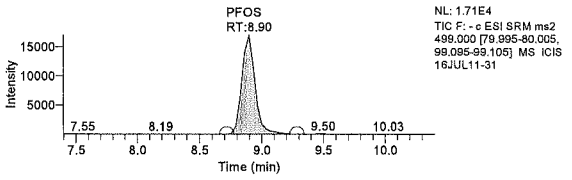


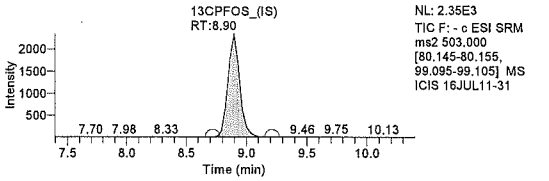
Component Name: PFOA



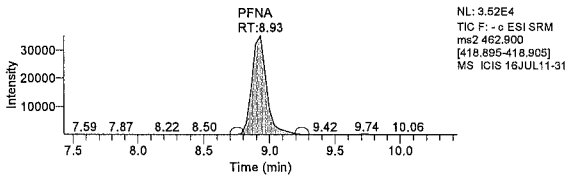


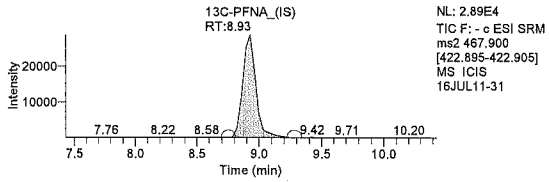
Component Name: PFOS



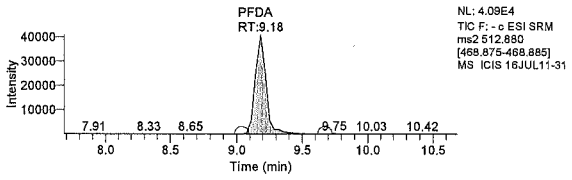


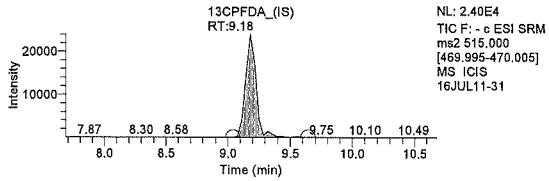
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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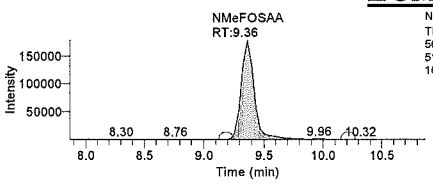
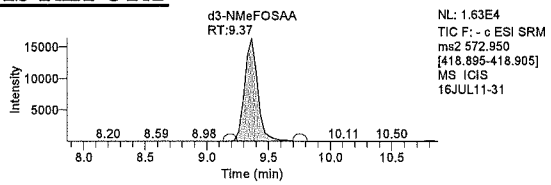
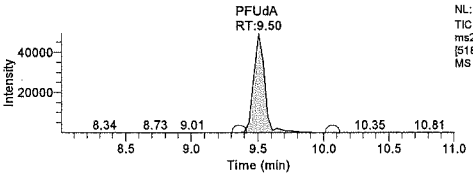
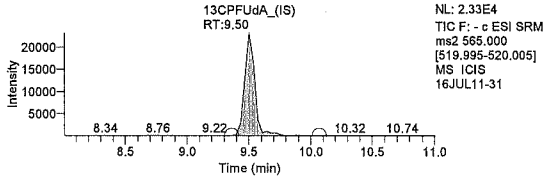


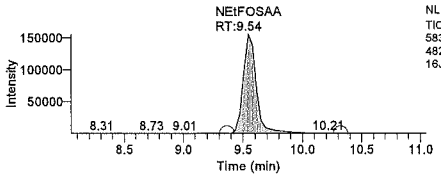


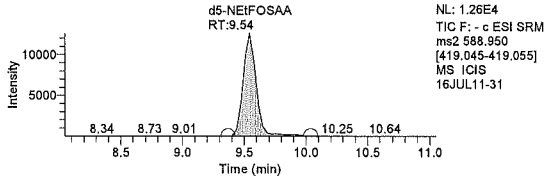
Component Name: PFUdA



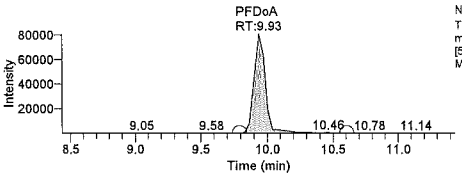


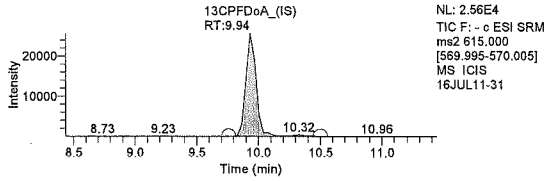
Component Name: NEtFOSAA



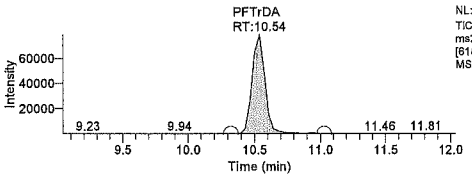


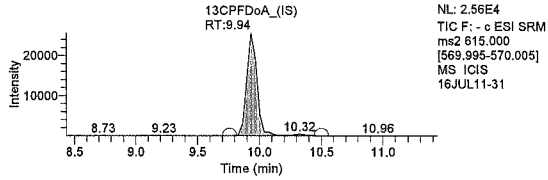
Component Name: PFDoA



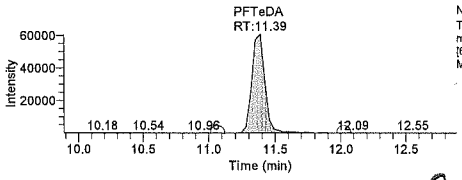


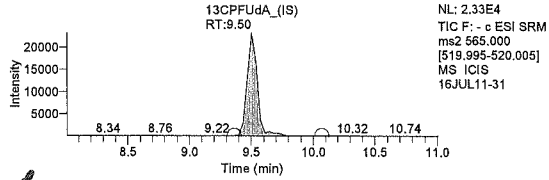
Component Name: PFTrDA





Component Name: PFTeDA





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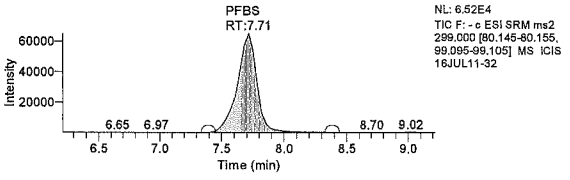
LCMSMS ANALYSIS REPORT

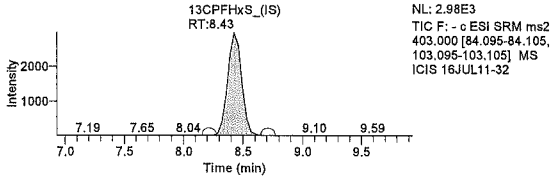
Sample Name:	CAL5	Original Data Path:	C:\XCALIBUR\PFC\2016\16JUL11
Sample ID:	CAL5	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL11-32		
Acquisition Date:	07/11/16 03:24:25 PM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:7	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.90	166706.63	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.71	138662.31	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.11	146127.04	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.87	165645.81	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.46	115333.66	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.07	80808.09	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.43	24493.26	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.86	10137.51	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.44	146832.92	N/A	N/A	N/A
NEtFOSAA	233.680	9.51	2972839.32	82909.30	35.857	ng/g
NMeFOSAA	238.413	9.29	3338774.93	107442.70	31.075	ng/g
PFBS	218.669	7.71	698333.65	24493.26	28.511	ng/g
PFDA	59.952	9.11	677880.81	146127.04	4.639	ng/g
PFDoA	108.034	9.87	1587433.29	165645.81	9.583	ng/g
PFHxA	60.028	8.10	473692.16	80808.09	5.862	ng/g
PFHxS	216.911	8.43	496183.71	24493.26	20.258	ng/g
PFNA	62.961	8.90	704320.58	166706.63	4.225	ng/g
PFOA	61.578	8.71	1000850.22	138662.31	7.218	ng/g
PFOS	294.860	8.90	350399.84	10137.51	34.565	ng/g
PFTeDA	117.267	11.28	1197761.82	146832.92	8.157	ng/g
PFTrDA	104.718	10.43	1489808.51	165645.81	8.994	ng/g
PFUdA	60.535	9.47	787392.18	146832.92	5.363	ng/g
PFhpA	58.504	8.46	600475.65	115333.66	5.206	ng/g
d3-NMeFOSAA	N/A	9.30	107442.70	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.51	82909.30	N/A	N/A	N/A

Component Name: PFBS





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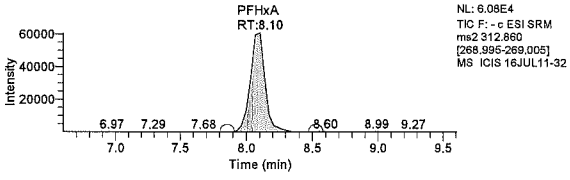

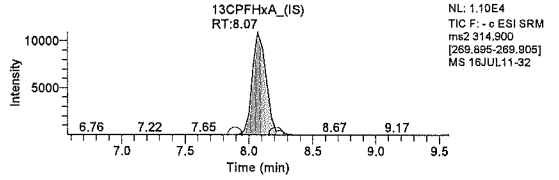

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Component Name: PFHxS

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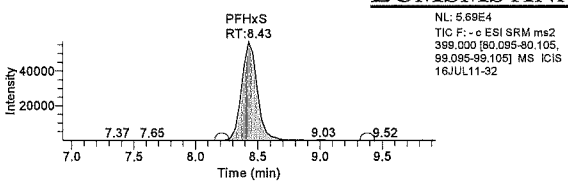

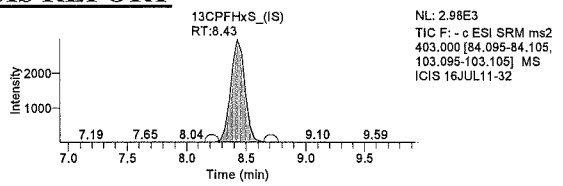

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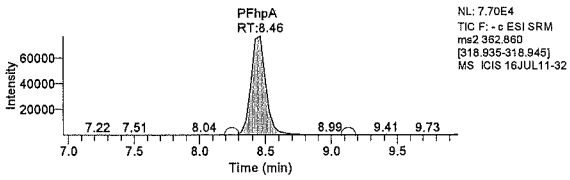

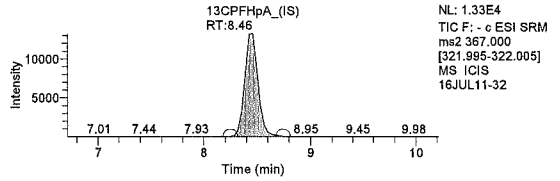

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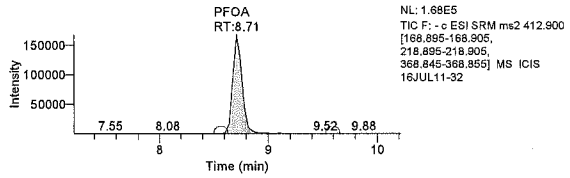

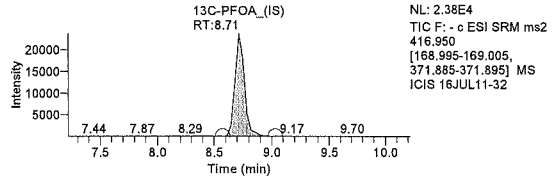

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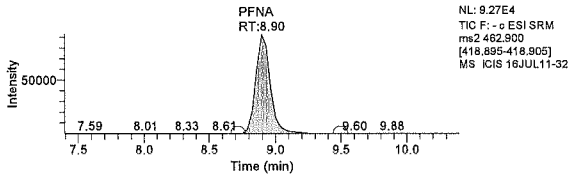

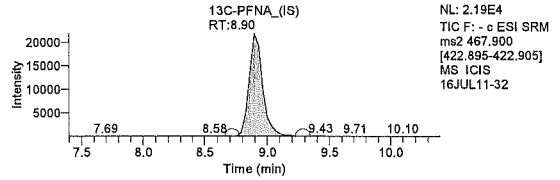

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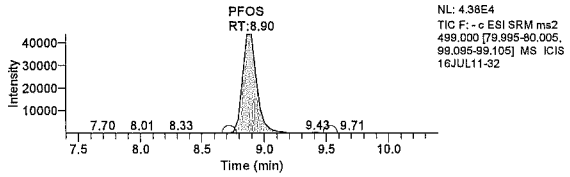

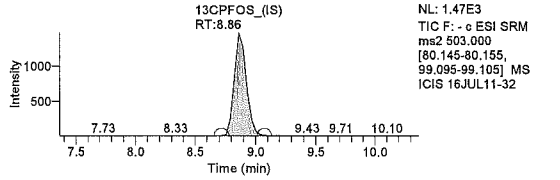

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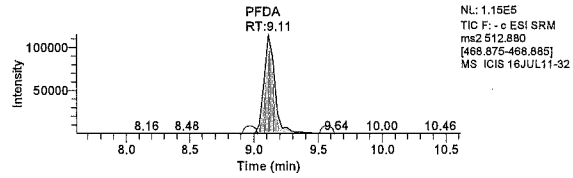

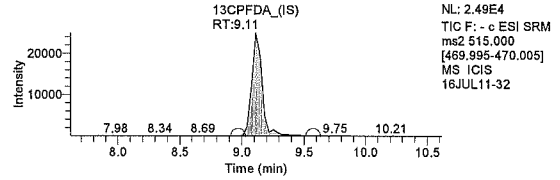

Component Name: NMeFOSAA

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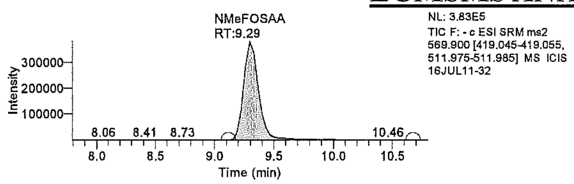

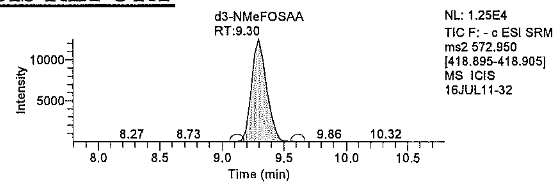

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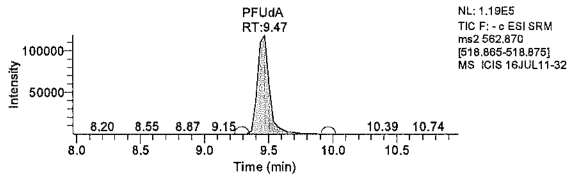

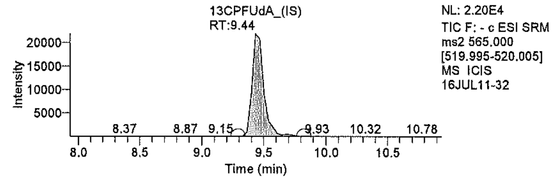

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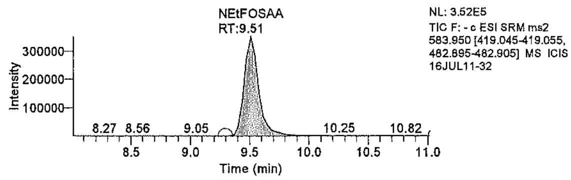

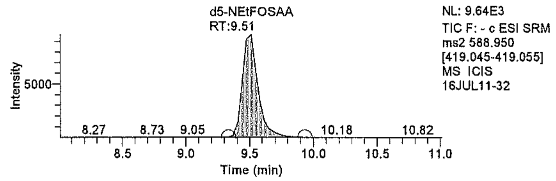

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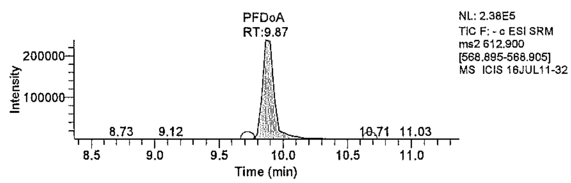
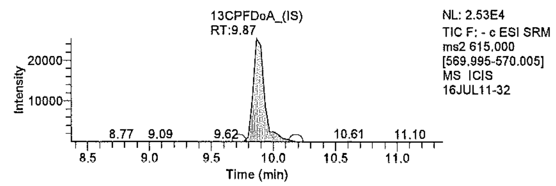
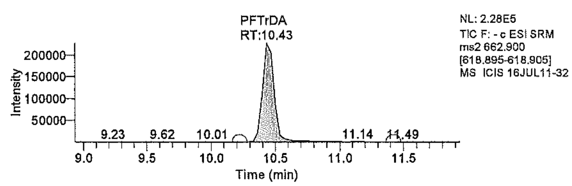
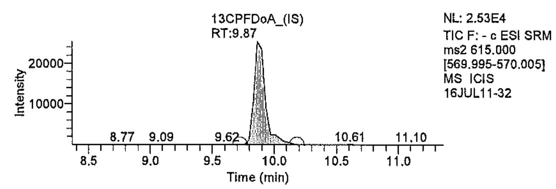


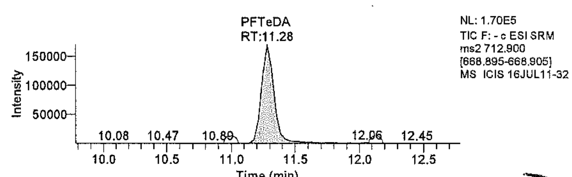


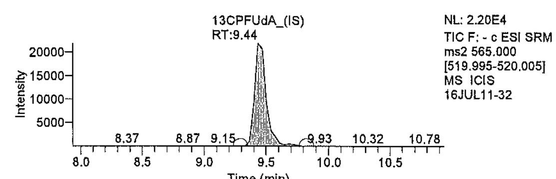
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd

JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

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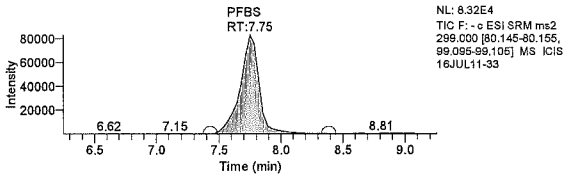
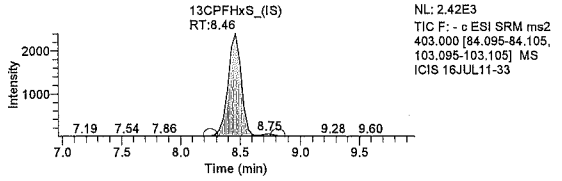
Sample Name:	CAL6	Original Data Path:	C:\XCALIBUR\PFC\2016\16JUL11
Sample ID:	CAL6	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL11-33		
Acquisition Date:	07/11/16 03:41:39 PM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:8	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

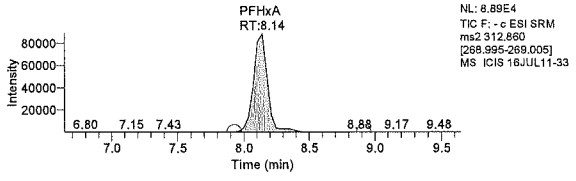
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.00	159333.50	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.79	134323.18	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.22	146587.01	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.97	132446.54	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.46	95177.62	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.14	83651.12	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.46	18938.68	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.97	12119.31	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.51	143529.28	N/A	N/A	N/A
NEtFOSAA	324.177	9.58	3335927.89	67059.18	49.746	ng/g
NMeFOSAA	319.298	9.37	3665352.86	88015.63	41.644	ng/g
PFBS	355.371	7.75	878620.58	18938.68	46.393	ng/g
PFDA	80.009	9.22	907420.73	146587.01	6.190	ng/g
PFDoA	176.386	9.97	2074627.79	132446.54	15.664	ng/g
PFHxA	80.922	8.14	661040.61	83651.12	7.902	ng/g
PFHxS	353.168	8.46	625799.09	18938.68	33.043	ng/g
PFNA	78.407	9.00	838633.06	159333.50	5.263	ng/g
PFOA	81.081	8.78	1276993.98	134323.18	9.507	ng/g
PFOS	280.089	8.97	397833.14	12119.31	32.826	ng/g
PFTeDA	159.826	11.32	1597802.28	143529.28	11.132	ng/g
PFTrDA	174.539	10.54	1987184.16	132446.54	15.004	ng/g
PFUdA	76.492	9.51	972777.32	143529.28	6.778	ng/g
PFhpA	80.915	8.46	685412.09	95177.62	7.201	ng/g
d3-NMeFOSAA	N/A	9.37	88015.63	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.55	67059.18	N/A	N/A	N/A

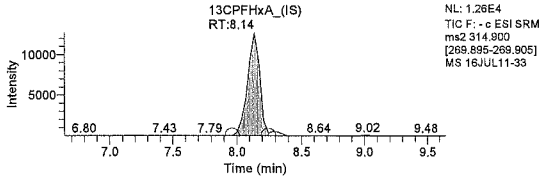
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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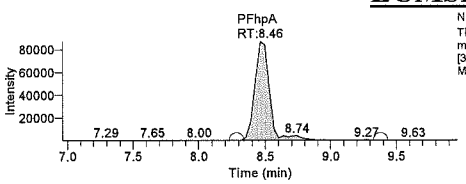
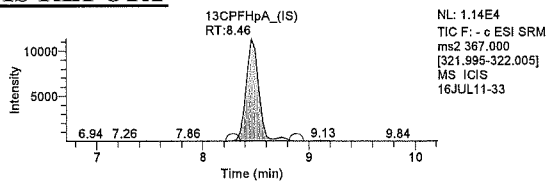
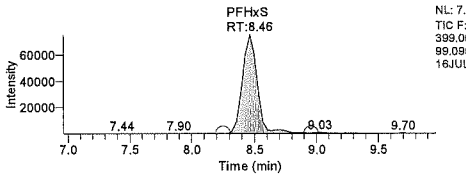
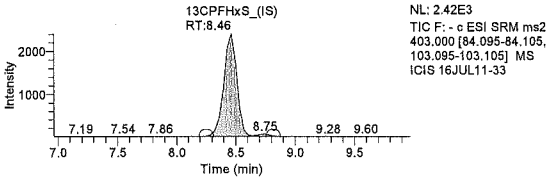




Component Name: PFHxS





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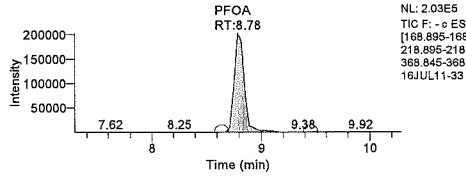
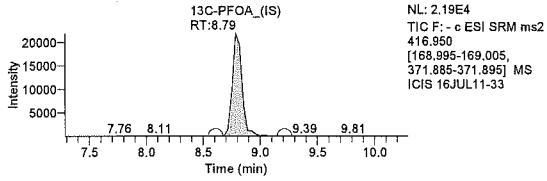
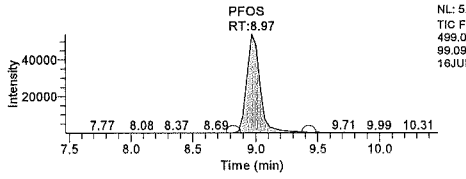
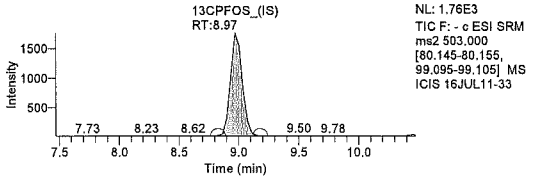




Component Name: PFOS





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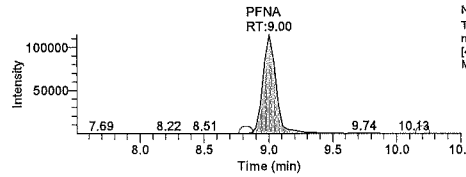

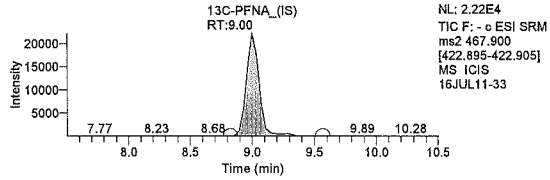

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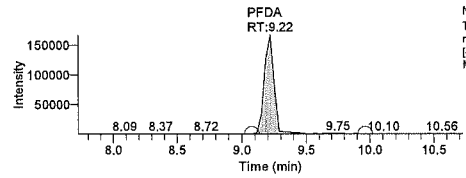

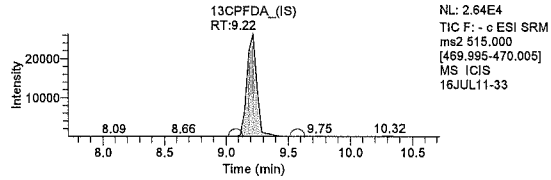

Component Name: NMeFOSAA

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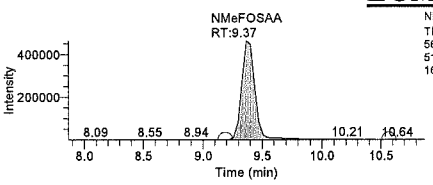

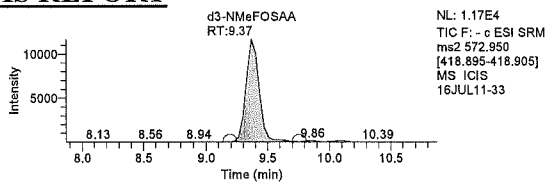

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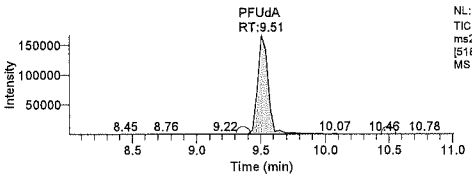

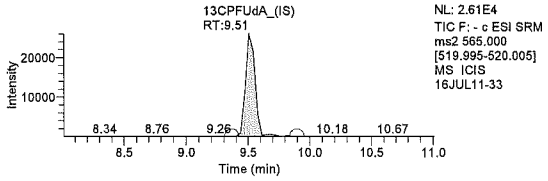

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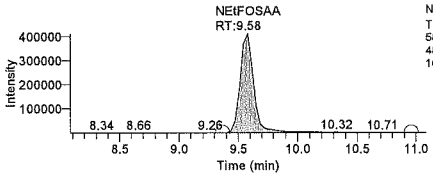

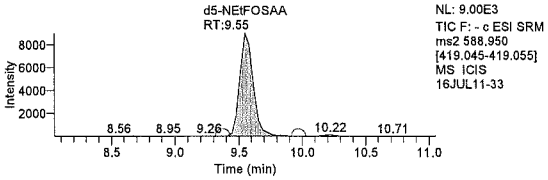

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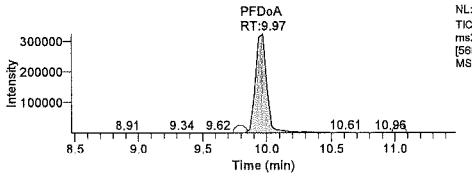
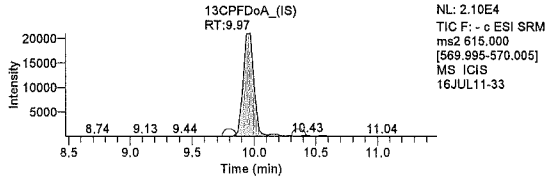
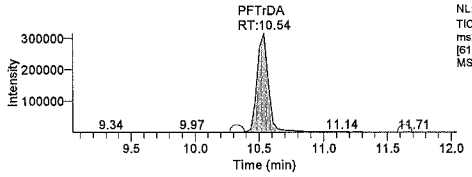
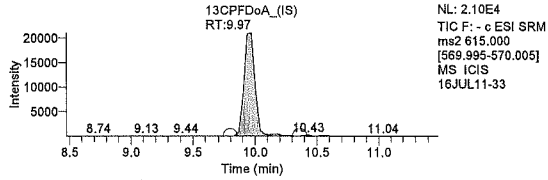


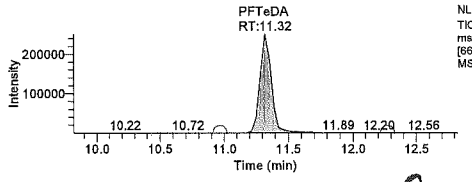


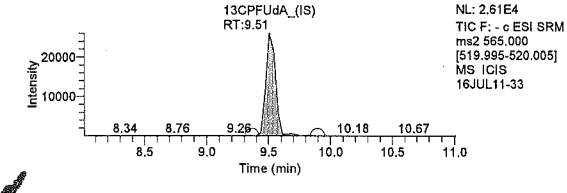
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

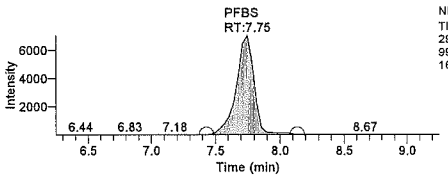
LCMSMS ANALYSIS REPORT

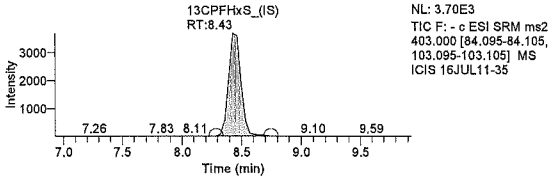
Sample Name:	ICV1	Original Data Path:	C:\XCALIBUR\PFC\2016\16JUL11
Sample ID:	ICV1	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL11-35		
Acquisition Date:	07/11/16 04:16:08 PM	Dilution Factor:	1.00
Sample Type:	QC	Instrument Model:	TSQ Quantum Access
Vial:	c:9	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

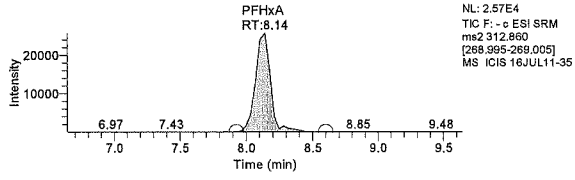
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.97	218387.94	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.72	141454.31	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.22	158167.36	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.22	148071.32	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.46	144444.64	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.14	88446.85	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.43	26942.94	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.93	14111.16	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.58	153984.90	N/A	N/A	N/A
NEtFOSAA	19.868	9.65	326326.89	107330.77	3.040	ng/g
NMeFOSAA	31.065	9.44	507101.72	127401.73	3.980	ng/g
PFBS	19.505	7.75	66252.15	26942.94	2.459	ng/g
PFDA	25.975	9.22	318060.27	158167.36	2.011	ng/g
PFDoA	23.191	10.22	301430.37	148071.32	2.036	ng/g
PFHxA	23.174	8.14	200150.42	88446.85	2.263	ng/g
PFHxS	22.229	8.46	53626.56	26942.94	1.990	ng/g
PFNA	21.789	8.97	318145.47	218387.94	1.457	ng/g
PFOA	23.787	8.71	393585.15	141454.31	2.782	ng/g
PFOS	18.619	8.93	28987.73	14111.16	2.054	ng/g
PFTeDA	21.506	11.67	225374.43	153984.90	1.464	ng/g
PFTrDA	19.860	10.82	250213.33	148071.32	1.690	ng/g
PFUdA	25.166	9.58	342735.51	153984.90	2.226	ng/g
PFhpA	23.595	8.46	303185.66	144444.64	2.099	ng/g
d3-NMeFOSAA	N/A	9.44	127401.73	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.62	107330.77	N/A	N/A	N/A

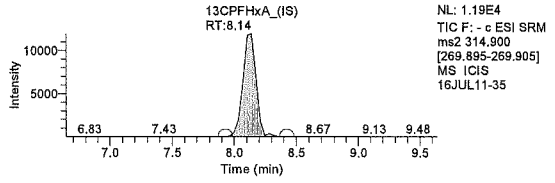
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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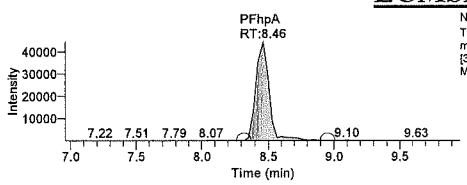
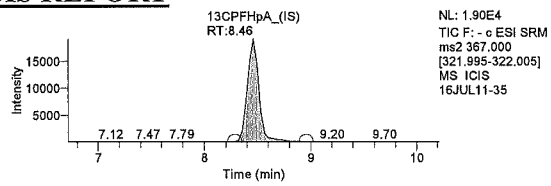
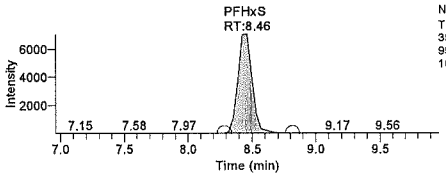
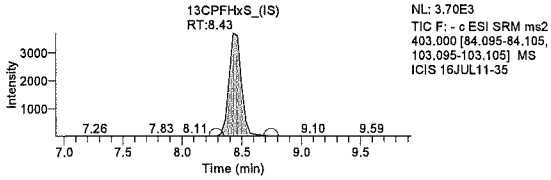


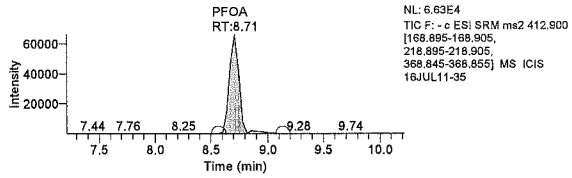


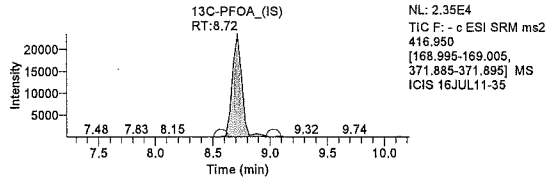
Component Name: PFHxS



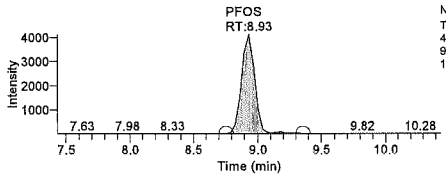


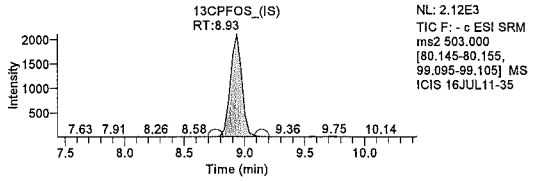
Component Name: PFOA



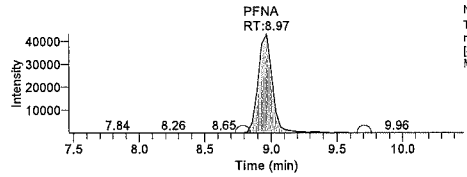


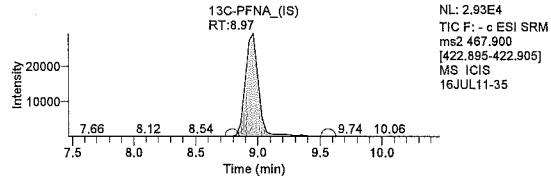
Component Name: PFOS



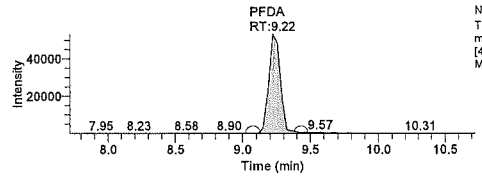


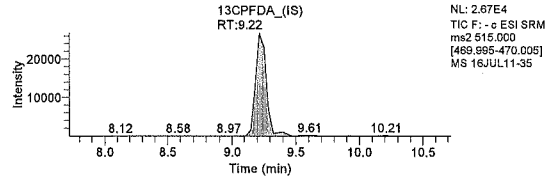
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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JUL 18 2016

