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
Groundwater Samples
Collected on 06/01/16

SDG# SSX45

GROUP	SAMPLE NUMBERS
1668730	8411847-8411854

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:** **07/11/2016**

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# SSX45

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Sample Reference List for SDG Number SSX45
with a Data Package Type of I

20613 - CenterPoint Properties

Project: SSP-1428

Lab Sample Number	Client Sample ID	Collection Date	Date Received
8411847	KC-279	06/01/2016 14:35	06/02/2016 09:30
8411848	KC-01-274-L	06/01/2016 14:40	06/02/2016 09:30
8411849	Footing Drain	06/01/2016 14:45	06/02/2016 09:30
8411850	KC-99-235-L	06/01/2016 14:47	06/02/2016 09:30
8411851	Outfall-002	06/01/2016 14:50	06/02/2016 09:30
8411852	KC-01-275-L	06/01/2016 14:53	06/02/2016 09:30
8411853	Outfall-001	06/01/2016 14:58	06/02/2016 09:30
8411854	Outfall-001-DUP	06/01/2016 14:58	06/02/2016 09:30

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Sample pH Log

SDG: SSX45

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	Res. Cl. Present?	Corrective Substance	CS Lot #
8411847	201A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411847	201B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411848	201A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411848	201B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411849	201A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411849	201B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411850	201A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411850	201B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411851	201A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411851	201B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411852	201A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411852	201B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411853	201A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411853	201B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411854	201A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA
8411854	201B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA

Check Code Key
PK = Original container checked - pH is within the correct range. (No preservative was added)
PA = Original container checked - pH adjusted to correct range. (Preservative was added)
PV = Volatile container checked
PC = pH checked (unpreserved container)
SPK = Subsampled from an original container. Original container checked - pH is within correct range
SPA = Subsampled from an original container. Subsample container checked - pH adjusted to correct range.
SPC = Subsampled from an original container. pH checked (unpreserved container).
SUP = Subsampled from original container. Unable to be preserved due to the matrix of the sample.
UP = Unable to preserve due to matrix of the sample.
NA = Not applicable

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

14091 PFAA Water Prep
10954 PFAAs in Water by LC/MS/MS

A 100 ml sample of water is extracted using a solid phase extraction (SPE) cartridge. The resulting extract is analyzed by LC/MS/MS in negative electrospray ionization (ESI) mode.

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: June 24, 2016

Project: SSP-1428

Submittal Date: 06/02/2016
Group Number: 1668730
SDG: SSX45
State of Sample Origin: MO

Client Sample Description	Lancaster Labs (LL) #
KC-279 Grab Groundwater	8411847
KC-01-274-L Grab Groundwater	8411848
Footing Drain Grab Groundwater	8411849
KC-99-235-L Grab Groundwater	8411850
Outfall-002 Grab Groundwater	8411851
KC-01-275-L Grab Groundwater	8411852
Outfall-001 Grab Groundwater	8411853
Outfall-001-DUP Grab Groundwater	8411854

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

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Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: KC-279 Grab Groundwater
SSP-1428

LL Sample # GW 8411847
LL Group # 1668730
Account # 20613

Project Name: SSP-1428

Collected: 06/01/2016 14:35 by SSP

Submitted: 06/02/2016 09:30
Reported: 06/24/2016 08:42

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

14281 SDG#: SSX45-01

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/l		ng/l	ng/l	
10954	Perfluorooctanoic acid	335-67-1	4		2	1	1
10954	Perfluorononanoic acid	375-95-1	2	U	2	1	1
10954	Perfluorodecanoic acid	335-76-2	2	U	2	1	1
10954	Perfluoroundecanoic acid	2058-94-8	4	U	4	2	1
10954	Perfluorododecanoic acid	307-55-1	5	U	5	3	1
10954	Perfluorotridecanoic acid	72629-94-8	4	U	4	2	1
10954	Perfluorotetradecanoic acid	376-06-7	5	U	5	3	1
10954	Perfluorohexanoic acid	307-24-4	2	U	2	1	1
10954	Perfluoroheptanoic acid	375-85-9	7		2	1	1
10954	Perfluorobutanesulfonate	375-73-5	37		10	4	1
10954	Perfluorohexanesulfonate	355-46-4	10	U	10	4	1
10954	Perfluoro-octanesulfonate	1763-23-1	10	U	10	5	1
10954	8:2 fluorotelomersulfonate	39108-34-4	4	U	4	2	1
10954	NEtFOSAA	2991-50-6	8	U	8	5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
10954	NMeFOSAA	2355-31-9	8	U	8	4	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Comments