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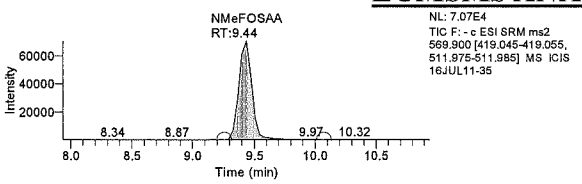
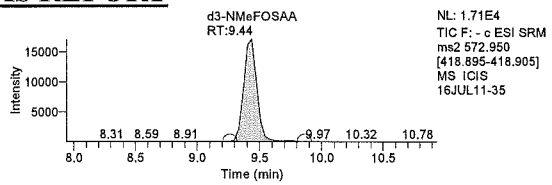
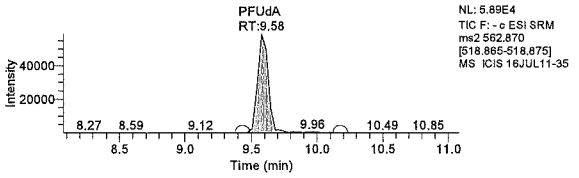
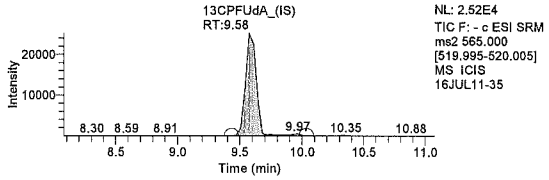


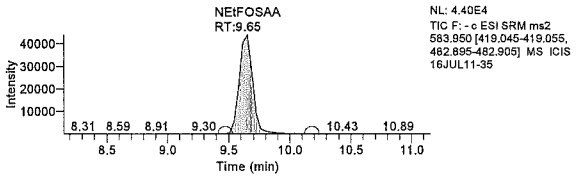


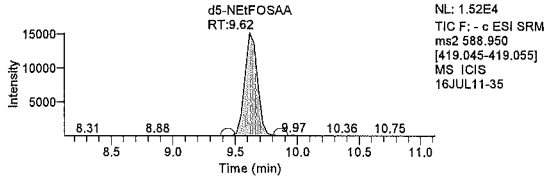
Component Name: PFUdA



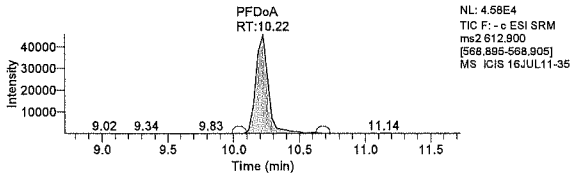


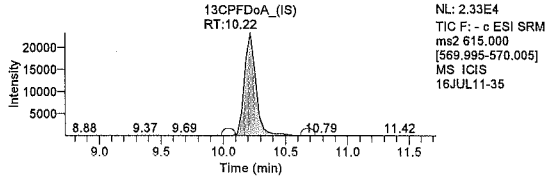
Component Name: NEtFOSAA



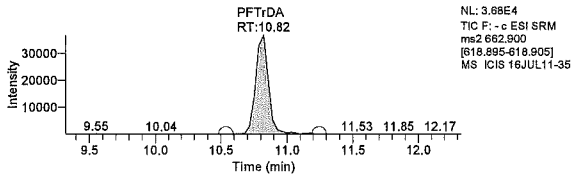


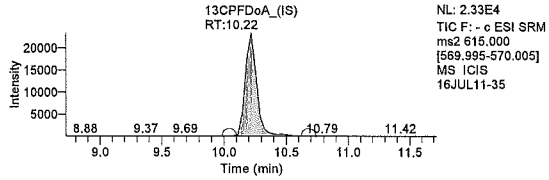
Component Name: PFDoA



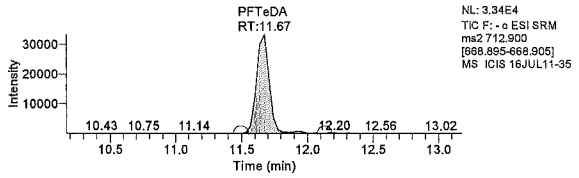


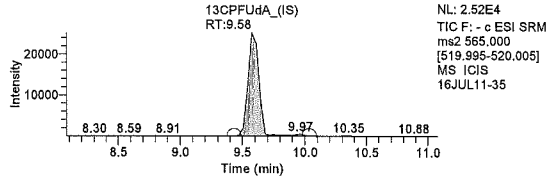
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

Wednesday, July 13, 2016, 11:13:13

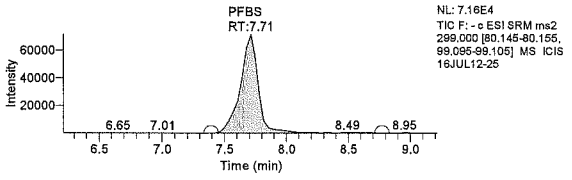
LCMSMS ANALYSIS REPORT

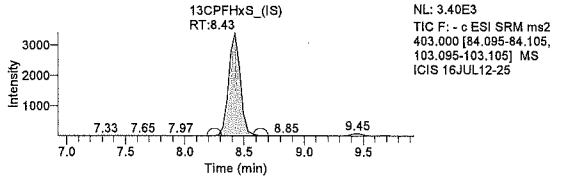
Sample Name:	CCV3	Original Data Path:	C:\Xcalibur\PFC\2016\16JUL12
Sample ID:	CCV3	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL12-25		M\HWell_16.5minutes
Acquisition Date:	07/12/16 04:24:18 PM	Dilution Factor:	1.00
Sample Type:	QC	Instrument Model:	TSQ Quantum Access
Vial:	c:7	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

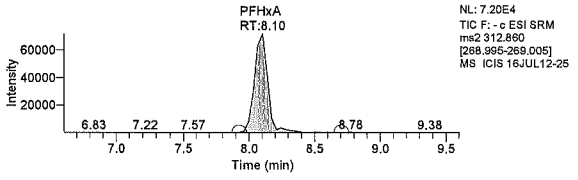
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.93	176740.06	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.68	158048.11	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.22	143500.33	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.97	157730.77	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.42	107524.09	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.10	85737.57	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.43	23177.27	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.90	14871.22	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.54	136100.45	N/A	N/A	N/A
NEtFOSAA	224.533	9.58	3129090.90	90823.06	34.453	ng/g
NMeFOSAA	228.833	9.40	3397227.70	113912.57	29.823	ng/g
PFBS	235.479	7.71	711777.15	23177.27	30.710	ng/g
PFDA	68.139	9.22	756565.96	143500.33	5.272	ng/g
PFDoA	112.937	9.97	1580373.22	157730.77	10.019	ng/g
PFHxA	60.808	8.10	509121.54	85737.57	5.938	ng/g
PFHxS	237.266	8.42	513793.84	23177.27	22.168	ng/g
PFNA	61.448	8.93	728726.53	176740.06	4.123	ng/g
PFOA	55.422	8.68	1026579.00	158048.11	6.495	ng/g
PFOS	196.700	8.90	342223.54	14871.22	23.012	ng/g
PFTeDA	134.494	11.46	1274103.38	136100.45	9.361	ng/g
PFTrDA	115.775	10.57	1568731.60	157730.77	9.946	ng/g
PFUdA	64.472	9.54	777354.85	136100.45	5.712	ng/g
PFhpA	58.495	8.42	559732.78	107524.09	5.206	ng/g
d3-NMeFOSAA	N/A	9.37	113912.57	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.58	90823.06	N/A	N/A	N/A

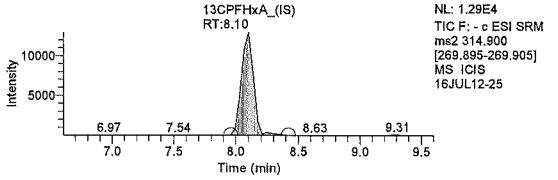
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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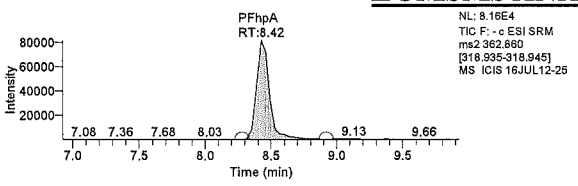
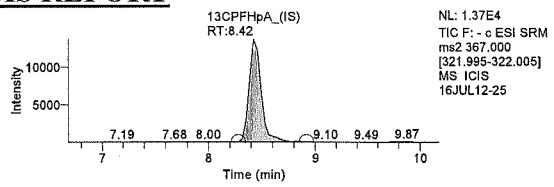
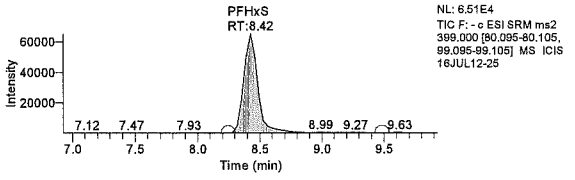
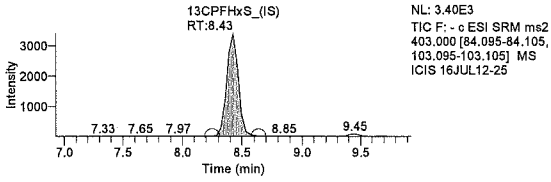
LCMSMS ANALYSIS REPORT



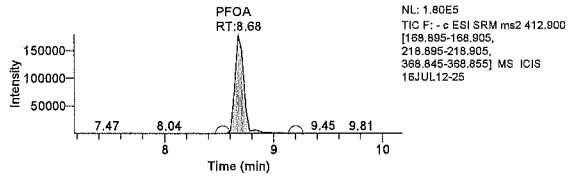


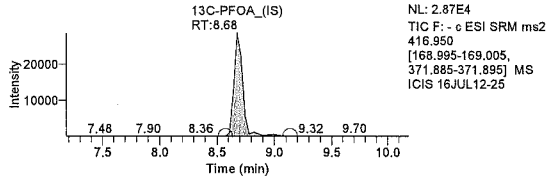
Component Name: PFHxS



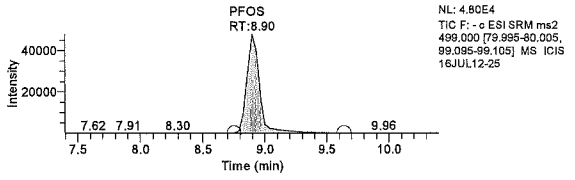


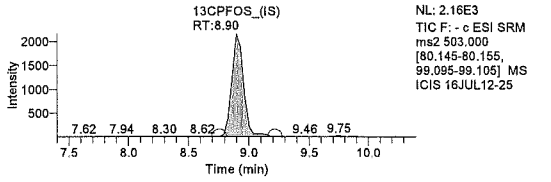
Component Name: PFOA



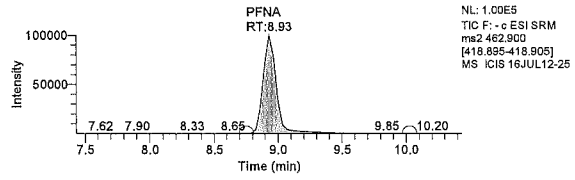


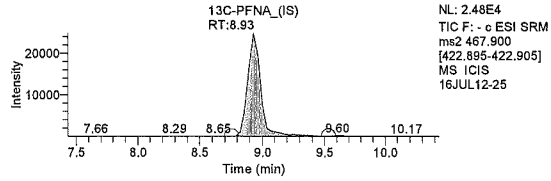
Component Name: PFOS



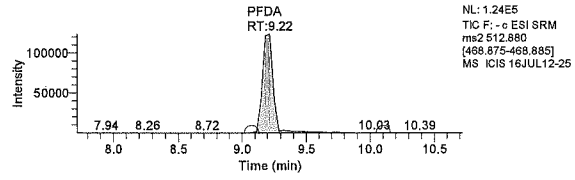


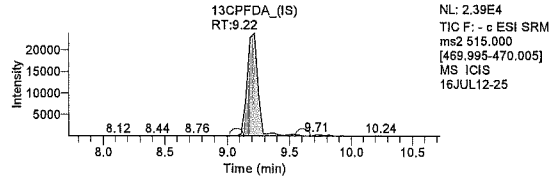
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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JUL 18 2016

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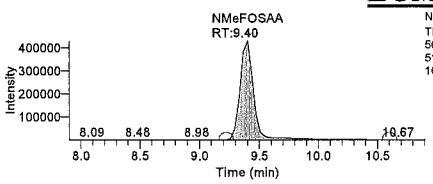

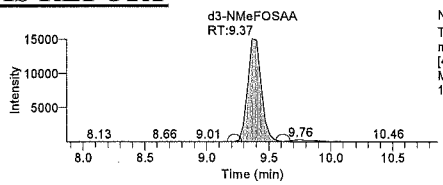

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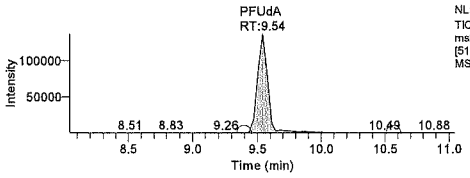

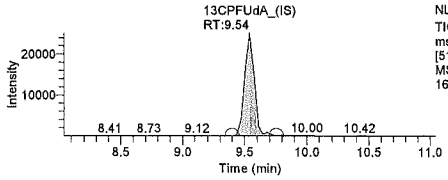

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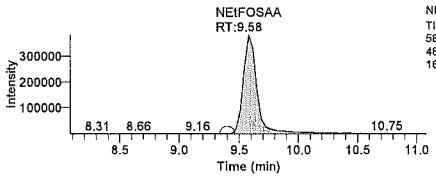
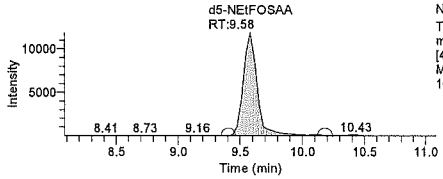
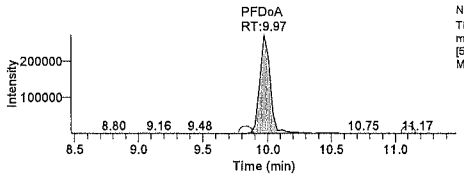
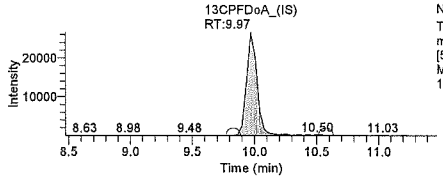


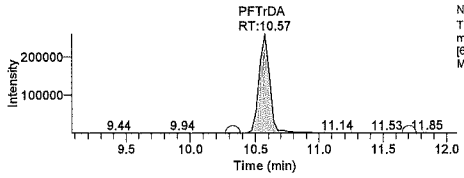


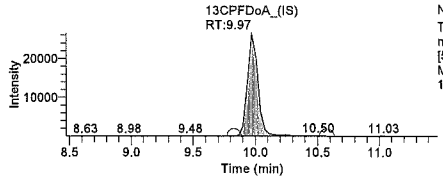
Component Name: PFDoA



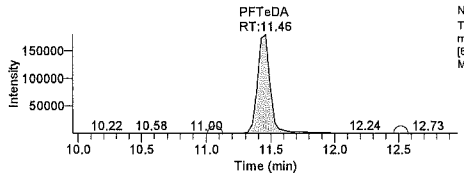


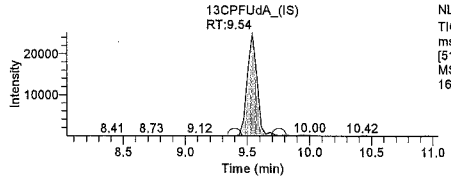
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

Wednesday, July 13, 2016, 11:13:15

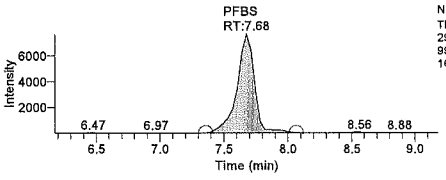
LCMSMS ANALYSIS REPORT

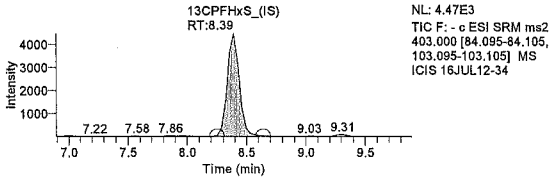
Sample Name:	CCV1	Original Data Path:	C:\Xcalibur\PFC\2016\16JUL12
Sample ID:	CCV1	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL12-34		
Acquisition Date:	07/12/16 06:59:27 PM	Dilution Factor:	1.00
Sample Type:	QC	Instrument Model:	TSQ Quantum Access
Vial:	c:5	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

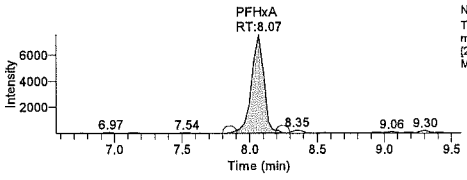
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	8.89	238760.18	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.68	165480.68	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.11	180510.88	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	9.76	157615.57	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.39	152813.56	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.07	97819.69	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.39	31737.06	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.86	20258.13	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	9.40	182457.23	N/A	N/A	N/A
NEtFOSAA	16.618	9.44	335965.72	132187.02	2.542	ng/g
NMeFOSAA	17.910	9.29	377944.98	167128.76	2.261	ng/g
PFBS	17.813	7.68	71015.77	31737.06	2.238	ng/g
PFDA	4.336	9.11	60865.14	180510.88	0.337	ng/g
PFDoA	9.543	9.76	129485.96	157615.57	0.822	ng/g
PFHxA	4.940	8.07	47177.56	97819.69	0.482	ng/g
PFHxS	15.630	8.39	43516.83	31737.06	1.371	ng/g
PFNA	4.886	8.89	76498.57	238760.18	0.320	ng/g
PFOA	4.383	8.68	83550.57	165480.68	0.505	ng/g
PFOS	14.904	8.86	32758.94	20258.13	1.617	ng/g
PFTeDA	8.298	10.96	98592.89	182457.23	0.540	ng/g
PFTrDA	9.605	10.25	127221.61	157615.57	0.807	ng/g
PFUdA	4.368	9.40	69574.88	182457.23	0.381	ng/g
PFhpA	4.550	8.39	61672.85	152813.56	0.404	ng/g
d3-NMeFOSAA	N/A	9.29	167128.76	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.44	132187.02	N/A	N/A	N/A

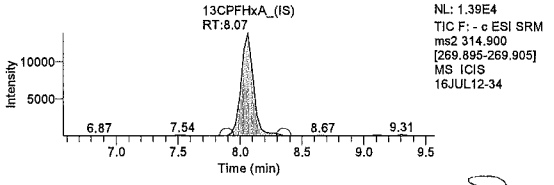
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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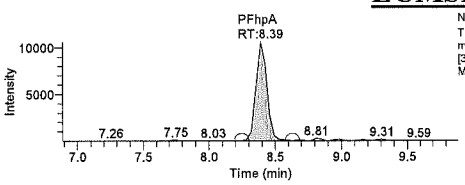
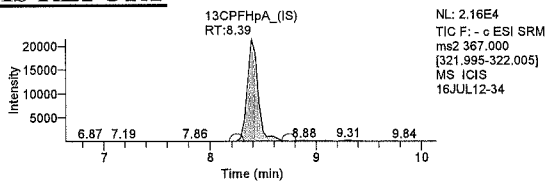
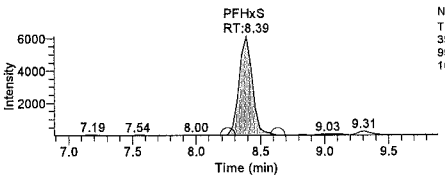
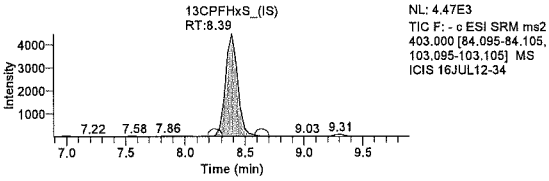


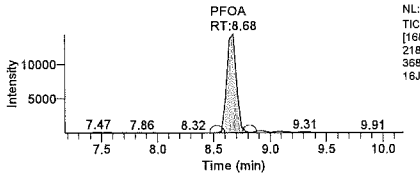


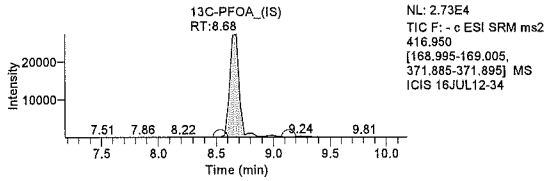
Component Name: PFHxS



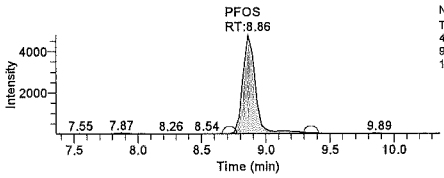


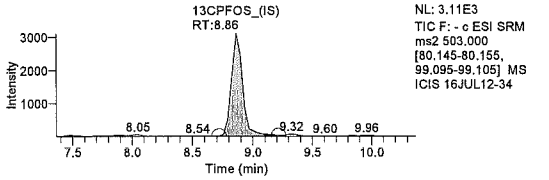
Component Name: PFOA



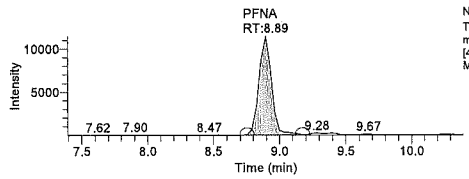


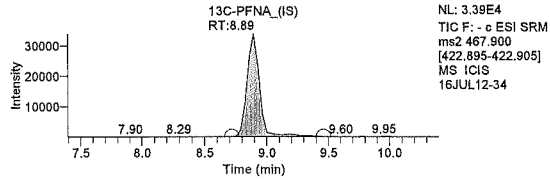
Component Name: PFOS



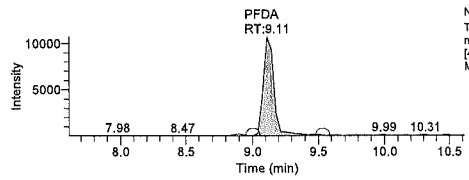


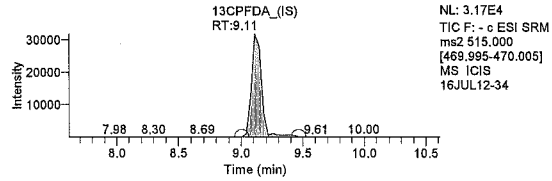
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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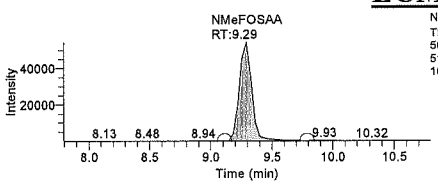
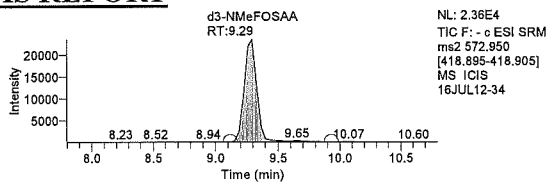
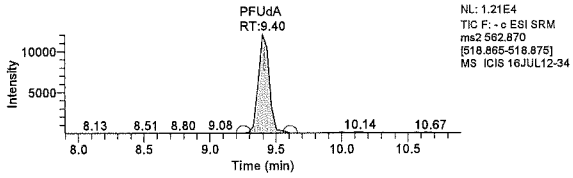
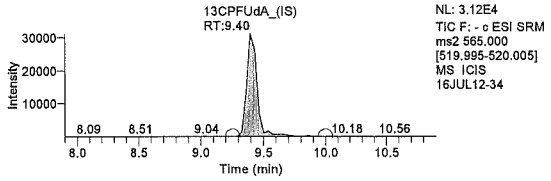


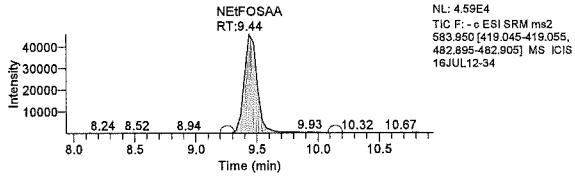


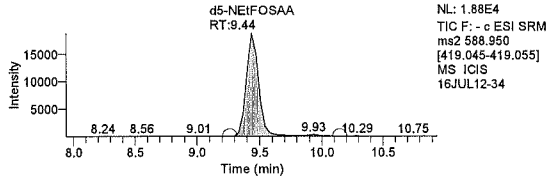
Component Name: PFUdA



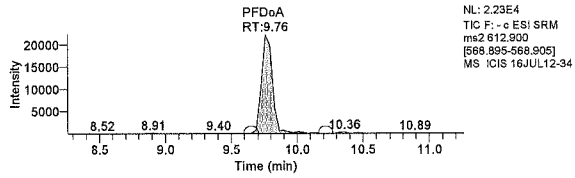


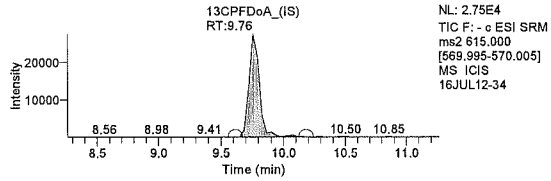
Component Name: NEtFOSAA



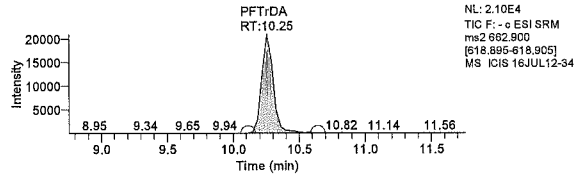


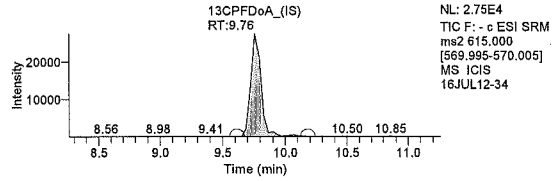
Component Name: PFDoA



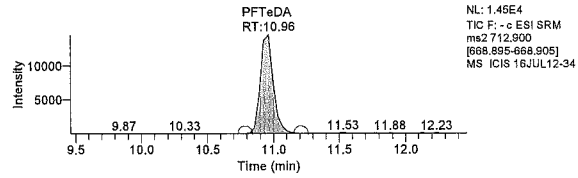


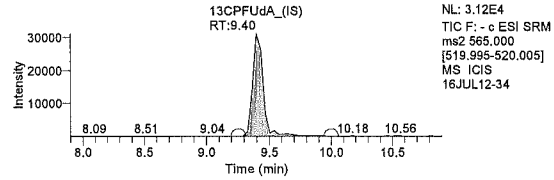
Component Name: PFTrDA





Component Name: PFTeDA





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JUL 19 2016

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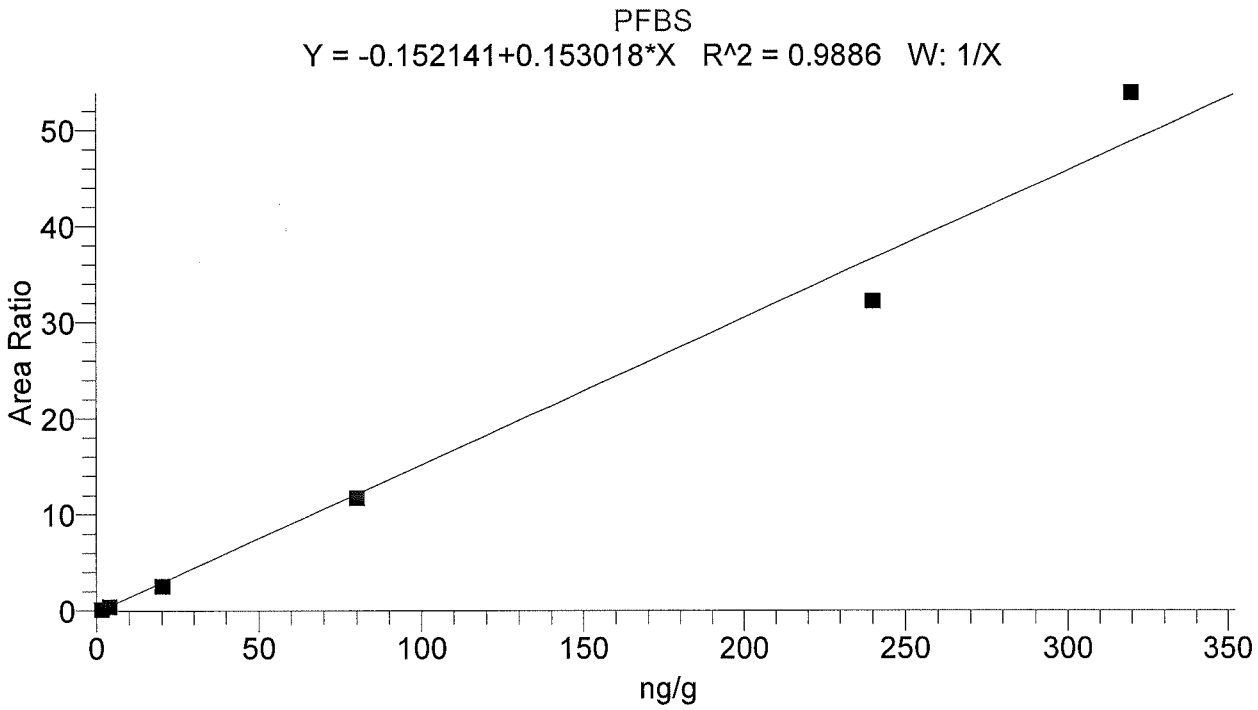
Component Name: **PFBS**



Identification		Component Name:	PFBS
Filter:	- c ESI SRM ms2 299.00 [80.14-80.16, 99.09-99.11]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	8.17000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	25
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	20.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFHxS_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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JUL 18 2016

LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV1	20.000
ICV2	40.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	1.888	4811.12	35181.64	0.137	18.00
CAL2	16JUL14-05	3.894	13077.91	29478.97	0.444	-2.66
CAL3	16JUL14-09	17.860	85851.64	33266.54	2.581	-10.70
CAL6	16JUL14-11	353.084	993059.71	18432.30	53.876	10.34
CAL5	16JUL14-12	211.279	842877.85	26194.70	32.177	-11.97
CAL4	16JUL14-14	77.596	342502.32	29220.27	11.721	-3.01
CCV1	16JUL14-17	18.403	88554.67	33243.42	2.664	-7.99
ICV1	16JUL14-19	14.904	62137.85	29194.99	2.128	-25.48
CCV3	16JUL14-38	190.823	752809.62	25916.79	29.047	-20.49
CCV2	16JUL14-44	68.250	289300.24	28110.98	10.291	-14.69

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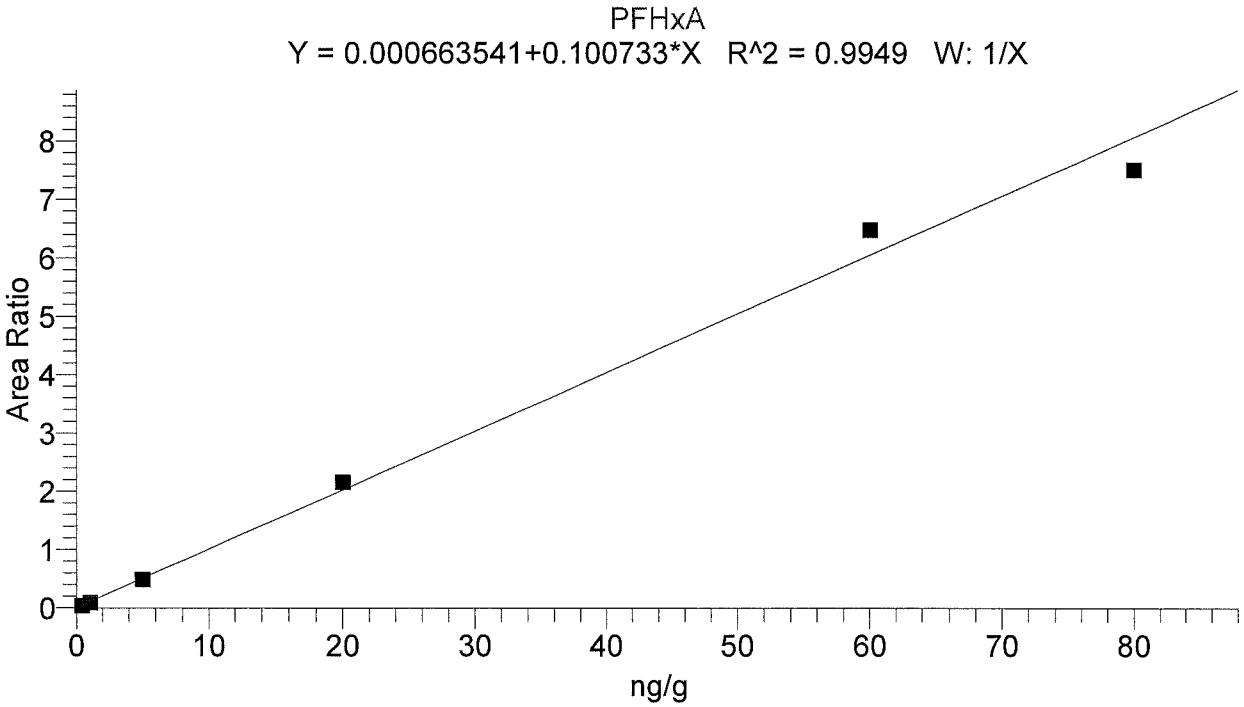
Component Name: **PFHxA**



Identification		Component Name:	PFHxA
Filter:	- c ESI SRM ms2 312.86 [269.00-269.01]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	8.49000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFHxA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.412	5395.91	128045.65	0.042	2.94
CAL2	16JUL14-05	0.930	12246.97	129869.42	0.094	-7.04
CAL3	16JUL14-09	4.836	62484.48	128080.33	0.488	-3.27
CAL6	16JUL14-11	74.504	937317.86	124880.60	7.506	-6.87
CAL5	16JUL14-12	64.303	778440.85	120164.14	6.478	7.17
CAL4	16JUL14-14	21.415	250180.20	115938.91	2.158	7.07
CCV1	16JUL14-17	5.227	62542.00	118636.57	0.527	4.54
ICV1	16JUL14-19	15.851	220022.81	137739.29	1.597	-20.75
CCV3	16JUL14-38	61.127	601441.87	97664.82	6.158	1.88
CCV2	16JUL14-44	20.780	198473.48	94786.91	2.094	3.90