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
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 06:59	Jason W Knight	1
14091	PFAA Water Prep	EPA 537 Rev. 1.1 modified	1	16160012	06/14/2016 10:00	Jason W Knight	1

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

Sample Description: KC-01-274-L Grab Groundwater
SSP-1428

LL Sample # GW 8411848
LL Group # 1668730
Account # 20613

Project Name: SSP-1428

Collected: 06/01/2016 14:40 by SSP

Submitted: 06/02/2016 09:30
Reported: 06/24/2016 08:42

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

14282 SDG#: SSX45-02

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/l		ng/l	ng/l	
10954	Perfluorooctanoic acid	335-67-1	1	J	2	1	1
10954	Perfluorononanoic acid	375-95-1	2	U	2	1	1
10954	Perfluorodecanoic acid	335-76-2	2	U	2	1	1
10954	Perfluoroundecanoic acid	2058-94-8	4	U	4	2	1
10954	Perfluorododecanoic acid	307-55-1	5	U	5	3	1
10954	Perfluorotridecanoic acid	72629-94-8	4	U	4	2	1
10954	Perfluorotetradecanoic acid	376-06-7	5	U	5	3	1
10954	Perfluorohexanoic acid	307-24-4	2	U	2	1	1
10954	Perfluoroheptanoic acid	375-85-9	2	U	2	1	1
10954	Perfluorobutanesulfonate	375-73-5	10	U	10	4	1
10954	Perfluorohexanesulfonate	355-46-4	10	U	10	4	1
10954	Perfluoro-octanesulfonate	1763-23-1	10	U	10	5	1
10954	8:2 fluorotelomersulfonate	39108-34-4	2	J	4	2	1
10954	NEtFOSAA	2991-50-6	8	U	8	5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
10954	NMeFOSAA	2355-31-9	8	U	8	4	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Comments

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
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 04:33	Jason W Knight	1
14091	PFAA Water Prep	EPA 537 Rev. 1.1 modified	1	16160012	06/14/2016 10:00	Jason W Knight	1

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

Sample Description: Footing Drain Grab Groundwater
SSP-1428

LL Sample # GW 8411849
LL Group # 1668730
Account # 20613

Project Name: SSP-1428

Collected: 06/01/2016 14:45 by SSP

Submitted: 06/02/2016 09:30
Reported: 06/24/2016 08:42

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

14283 SDG#: SSX45-03

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/l		ng/l	ng/l	
10954	Perfluorooctanoic acid	335-67-1	9		2	1	1
10954	Perfluorononanoic acid	375-95-1	1	J	2	1	1
10954	Perfluorodecanoic acid	335-76-2	2	J	2	1	1
10954	Perfluoroundecanoic acid	2058-94-8	4	U	4	2	1
10954	Perfluorododecanoic acid	307-55-1	5	U	5	3	1
10954	Perfluorotridecanoic acid	72629-94-8	4	U	4	2	1
10954	Perfluorotetradecanoic acid	376-06-7	5	U	5	3	1
10954	Perfluorohexanoic acid	307-24-4	21		2	1	1
10954	Perfluoroheptanoic acid	375-85-9	8		2	1	1
10954	Perfluorobutanesulfonate	375-73-5	10	U	10	4	1
10954	Perfluorohexanesulfonate	355-46-4	10	U	10	4	1
10954	Perfluoro-octanesulfonate	1763-23-1	10	U	10	5	1
10954	8:2 fluorotelomersulfonate	39108-34-4	4	U	4	2	1
10954	NEtFOSAA	2991-50-6	8	U	8	5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
10954	NMeFOSAA	2355-31-9	8	U	8	4	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Comments

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
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 04:49	Jason W Knight	1
14091	PFAA Water Prep	EPA 537 Rev. 1.1 modified	1	16160012	06/14/2016 10:00	Jason W Knight	1