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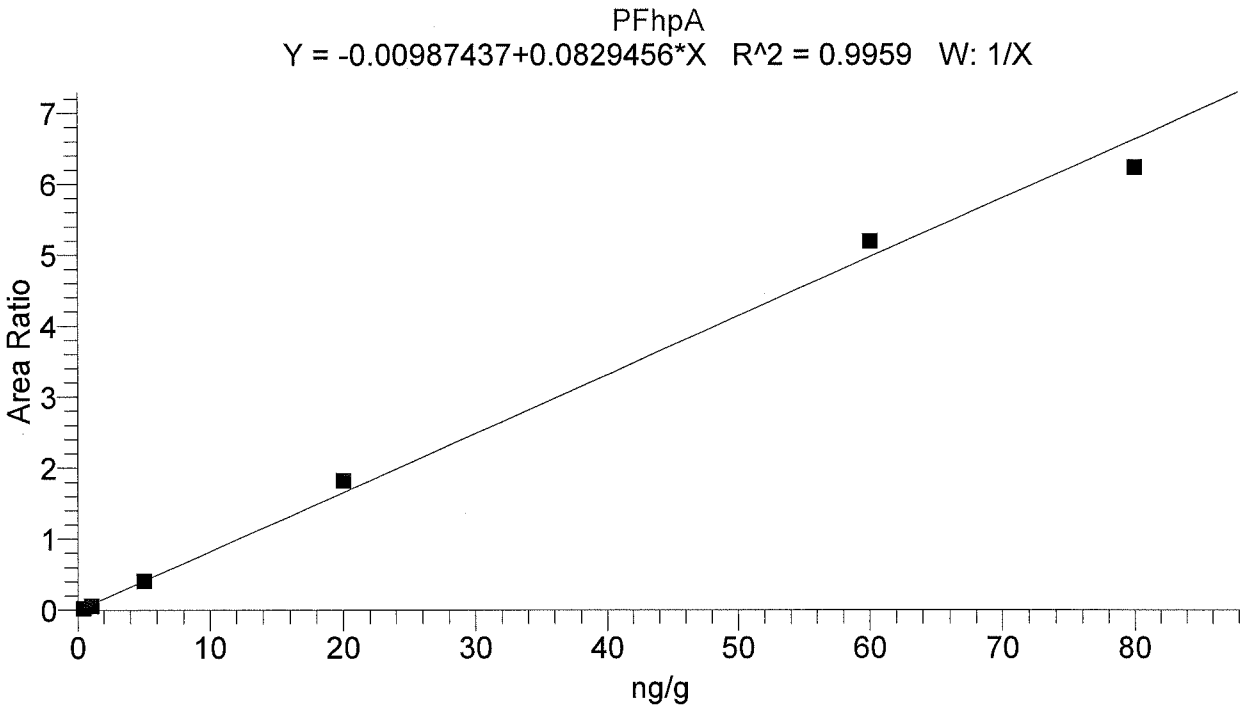
LCMSMS ANALYSIS REPORT

Component Name: **PFhpA**



Identification		Component Name:	PFhpA
Filter:	- c ESI SRM ms2 362.86 [318.94-318.94]	1st Trace Type:	TIC
2nd Trace Type:	N/A		
Mass Range 2 (m/z):		Mass Range 1 (m/z):	
Base Peak(BP):		Wavelength Range 2 (nm):	N/A
Retention Time			
Window (sec):	50.00000	Expected RT (min):	8.50000
RT Reference:	No	View Width (min):	3.00000
Adjust Using:	N/A	Adjust Expected RT:	No
Detection Options			
		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFHpA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.434	5886.08	224985.66	0.026	8.61
CAL2	16JUL14-05	0.812	14035.60	244065.90	0.058	-18.76
CAL3	16JUL14-09	5.059	89271.98	217862.12	0.410	1.18
CAL6	16JUL14-11	75.320	909338.98	145784.54	6.238	-5.85
CAL5	16JUL14-12	62.717	848418.54	163402.26	5.192	4.53
CAL4	16JUL14-14	22.058	366994.77	201678.93	1.820	10.29
CCV1	16JUL14-17	5.430	89019.76	202060.69	0.441	8.61
ICV1	16JUL14-19	21.118	292126.93	167721.46	1.742	5.59
CCV3	16JUL14-38	59.153	690762.92	141068.72	4.897	-1.41
CCV2	16JUL14-44	19.058	264471.36	168360.10	1.571	-4.71

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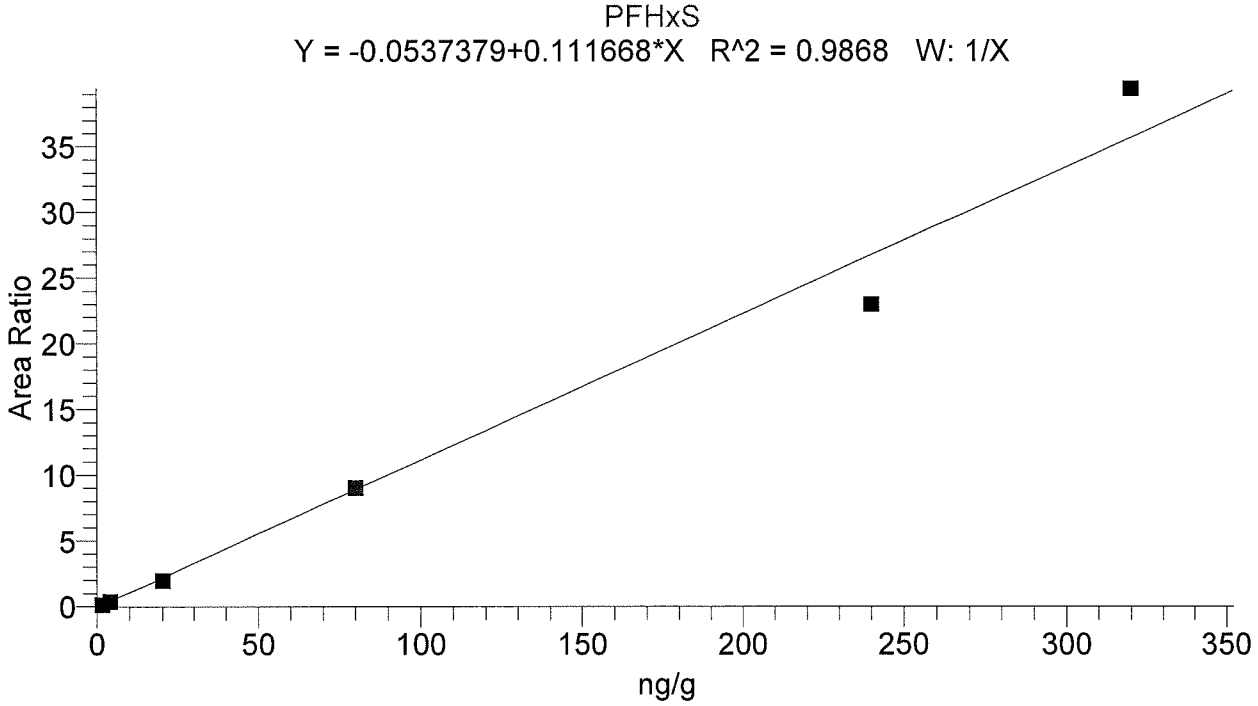
LCMSMS ANALYSIS REPORT

Component Name: **PFHxS**



Identification		Component Name:	PFHxS
Filter:	- c ESI SRM ms2 399.00 [80.09-80.11, 99.09-99.11]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	8.54000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	25
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	20.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFHxS_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	1.756	5008.18	35181.64	0.142	9.75
CAL2	16JUL14-05	4.029	11679.06	29478.97	0.396	0.73
CAL3	16JUL14-09	18.257	66033.88	33266.54	1.985	-8.71
CAL6	16JUL14-11	353.625	726872.68	18432.30	39.435	10.51
CAL5	16JUL14-12	206.626	602992.76	26194.70	23.020	-13.91
CAL4	16JUL14-14	81.307	263731.55	29220.27	9.026	1.63
CCV1	16JUL14-17	18.762	67861.99	33243.42	2.041	-6.19
ICV1	16JUL14-19	16.305	51588.70	29194.99	1.767	-18.47
CCV3	16JUL14-38	205.693	593895.88	25916.79	22.915	-14.29
CCV2	16JUL14-44	77.479	241701.81	28110.98	8.598	-3.15

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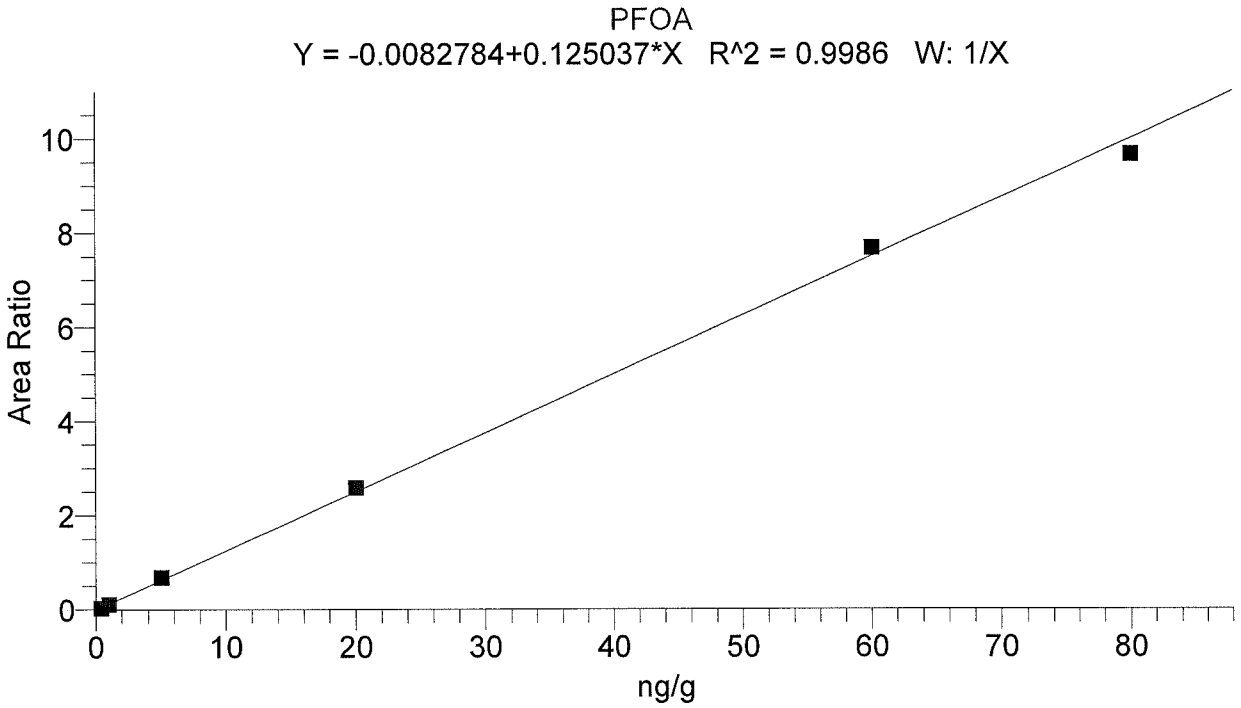
LCMSMS ANALYSIS REPORT

Component Name: **PFOA**



Identification		Component Name:	PFOA
Filter:	- c ESI SRM ms2 412.90 [168.90-168.91, 218.90-218.91, 368.85-368.86]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.13000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	15
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13C-PFOA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.344	7362.76	212107.95	0.035	-14.04
CAL2	16JUL14-05	1.003	25335.43	216400.46	0.117	0.25
CAL3	16JUL14-09	5.553	142098.19	207129.54	0.686	11.06
CAL6	16JUL14-11	77.315	1646342.31	170447.97	9.659	-3.36
CAL5	16JUL14-12	61.452	1406717.27	183273.16	7.676	2.42
CAL4	16JUL14-14	20.733	476231.27	184289.30	2.584	3.67
CCV1	16JUL14-17	4.768	112463.33	191315.95	0.588	-4.65
ICV1	16JUL14-19	16.286	372446.05	183650.31	2.028	-18.57
CCV3	16JUL14-38	61.580	1121017.61	145747.48	7.692	2.63
CCV2	16JUL14-44	21.010	382335.11	145998.42	2.619	5.05

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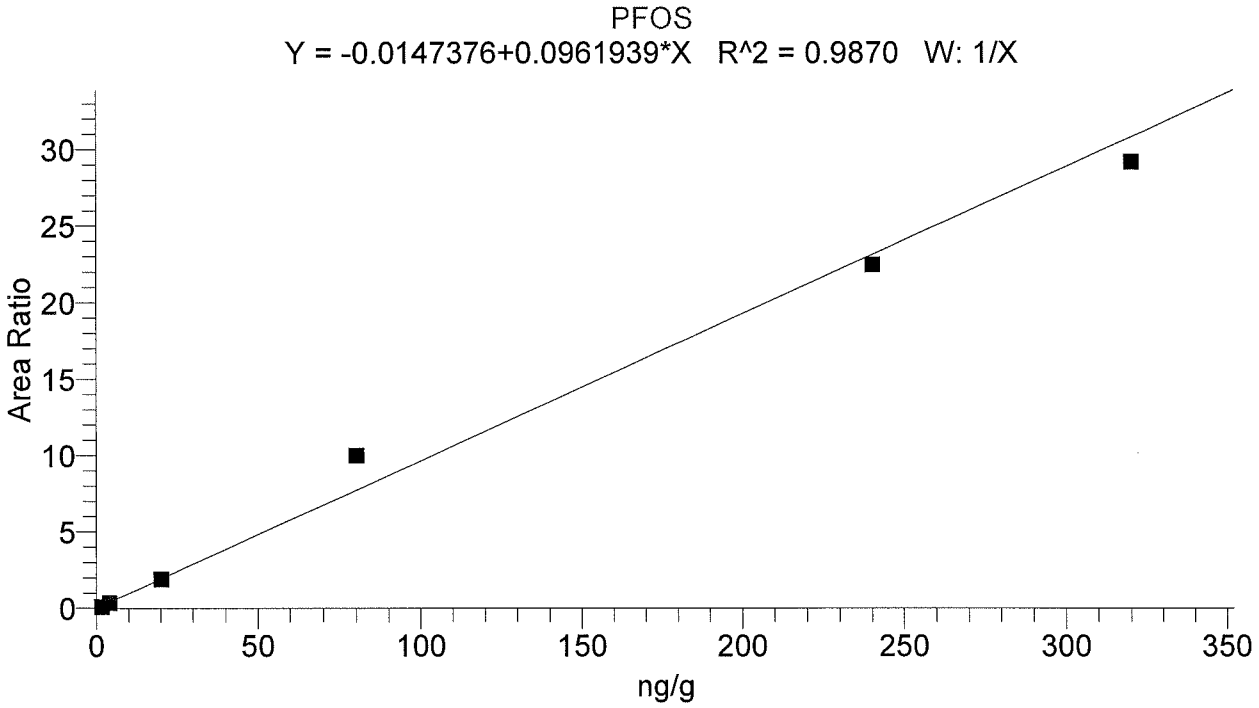
LCMSMS ANALYSIS REPORT

Component Name: **PFOS**



Identification		Component Name:	PFOS
Filter:	- c ESI SRM ms2 499.00 [80.00-80.00, 99.09-99.11]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.46000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	25
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	20.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFOS_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	1.375	1990.29	16931.36	0.118	-14.05
CAL2	16JUL14-05	3.703	6517.52	19088.34	0.341	-7.43
CAL3	16JUL14-09	19.914	35475.09	18662.80	1.901	-0.43
CAL6	16JUL14-11	303.267	466067.44	15984.37	29.158	-5.23
CAL5	16JUL14-12	233.443	405197.77	18056.10	22.441	-2.73
CAL4	16JUL14-14	103.899	153587.30	15390.01	9.980	29.87
CCV1	16JUL14-17	22.814	42292.50	19401.47	2.180	14.07
ICV1	16JUL14-19	15.982	26915.23	17676.24	1.523	-20.09
CCV3	16JUL14-38	297.065	381207.61	13347.10	28.561	23.78
CCV2	16JUL14-44	86.341	139169.81	16786.21	8.291	7.93

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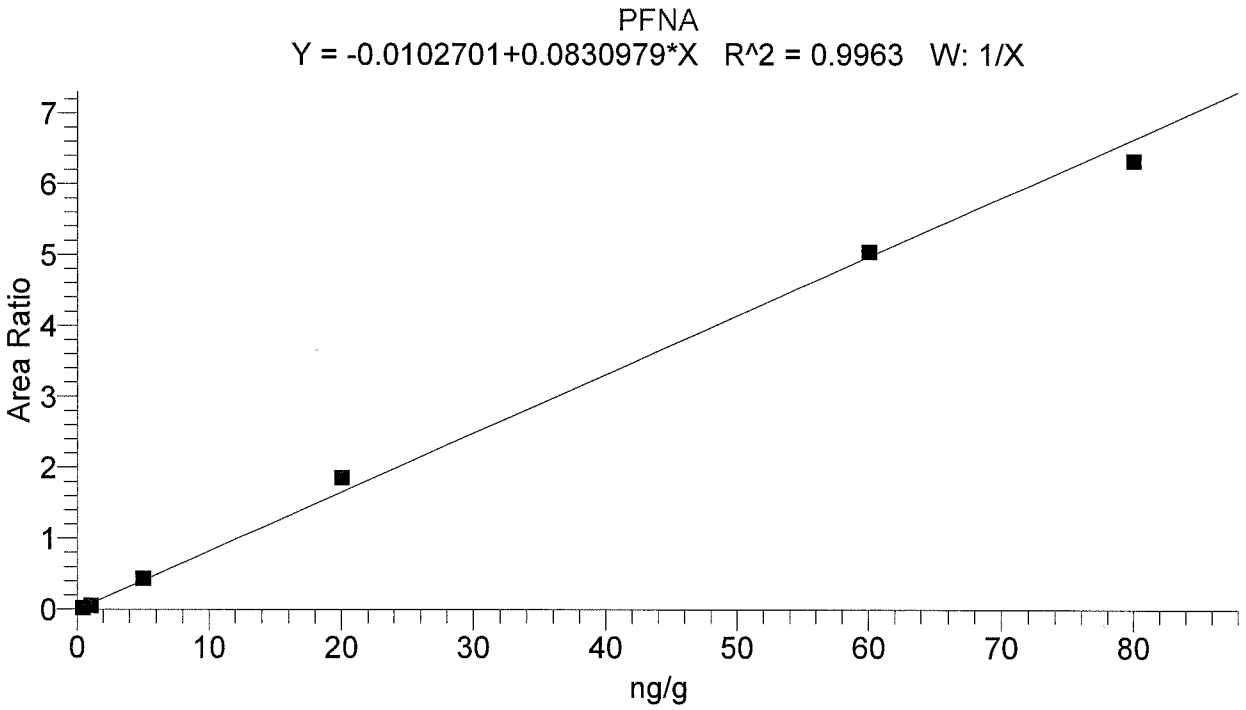
LCMSMS ANALYSIS REPORT

Component Name: **PFNA**



Identification		Component Name:	PFNA
Filter:	- c ESI SRM ms2 462.90 [418.89-418.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.15000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13C-PFNA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.418	7378.66	301477.26	0.024	4.53
CAL2	16JUL14-05	0.778	14811.13	272353.68	0.054	-22.20
CAL3	16JUL14-09	5.398	98398.97	224484.36	0.438	7.97
CAL6	16JUL14-11	76.389	1047617.14	165305.61	6.337	-4.51
CAL5	16JUL14-12	60.862	923857.07	183043.00	5.047	1.44
CAL4	16JUL14-14	22.555	371926.95	199529.94	1.864	12.78
CCV1	16JUL14-17	4.730	89845.28	234740.48	0.383	-5.41
ICV1	16JUL14-19	14.038	278471.93	240846.38	1.156	-29.81
CCV3	16JUL14-38	53.474	812873.01	183356.14	4.433	-10.88
CCV2	16JUL14-44	19.813	282334.71	172557.51	1.636	-0.93

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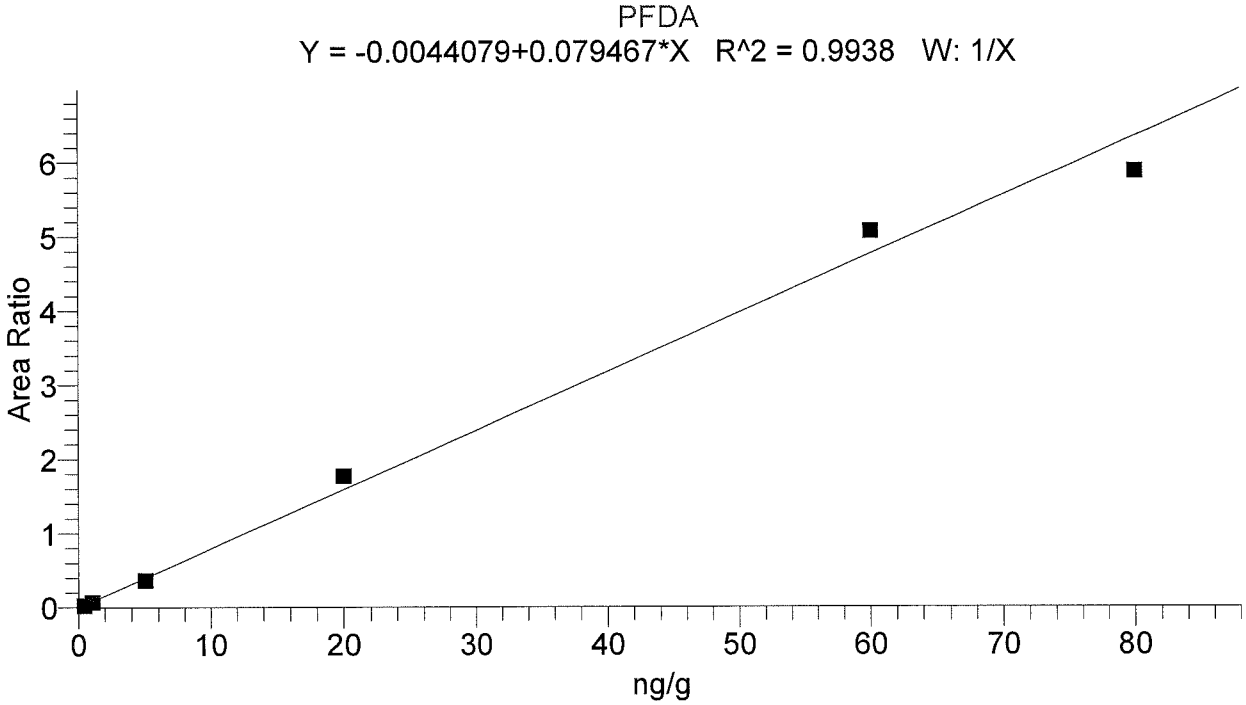
LCMSMS ANALYSIS REPORT

Component Name: **PFDA**



Identification		Component Name:	PFDA
Filter:	- c ESI SRM ms2 512.88 [468.88-468.88]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.41000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFDA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.389	5294.71	199769.15	0.027	-2.75
CAL2	16JUL14-05	0.985	12796.59	173265.95	0.074	-1.52
CAL3	16JUL14-09	4.670	72159.56	196784.77	0.367	-6.60
CAL6	16JUL14-11	74.108	1093889.96	185886.07	5.885	-7.37
CAL5	16JUL14-12	63.902	810987.67	159841.42	5.074	6.50
CAL4	16JUL14-14	22.346	307618.00	173660.00	1.771	11.73
CCV1	16JUL14-17	5.533	74646.93	171483.72	0.435	10.66
ICV1	16JUL14-19	21.030	275605.63	165351.18	1.667	5.15
CCV3	16JUL14-38	56.767	754487.79	167414.00	4.507	-5.39
CCV2	16JUL14-44	21.195	269296.06	160307.61	1.680	5.97

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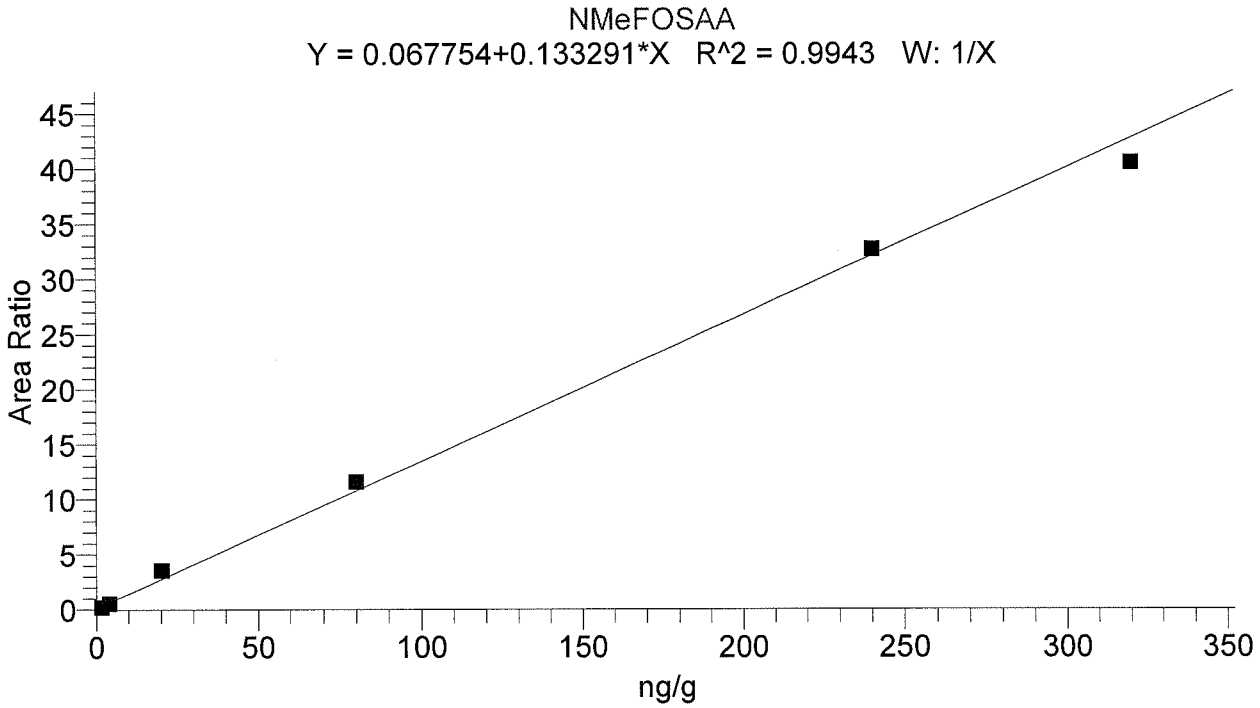
LCMSMS ANALYSIS REPORT

Component Name: **NMeFOSAA**



Identification		Component Name:	NMeFOSAA
Filter:	- c ESI SRM ms2 569.90 [419.05-419.06, 511.98-511.99]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.37000
Window (sec):	60.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Highest Peak
ICIS Minimum Peak Height (S/N):	100.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	d3-NMeFOSAA	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV1	20.000
ICV2	40.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	1.226	16956.74	73350.36	0.231	-23.37
CAL2	16JUL14-05	3.474	37362.33	70387.08	0.531	-13.15
CAL3	16JUL14-09	26.310	172322.54	48206.52	3.575	31.55
CAL6	16JUL14-11	303.504	2321257.18	57283.57	40.522	-5.15
CAL5	16JUL14-12	244.478	1785516.75	54679.03	32.655	1.87
CAL4	16JUL14-14	86.608	633286.78	54537.96	11.612	8.26
CCV1	16JUL14-17	21.289	173375.28	59673.55	2.905	6.45
ICV1	16JUL14-19	15.580	131626.30	61381.75	2.144	-22.10
CCV3	16JUL14-38	223.829	1803368.08	60308.85	29.902	-6.74
CCV2	16JUL14-44	98.942	672162.55	50706.60	13.256	23.68

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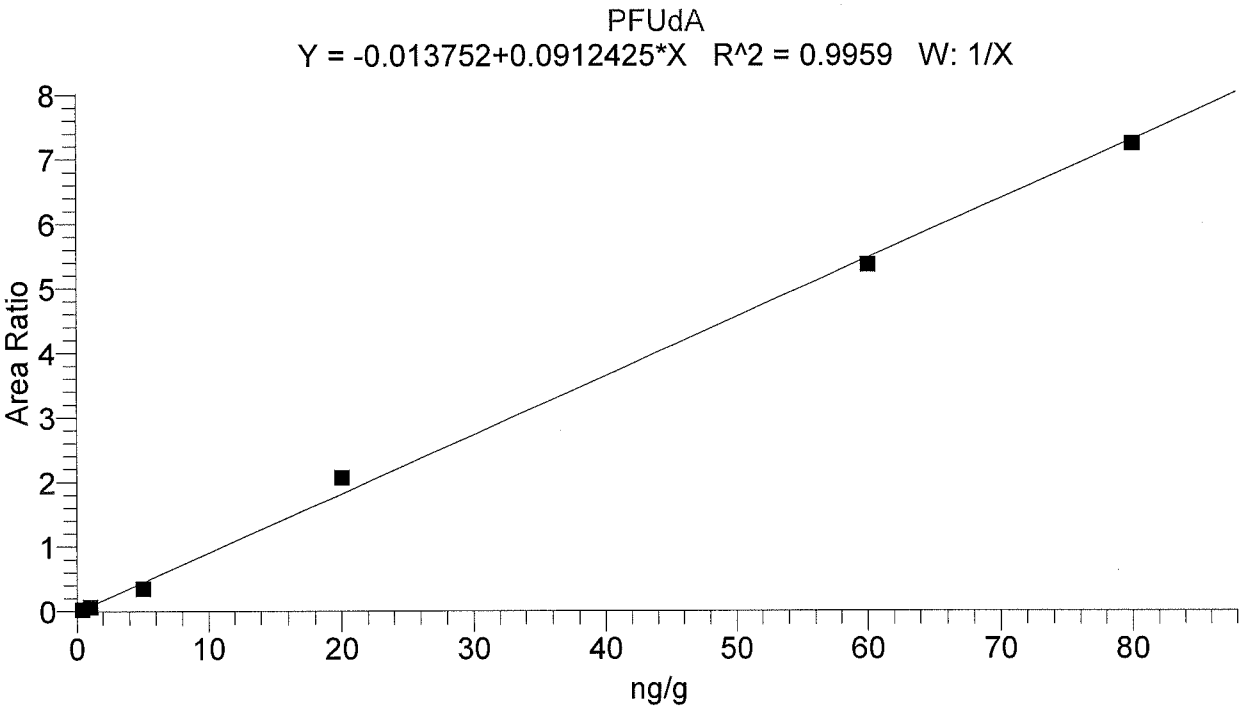
LCMSMS ANALYSIS REPORT

Component Name: **PFUdA**



Identification		Component Name:	PFUdA
Filter:	- c ESI SRM ms2 562.87 [518.87-518.88]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.95000
Window (sec):	50.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFUdA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.400
2	1.000
3	5.000
4	20.000
5	60.000
6	80.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	5.000
2	20.000
3	60.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.469	5633.99	193956.02	0.029	17.27
CAL2	16JUL14-05	0.919	13433.33	191684.67	0.070	-8.12
CAL3	16JUL14-09	3.976	56961.38	163204.64	0.349	-20.48
CAL6	16JUL14-11	79.369	1170914.82	161994.79	7.228	-0.79
CAL5	16JUL14-12	58.864	901719.17	168321.86	5.357	-1.89
CAL4	16JUL14-14	22.803	329955.16	159639.75	2.067	14.02
CCV1	16JUL14-17	5.927	88145.30	167243.01	0.527	18.54
ICV1	16JUL14-19	18.245	318172.34	192714.36	1.651	-8.77
CCV3	16JUL14-38	65.416	861320.99	144638.61	5.955	9.03
CCV2	16JUL14-44	23.101	347065.79	165741.93	2.094	15.50

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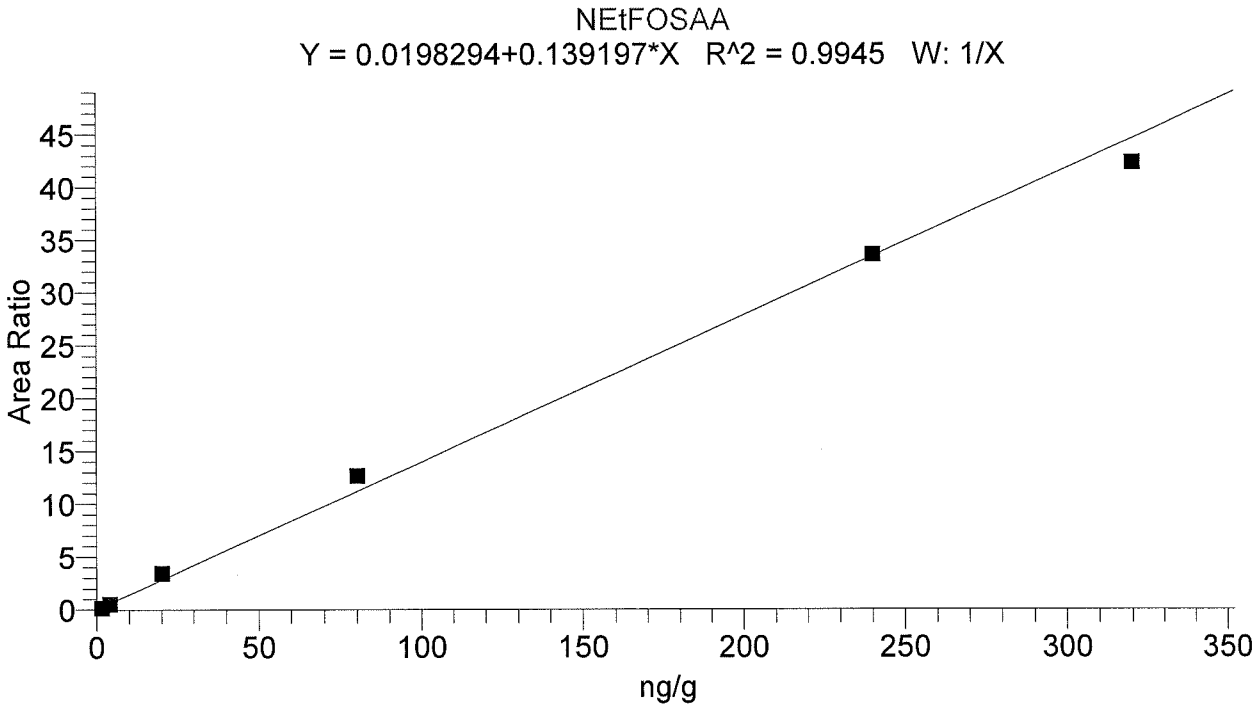
LCMSMS ANALYSIS REPORT

Component Name: **NEtFOSAA**



Identification		Component Name:	NEtFOSAA
Filter:	- c ESI SRM ms2 583.95 [419.00-5419.06, 482.89-482.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	9.58000
Window (sec):	60.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	ICIS
		ICIS Peak Integration	
ICIS Smoothing Points:	5	Baseline Window:	100
Area Noise Factor:	5	Peak Noise Factor:	25
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Highest Peak
ICIS Minimum Peak Height (S/N):	100.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	d5-NEtFOSAA	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	1.600
2	4.000
3	20.000
4	80.000
5	240.000
6	320.000

Component QC Level Table

QC Level	Amount
ICV1	20.000
ICV2	40.000
1	20.000
2	80.000
3	240.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	1.225	13465.80	70767.63	0.190	-23.47
CAL2	16JUL14-05	3.654	36203.50	68499.78	0.529	-8.64
CAL3	16JUL14-09	24.583	138555.76	40257.41	3.442	22.92
CAL6	16JUL14-11	303.950	2151526.34	50828.90	42.329	-5.02
CAL5	16JUL14-12	241.237	1686227.60	50186.50	33.599	0.52
CAL4	16JUL14-14	90.951	610090.72	48114.77	12.680	13.69
CCV1	16JUL14-17	22.181	172184.71	55411.76	3.107	10.91
ICV1	16JUL14-19	25.012	154020.46	43988.58	3.501	25.06
CCV3	16JUL14-38	236.133	1684413.38	51215.32	32.889	-1.61
CCV2	16JUL14-44	99.249	711789.08	51448.25	13.835	24.06