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

Sample Description: KC-99-235-L Grab Groundwater
SSP-1428

LL Sample # GW 8411850
LL Group # 1668730
Account # 20613

Project Name: SSP-1428

Collected: 06/01/2016 14:47 by SSP

Submitted: 06/02/2016 09:30
Reported: 06/24/2016 08:42

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

14284 SDG#: SSX45-04

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/l		ng/l	ng/l	
10954	Perfluorooctanoic acid	335-67-1	5		2	1	1
10954	Perfluorononanoic acid	375-95-1	4		2	1	1
10954	Perfluorodecanoic acid	335-76-2	2	U	2	1	1
10954	Perfluoroundecanoic acid	2058-94-8	4	U	4	2	1
10954	Perfluorododecanoic acid	307-55-1	5	U	5	3	1
10954	Perfluorotridecanoic acid	72629-94-8	4	U	4	2	1
10954	Perfluorotetradecanoic acid	376-06-7	5	U	5	3	1
10954	Perfluorohexanoic acid	307-24-4	13		2	1	1
10954	Perfluoroheptanoic acid	375-85-9	5		2	1	1
10954	Perfluorobutanesulfonate	375-73-5	10	U	10	4	1
10954	Perfluorohexanesulfonate	355-46-4	10	U	10	4	1
10954	Perfluoro-octanesulfonate	1763-23-1	10	U	10	5	1
10954	8:2 fluorotelomersulfonate	39108-34-4	4	U	4	2	1
10954	NEtFOSAA	2991-50-6	8	U	8	5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
10954	NMeFOSAA	2355-31-9	8	U	8	4	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Comments

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
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 05:05	Jason W Knight	1
14091	PFAA Water Prep	EPA 537 Rev. 1.1 modified	1	16160012	06/14/2016 10:00	Jason W Knight	1

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

Sample Description: Outfall-002 Grab Groundwater
SSP-1428

LL Sample # GW 8411851
LL Group # 1668730
Account # 20613

Project Name: SSP-1428

Collected: 06/01/2016 14:50 by SSP

Submitted: 06/02/2016 09:30
Reported: 06/24/2016 08:42

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

14285 SDG#: SSX45-05

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/l		ng/l	ng/l	
10954	Perfluorooctanoic acid	335-67-1	3		2	1	1
10954	Perfluorononanoic acid	375-95-1	3		2	1	1
10954	Perfluorodecanoic acid	335-76-2	2	U	2	1	1
10954	Perfluoroundecanoic acid	2058-94-8	4	U	4	2	1
10954	Perfluorododecanoic acid	307-55-1	5	U	5	3	1
10954	Perfluorotridecanoic acid	72629-94-8	4	U	4	2	1
10954	Perfluorotetradecanoic acid	376-06-7	5	U	5	3	1
10954	Perfluorohexanoic acid	307-24-4	8		2	1	1
10954	Perfluoroheptanoic acid	375-85-9	3		2	1	1
10954	Perfluorobutanesulfonate	375-73-5	10	U	10	4	1
10954	Perfluorohexanesulfonate	355-46-4	10	U	10	4	1
10954	Perfluoro-octanesulfonate	1763-23-1	10	U	10	5	1
10954	8:2 fluorotelomersulfonate	39108-34-4	4	U	4	2	1
10954	NEtFOSAA	2991-50-6	8	U	8	5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
10954	NMeFOSAA	2355-31-9	4	J	8	4	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Comments

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
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 05:54	Jason W Knight	1
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 14:18	Jason W Knight	1
14091	PFAA Water Prep	EPA 537 Rev. 1.1 modified	1	16160012	06/14/2016 10:00	Jason W Knight	1

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

Sample Description: KC-01-275-L Grab Groundwater
SSP-1428

LL Sample # GW 8411852
LL Group # 1668730
Account # 20613

Project Name: SSP-1428

Collected: 06/01/2016 14:53 by SSP

Submitted: 06/02/2016 09:30
Reported: 06/24/2016 08:42

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

14286 SDG#: SSX45-06

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/l		ng/l	ng/l	
10954	Perfluorooctanoic acid	335-67-1	1	J	2	1	1
10954	Perfluorononanoic acid	375-95-1	2	U	2	1	1
10954	Perfluorodecanoic acid	335-76-2	2	U	2	1	1
10954	Perfluoroundecanoic acid	2058-94-8	4	U	4	2	1
10954	Perfluorododecanoic acid	307-55-1	5	U	5	3	1
10954	Perfluorotridecanoic acid	72629-94-8	4	U	4	2	1
10954	Perfluorotetradecanoic acid	376-06-7	5	U	5	3	1
10954	Perfluorohexanoic acid	307-24-4	2	U	2	1	1
10954	Perfluoroheptanoic acid	375-85-9	2	J	2	1	1
10954	Perfluorobutanesulfonate	375-73-5	10	U	10	4	1
10954	Perfluorohexanesulfonate	355-46-4	10	U	10	4	1
10954	Perfluoro-octanesulfonate	1763-23-1	10	U	10	5	1
10954	8:2 fluorotelomersulfonate	39108-34-4	2	J	4	2	1
10954	NEtFOSAA	2991-50-6	8	U	8	5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
10954	NMeFOSAA	2355-31-9	8	U	8	4	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Comments