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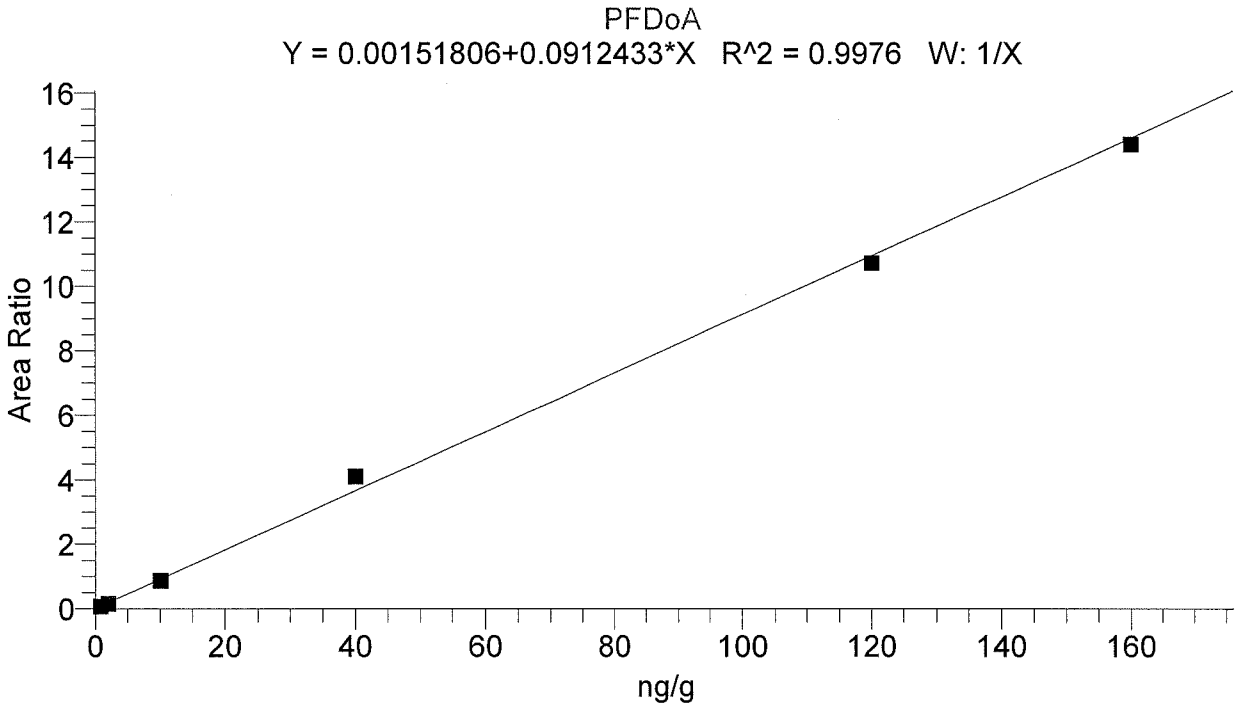
LCMSMS ANALYSIS REPORT

Component Name: **PFDoA**



Identification		Component Name:	PFDoA
Filter:	- c ESI SRM ms2 612.90 [568.89-568.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time			
Window (sec):	60.00000	Expected RT (min):	10.60000
RT Reference:	No	View Width (min):	3.00000
Adjust Using:	N/A	Adjust Expected RT:	No
Detection Options		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFDoA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.800
2	2.000
3	10.000
4	40.000
5	120.000
6	160.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	10.000
2	40.000
3	120.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.861	14212.75	177574.49	0.080	7.57
CAL2	16JUL14-05	1.757	29410.24	181760.51	0.162	-12.16
CAL3	16JUL14-09	9.533	163446.59	187579.05	0.871	-4.67
CAL6	16JUL14-11	158.151	2166583.63	150125.98	14.432	-1.16
CAL5	16JUL14-12	117.496	1707046.04	159205.64	10.722	-2.09
CAL4	16JUL14-14	45.002	676828.02	164773.06	4.108	12.50
CCV1	16JUL14-17	10.210	168691.46	180776.14	0.933	2.10
ICV1	16JUL14-19	17.208	271017.08	172447.88	1.572	-13.96
CCV3	16JUL14-38	119.826	1641537.03	150119.49	10.935	-0.14
CCV2	16JUL14-44	49.078	695373.30	155233.28	4.480	22.69

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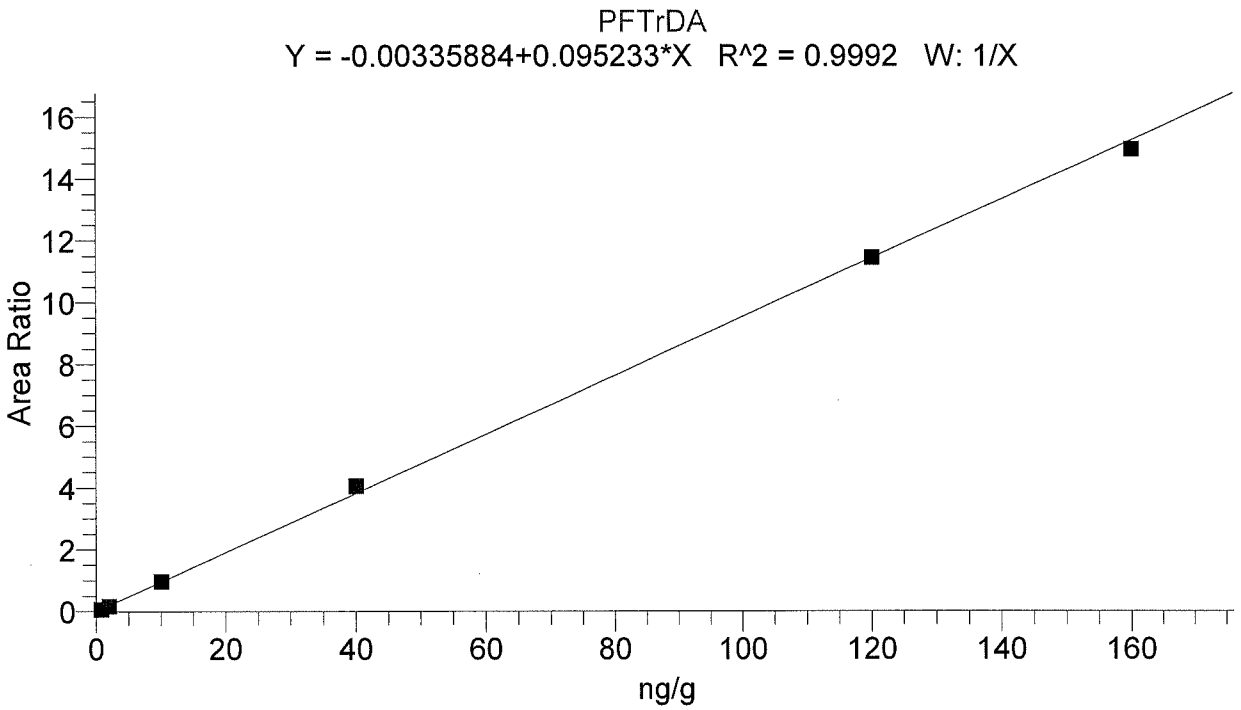
LCMSMS ANALYSIS REPORT

Component Name: **PFTrDA**



Identification		Component Name:	PFTrDA
Filter:	- c ESI SRM ms2 662.90 [618.89-618.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A	Mass Range 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	11.46000
Window (sec):	60.00000	View Width (min):	3.00000
RT Reference:	No	Adjust Expected RT:	No
Adjust Using:	N/A		
Detection Options		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFDoA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.800
2	2.000
3	10.000
4	40.000
5	120.000
6	160.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	10.000
2	40.000
3	120.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.807	13042.65	177574.49	0.073	0.82
CAL2	16JUL14-05	1.842	31265.50	181760.51	0.172	-7.92
CAL3	16JUL14-09	10.206	181692.65	187579.05	0.969	2.06
CAL6	16JUL14-11	157.090	2245401.34	150125.98	14.957	-1.82
CAL5	16JUL14-12	120.165	1821366.99	159205.64	11.440	0.14
CAL4	16JUL14-14	③ 42.691	669340.58	164773.06	③ 4.062	6.73 ③
CCV1	16JUL14-17	9.79 ~~N/A~~	③ ~~N/A~~	180776.14	0.969 ~~N/A~~	~~N/A~~ -2.60
ICV1	16JUL14-19	12.985	212668.63	172447.88	1.233	-35.08
CCV3	16JUL14-38	121.007	1729458.84	150119.49	11.521	0.84
CCV2	16JUL14-44	42.503	627811.01	155233.28	4.044	6.26

③ CW21412 8/10/16

166985.75

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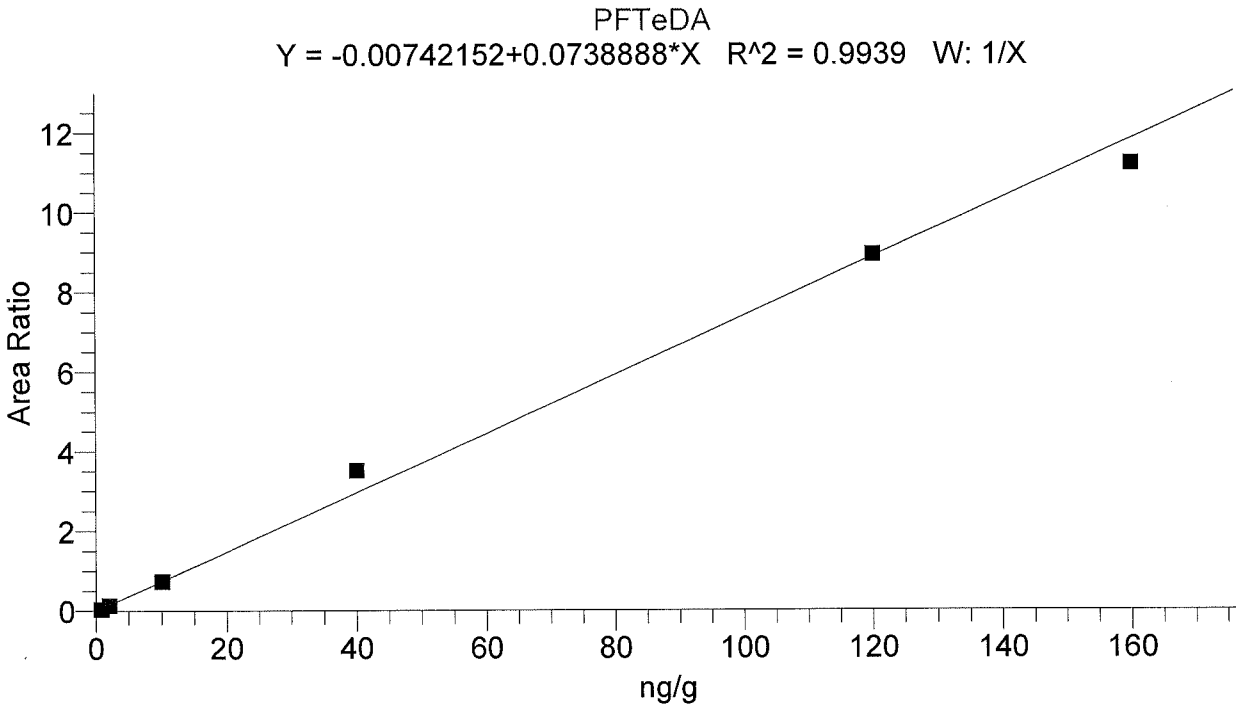
LCMSMS ANALYSIS REPORT

Component Name: **PFTeDA**



Identification		Component Name:	PFTeDA
Filter:	- c ESI SRM ms2 712.90 [668.89-668.90]	1st Trace Type:	TIC
2nd Trace Type:	N/A		
Mass Range 2 (m/z):		Mass Range 1 (m/z):	
Base Peak(BP):		Wavelength Range 2 (nm):	N/A
Retention Time			
Window (sec):	50.00000	Expected RT (min):	12.63000
RT Reference:	No	View Width (min):	3.00000
Adjust Using:	N/A	Adjust Expected RT:	No
Detection Options			
		Peak Detection Algorithm:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	75
Area Noise Factor:	5	Peak Noise Factor:	10
ICIS Constrain Peak Width:	No	ICIS Peak Height (%):	N/A
ICIS Tailing Factor:	N/A		
ICIS Peak Detection		ICIS Identify By:	Nearest RT
ICIS Minimum Peak Height (S/N):	50.0	ICIS Ion Ratio Confirmation:	Disabled
ICIS Window %:		ICIS Qualifier Ion Coelution (min):	N/A
		ICIS Spectrum Thresholds	
ICIS Forward:	0	ICIS Reverse:	0
ICIS Match:	0		
ICIS Advanced Parameters		Noise Method:	Incos
Minimum Peak Width:	3	Multiplet Resolution:	10
Area Tail Extension:	5	Area Scan Window:	0
		Calibration	
Component Type:	Target Compound	%RSD Calculation Method:	Use calculated amounts
		Internal Standard	
ISTD Amount:	N/A	ISTD Units:	N/A
		Target Compounds	
ISTD:	13CPFUdA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/g
Number of Cal. Levels:	6	Number of QC Levels:	5
		Peak Purity Options	
Scan Threshold (mAU):	N/A	Peak Coverage (%):	N/A
Limit ScanRange (nm):	N/A		

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	0.800
2	2.000
3	10.000
4	40.000
5	120.000
6	160.000

Component QC Level Table

QC Level	Amount
ICV2	40.000
ICV1	20.000
1	10.000
2	40.000
3	120.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16JUL14-04	0.715	8801.85	193956.02	0.045	-10.67
CAL2	16JUL14-05	1.910	25629.65	191684.67	0.134	-4.50
CAL3	16JUL14-09	10.048	119963.28	163204.64	0.735	0.48
CAL6	16JUL14-11	151.612	1813529.58	161994.79	11.195	-5.24
CAL5	16JUL14-12	120.815	1501337.03	168321.86	8.919	0.68
CAL4	16JUL14-14	47.700	561470.75	159639.75	3.517	19.25
CCV1	16JUL14-17	11.072	135573.96	167243.01	0.811	10.72
ICV1	16JUL14-19	15.500	219277.84	192714.36	1.138	-22.50
CCV3	16JUL14-38	122.608	1309259.85	144638.61	9.052	2.17
CCV2	16JUL14-44	42.322	517070.09	165741.93	3.120	5.81

Lynn Dodd
JUL 19 2016

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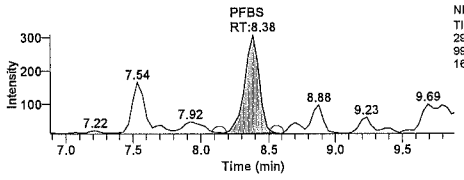
LCMSMS ANALYSIS REPORT

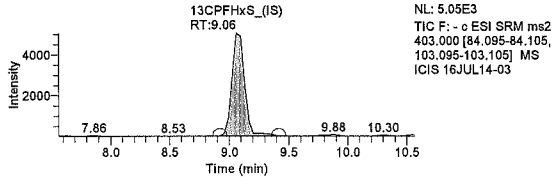
Sample Name:	MDL	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	MDL	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-03		M\HWell_16.5minutes
Acquisition Date:	07/14/16 09:06:39 AM	Dilution Factor:	1.00
Sample Type:	Unknown	Instrument Model:	TSQ Quantum Access
Vial:	c:2	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

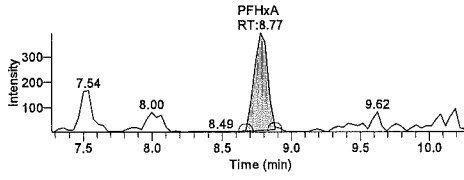
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.71	270826.13	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.35	226101.69	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.17	211895.24	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.63	193240.88	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.10	229709.18	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.78	122333.50	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.06	38029.96	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.68	16763.22	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.96	188369.48	N/A	N/A	N/A
NEtFOSAA	0.448	11.03	6561.63	79872.17	0.082	ng/g
NMeFOSAA	0.687	10.50	10784.51	67660.76	0.159	ng/g
PFBS	1.379	8.38	2241.10	38029.96	0.059	ng/g
PFDA	0.322	10.21	4483.71	211895.24	0.021	ng/g
PFDoA	0.386	11.63	7100.83	193240.88	0.037	ng/g
PFHxA	0.208	8.77	2641.02	122333.50	0.022	ng/g
PFHxS	1.091	9.10	2589.83	38029.96	0.068	ng/g
PFNA	0.281	9.71	3545.20	270826.13	0.013	ng/g
PFOA	0.251	9.35	5232.81	226101.69	0.023	ng/g
PFOS	1.138	9.71	1588.41	16763.22	0.095	ng/g
PFTeDA	0.444	13.65	4777.37	188369.48	0.025	ng/g
PFTrDA	0.370	12.52	6166.64	193240.88	0.032	ng/g
PFUdA	0.252	10.95	1738.74	188369.48	0.009	ng/g
PFhpA	0.294	9.09	3324.23	229709.18	0.014	ng/g
d3-NMeFOSAA	N/A	10.50	67660.76	N/A	N/A	N/A
d5-NEtFOSAA	N/A	11.00	79872.17	N/A	N/A	N/A

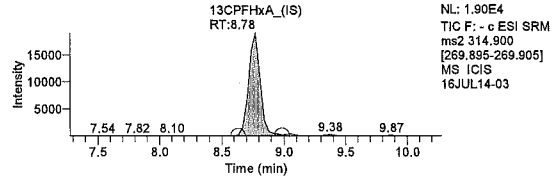
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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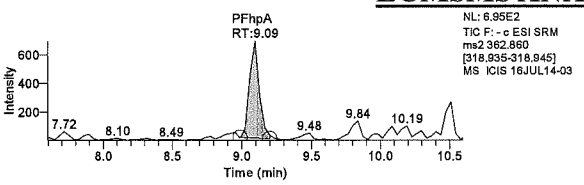
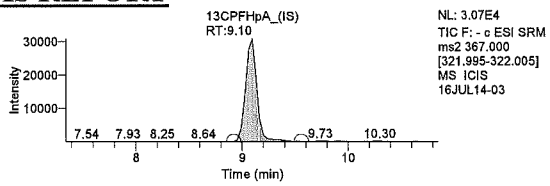
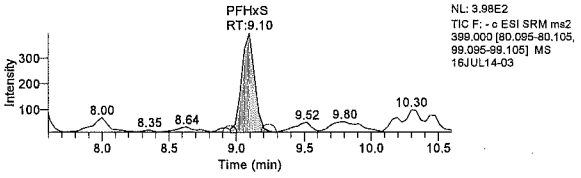
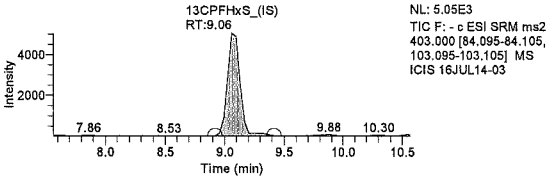


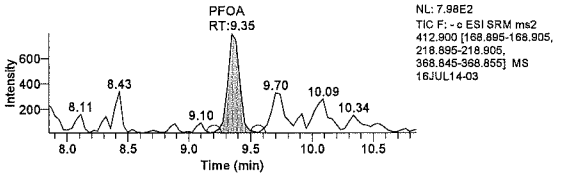


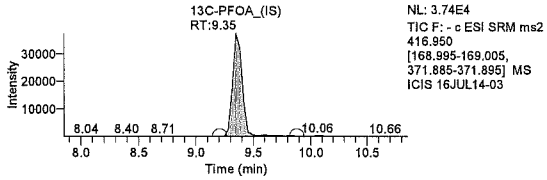
Component Name: PFHxS



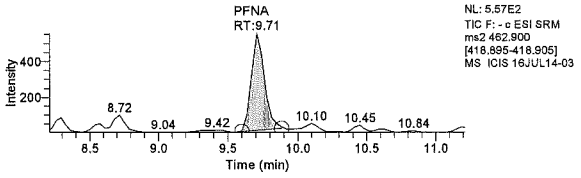


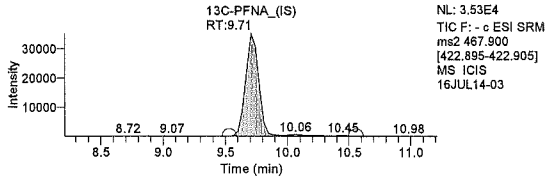
Component Name: PFOA



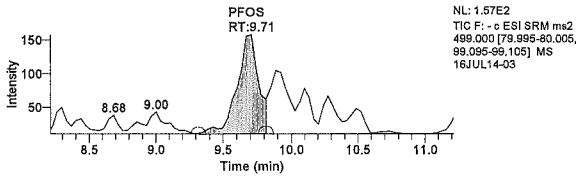


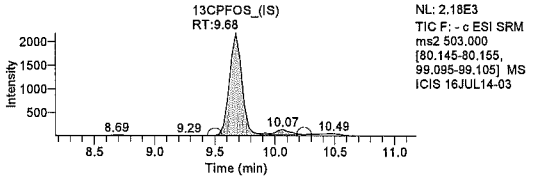
Component Name: PFNA



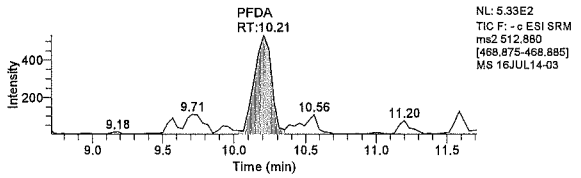


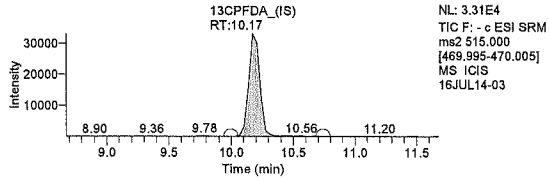
Component Name: PFOS





Component Name: PFDA





Component Name: NMeFOSAA

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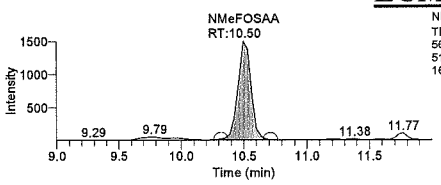
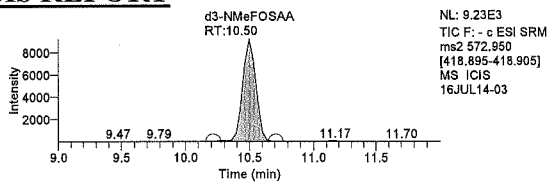
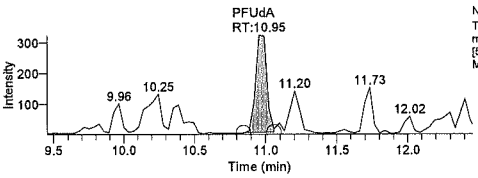
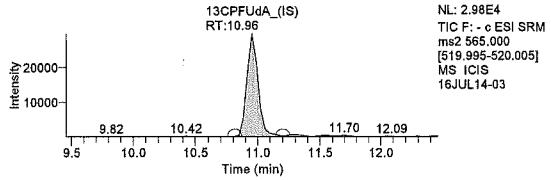


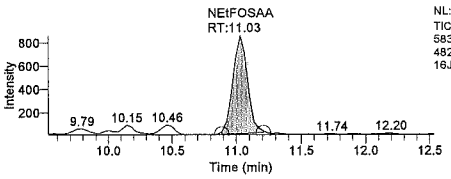


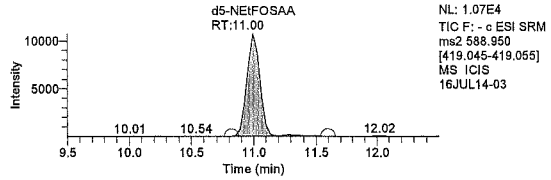
Component Name: PFUdA



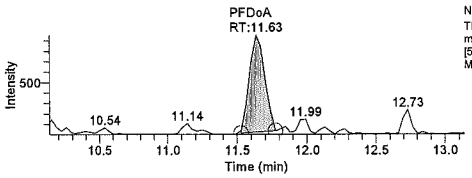


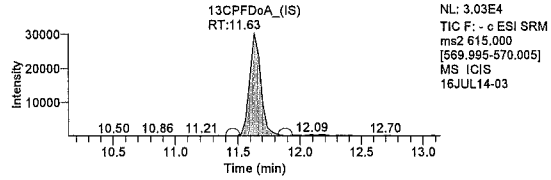
Component Name: NEtFOSAA



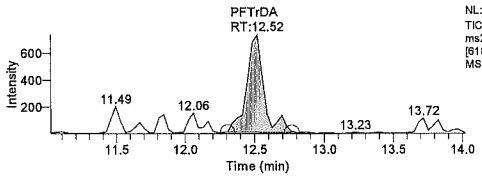


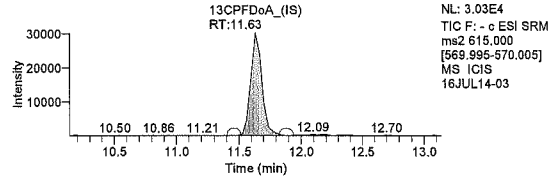
Component Name: PFDoA



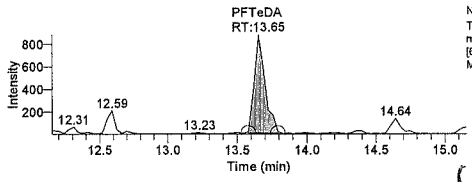


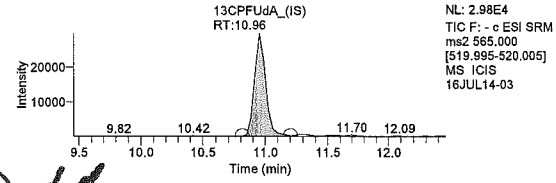
Component Name: PFTrDA





Component Name: PFTeDA





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JUL 18 2016

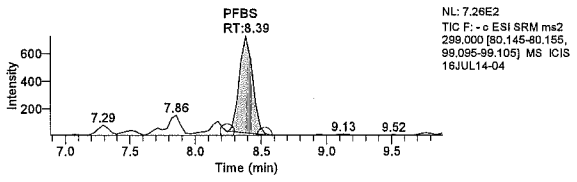
LCMSMS ANALYSIS REPORT

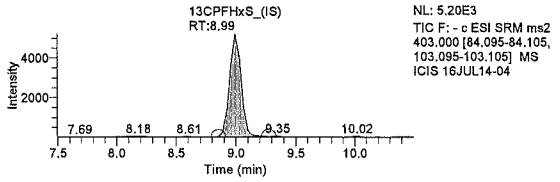
Sample Name:	CAL1	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CAL1	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-04		M\HWell_16.5minutes
Acquisition Date:	07/14/16 09:23:53 AM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:3	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

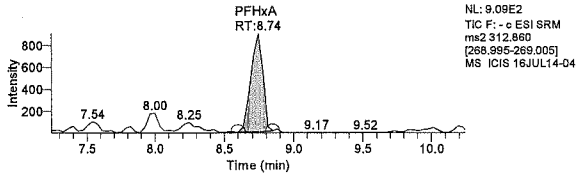
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.57	301477.26	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.28	212107.95	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.96	199769.15	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.32	177574.49	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.99	224985.66	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.71	128045.65	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.99	35181.64	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.54	16931.36	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.53	193956.02	N/A	N/A	N/A
NEtFOSAA	1.225	10.61	13465.80	70767.63	0.190	ng/g
NMeFOSAA	1.226	10.25	16956.74	73350.36	0.231	ng/g
PFBS	1.888	8.39	4811.12	35181.64	0.137	ng/g
PFDA	0.389	9.96	5294.71	199769.15	0.027	ng/g
PFDoA	0.861	11.32	14212.75	177574.49	0.080	ng/g
PFHxA	0.412	8.74	5395.91	128045.65	0.042	ng/g
PFHxS	1.756	8.99	5008.18	35181.64	0.142	ng/g
PFNA	0.418	9.57	7378.66	301477.26	0.024	ng/g
PFOA	0.344	9.24	7362.76	212107.95	0.035	ng/g
PFOS	1.375	9.53	1990.29	16931.36	0.118	ng/g
PFTeDA	0.715	13.23	8801.85	193956.02	0.045	ng/g
PFTrDA	0.807	12.27	13042.65	177574.49	0.073	ng/g
PFUdA	0.469	10.53	5633.99	193956.02	0.029	ng/g
PFhpA	0.434	8.99	5886.08	224985.66	0.026	ng/g
d3-NMeFOSAA	N/A	10.25	73350.36	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.61	70767.63	N/A	N/A	N/A

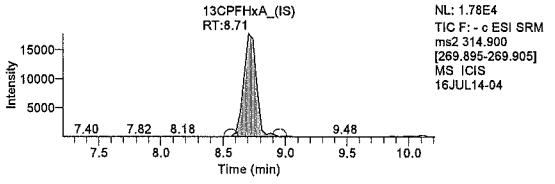
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFHpA

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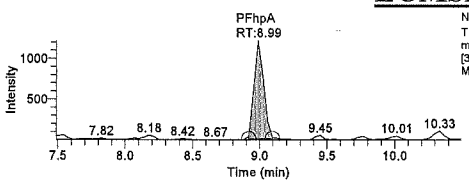
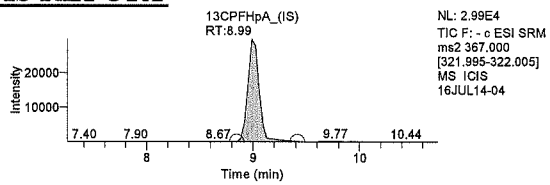
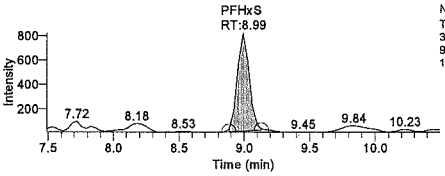
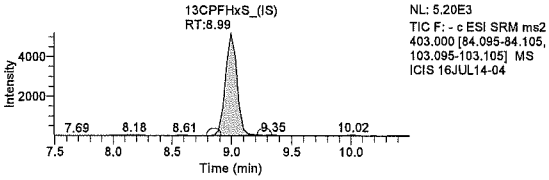


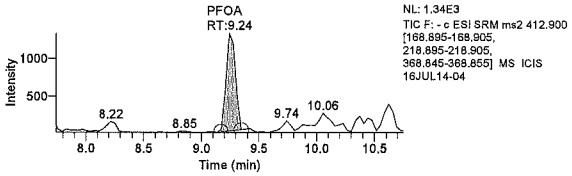


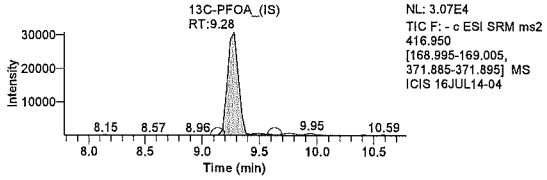
Component Name: PFHxS



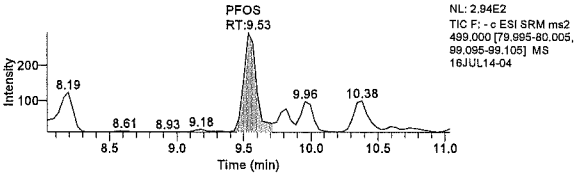


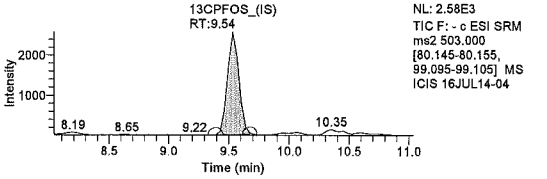
Component Name: PFOA



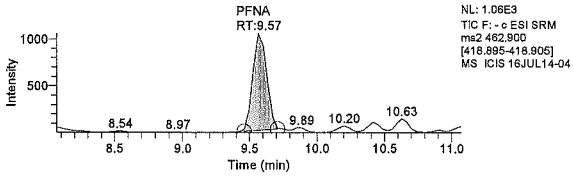


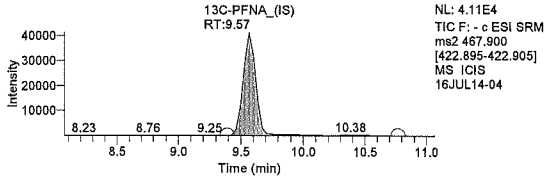
Component Name: PFOS



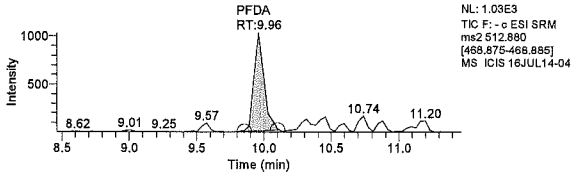


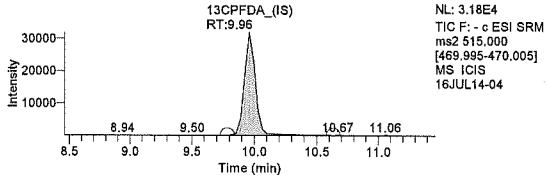
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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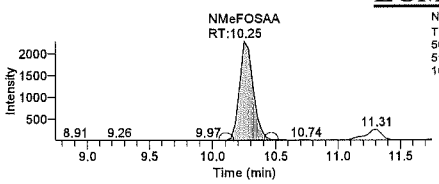
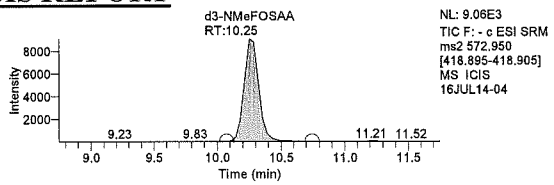
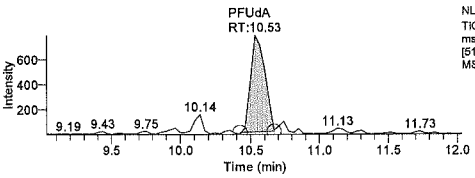
JUL 18 2016

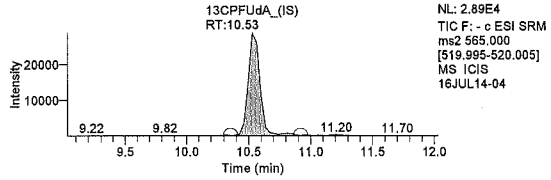
LCMSMS ANALYSIS REPORT



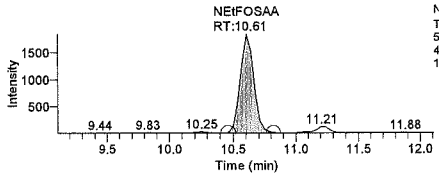


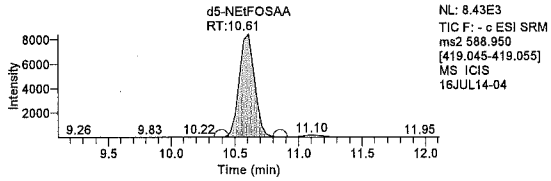
Component Name: PFUdA



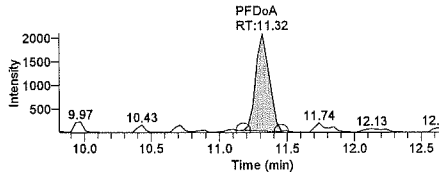


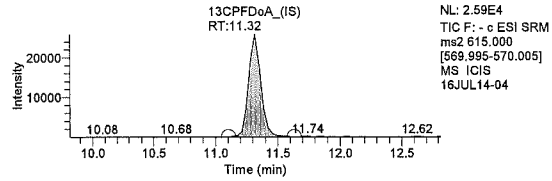
Component Name: NEtFOSAA



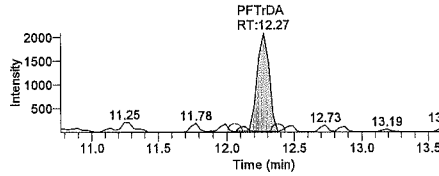


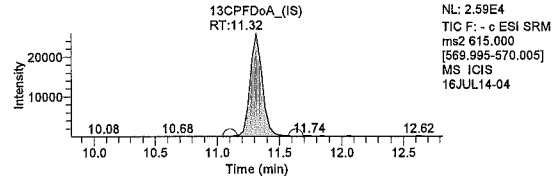
Component Name: PFDoA



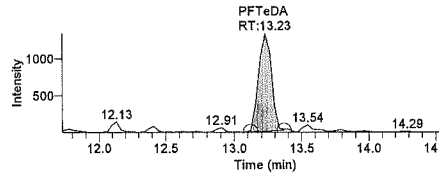


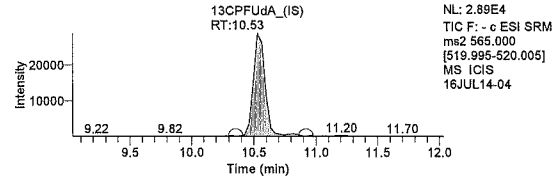
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

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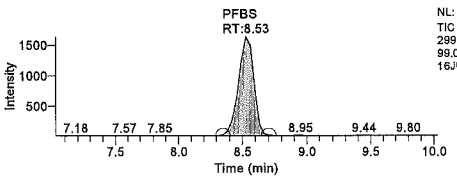
LCMSMS ANALYSIS REPORT

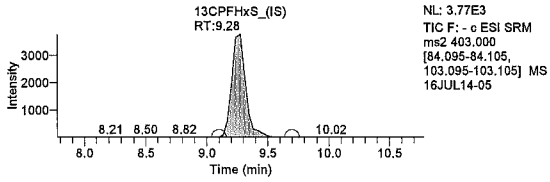
Sample Name:	CAL2	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CAL2	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-05		M\HWell_16.5minutes
Acquisition Date:	07/14/16 09:41:08 AM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:4	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

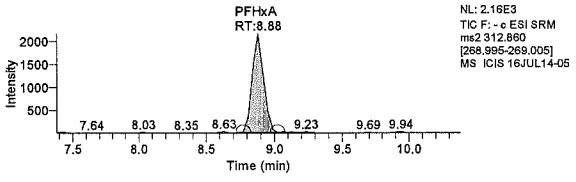
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.78	272353.68	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.49	216400.46	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.21	173265.95	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.60	181760.51	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.27	244065.90	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.88	129869.42	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.28	29478.97	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.75	19088.34	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.81	191684.67	N/A	N/A	N/A
NEtFOSAA	3.654	10.89	36203.50	68499.78	0.529	ng/g
NMeFOSAA	3.474	10.53	37362.33	70387.08	0.531	ng/g
PFBS	3.894	8.53	13077.91	29478.97	0.444	ng/g
PFDA	0.985	10.21	12796.59	173265.95	0.074	ng/g
PFDoA	1.757	11.60	29410.24	181760.51	0.162	ng/g
PFHxA	0.930	8.88	12246.97	129869.42	0.094	ng/g
PFHxS	4.029	9.24	11679.06	29478.97	0.396	ng/g
PFNA	0.778	9.78	14811.13	272353.68	0.054	ng/g
PFOA	1.003	9.49	25335.43	216400.46	0.117	ng/g
PFOS	3.703	9.71	6517.52	19088.34	0.341	ng/g
PFTeDA	1.910	13.69	25629.65	191684.67	0.134	ng/g
PFTrDA	1.842	12.48	31265.50	181760.51	0.172	ng/g
PFUdA	0.919	10.81	13433.33	191684.67	0.070	ng/g
PFhpA	0.812	9.27	14035.60	244065.90	0.058	ng/g
d3-NMeFOSAA	N/A	10.53	70387.08	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.85	68499.78	N/A	N/A	N/A

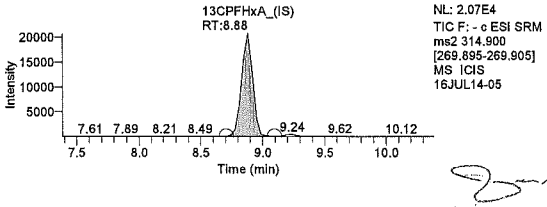
Component Name: PFBS





Component Name: PFHxA





Jason W. Knight
Senior Chemist

Component Name: PFHxS

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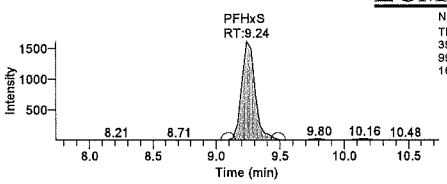
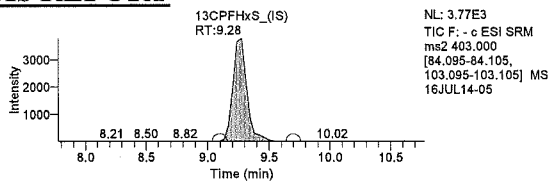
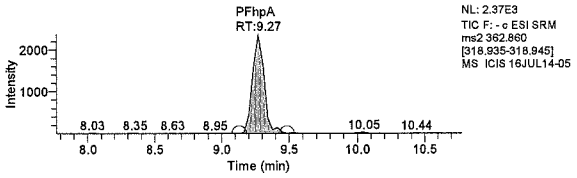
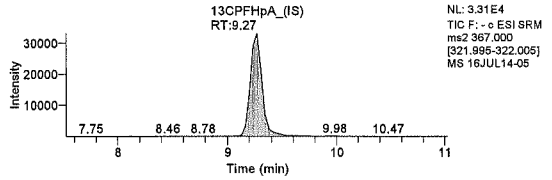
LCMSMS ANALYSIS REPORT



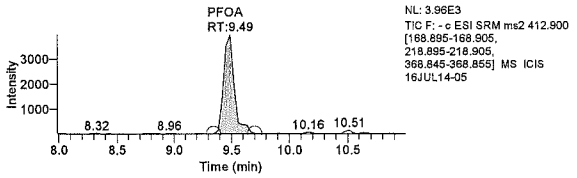


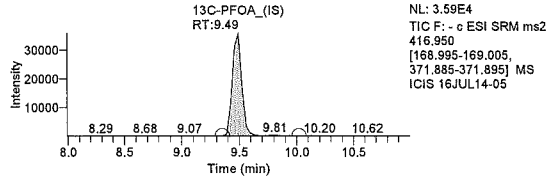
Component Name: PFhpA



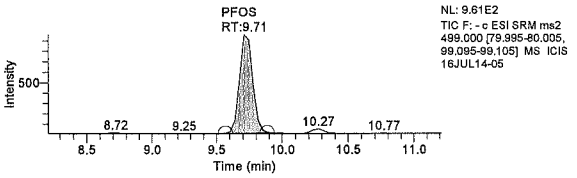


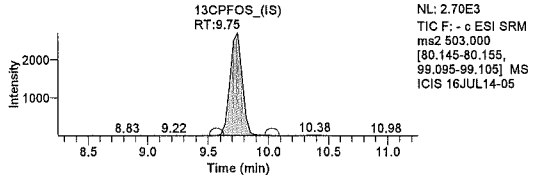
Component Name: PFOA



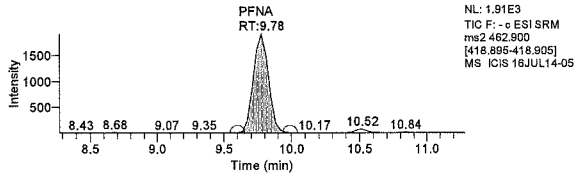


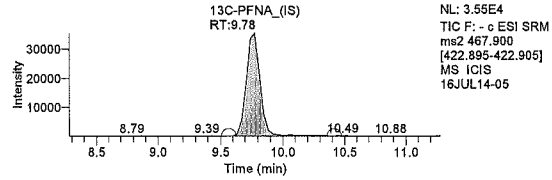
Component Name: PFOS



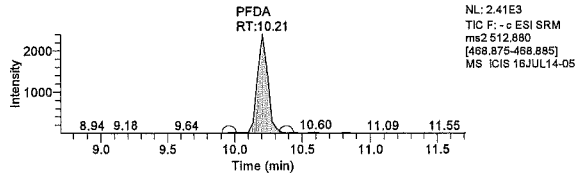


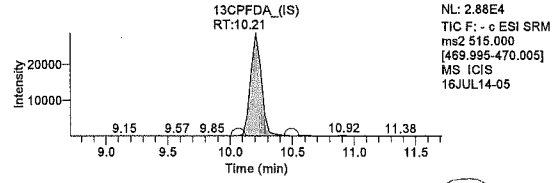
Component Name: PFNA





Component Name: PFDA





Jason W. Knight
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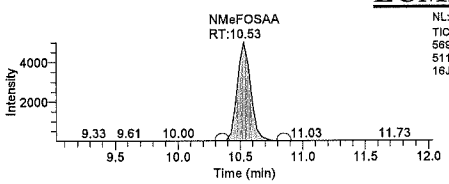
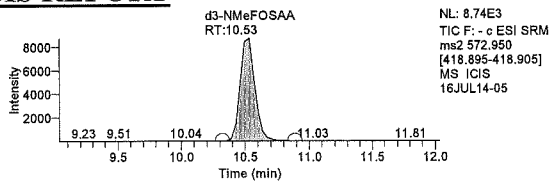
Component Name: NMeFOSAA

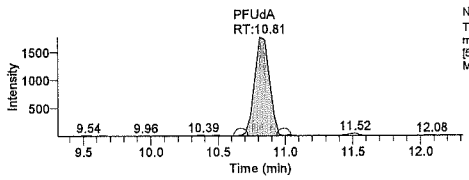
JUL 18 2016

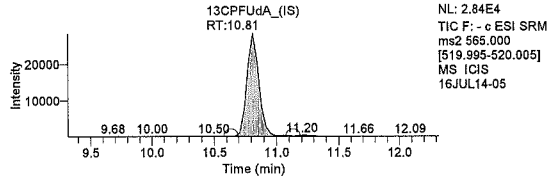
LCMSMS ANALYSIS REPORT



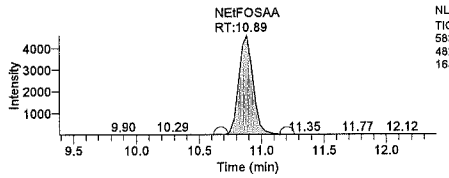


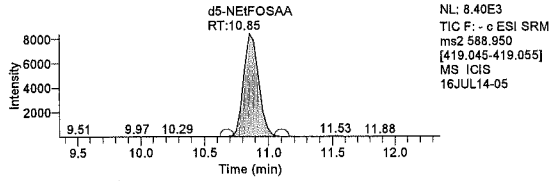
Component Name: PFUdA



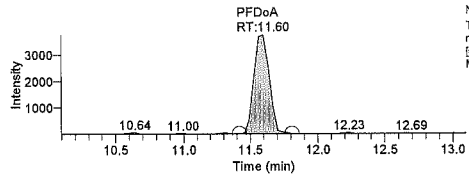


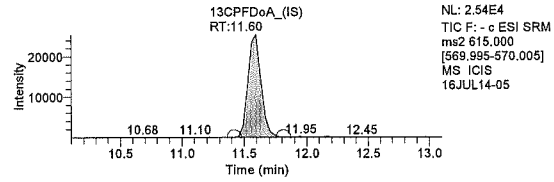
Component Name: NEtFOSAA



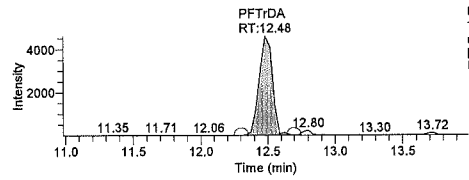


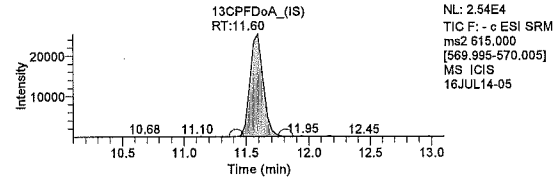
Component Name: PFDoA



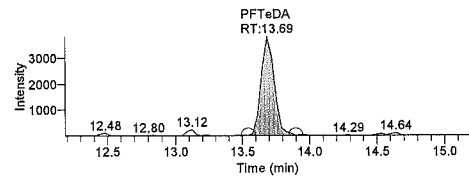


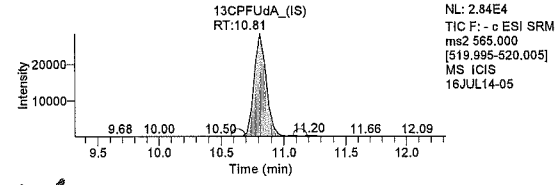
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

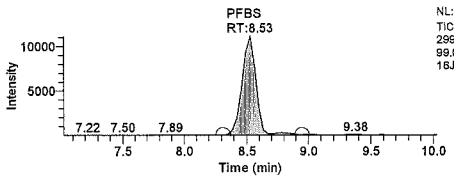
LCMSMS ANALYSIS REPORT

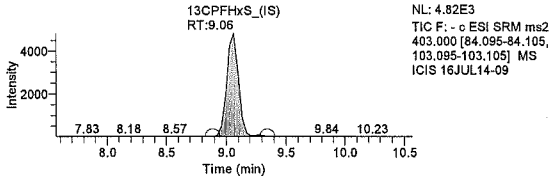
Sample Name:	CAL3	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CAL3	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-09		M\HWell_16.5minutes
Acquisition Date:	07/14/16 10:50:05 AM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:5	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

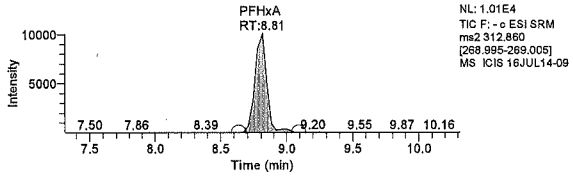
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.67	224484.36	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.32	207129.54	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.10	196784.77	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.49	187579.05	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.06	217862.12	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.81	128080.33	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.06	33266.54	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.61	18662.80	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.74	163204.64	N/A	N/A	N/A
NEtFOSAA	24.583	10.89	138555.76	40257.41	3.442	ng/g
NMeFOSAA	26.310	10.43	172322.54	48206.52	3.575	ng/g
PFBS	17.860	8.53	85851.64	33266.54	2.581	ng/g
PFDA	4.670	10.10	72159.56	196784.77	0.367	ng/g
PFDoA	9.533	11.49	163446.59	187579.05	0.871	ng/g
PFHxA	4.836	8.81	62484.48	128080.33	0.488	ng/g
PFHxS	18.257	9.06	66033.88	33266.54	1.985	ng/g
PFNA	5.398	9.67	98398.97	224484.36	0.438	ng/g
PFOA	5.553	9.31	142098.19	207129.54	0.686	ng/g
PFOS	19.914	9.60	35475.09	18662.80	1.901	ng/g
PFTeDA	10.048	13.44	119963.28	163204.64	0.735	ng/g
PFTrDA	10.206	12.31	181692.65	187579.05	0.969	ng/g
PFUdA	3.976	10.74	56961.38	163204.64	0.349	ng/g
PFhpA	5.059	9.06	89271.98	217862.12	0.410	ng/g
d3-NMeFOSAA	N/A	10.39	48206.52	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.86	40257.41	N/A	N/A	N/A

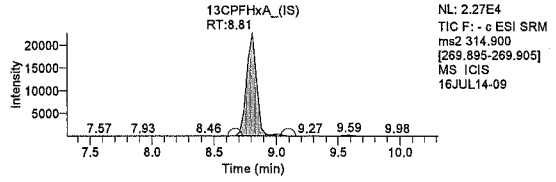
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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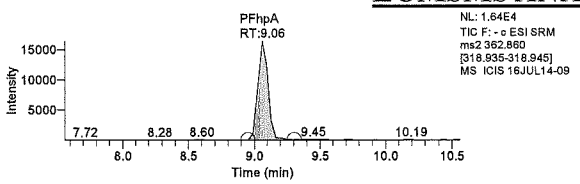
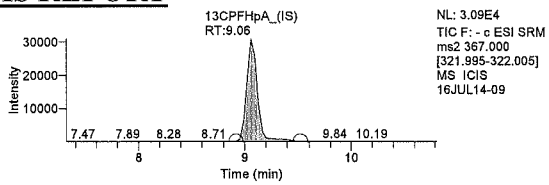
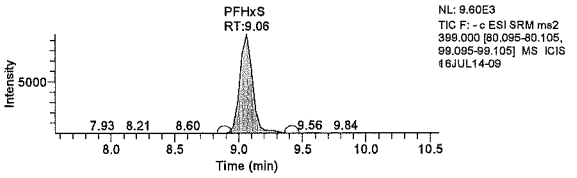
JUL 18 2016

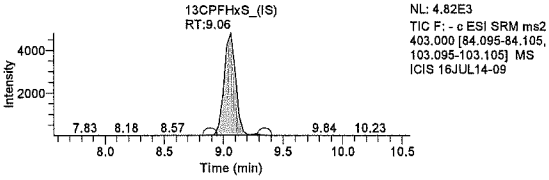
LCMSMS ANALYSIS REPORT



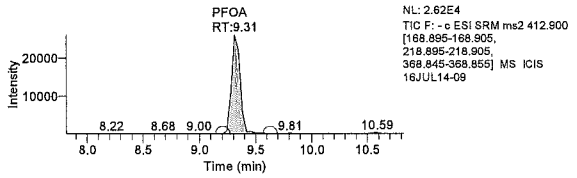


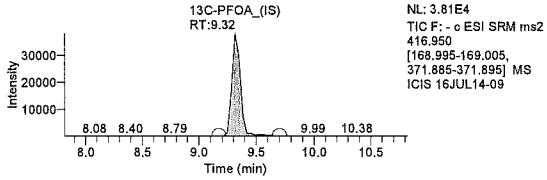
Component Name: PFHxS



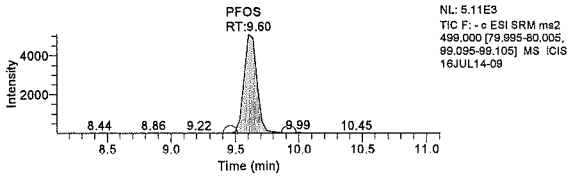


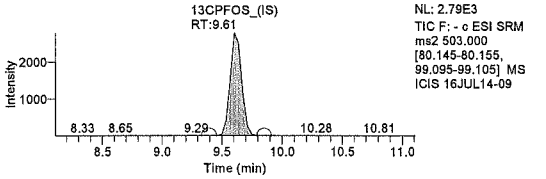
Component Name: PFOA



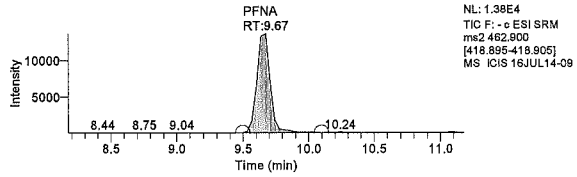


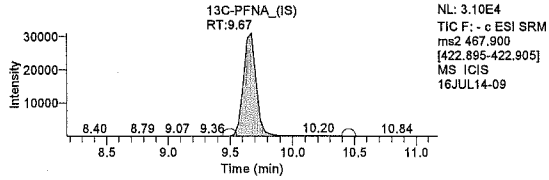
Component Name: PFOS



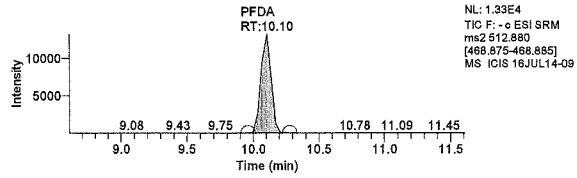


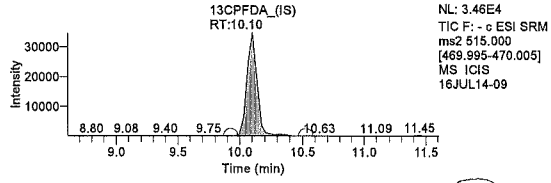
Component Name: PFNA





Component Name: PFDA





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Component Name: NMeFOSAA

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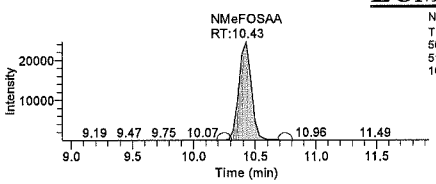
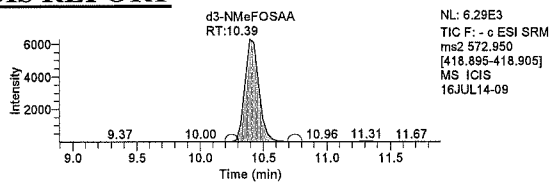
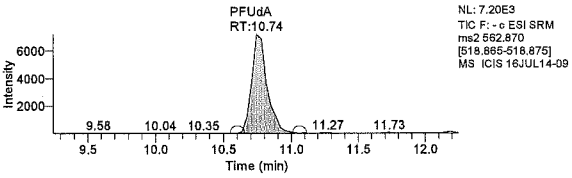
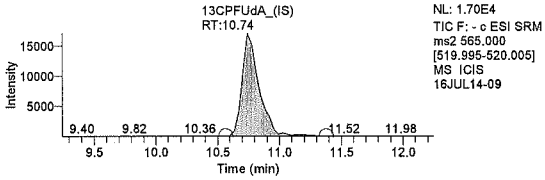


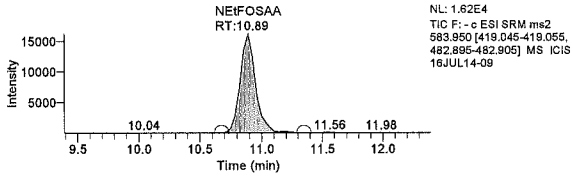


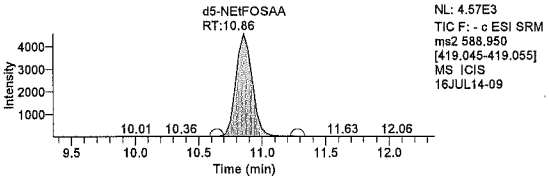
Component Name: PFUdA



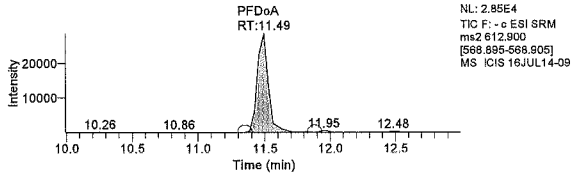


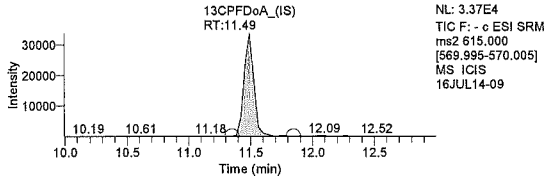
Component Name: NEtFOSAA



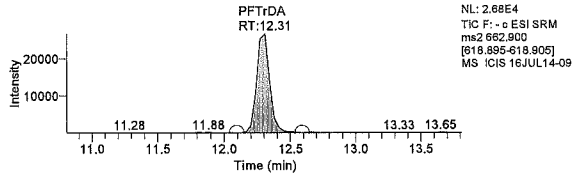


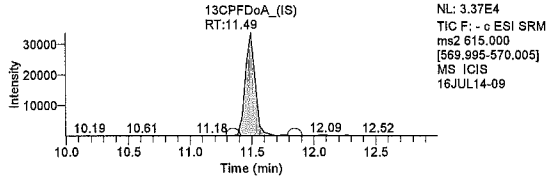
Component Name: PFDoA



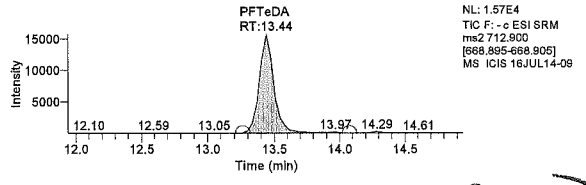


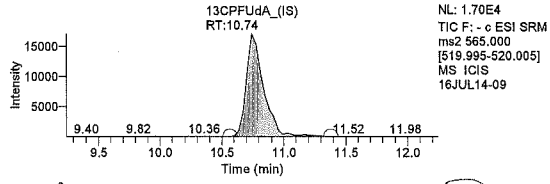
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd

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Jason W. Knight
Senior Chemist

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Lynn Dodd
Principal Specialist

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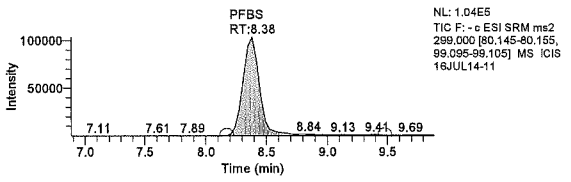
LCMSMS ANALYSIS REPORT

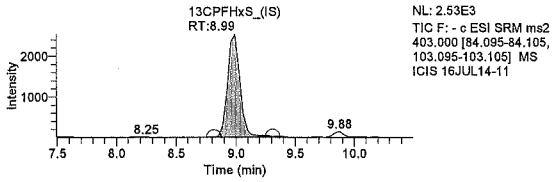
Sample Name:	CAL6	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CAL6	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-11		M\HWell_16.5minutes
Acquisition Date:	07/14/16 11:24:34 AM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:8	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

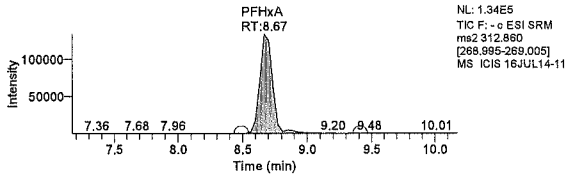
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.60	165305.61	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.28	170447.97	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.07	185886.07	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.32	150125.98	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.99	145784.54	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.67	124880.60	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.99	18432.30	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.57	15984.37	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.64	161994.79	N/A	N/A	N/A
NEtFOSAA	303.950	10.71	2151526.34	50828.90	42.329	ng/g
NMeFOSAA	303.504	10.35	2321257.18	57283.57	40.522	ng/g
PFBS	353.084	8.38	993059.71	18432.30	53.876	ng/g
PFDA	74.108	10.07	1093889.96	185886.07	5.885	ng/g
PFDoA	158.151	11.35	2166583.63	150125.98	14.432	ng/g
PFHxA	74.504	8.67	937317.86	124880.60	7.506	ng/g
PFHxS	353.625	8.99	726872.68	18432.30	39.435	ng/g
PFNA	76.388	9.60	1047617.14	165305.61	6.337	ng/g
PFOA	77.315	9.28	1646342.31	170447.97	9.659	ng/g
PFOS	303.267	9.57	466067.44	15984.37	29.158	ng/g
PFTeDA	151.612	13.33	1813529.58	161994.79	11.195	ng/g
PFTrDA	157.090	12.16	2245401.34	150125.98	14.957	ng/g
PFUdA	79.369	10.64	1170914.82	161994.79	7.228	ng/g
PFhpA	75.320	8.99	909338.98	145784.54	6.238	ng/g
d3-NMeFOSAA	N/A	10.36	57283.57	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.68	50828.90	N/A	N/A	N/A

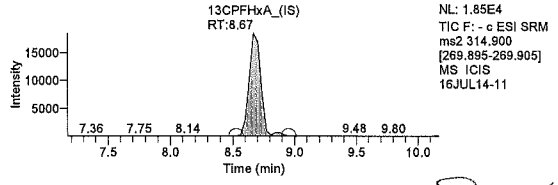
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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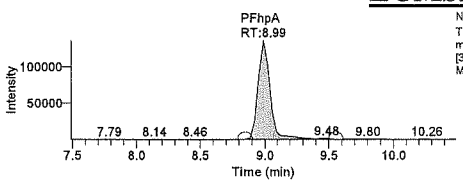
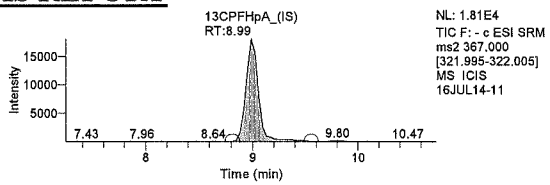
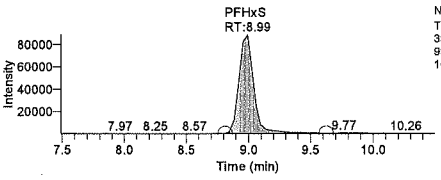
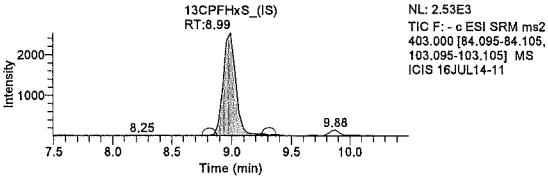


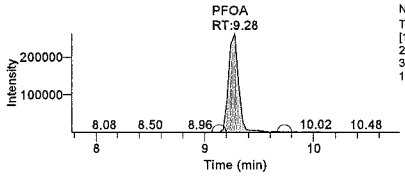


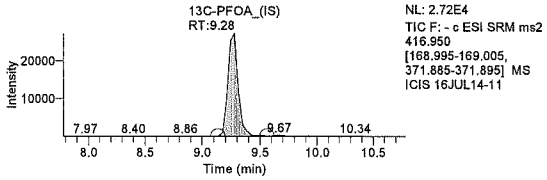
Component Name: PFHxS



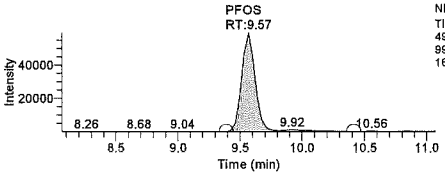


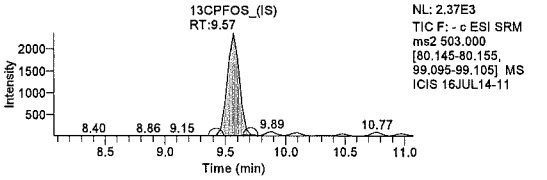
Component Name: PFOA



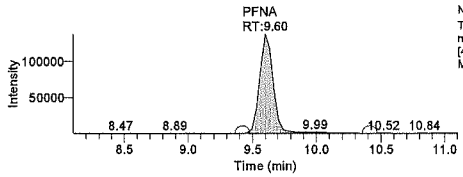


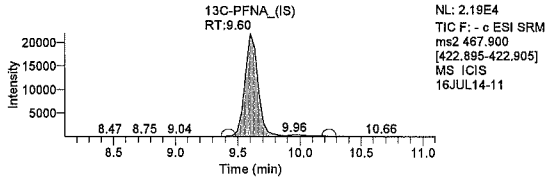
Component Name: PFOS



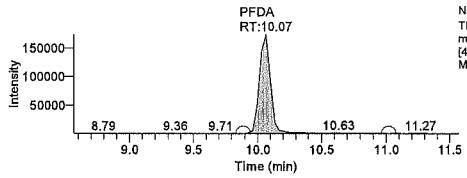


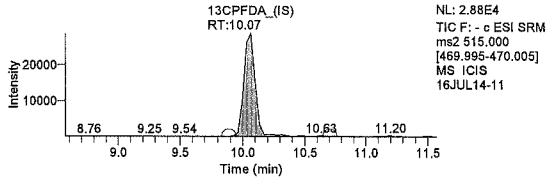
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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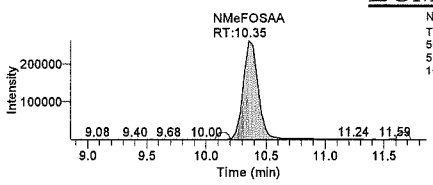
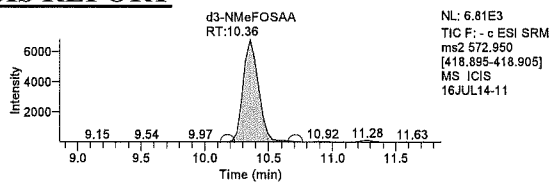
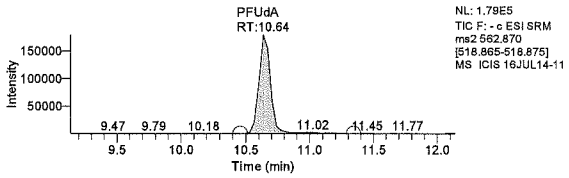
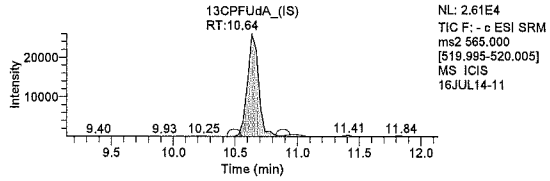


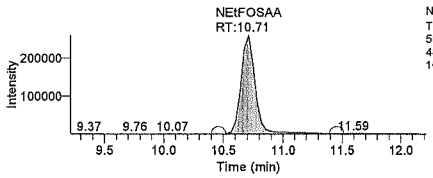


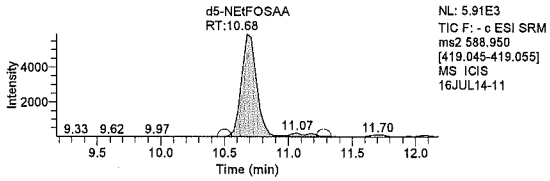
Component Name: PFUdA



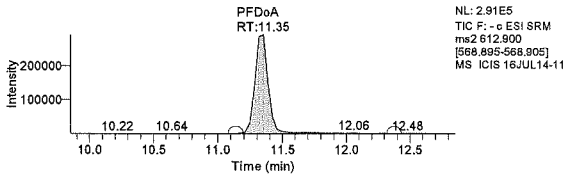


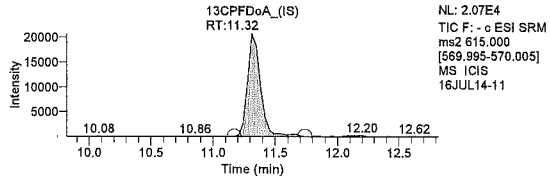
Component Name: NEtFOSAA



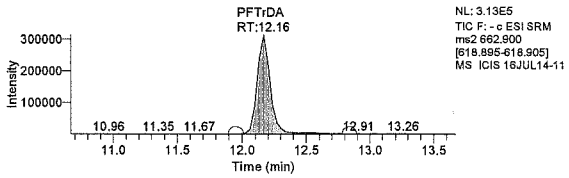


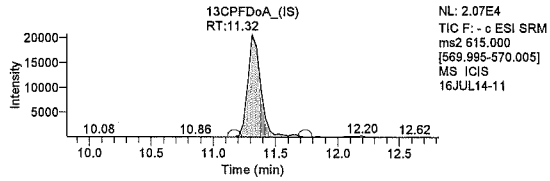
Component Name: PFDoA



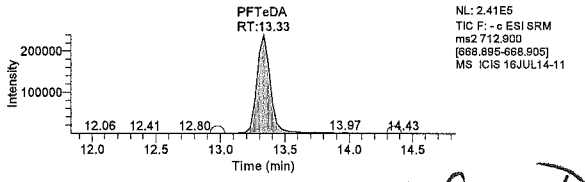


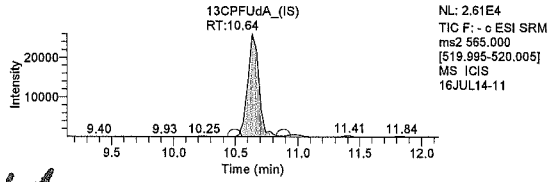
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
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Jason W. Knight
Senior Chemist