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
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 06:10	Jason W Knight	1
14091	PFAA Water Prep	EPA 537 Rev. 1.1 modified	1	16160012	06/14/2016 10:00	Jason W Knight	1

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

Sample Description: Outfall-001 Grab Groundwater
SSP-1428

LL Sample # GW 8411853
LL Group # 1668730
Account # 20613

Project Name: SSP-1428

Collected: 06/01/2016 14:58 by SSP

Submitted: 06/02/2016 09:30
Reported: 06/24/2016 08:42

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

14287 SDG#: SSX45-07

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/l		ng/l	ng/l	
10954	Perfluorooctanoic acid	335-67-1	3		2	1	1
10954	Perfluorononanoic acid	375-95-1	7		2	1	1
10954	Perfluorodecanoic acid	335-76-2	2	U	2	1	1
10954	Perfluoroundecanoic acid	2058-94-8	4	U	4	2	1
10954	Perfluorododecanoic acid	307-55-1	5	U	5	3	1
10954	Perfluorotridecanoic acid	72629-94-8	4	U	4	2	1
10954	Perfluorotetradecanoic acid	376-06-7	5	U	5	3	1
10954	Perfluorohexanoic acid	307-24-4	6		2	1	1
10954	Perfluoroheptanoic acid	375-85-9	3		2	1	1
10954	Perfluorobutanesulfonate	375-73-5	10	U	10	4	1
10954	Perfluorohexanesulfonate	355-46-4	9	J	10	4	1
10954	Perfluoro-octanesulfonate	1763-23-1	10	U	10	5	1
10954	8:2 fluorotelomersulfonate	39108-34-4	4	U	4	2	1
10954	NEtFOSAA	2991-50-6	8	U	8	5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
10954	NMeFOSAA	2355-31-9	8	U	8	4	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Comments

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
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 06:27	Jason W Knight	1
14091	PFAA Water Prep	EPA 537 Rev. 1.1 modified	1	16160012	06/14/2016 10:00	Jason W Knight	1

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

Sample Description: Outfall-001-DUP Grab Groundwater
SSP-1428

LL Sample # GW 8411854
LL Group # 1668730
Account # 20613

Project Name: SSP-1428

Collected: 06/01/2016 14:58 by SSP

Submitted: 06/02/2016 09:30
Reported: 06/24/2016 08:42

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

14288 SDG#: SSX45-08FD

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/l		ng/l	ng/l	
10954	Perfluorooctanoic acid	335-67-1	4		2	1	1
10954	Perfluorononanoic acid	375-95-1	6		2	1	1
10954	Perfluorodecanoic acid	335-76-2	2	U	2	1	1
10954	Perfluoroundecanoic acid	2058-94-8	4	U	4	2	1
10954	Perfluorododecanoic acid	307-55-1	5	U	5	3	1
10954	Perfluorotridecanoic acid	72629-94-8	4	U	4	2	1
10954	Perfluorotetradecanoic acid	376-06-7	5	U	5	3	1
10954	Perfluorohexanoic acid	307-24-4	9		2	1	1
10954	Perfluoroheptanoic acid	375-85-9	3		2	1	1
10954	Perfluorobutanesulfonate	375-73-5	10	U	10	4	1
10954	Perfluorohexanesulfonate	355-46-4	10	U	10	4	1
10954	Perfluoro-octanesulfonate	1763-23-1	10	U	10	5	1
10954	8:2 fluorotelomersulfonate	39108-34-4	3	J	4	2	1
10954	NEtFOSAA	2991-50-6	8	U	8	5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.						
10954	NMeFOSAA	2355-31-9	8	U	8	4	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.						

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Comments

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
10954	PFAAs in Water by LC/MS/MS	EPA 537 Rev. 1.1 modified	1	16160012	06/23/2016 06:43	Jason W Knight	1
14091	PFAA Water Prep	EPA 537 Rev. 1.1 modified	1	16160012	06/14/2016 10:00	Jason W Knight	1