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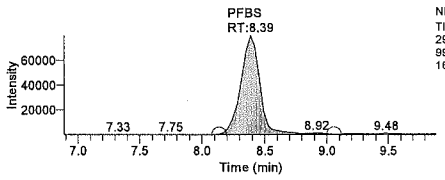
LCMSMS ANALYSIS REPORT

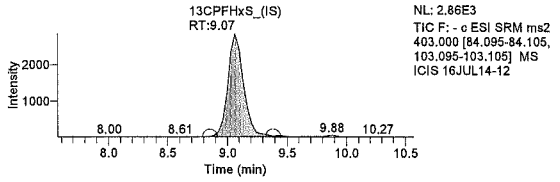
Sample Name:	CAL5	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CAL5	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-12		M\HWell_16.5minutes
Acquisition Date:	07/14/16 11:41:49 AM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:7	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

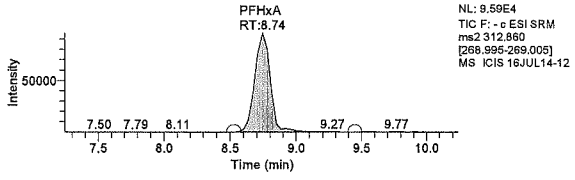
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.71	183043.00	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.42	183273.16	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.11	159841.42	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.46	159205.64	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.10	163402.26	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.74	120164.14	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.07	26194.70	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.64	18056.10	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.74	168321.86	N/A	N/A	N/A
NEtFOSAA	241.237	10.78	1686227.60	50186.50	33.599	ng/g
NMeFOSAA	244.478	10.43	1785516.75	54679.03	32.655	ng/g
PFBS	211.279	8.39	842877.85	26194.70	32.177	ng/g
PFDA	63.902	10.10	810987.67	159841.42	5.074	ng/g
PFDoA	117.496	11.46	1707046.04	159205.64	10.722	ng/g
PFHxA	64.303	8.74	778440.85	120164.14	6.478	ng/g
PFHxS	206.626	9.06	602992.76	26194.70	23.020	ng/g
PFNA	60.862	9.71	923857.07	183043.00	5.047	ng/g
PFOA	61.452	9.42	1406717.27	183273.16	7.676	ng/g
PFOS	233.443	9.68	405197.77	18056.10	22.441	ng/g
PFTeDA	120.815	13.44	1501337.03	168321.86	8.919	ng/g
PFTrDA	120.165	12.34	1821366.99	159205.64	11.440	ng/g
PFUdA	58.864	10.74	901719.17	168321.86	5.357	ng/g
PFhpA	62.717	9.10	848418.54	163402.26	5.192	ng/g
d3-NMeFOSAA	N/A	10.43	54679.03	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.79	50186.50	N/A	N/A	N/A

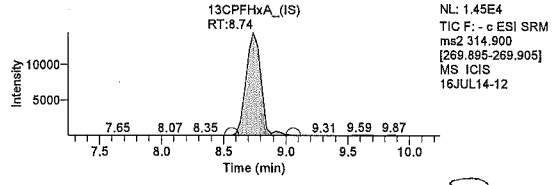
Component Name: PFBS





Component Name: PFHxA





Jason W. Knight
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Component Name: PFHxS

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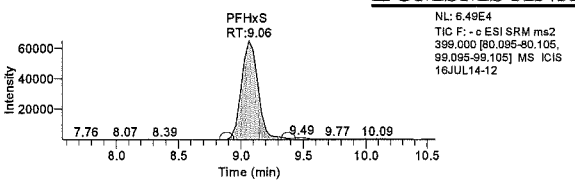
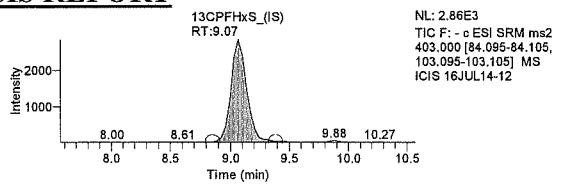
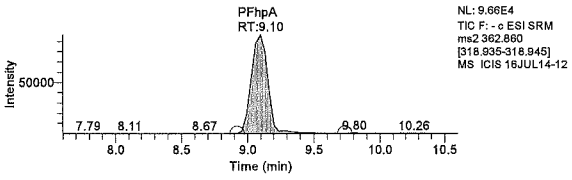
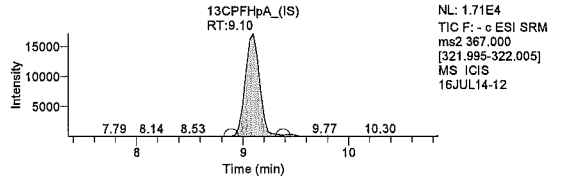


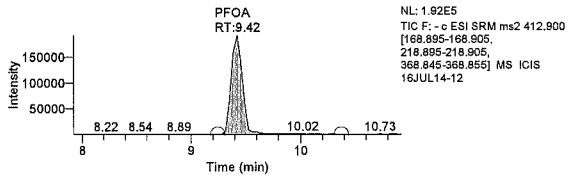


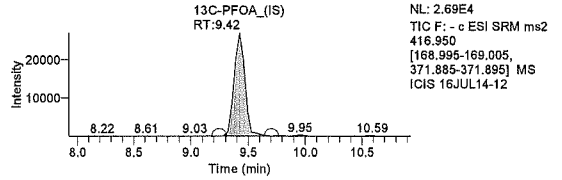
Component Name: PFhpA



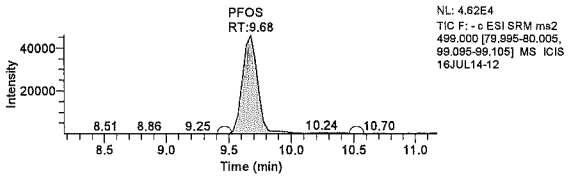


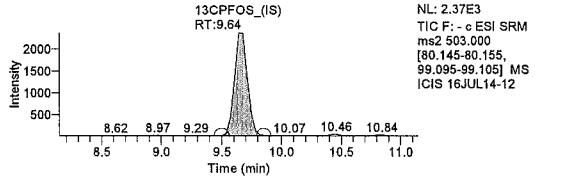
Component Name: PFOA



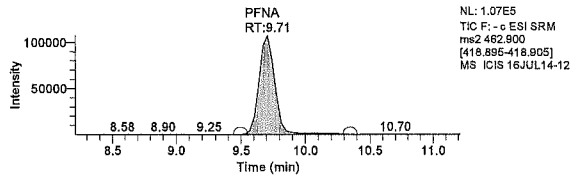


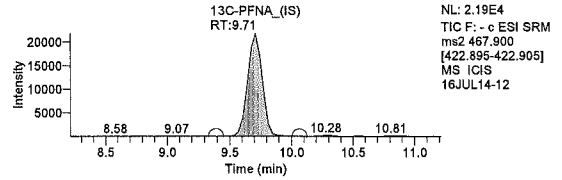
Component Name: PFOS



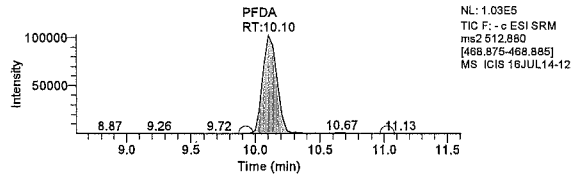


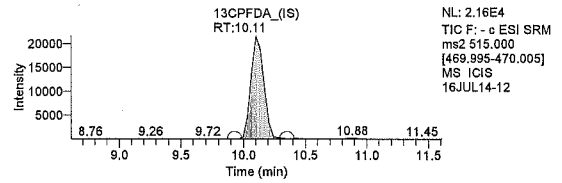
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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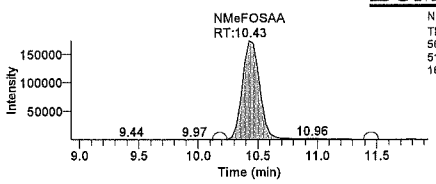
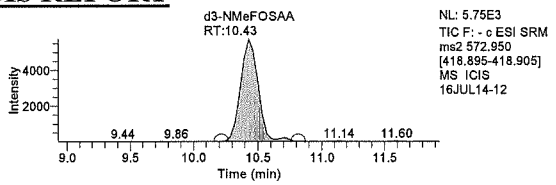
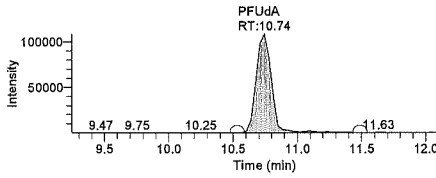
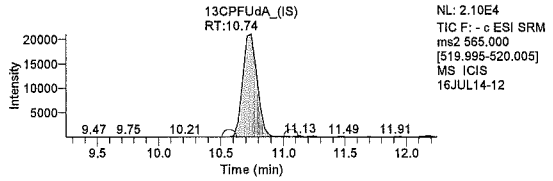


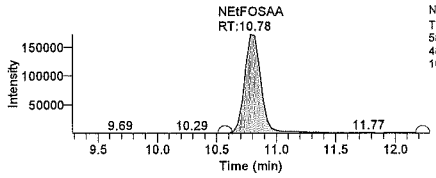


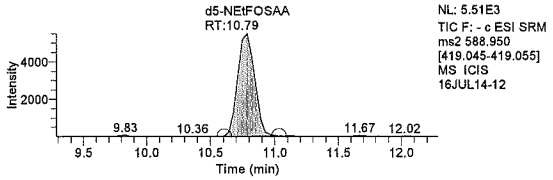
Component Name: PFUdA



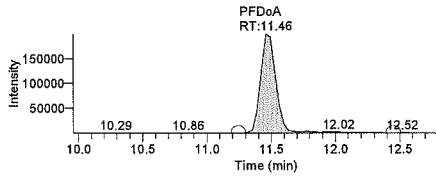


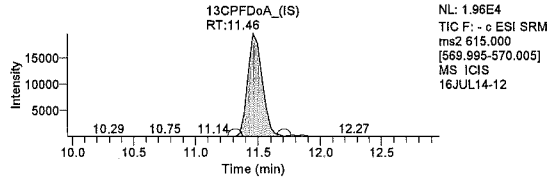
Component Name: NEtFOSAA



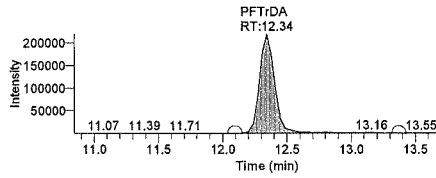


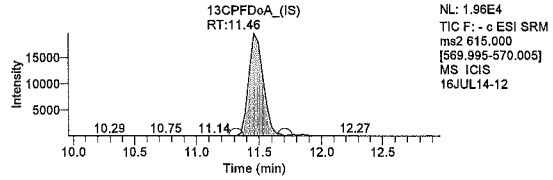
Component Name: PFDoA



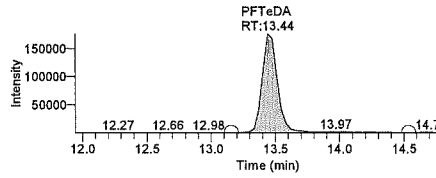


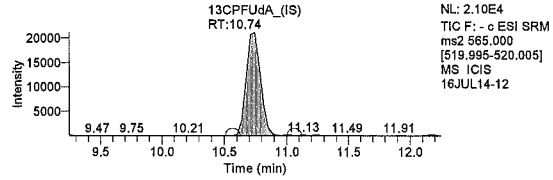
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

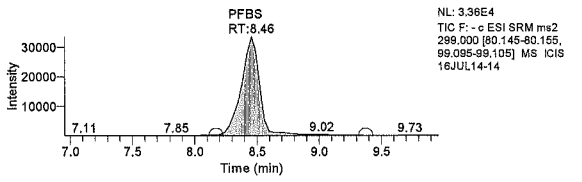
LCMSMS ANALYSIS REPORT

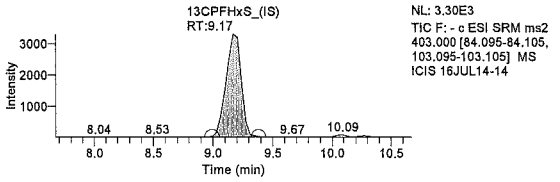
Sample Name:	CAL4	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CAL4	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-14		M\HWell_16.5minutes
Acquisition Date:	07/14/16 12:16:18 PM	Dilution Factor:	1.00
Sample Type:	Std Bracket	Instrument Model:	TSQ Quantum Access
Vial:	c:6	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

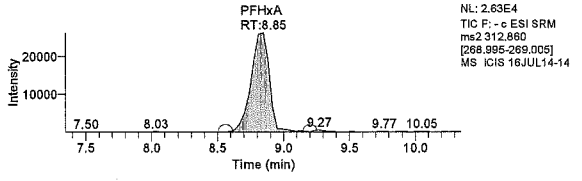
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.67	199529.94	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.39	184289.30	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.10	173660.00	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.49	164773.06	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.17	201678.93	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.85	115938.91	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.17	29220.27	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.64	15390.01	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.71	159639.75	N/A	N/A	N/A
NEtFOSAA	90.951	10.78	610090.72	48114.77	12.680	ng/g
NMeFOSAA	86.608	10.43	633286.78	54537.96	11.612	ng/g
PFBS	77.596	8.46	342502.32	29220.27	11.721	ng/g
PFDA	22.346	10.10	307618.00	173660.00	1.771	ng/g
PFDoA	45.002	11.49	676828.02	164773.06	4.108	ng/g
PFHxA	21.415	8.85	250180.20	115938.91	2.158	ng/g
PFHxS	81.307	9.17	263731.55	29220.27	9.026	ng/g
PFNA	22.555	9.67	371926.95	199529.94	1.864	ng/g
PFOA	20.733	9.35	476231.27	184289.30	2.584	ng/g
PFOS	103.899	9.64	153587.30	15390.01	9.980	ng/g
PFTeDA	47.700	13.33	561470.75	159639.75	3.517	ng/g
PFTrDA	42.691	12.41	669340.58	164773.06	4.062	ng/g
PFUdA	22.803	10.71	329955.16	159639.75	2.067	ng/g
PFhpA	22.058	9.17	366994.77	201678.93	1.820	ng/g
d3-NMeFOSAA	N/A	10.43	54537.96	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.78	48114.77	N/A	N/A	N/A

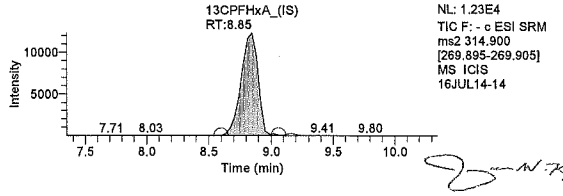
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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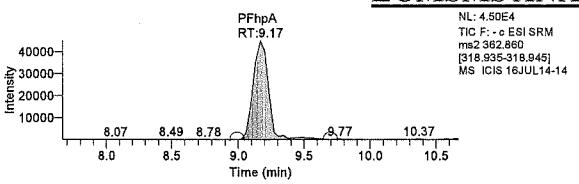
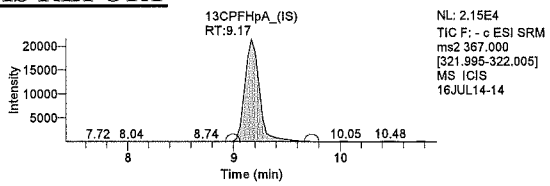
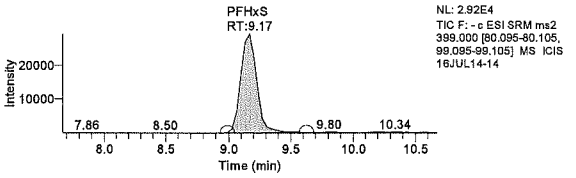
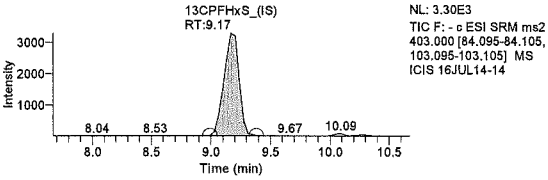


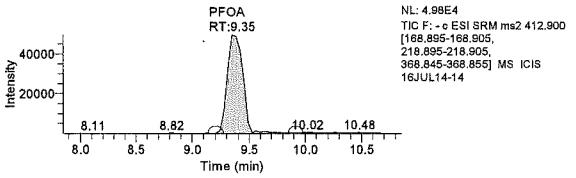


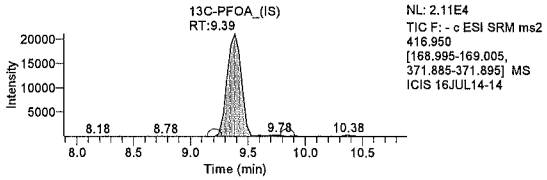
Component Name: PFHxS



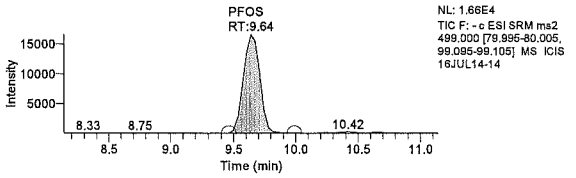


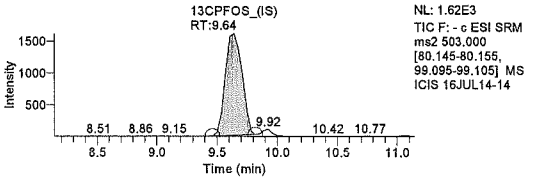
Component Name: PFOA



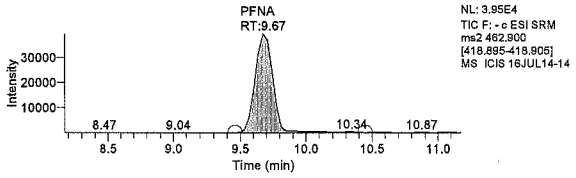


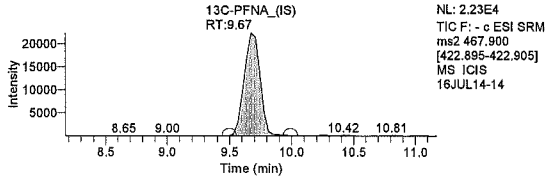
Component Name: PFOS



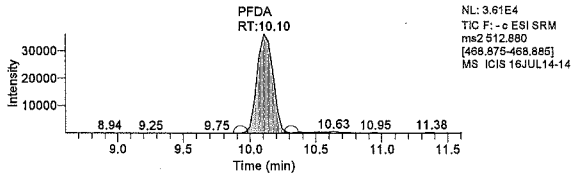


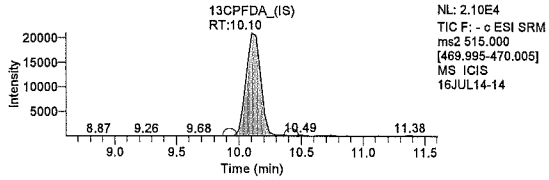
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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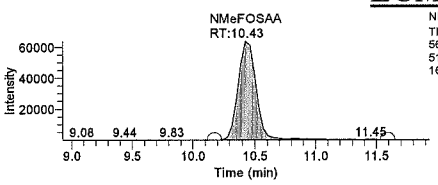
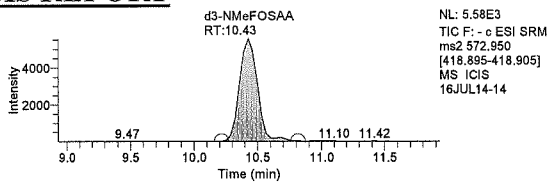
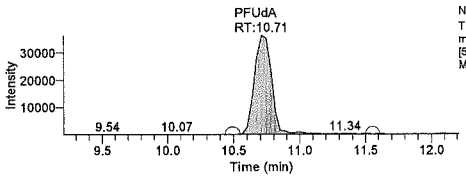
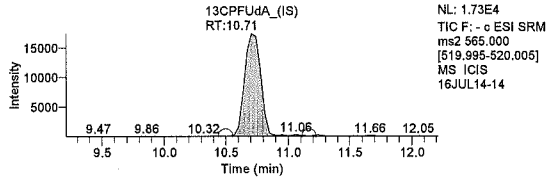


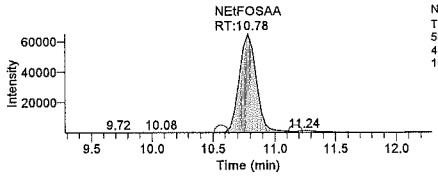


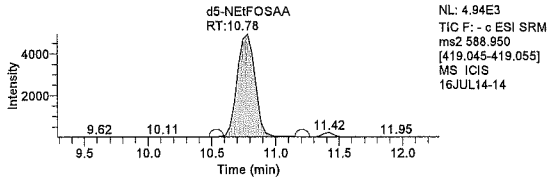
Component Name: PFUdA



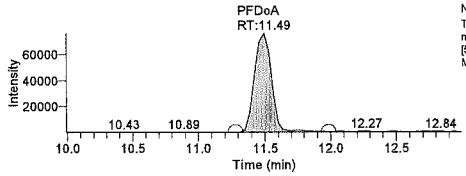


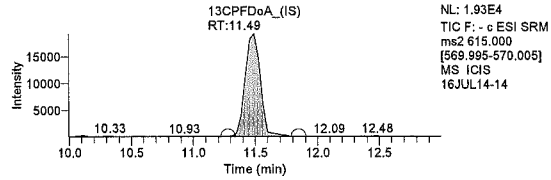
Component Name: NEtFOSAA



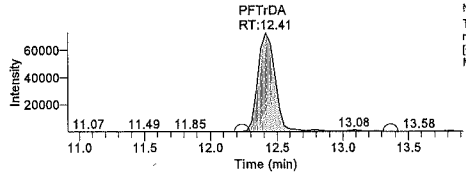


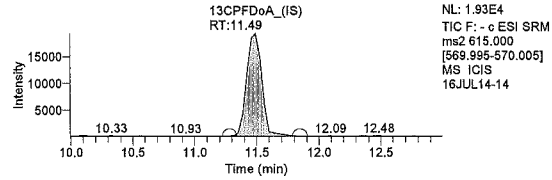
Component Name: PFDoA



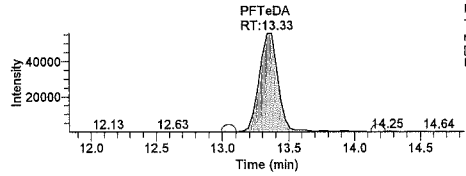


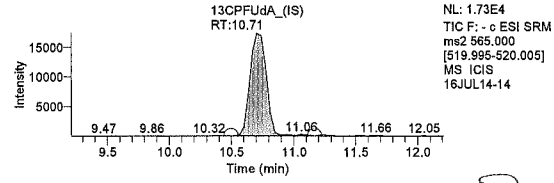
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist
JUL 18 2016

Lynn Dodd
Principal Specialist

Monday, July 18, 2016, 07:24:33

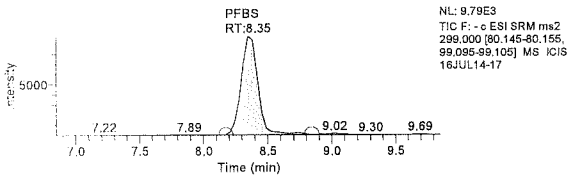
LCMSMS ANALYSIS REPORT

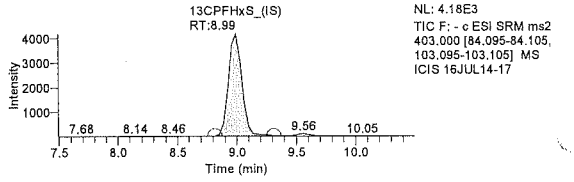
Sample Name:	CCV1	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CCV1	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-17		M\HWell_16.5minutes
Acquisition Date:	07/14/16 01:09:33 PM	Dilution Factor:	1.00
Sample Type:	QC	Instrument Model:	TSQ Quantum Access
Vial:	c:5	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

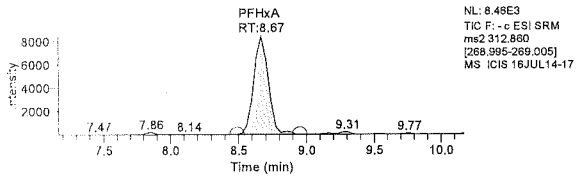
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.60	234740.48	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.28	191315.95	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.07	171483.72	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.46	180776.14	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.99	202060.69	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.67	118636.57	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.99	33243.42	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.57	19401.47	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.71	167243.01	N/A	N/A	N/A
NEtFOSAA	22.181	10.75	172184.71	55411.76	3.107	ng/g
NMeFOSAA	21.289	10.39	173375.28	59673.55	2.905	ng/g
PFBS	18.403	8.35	88554.67	33243.42	2.664	ng/g
PFDA	5.533	10.07	74646.93	171483.72	0.435	ng/g
PFDoA	10.210	11.42	168691.46	180776.14	0.933	ng/g
PFHxA	5.227	8.67	62542.00	118636.57	0.527	ng/g
PFHxS	18.762	8.99	67861.99	33243.42	2.041	ng/g
PFNA	4.730	9.64	89845.28	234740.48	0.383	ng/g
PFOA	4.768	9.28	112463.33	191315.95	0.588	ng/g
PFOS	22.814	9.57	42292.50	19401.47	2.180	ng/g
PFTeDA	11.072	13.54	135573.96	167243.01	0.811	ng/g
PFTrDA	9.735	12.27	166985.75	180776.14	0.924	ng/g
PFUdA	5.927	10.71	88145.30	167243.01	0.527	ng/g
PFhpA	5.430	8.99	89019.76	202060.69	0.441	ng/g
d3-NMeFOSAA	N/A	10.39	59673.55	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.75	55411.76	N/A	N/A	N/A

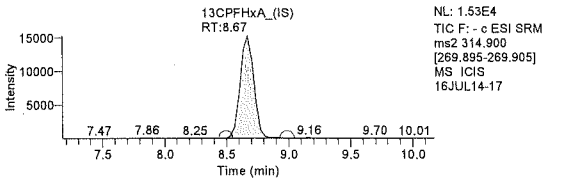
Component Name: PFBS





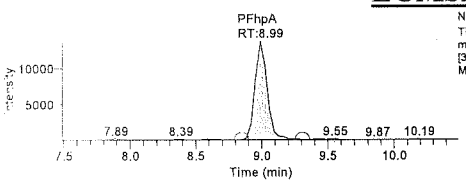
Component Name: PFHxA

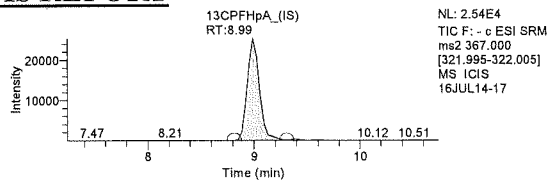




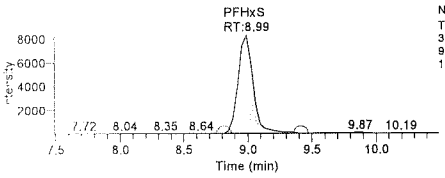
Component Name: PFhpA

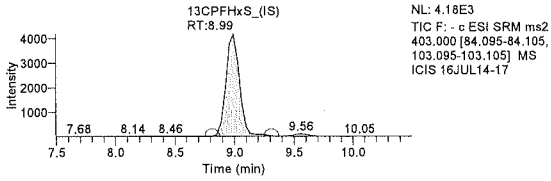
LCMSMS ANALYSIS REPORT



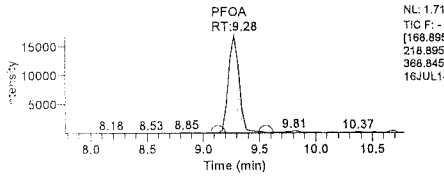


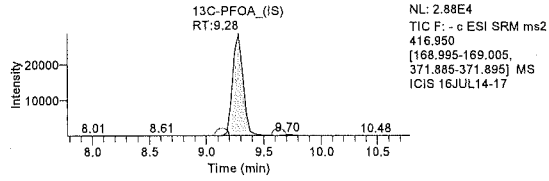
Component Name: PFHxS



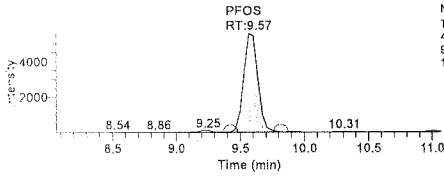


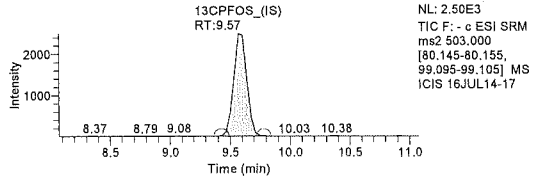
Component Name: PFOA



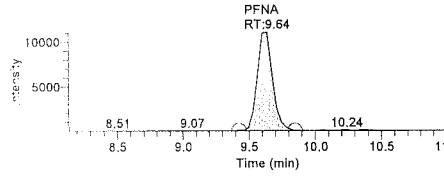


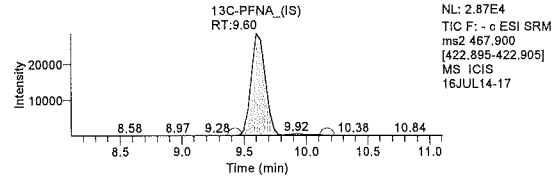
Component Name: PFOS



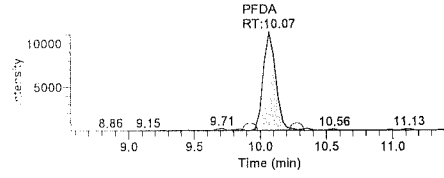


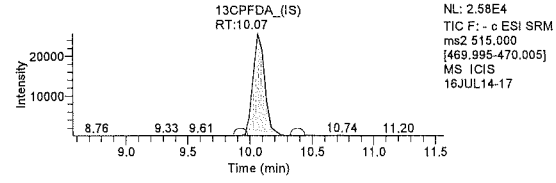
Component Name: PFNA





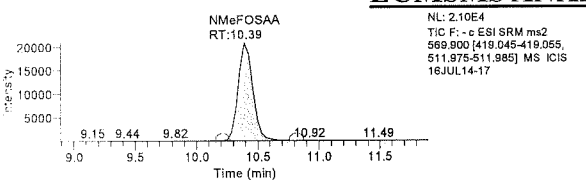
Component Name: PFDA

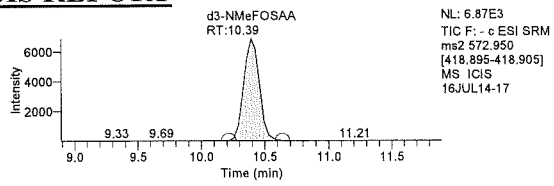




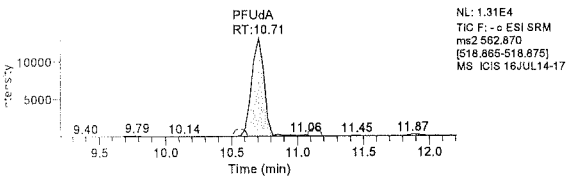
Component Name: NMeFOSAA

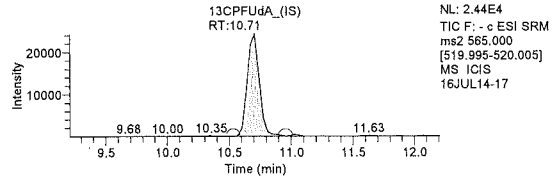
LCMSMS ANALYSIS REPORT



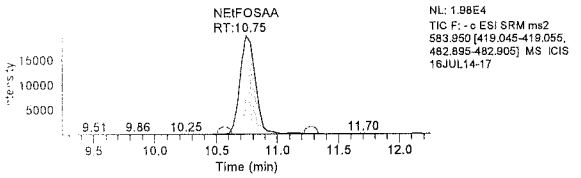


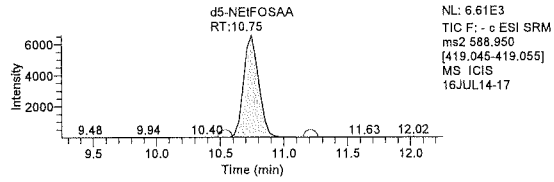
Component Name: PFUdA



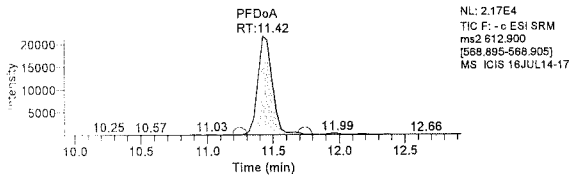


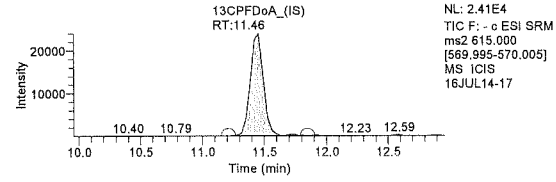
Component Name: NEtFOSAA



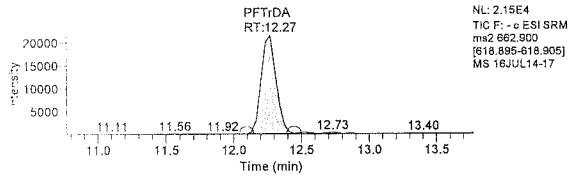


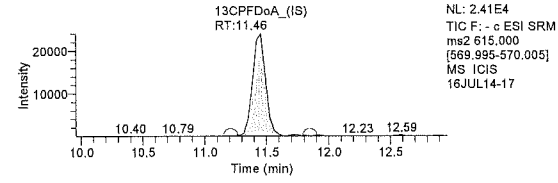
Component Name: PFDoA



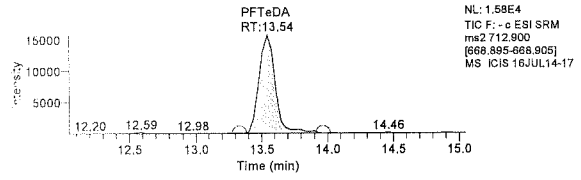


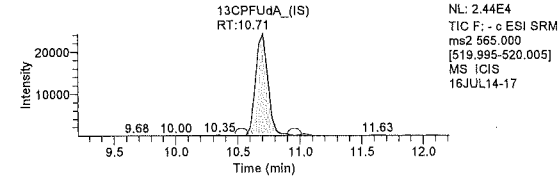
Component Name: PFTrDA





Component Name: PFTeDA





CMM 7/12
8/10/16

Jason W. Knight
Senior Chemist

AUG 10 2016

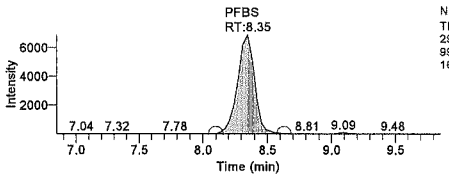
LCMSMS ANALYSIS REPORT

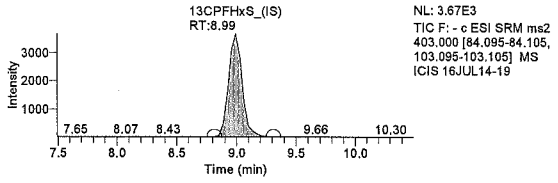
Sample Name:	ICV1	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	ICV1	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-19		M\HWell_16.5minutes
Acquisition Date:	07/14/16 01:47:08 PM	Dilution Factor:	1.00
Sample Type:	QC	Instrument Model:	TSQ Quantum Access
Vial:	c:9	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