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

Quality Control Summary

Client Name: CenterPoint Properties
Reported: 06/24/2016 08:42

Group Number: 1668730

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/l		LOQ** ng/l	MDL ng/l
Batch number: 16160012	Sample number(s): 8411847-8411854			
Perfluorooctanoic acid	2	U	2	1
Perfluorononanoic acid	2	U	2	1
Perfluorodecanoic acid	2	U	2	1
Perfluoroundecanoic acid	4	U	4	2
Perfluorododecanoic acid	5	U	5	3
Perfluorotridecanoic acid	4	U	4	2
Perfluorotetradecanoic acid	5	U	5	3
Perfluorohexanoic acid	2	U	2	1
Perfluoroheptanoic acid	2	U	2	1
Perfluorobutanesulfonate	10	U	10	4
Perfluorohexanesulfonate	10	U	10	4
Perfluoro-octanesulfonate	10	U	10	5
8:2 fluorotelomersulfonate	4	U	4	2
NEtFOSAA	8	U	8	5
NMeFOSAA	8	U	8	4

LCS/LCSD

Analysis Name	LCS Spike Added ng/l	LCS Conc ng/l	LCSD Spike Added ng/l	LCSD Conc ng/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 16160012	Sample number(s): 8411847-8411854								
Perfluorooctanoic acid	200	198.45	200	184.75	99	92	70-130	7	30
Perfluorononanoic acid	200	165.37	200	183.57	83	92	70-130	10	30
Perfluorodecanoic acid	200	162.12	200	157.6	81	79	70-130	3	30
Perfluoroundecanoic acid	200	182.57	200	186.03	91	93	70-130	2	30
Perfluorododecanoic acid	200	169.98	200	167	85	84	70-130	2	30
Perfluorotridecanoic acid	200	160.99	200	151.91	80	76	70-130	6	30
Perfluorotetradecanoic acid	200	178.4	200	168.53	89	84	70-130	6	30
Perfluorohexanoic acid	200	185.38	200	174.4	93	87	70-130	6	30
Perfluoroheptanoic acid	200	163.76	200	167.42	82	84	70-130	2	30
Perfluorobutanesulfonate	176.8	160.1	176.8	131.19	91	74	70-130	20	30
Perfluorohexanesulfonate	189.2	158.46	189.2	156.07	84	82	70-130	2	30
Perfluoro-octanesulfonate	191.2	181.96	191.2	148.37	95	78	70-130	20	30
8:2 fluorotelomersulfonate	191.6	294.52	191.6	208.75	154*	109	70-130	34*	30
NEtFOSAA	200	172.73	200	197.04	86	99	70-130	13	30
NMeFOSAA	200	214.96	200	181.48	107	91	70-130	17	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
Reported: 06/24/2016 08:42

Group Number: 1668730

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ng/l		MS Spike Added ng/l	MS Conc ng/l	MSD Spike Added ng/l	MSD Conc ng/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 16160012	Sample number(s): 8411847-8411854 UNSPK: 8411847										
Perfluorooctanoic acid	4.04		200	222.31			109		70-130		
Perfluorononanoic acid	2	U	200	202.55			101		70-130		
Perfluorodecanoic acid	2	U	200	194.53			97		70-130		
Perfluoroundecanoic acid	4	U	200	201.6			101		70-130		
Perfluorododecanoic acid	5	U	200	221.66			111		70-130		
Perfluorotridecanoic acid	4	U	200	218.67			109		70-130		
Perfluorotetradecanoic acid	5	U	200	203.87			102		70-130		
Perfluorohexanoic acid	2	U	200	243.77			122		70-130		
Perfluoroheptanoic acid	6.79		200	187.71			90		70-130		
Perfluorobutanesulfonate	37.42		176.8	231.3			110		70-130		
Perfluorohexanesulfonate	10	U	189.2	205.02			108		70-130		
Perfluoro-octanesulfonate	10	U	191.2	192.31			101		70-130		
8:2 fluorotelomersulfonate	4	U	191.6	162.62			85		70-130		
NEtFOSAA	8	U	200	198.98			99		70-130		
NMeFOSAA	8	U	200	293.03			147*		70-130		

*- 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

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Acct. # 20613 Group # 1668730 Sample # 841184?-58

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	Sediment	Potable	Ground Water	NPDES	Surface	Other:	Total # of Containers	Metals U + Cr (6020A)	Lab Homogonization and Archive	VOCs + 15 TICs (8260C)	PFCs	Remarks
KC-279	6/1/16	14:35	X									2				X	2 x 250 mL Poly
KC-01-274-L	6/1/16	14:40	X									2				X	
Footing Drain	6/1/16	14:45	X									2				X	
KC-99-235-L	6/1/16	14:47	X									2				X	
OUTFALL-002	6/1/16	14:50	X									2				X	
KC-01-275-L	6/1/16	14:53	X									2				X	
OUTFALL-001	6/1/16	14:58	X									2				X	
OUTFALL-001-Dup	6/1/16	14:58	X									2				X	
TRIP BLANK												2					2 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	ADAM HOBSON	6/1/16	1855	FedEx 804713166058	6/1/16	
2						
3						
4						
5				Joe Hobson	6.2.16	930