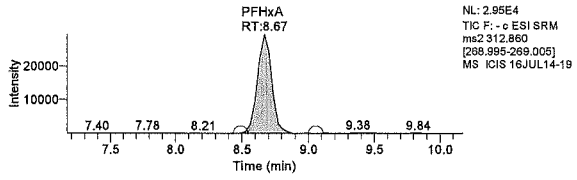
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.60	240846.38	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.28	183650.31	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.10	165351.18	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.42	172447.88	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.99	167721.46	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.67	137739.29	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.99	29194.99	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.57	17676.24	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.71	192714.36	N/A	N/A	N/A
NEtFOSAA	25.012	10.75	154020.46	43988.58	3.501	ng/g
NMeFOSAA	15.580	10.43	131626.30	61381.75	2.144	ng/g
PFBS	14.904	8.35	62137.85	29194.99	2.128	ng/g
PFDA	21.030	10.10	275605.63	165351.18	1.667	ng/g
PFDoA	17.208	11.42	271017.08	172447.88	1.572	ng/g
PFHxA	15.851	8.67	220022.81	137739.29	1.597	ng/g
PFHxS	16.305	8.99	51588.70	29194.99	1.767	ng/g
PFNA	14.038	9.60	278471.93	240846.38	1.156	ng/g
PFOA	16.286	9.28	372446.05	183650.31	2.028	ng/g
PFOS	15.982	9.57	26915.23	17676.24	1.523	ng/g
PFTeDA	15.500	13.30	219277.84	192714.36	1.138	ng/g
PFTrDA	12.985	12.41	212668.63	172447.88	1.233	ng/g
PFUdA	18.245	10.71	318172.34	192714.36	1.651	ng/g
PFhpA	21.118	8.99	292126.93	167721.46	1.742	ng/g
d3-NMeFOSAA	N/A	10.39	61381.75	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.75	43988.58	N/A	N/A	N/A

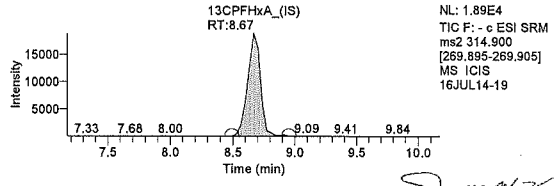
Component Name: PFBS





Component Name: PFHxA



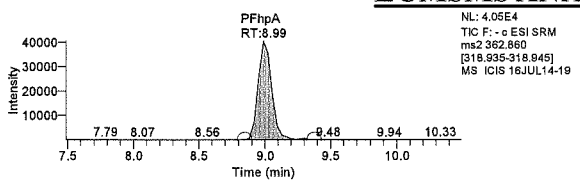


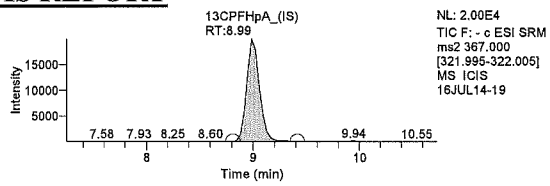
Jason W. Knight
Senior Chemist

Component Name: PFHpA

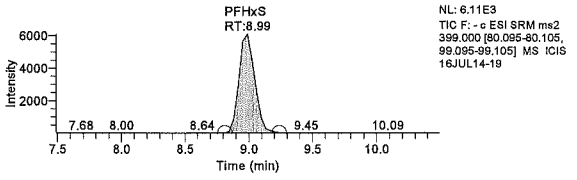
JUL 18 2016

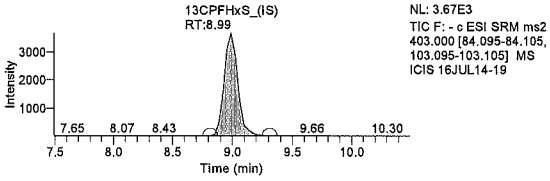
LCMSMS ANALYSIS REPORT



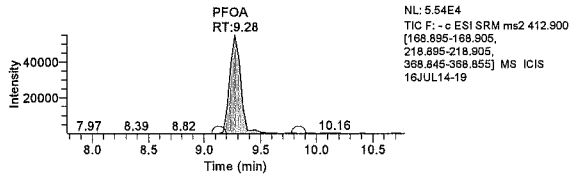


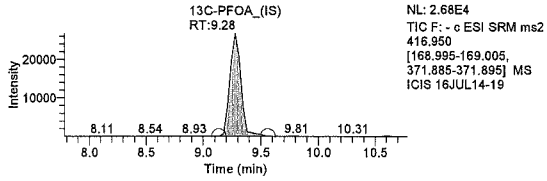
Component Name: PFHxS



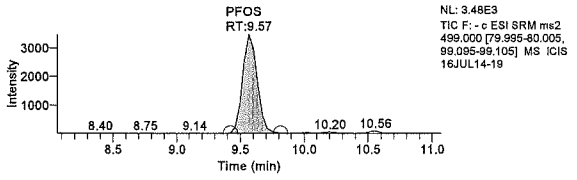


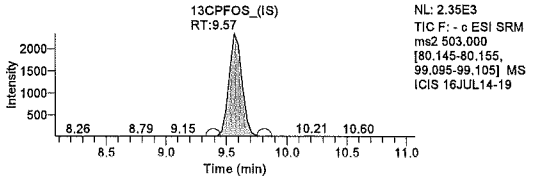
Component Name: PFOA



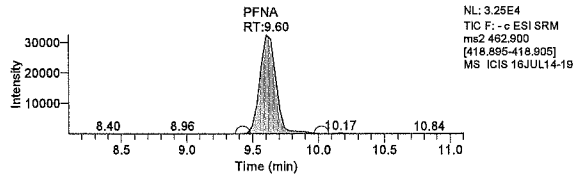


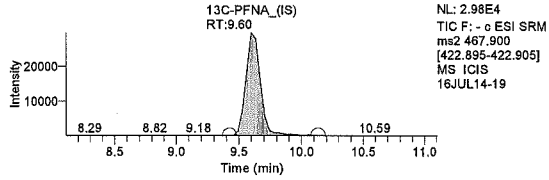
Component Name: PFOS



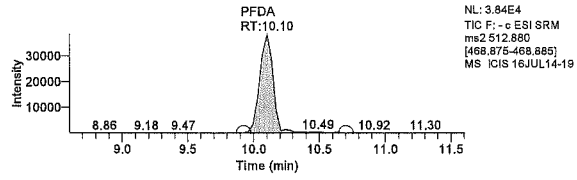


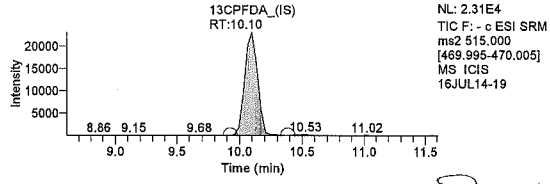
Component Name: PFNA





Component Name: PFDA





Jason W. Knight
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Component Name: NMeFOSAA

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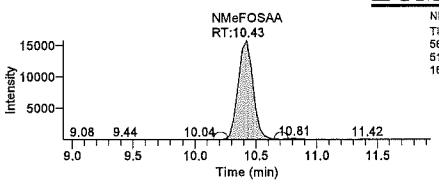
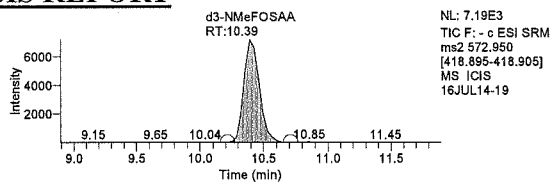
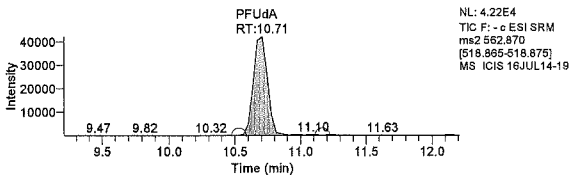
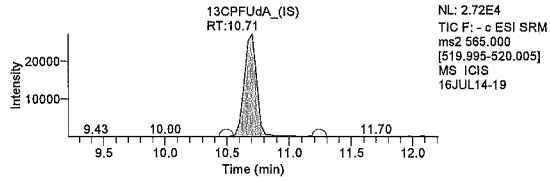


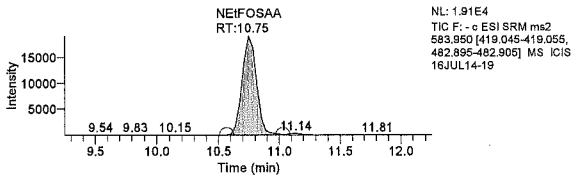


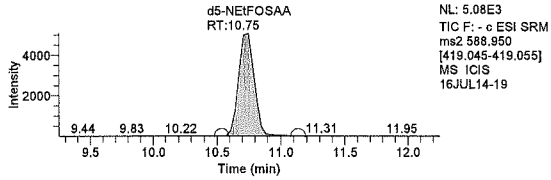
Component Name: PFUdA



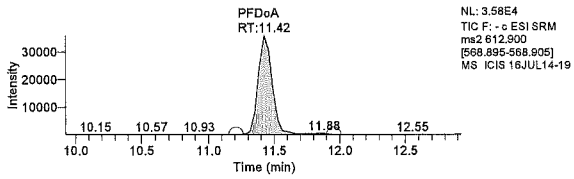


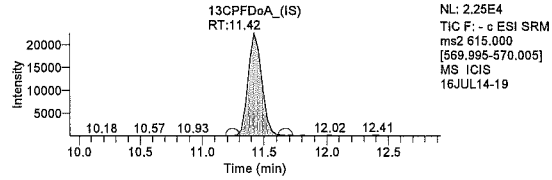
Component Name: NEtFOSAA



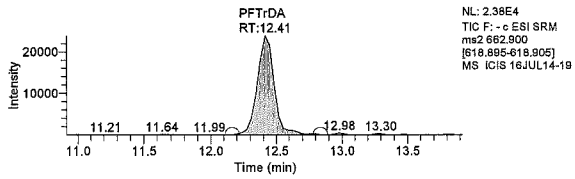


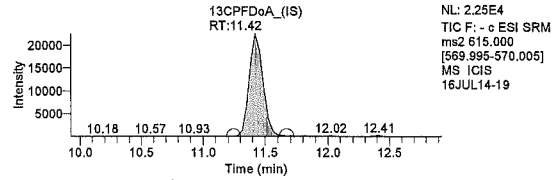
Component Name: PFDoA



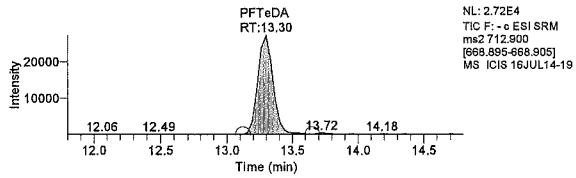


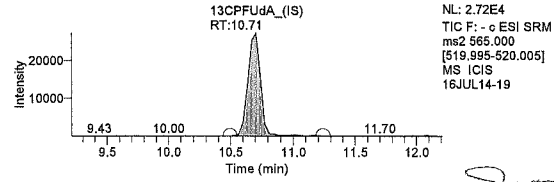
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd

JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

Monday, July 18, 2016, 07:24:36

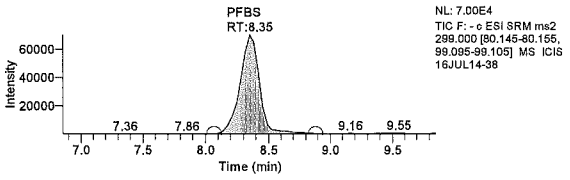
LCMSMS ANALYSIS REPORT

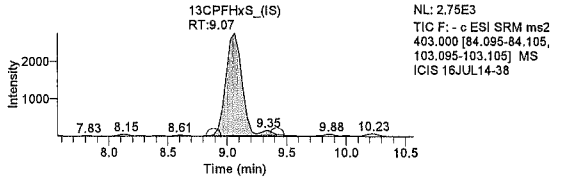
Sample Name:	CCV3	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CCV3	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-38		M\HWell_16.5minutes
Acquisition Date:	07/14/16 07:19:46 PM	Dilution Factor:	1.00
Sample Type:	QC	Instrument Model:	TSQ Quantum Access
Vial:	c:7	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

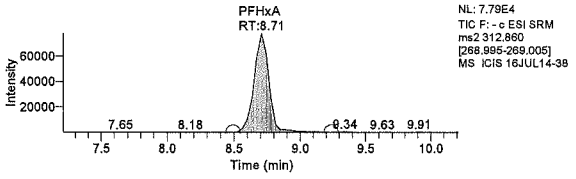
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.71	183356.14	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.35	145747.48	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.14	167414.00	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.74	150119.49	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.06	141068.72	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.71	97664.82	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.07	25916.79	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.64	13347.10	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.78	144638.61	N/A	N/A	N/A
NEtFOSAA	236.133	10.85	1684413.38	51215.32	32.889	ng/g
NMeFOSAA	223.829	10.50	1803368.08	60308.85	29.902	ng/g
PFBS	190.823	8.35	752809.62	25916.79	29.047	ng/g
PFDA	56.767	10.14	754487.79	167414.00	4.507	ng/g
PFDoA	119.826	11.74	1641537.03	150119.49	10.935	ng/g
PFHxA	61.127	8.71	601441.87	97664.82	6.158	ng/g
PFHxS	205.693	9.06	593895.88	25916.79	22.915	ng/g
PFNA	53.474	9.71	812873.01	183356.14	4.433	ng/g
PFOA	61.580	9.35	1121017.61	145747.48	7.692	ng/g
PFOS	297.065	9.68	381207.61	13347.10	28.561	ng/g
PFTeDA	122.608	13.40	1309259.85	144638.61	9.052	ng/g
PFTrDA	121.007	12.41	1729458.84	150119.49	11.521	ng/g
PFUdA	65.416	10.78	861320.99	144638.61	5.955	ng/g
PFhpA	59.153	9.06	690762.92	141068.72	4.897	ng/g
d3-NMeFOSAA	N/A	10.46	60308.85	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.82	51215.32	N/A	N/A	N/A

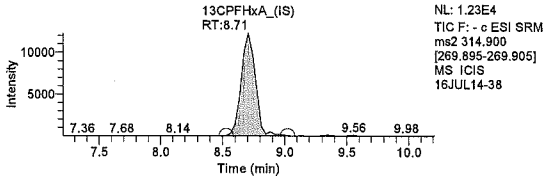
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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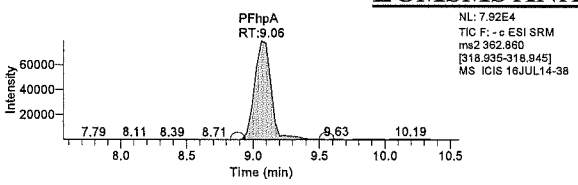
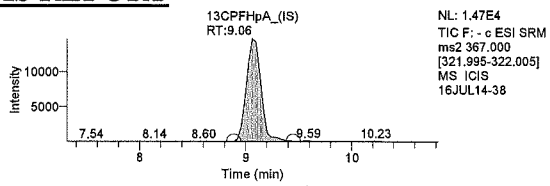
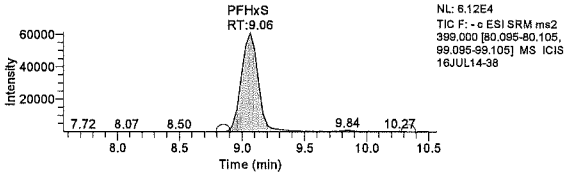
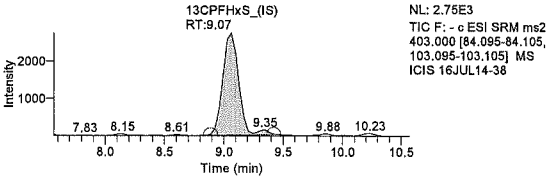


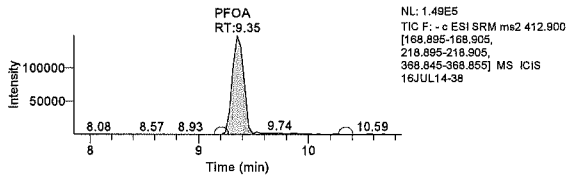


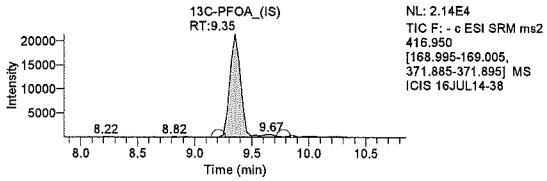
Component Name: PFHxS



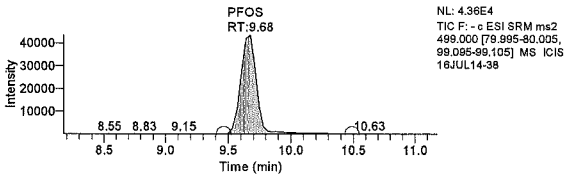


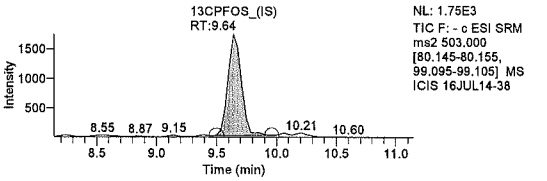
Component Name: PFOA



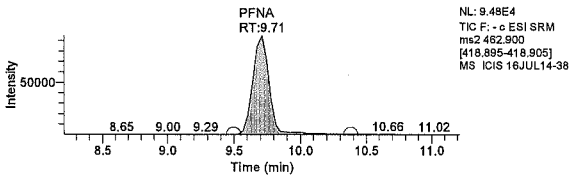


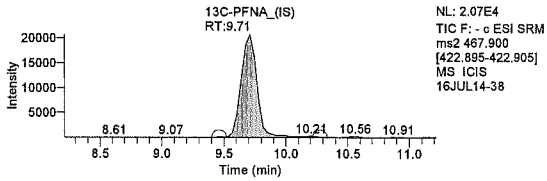
Component Name: PFOS



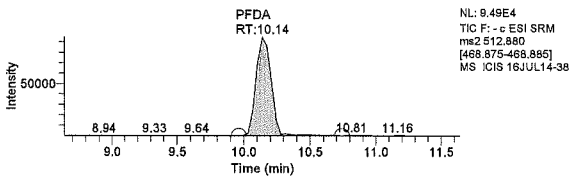


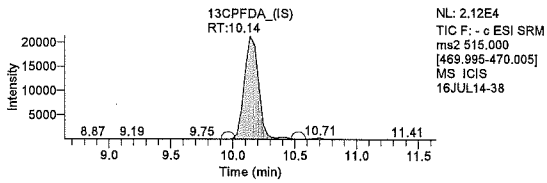
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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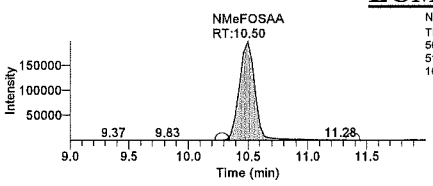
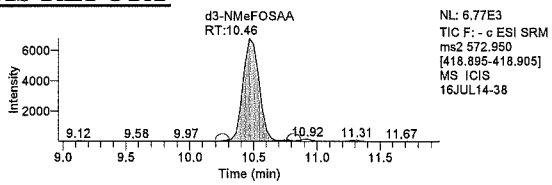
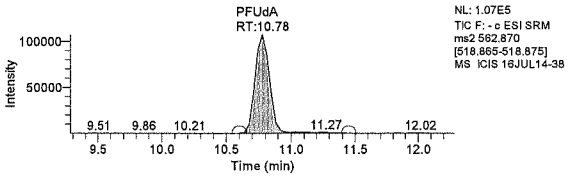
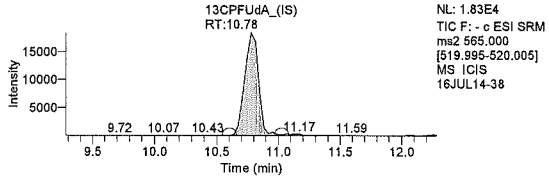


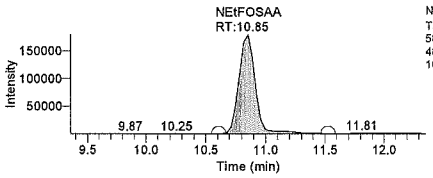


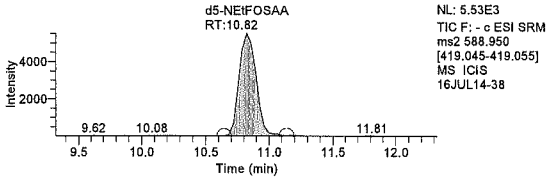
Component Name: PFUdA



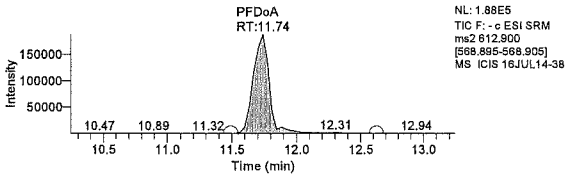


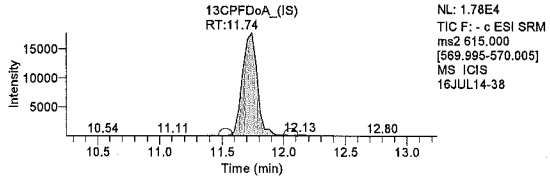
Component Name: NEtFOSAA



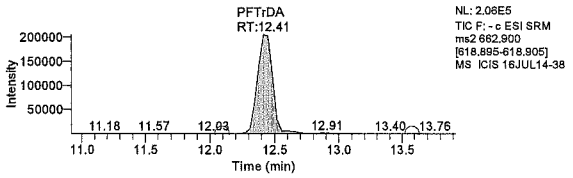


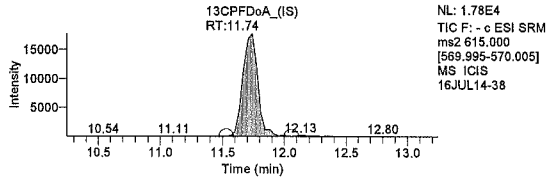
Component Name: PFDoA



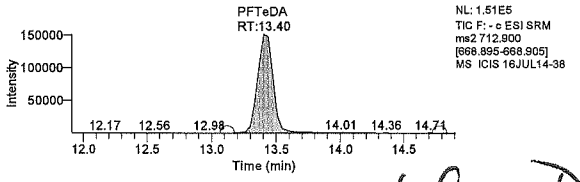


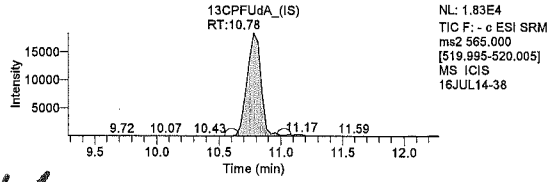
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

LCMSMS ANALYSIS REPORT

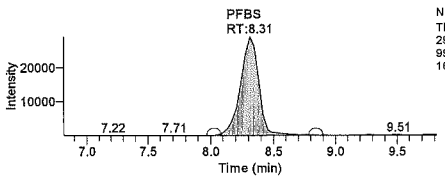
Sample Name:	CCV2	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	CCV2	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-44		M\HWell_16.5minutes
Acquisition Date:	07/14/16 09:03:13 PM	Dilution Factor:	1.00
Sample Type:	QC	Instrument Model:	TSQ Quantum Access
Vial:	c:6	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

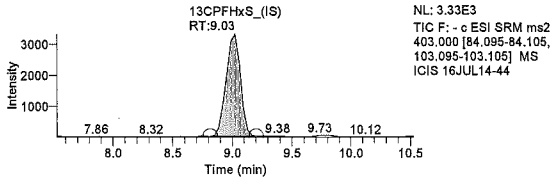
Extracted Ion Chromatogram

Quan Peak Table

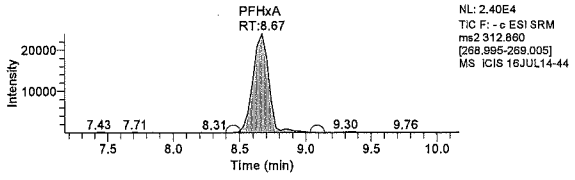
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.71	172557.51	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.31	145998.42	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.24	160307.61	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.63	155233.28	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.02	168360.10	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.67	94786.91	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.03	28110.98	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.67	16786.21	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.88	165741.93	N/A	N/A	N/A
NEtFOSAA	99.249	10.96	711789.08	51448.25	13.835	ng/g
NMeFOSAA	98.942	10.57	672162.55	50706.60	13.256	ng/g
PFBS	68.250	8.31	289300.24	28110.98	10.291	ng/g
PFDA	21.195	10.24	269296.06	160307.61	1.680	ng/g
PFDoA	49.078	11.63	695373.30	155233.28	4.480	ng/g
PFHxA	20.780	8.67	198473.48	94786.91	2.094	ng/g
PFHxS	77.479	8.99	241701.81	28110.98	8.598	ng/g
PFNA	19.813	9.71	282334.71	172557.51	1.636	ng/g
PFOA	21.010	9.31	382335.11	145998.42	2.619	ng/g
PFOS	86.341	9.67	139169.81	16786.21	8.291	ng/g
PFTeDA	42.322	13.54	517070.09	165741.93	3.120	ng/g
PFTrDA	42.503	12.41	627811.01	155233.28	4.044	ng/g
PFUdA	23.101	10.88	347065.79	165741.93	2.094	ng/g
PFhpA	19.058	9.02	264471.36	168360.10	1.571	ng/g
d3-NMeFOSAA	N/A	10.57	50706.60	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.96	51448.25	N/A	N/A	N/A

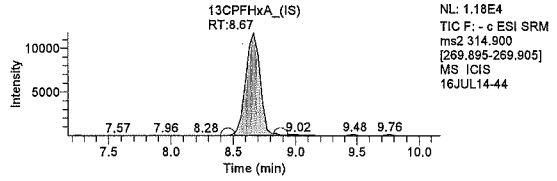
Component Name: PFBS





Component Name: PFHxA





Component Name: PFHxS

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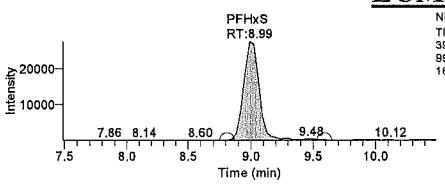
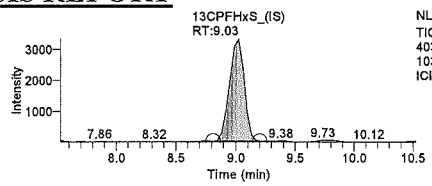
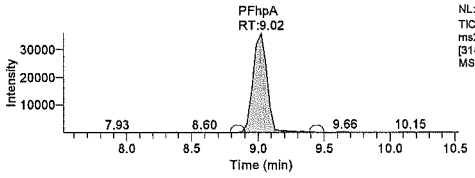
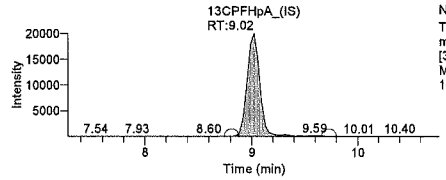


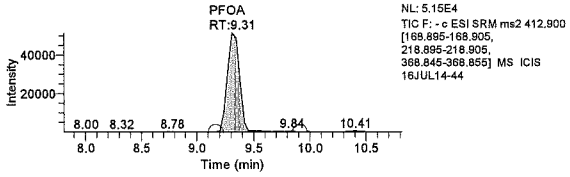


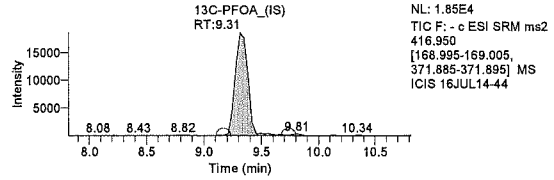
Component Name: PFhpA



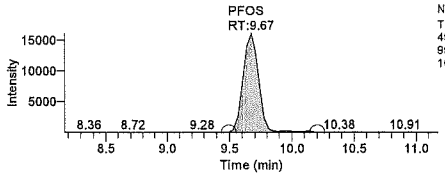


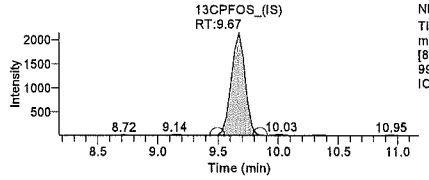
Component Name: PFOA



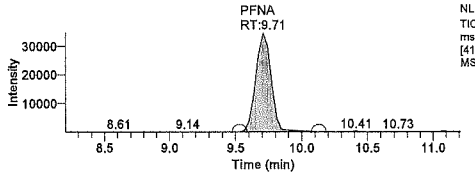


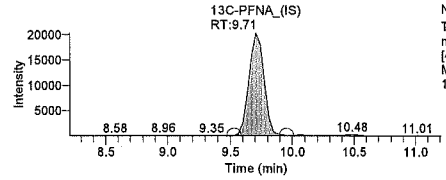
Component Name: PFOS



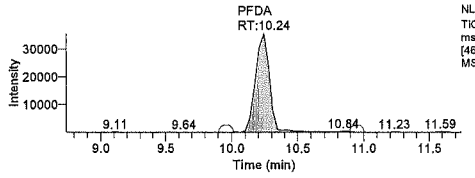


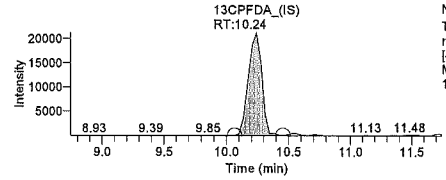
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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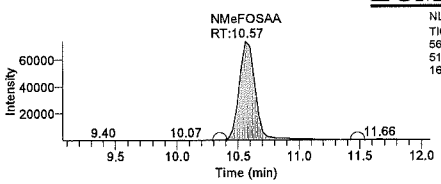
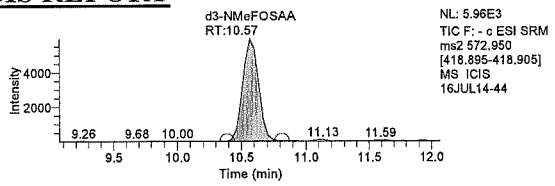
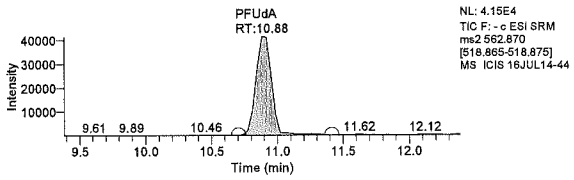
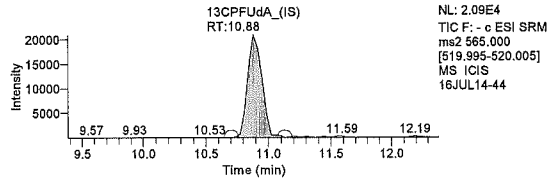


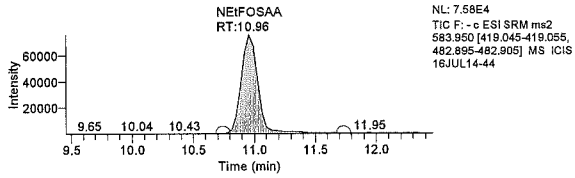


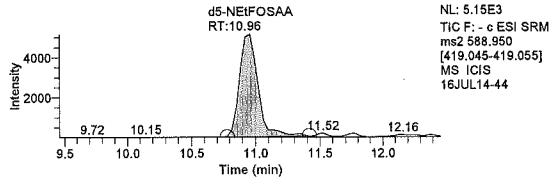
Component Name: PFUdA



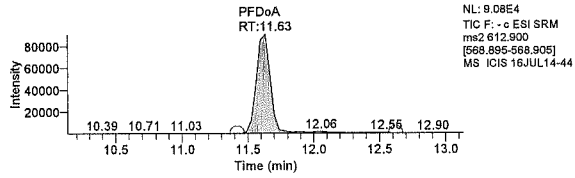


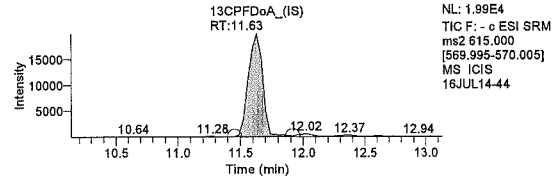
Component Name: NEtFOSAA



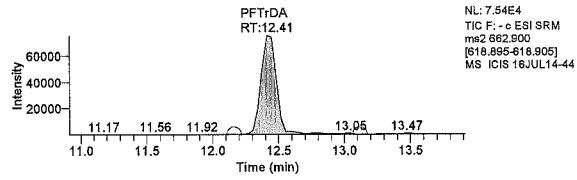


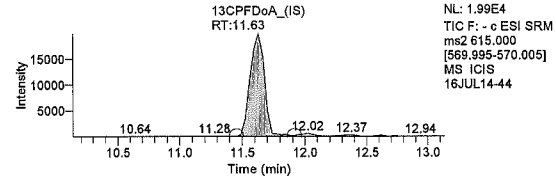
Component Name: PFDoA



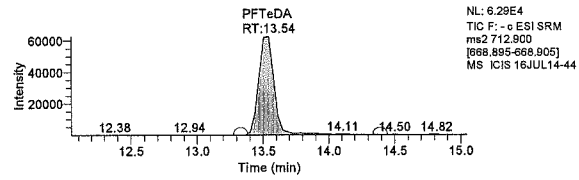


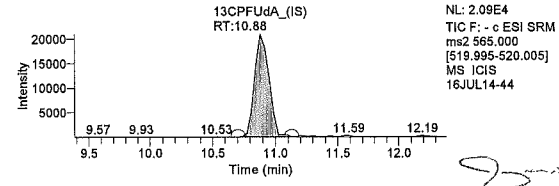
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

Monday, July 18, 2016, 07:24:39

Raw QC Data

Miscellaneous LC/MS/MS

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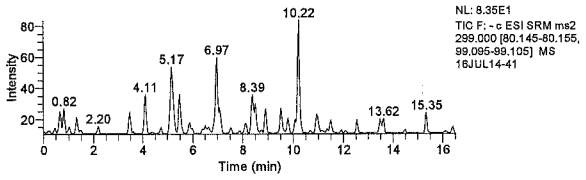
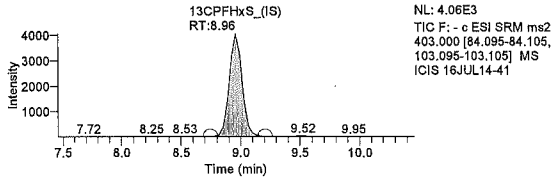
Sample Name:	MB 16182005	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	MB 16182005	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-41		M\HWell_16.5minutes
Acquisition Date:	07/14/16 08:11:30 PM	Dilution Factor:	1.00
Sample Type:	Unknown	Instrument Model:	TSQ Quantum Access
Vial:	d:13	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