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt 4.0 °C

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Sample Administration Receipt Documentation Log

Doc Log ID: 148709

Group Number(s): 1668730

Client: S.S. Papadopulos

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	06/02/2016 9:30
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
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:	2
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 Joseph Huber (7831) at 11:07 on 06/02/2016

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	DT121	4.0	DT	Wet	Y	Bagged	N

2425 New Holland Pike
T 717-656-2300
F 717-656-2681

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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.

PFAAs by LC/MS/MS Data

Case Narrative/Conformance Summary

PFAAs by LC/MS/MS

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Case Narrative/Conformance Summary

CLIENT: CenterPoint Properties
SDG: SSX45

Specialty Services Group

Fraction: PFAAs by LC/MS/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
8411847	KC-279	X		1	
8411848	KC-01-274-L	X		1	
8411849	Footing Drain	X		1	
8411850	KC-99-235-L	X		1	
8411851	Outfall-002	X		1	
8411852	KC-01-275-L	X		1	
8411853	Outfall-001	X		1	
8411854	Outfall-001-DUP	X		1	Field Duplicate Sample

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 8411847, 8411851-8411854: Analysis: 10954)
The internal standard response for 8:2 fluorotelomersulfonate in the opening calibration verification (CCV) standard was greater than 50% of the average area measured during the initial calibration. The calculated CCV concentration was within specifications.

(Sample number(s): 8411848-8411850: Analysis: 10954)
The internal standard response for 8:2 fluorotelomersulfonate in the closing calibration verification (CCV) standard was greater than 50% of the average area measured during the initial calibration. The calculated CCV concentration was within specifications.

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Case Narrative/Conformance Summary

CLIENT: CenterPoint Properties
SDG: SSX45

Specialty Services Group

Fraction: PFAAs by LC/MS/MS

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Method Blank

(Sample number(s): 8411847-8411854: Analysis: 10954)
The internal standard response for PFHxA in the method blank was less than 50% of the average area measured during the initial calibration. Since the response is low, any result should be considered biased high.

LCS/LCSD

(Sample number(s): 8411847-8411854: Analysis: 10954)
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Batch#: 16160012 (Sample number(s): 8411847-8411854, UNSPK: 8411847)
The relative percent difference(s) for the following analyte(s) in the LCS/LCSD is outside the acceptance window: 8:2 fluorotelomersulfonate

The recovery(ies) for the following analyte(s) in the LCS exceeds the acceptance window indicating a positive bias: 8:2 fluorotelomersulfonate
Since the recovery is high and no analytes are detected above the quantitation limit, the data is reported.

MS/MSD

Please note that US EPA Methods for organic compounds do not require action by the laboratory based on out-of-specification MS/MSD results.

Batch#: 16160012 (Sample number(s): 8411847-8411854, UNSPK: 8411847)
The recovery(ies) for the following analyte(s) in the MS is outside the acceptance window: NMeFOSAA

SAMPLE ANALYSIS:

(Sample number(s): 8411847, 8411849: Analysis: 10954)
The internal standard response for 8:2 fluorotelomersulfonate (8:2 FTS) in this sample was greater than 50% of the average area measured during the initial calibration. Since the response is high, indicating increased sensitivity, and 8:2 FTS was not detected in the sample, the data is reported.

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Case Narrative/Conformance Summary

CLIENT: CenterPoint Properties
SDG: SSX45

Specialty Services Group

Fraction: PFAAs by LC/MS/MS

(Sample number(s): 8411848, 8411854: Analysis: 10954)
The internal standard response for 8:2 fluorotelomersulfonate (8:2 FTS) in this sample was greater than 50% of the average area measured during the initial calibration. Since the response is high, indicating increased sensitivity the result reported for 8:2 FTS should be considered biased high.

(Sample number(s): 8411852: Analysis: 10954)
The internal standard response for 8:2 fluorotelomersulfonate (8:2 FTS) in this sample was greater than 50% of the average area measured during the initial calibration. Since the response is high, indicating increased sensitivity the result reported for 8:2 FTS should be considered biased high.

The internal standard response for NEtFOSAA in this sample was greater than 50% of the average area measured during the initial calibration. Since the response is high, indicating increased sensitivity, and NEtFOSAA was not detected in the sample, the data is reported.

(Sample number(s): 8411850, 8411853: Analysis: 10954)
The internal standard response for 8:2 fluorotelomersulfonate (8:2 FTS) in this sample was greater than 50% of the average area measured during the initial calibration. Since the response is high, indicating increased sensitivity, and 8:2 FTS was not detected in the sample, the data is reported.

The internal standard response for NEtFOSAA in this sample was greater than 50% of the average area measured during the initial calibration. Since the response is high, indicating increased sensitivity, and NEtFOSAA was not detected in the sample, the data is reported.

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

PFAAs by LC/MS/MS

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Quality Control Reference List
Specialty Services Group

CLIENT: CenterPoint Properties
SDG: SSX45

Fraction: PFAAs by LC/MS/MS

Analysis	Batch Number	Sample Number	Analysis Date
PFAAs in Water by LC/MS/MS	16160012	BLK	06/23/2016 02:18:00
		LCS	06/23/2016 03:44:00
		LCSD	06/23/2016 04:01:00
		8411847 UNSPK	06/23/2016 06:59:00
		8411847 MS	06/23/2016 07:16:00
		8411848	06/23/2016 04:33:00
		8411849	06/23/2016 04:49:00
		8411850	06/23/2016 05:05:00
		8411851	06/23/2016 05:54:00
		8411851	06/23/2016 14:18:00
		8411852	06/23/2016 06:10:00
		8411853	06/23/2016 06:27:00
		8411854	06/23/2016 06:43:00

Quality Control Summary
Method Blank
Specialty Services Group
SDG: SSX45
Matrix: LIQUID

Fraction: PFAAs by LC/MS/MS

16160012 / BLK Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Perfluorooctanoic acid	06/23/16	N.D.	ng/l	1	2
Perfluorononanoic acid	06/23/16	N.D.	ng/l	1	2
Perfluorodecanoic acid	06/23/16	N.D.	ng/l	1	2
Perfluoroundecanoic acid	06/23/16	N.D.	ng/l	2	4
Perfluorododecanoic acid	06/23/16	N.D.	ng/l	3	5
Perfluorotridecanoic acid	06/23/16	N.D.	ng/l	2	4
Perfluorotetradecanoic acid	06/23/16	N.D.	ng/l	3	5
Perfluorohexanoic acid	06/23/16	N.D.	ng/l	1	2
Perfluoroheptanoic acid	06/23/16	N.D.	ng/l	1	2
Perfluorobutanesulfonate	06/23/16	N.D.	ng/l	4	10
Perfluorohexanesulfonate	06/23/16	N.D.	ng/l	4	10
Perfluoro-octanesulfonate	06/23/16	N.D.	ng/l	5	10
8:2 fluorotelomersulfonate	06/23/16	N.D.	ng/l	2	4
NEtFOSAA	06/23/16	N.D.	ng/l	5	8
NMeFOSAA	06/23/16	N.D.	ng/l	4	8

Specialty Services Group
Fraction: PFAAs by LC/MS/MS

UNSPK: 8411847 MS: 8411847 **Analyte**	Batch: **16160012** (Sample number(s): 8411847-8411854) **Spike Added ng/l**	**Unspiked Conc ng/l**	**MS Conc ng/l**	**MSD Conc ng/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Perfluorooctanoic acid	200	4.04	222.31	NA	109	NA	70-130	NA	NA
Perfluorononanoic acid	200	N.D.	202.55	NA	101	NA	70-130	NA	NA
Perfluorodecanoic acid	200	N.D.	194.53	NA	97	NA	70-130	NA	NA
Perfluoroundecanoic acid	200	N.D.	201.6	NA	101	NA	70-130	NA	NA
Perfluorododecanoic acid	200	N.D.	221.66	NA	111	NA	70-130	NA	NA
Perfluorotridecanoic acid	200	N.D.	218.67	NA	109	NA	70-130	NA	NA
Perfluorotetradecanoic acid	200	N.D.	203.87	NA	102	NA	70-130	NA	NA
Perfluorohexanoic acid	200	N.D.	243.77	NA	122	NA	70-130	NA	NA
Perfluoroheptanoic acid	200	6.79	187.7	NA	90	NA	70-130	NA	NA
Perfluorobutanesulfonate	176.8	37.42	231.3	NA	110	NA	70-130	NA	NA
Perfluorohexanesulfonate	189.2	N.D.	205.02	NA	108	NA	70-130	NA	NA
Perfluoro-octanesulfonate	191.2	N.D.	192.31	NA	101	NA	70-130	NA	NA
8:2 fluorotelomersulfonate	191.6	N.D.	162.62	NA	85	NA	70-130	NA	NA
NEtFOSAA	200	N.D.	198.98	NA	99	NA	70-130	NA	NA
NMeFOSAA	200	N.D.	293.03	NA	147 *	NA	70-130	NA	NA