Extracted Ion Chromatogram
Quan Peak Table

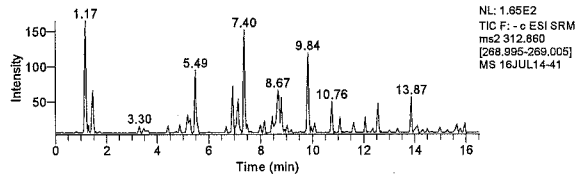
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.60	98222.62	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.28	111782.01	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.10	48599.78	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.53	46809.36	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.96	127424.36	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.60	89493.89	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.96	30557.75	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.57	13710.02	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.74	42763.17	N/A	N/A	N/A
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/g
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/g
PFBS	N/A	N/A	N/A	N/A	N/A	ng/g
PFDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/g
PFHxA	N/A	N/A	N/A	N/A	N/A	ng/g
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/g
PFNA	N/A	N/A	N/A	N/A	N/A	ng/g
PFOA	N/A	N/A	N/A	N/A	N/A	ng/g
PFOS	N/A	N/A	N/A	N/A	N/A	ng/g
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/g
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/g
PFhpA	N/A	N/A	N/A	N/A	N/A	ng/g
d3-NMeFOSAA	N/A	10.46	23378.93	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.82	24904.39	N/A	N/A	N/A

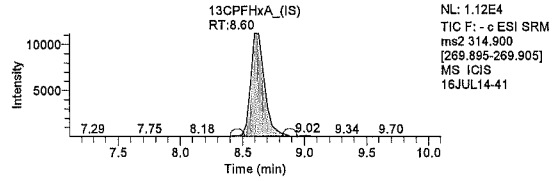
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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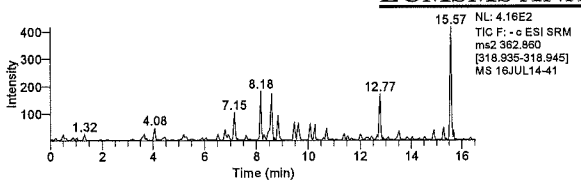
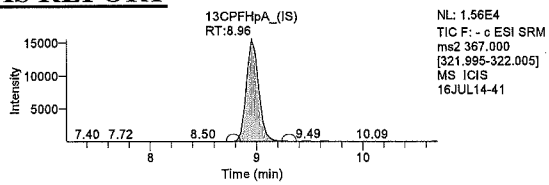
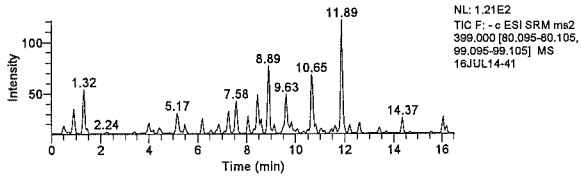
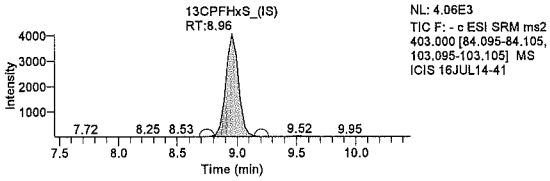


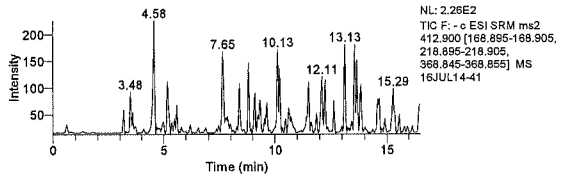


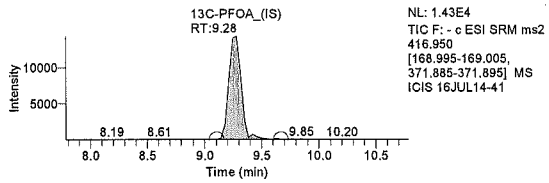
Component Name: PFHxS



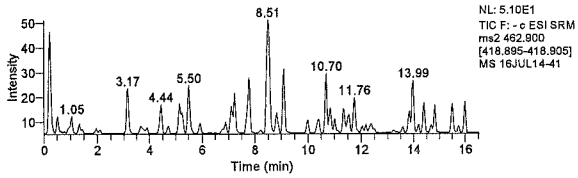


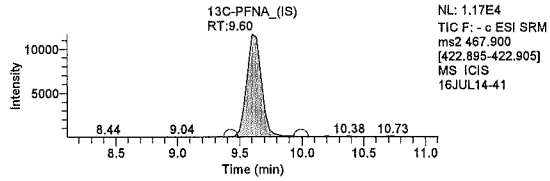
Component Name: PFOA



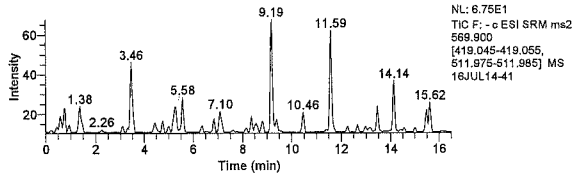


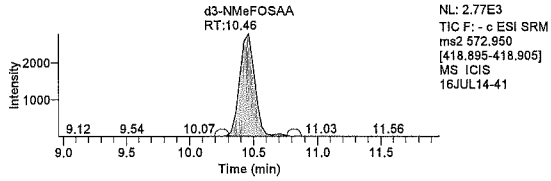
Component Name: PFNA



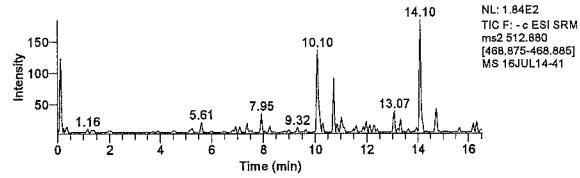


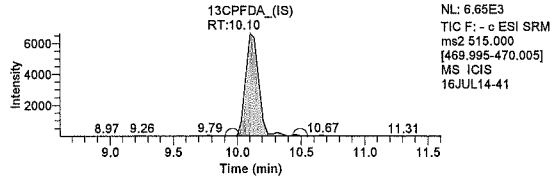
Component Name: NMeFOSAA





Component Name: PFDA





Component Name: PFOS

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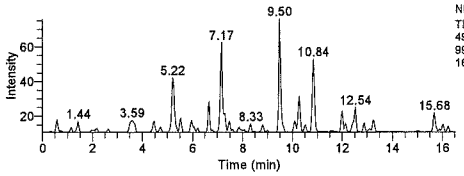
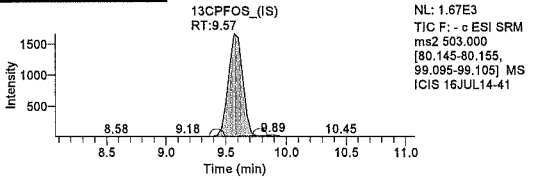
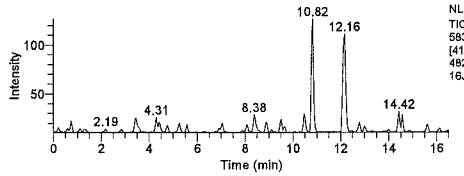
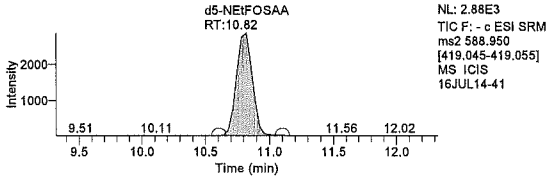


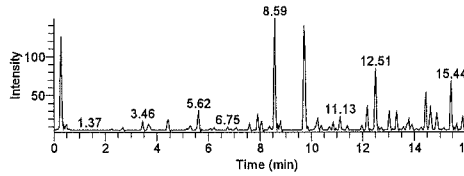


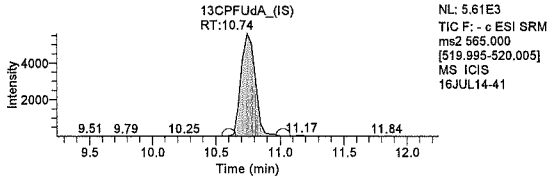
Component Name: NEtFOSAA



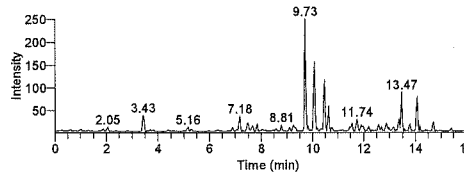


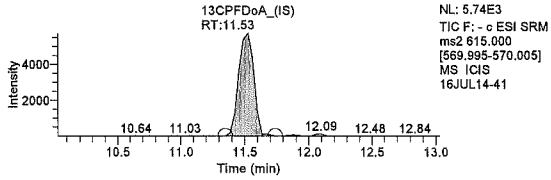
Component Name: PFUdA



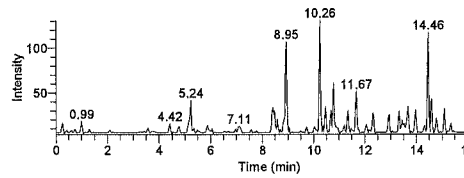


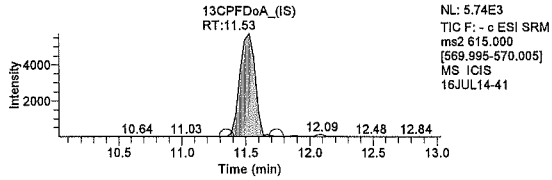
Component Name: PFDoA



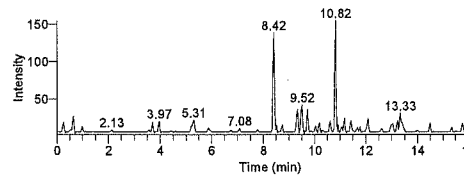


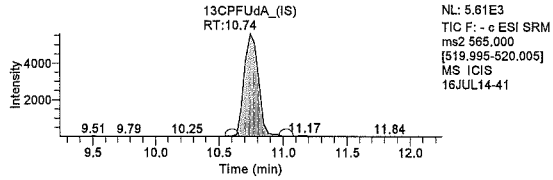
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

Monday, July 18, 2016, 07:24:44

LCMSMS ANALYSIS REPORT

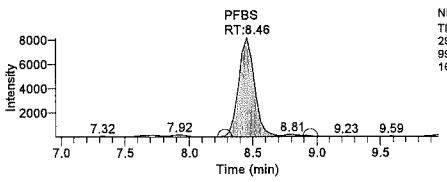
Sample Name:	LCS 16182005	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	LCS 16182005	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell_16.5minutes
Data File:	16JUL14-42		
Acquisition Date:	07/14/16 08:28:44 PM	Dilution Factor:	1.00
Sample Type:	Unknown	Instrument Model:	TSQ Quantum Access
Vial:	d:14	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

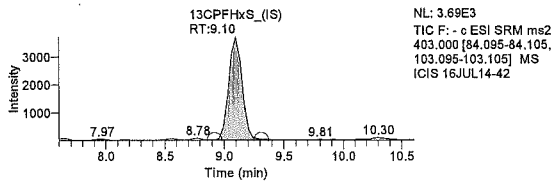
Extracted Ion Chromatogram

Quan Peak Table

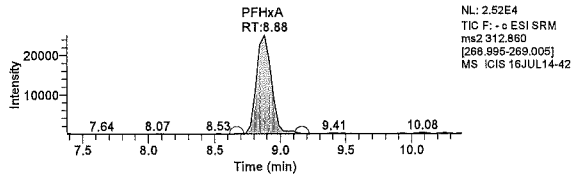
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.71	71247.36	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.35	81298.26	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.21	35330.05	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.74	50431.74	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.10	117887.80	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.88	106419.15	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.10	28507.79	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.68	18009.91	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.89	33413.61	N/A	N/A	N/A
NEtFOSAA	25.132	10.96	88204.74	25071.19	3.518	ng/g
NMeFOSAA	32.519	10.57	124408.32	28259.91	4.402	ng/g
PFBS	17.278	8.46	71034.69	28507.79	2.492	ng/g
PFDA	27.727	10.21	77690.61	35330.05	2.199	ng/g
PFDoA	23.353	11.74	107535.44	50431.74	2.132	ng/g
PFHxA	18.498	8.88	198368.43	106419.15	1.864	ng/g
PFHxS	18.070	9.10	55991.19	28507.79	1.964	ng/g
PFNA	16.383	9.71	96266.54	71247.36	1.351	ng/g
PFOA	20.329	9.35	205978.40	81298.26	2.534	ng/g
PFOS	21.910	9.64	37692.49	18009.91	2.093	ng/g
PFTeDA	50.959	13.44	125565.12	33413.61	3.758	ng/g
PFTrDA	21.561	12.59	103383.99	50431.74	2.050	ng/g
PFUdA	26.866	10.88	81448.72	33413.61	2.438	ng/g
PFhpA	24.571	9.10	239095.03	117887.80	2.028	ng/g
d3-NMeFOSAA	N/A	10.53	28259.91	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.93	25071.19	N/A	N/A	N/A

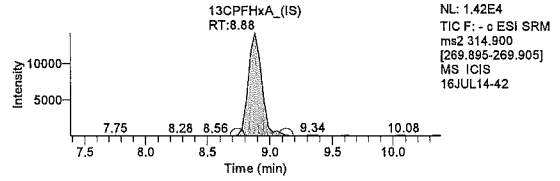
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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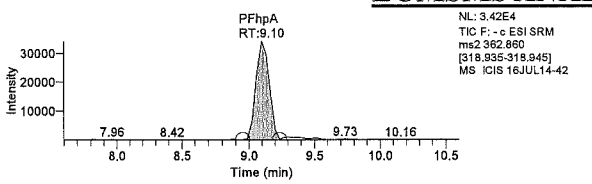
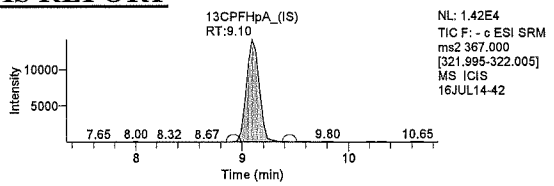
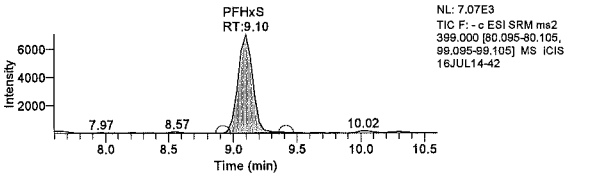
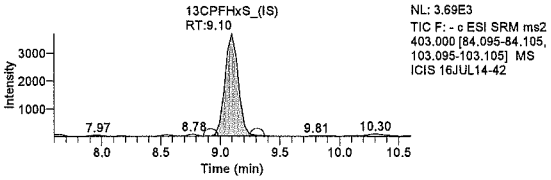
LCMSMS ANALYSIS REPORT



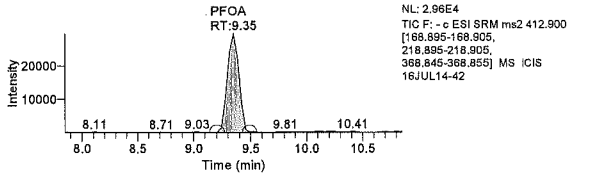


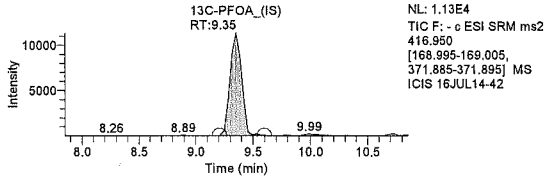
Component Name: PFHxS



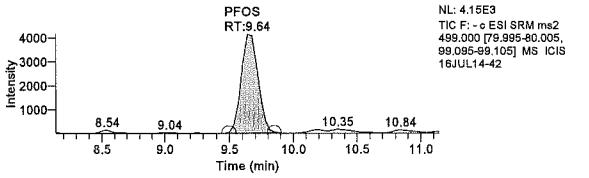


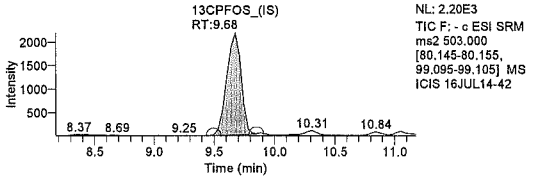
Component Name: PFOA



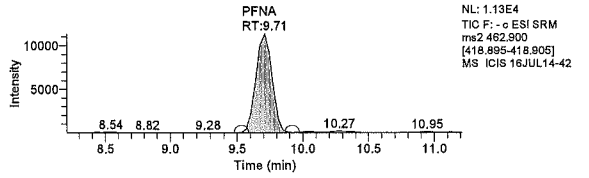


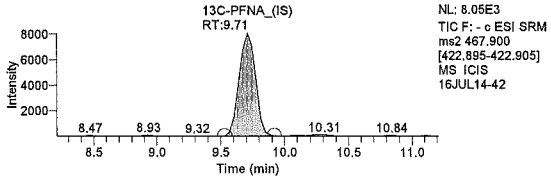
Component Name: PFOS



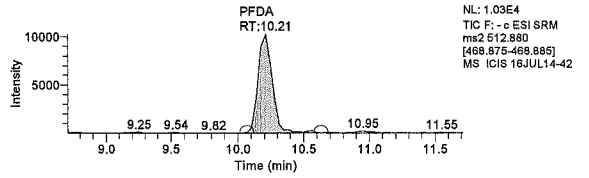


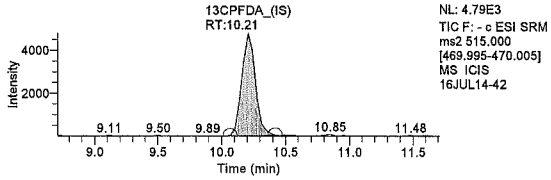
Component Name: PFNA





Component Name: PFDA





Component Name: NMeFOSAA

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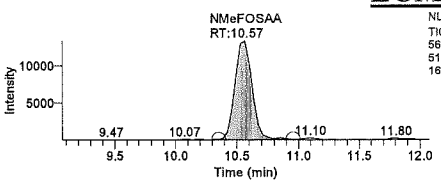
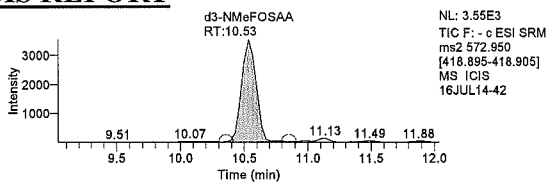
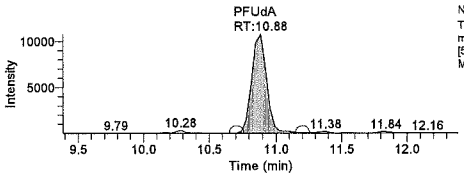
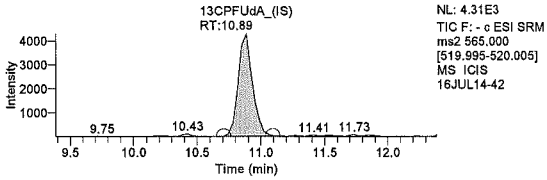
LCMSMS ANALYSIS REPORT



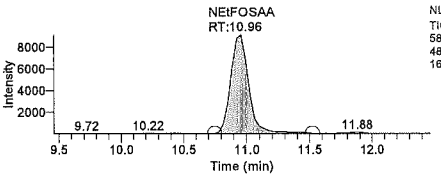


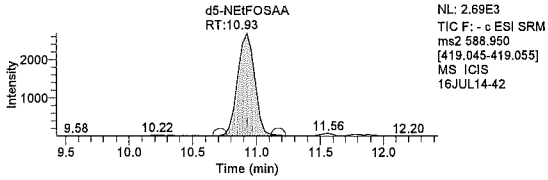
Component Name: PFUdA



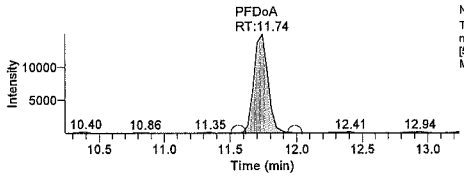


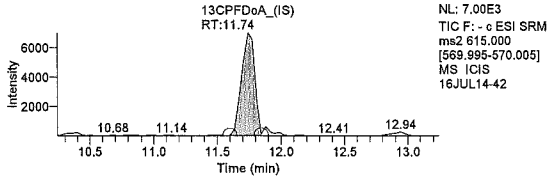
Component Name: NEtFOSAA



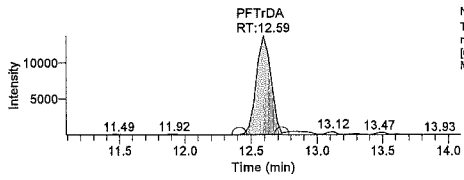


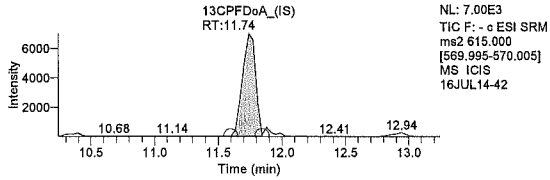
Component Name: PFDoA



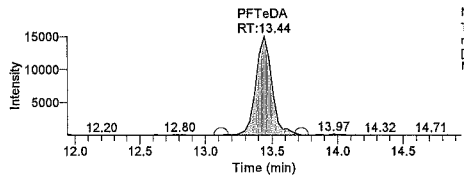


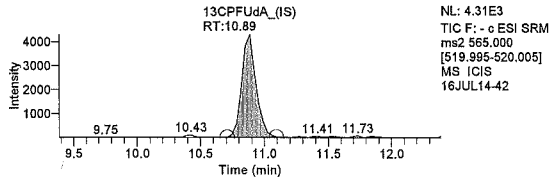
Component Name: PFTrDA





Component Name: PFTeDA





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JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Lynn Dodd
Principal Specialist

Monday, July 18, 2016, 07:24:45

LCMSMS ANALYSIS REPORT

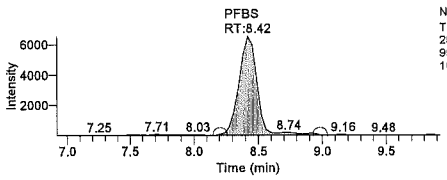
Sample Name:	LCSD 16182005	Original Data Path:	C:\Xcalibur\PFC\2016\Raw PFC DATA
Sample ID:	LCSD 16182005	Instrument Method:	C:\Xcalibur\PFC\Acquistion
Data File:	16JUL14-43		M\HWell_16.5minutes
Acquisition Date:	07/14/16 08:45:58 PM	Dilution Factor:	1.00
Sample Type:	Unknown	Instrument Model:	TSQ Quantum Access
Vial:	d:15	Instrument Software Version:	2.5.0.1311
Run Time(min):	16.51	Instrument Serial Number:	TQU01408
Injection Volume(µl):	10.00	Operator:	US19_USR_INS00022

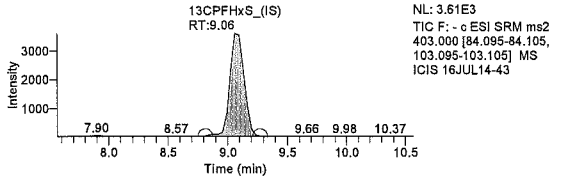
Extracted Ion Chromatogram

Quan Peak Table

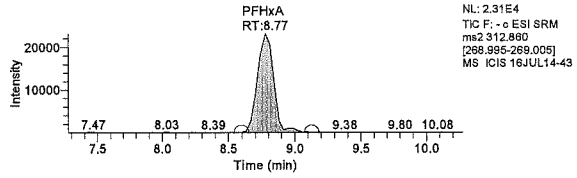
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.81	53393.64	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.39	63318.11	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.21	33622.48	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.53	40620.08	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	9.10	98198.27	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.78	77912.54	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	9.06	30459.06	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.78	11589.08	N/A	N/A	N/A
13CPFUdA_(IS)	N/A	10.78	30977.51	N/A	N/A	N/A
NEtFOSAA	19.818	10.85	84363.05	30363.09	2.778	ng/g
NMeFOSAA	28.767	10.50	121424.97	31117.15	3.902	ng/g
PFBS	14.409	8.42	62520.90	30459.06	2.053	ng/g
PFDA	25.452	10.21	67857.11	33622.48	2.018	ng/g
PFDoA	20.571	11.49	76302.54	40620.08	1.878	ng/g
PFHxA	24.798	8.77	194675.75	77912.54	2.499	ng/g
PFHxS	14.976	9.10	49299.24	30459.06	1.619	ng/g
PFNA	20.061	9.81	88461.91	53393.64	1.657	ng/g
PFOA	20.017	9.38	157954.32	63318.11	2.495	ng/g
PFOS	33.118	9.78	36749.37	11589.08	3.171	ng/g
PFTeDA	34.934	13.40	79731.02	30977.51	2.574	ng/g
PFTrDA	22.213	12.34	85790.67	40620.08	2.112	ng/g
PFUdA	26.771	10.78	75240.63	30977.51	2.429	ng/g
PFhpA	28.391	9.09	230281.79	98198.27	2.345	ng/g
d3-NMeFOSAA	N/A	10.50	31117.15	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.82	30363.09	N/A	N/A	N/A

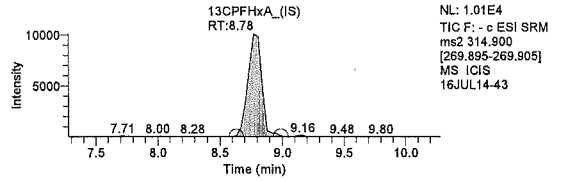
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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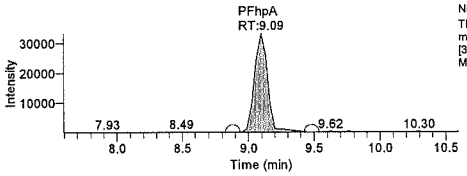
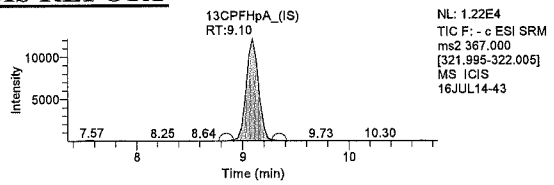
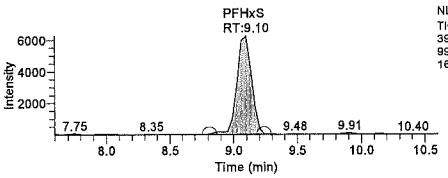
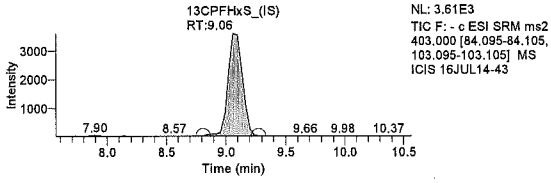
LCMSMS ANALYSIS REPORT





Component Name: PFHxS





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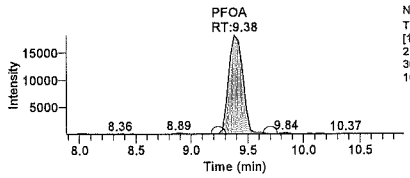
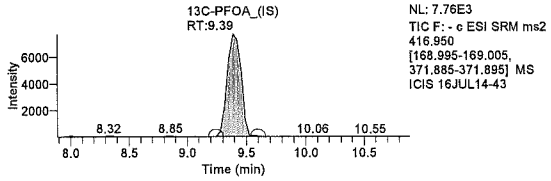
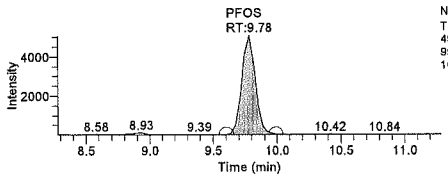
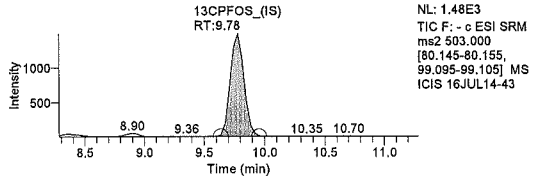




Component Name: PFOS





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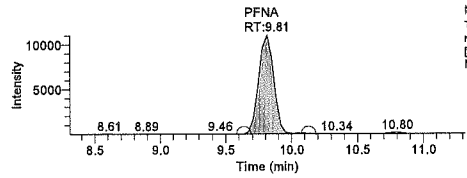

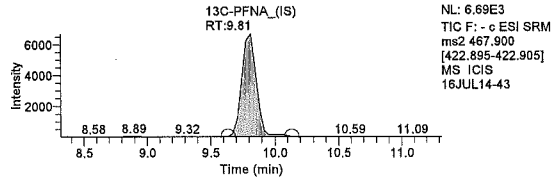

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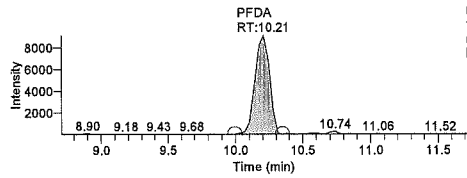
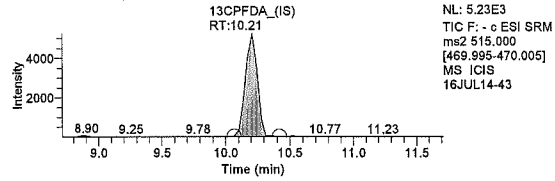


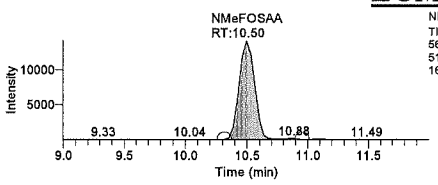


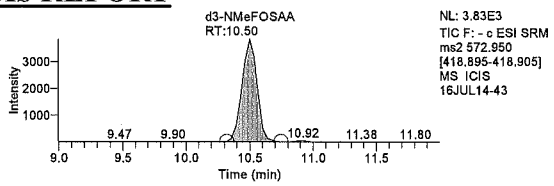
Component Name: NMeFOSAA

Jason W. Knight
Senior Chemist

JUL 18 2016

LCMSMS ANALYSIS REPORT





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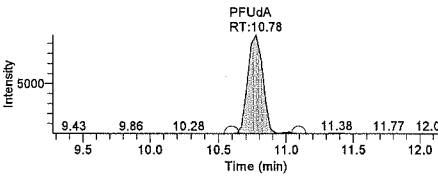

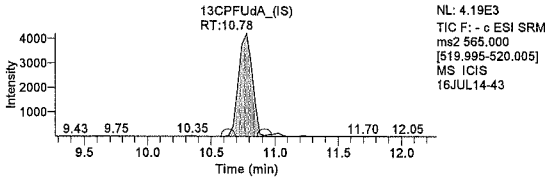

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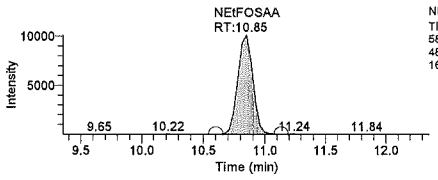
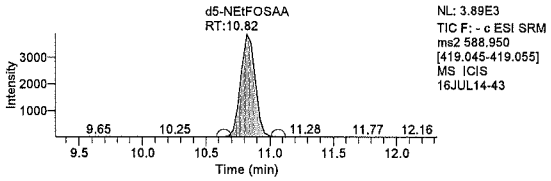
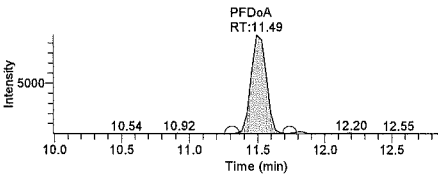
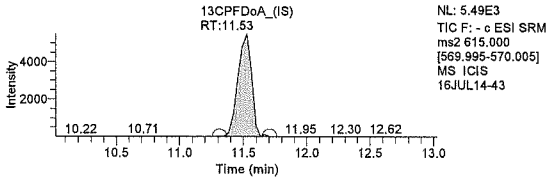


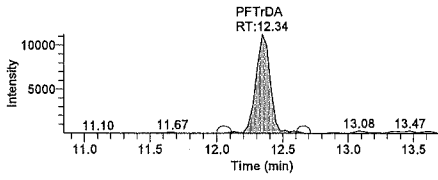


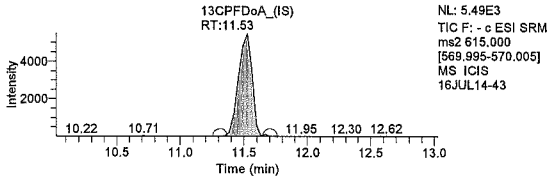
Component Name: PFDoA



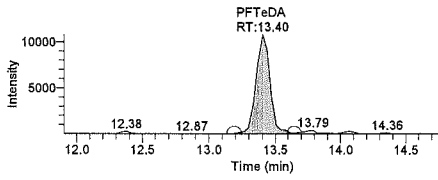


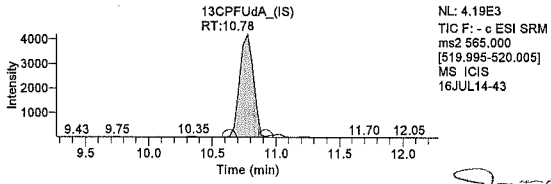
Component Name: PFTrDA





Component Name: PFTeDA





Lynn Dodd
Principal Specialist

JUL 19 2016

Jason W. Knight
Senior Chemist

JUL 18 2016

Preparation Logs

Miscellaneous LC/MS/MS

Organic Extraction Batchlog Assigned to: 375 Robert Brown

Reviewed by: dd 1415 Start Date: 6/30/16 Start time: 12:15

16182005

Tech 1: JWK9524 Tech 2: DW 102602

Dept: 37 Prep Analysis: 14090 PFC Solid Prep PFC s in Soil by LC/MS/MS

QC	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH	pH	BC	Comments
BLANKA	BLK182005	5.00	235002-23A	0.20	N/A	N/A	1	Z	Z		
LCSA	OPR182005	5.00	↓	0.20	235002-35A	0.04	1	Z	Z		
LCSDA		5.00	↓	0.20	↓	0.04	↓	Z	Z		

Solvent Used	Lot No.
80% ACN : H_2O	162247

Sample #	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	FV (mL)	pH	pH	BC	Comments	Analyses	List	Due Date	Prio
1 8450139	3122A	2.70	235002-23A	0.26	1	Z	Z	099a	Limited Sample	14027	19195	07/13/2016	N
2 8450140	3124A	2.88	↓	0.20	1	Z	Z	099a	↓	14027	19195	07/13/2016	N
3 8450141	3123A	3.18	↓	0.20	1	Z	Z	099a	↓	14027	19195	07/13/2016	N

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Rack ID:		Work Station		Micro Temp 100?	
Internal Standard		Balance #	1121111212		

S-bath ID	C	S-bath ID	C	N-Evap	C	M-vap	C	16182005

Documented temps are NIST corrected.

DF = Dilution Factor FV = Final Volume