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: SSX45
Matrix: LIQUID

Specialty Services Group
Fraction: PFAAs by LC/MS/MS

LCS: LCS LCSD: LCSD **Analyte**	Batch: **16160012** (Sample number(s): 8411847-8411854) **Spike Added ng/l**	**LCS Conc ng/l**	**LCSD Conc ng/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Perfluorooctanoic acid	200	198.45	184.75	99	92	70-130	7	30
Perfluorononanoic acid	200	165.37	183.57	83	92	70-130	10	30
Perfluorodecanoic acid	200	162.12	157.6	81	79	70-130	3	30
Perfluoroundecanoic acid	200	182.57	186.03	91	93	70-130	2	30
Perfluorododecanoic acid	200	169.98	167	85	84	70-130	2	30
Perfluorotridecanoic acid	200	160.99	151.91	80	76	70-130	6	30
Perfluorotetradecanoic acid	200	178.4	168.53	89	84	70-130	6	30
Perfluorohexanoic acid	200	185.38	174.4	93	87	70-130	6	30
Perfluoroheptanoic acid	200	163.76	167.42	82	84	70-130	2	30
Perfluorobutanesulfonate	176.8	160.1	131.18	91	74	70-130	20	30
Perfluorohexanesulfonate	189.2	158.46	156.07	84	82	70-130	2	30
Perfluoro-octanesulfonate	191.2	181.96	148.37	95	78	70-130	20	30
8:2 fluorotelomersulfonate	191.6	294.52	208.74	154 *	109	70-130	34 *	30
NEtFOSAA	200	172.73	197.04	86	99	70-130	13	30
NMeFOSAA	200	214.96	181.48	107	91	70-130	17	30

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Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881

Lab File ID: 16Jun22-13

Date/Time Analyzed: 06/23/2016 01:29

Lab Sample ID: CCV2

Init. Calib. Date/Times: 06/22/2016 23:03 06/23/2016 00:40

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	487296	430974	400.00	348.59	-12.85	±30
PFDA	749709	616495	100.00	102.44	2.44	±30
PFDoA	1117798	951708	200.00	209.11	4.56	±30
PFHxA	599091	494306	100.00	109.01	9.01	±30
PFHxS	371331	337730	400.00	410.52	2.63	±30
PFNA	696921	611823	100.00	102.28	2.28	±30
PFOA	1032522	852966	100.00	111.43	11.43	±30
PFOS	314506	171813	400.00	341.34	-14.67	±30
PFTeDA	898495	738501	200.00	229.46	14.73	±30
PFTrDA	982364	818565	200.00	204.14	2.07	±30
PFUdA	721569	600609	100.00	116.13	16.13	±30
PFHpA	632326	580073	100.00	102.32	2.32	±30
NEtFOSAA	1257032	1235586	400.00	385.41	-3.65	±30
NMeFOSAA	1625792	1460993	400.00	363.81	-9.05	±30
8:2FTS	425950	420881	200.00	258.76	29.38	±30

* Outside QC Limits.

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Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881

Lab File ID: 16Jun22-23

Date/Time Analyzed: 06/23/2016 05:38

Lab Sample ID: CCV3

Init. Calib. Date/Times: 06/22/2016 23:03 06/23/2016 00:40

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	487296	1148119	1200.00	1098.13	-8.49	±30
PFDA	749709	1868494	300.00	289.83	-3.39	±30
PFDoA	1117798	2943777	600.00	576.30	-3.95	±30
PFHxA	599091	1378709	300.00	313.65	4.55	±30
PFHxS	371331	926394	1200.00	1376.41	14.70	±30
PFNA	696921	1684475	300.00	293.50	5.73	±30
PFOA	1032522	2502029	300.00	304.98	1.66	±30
PFOS	314506	527834	1200.00	1248.95	4.08	±30
PFTeDA	898495	2043258	600.00	539.85	-10.03	±30
PFTrDA	982364	2428711	600.00	539.06	-10.16	±30
PFUdA	721569	1819331	300.00	298.95	-0.35	±30
PFHpA	632326	1516792	300.00	316.13	8.55	±30
NEtFOSAA	1257032	4712189	1200.00	1145.51	-4.54	±30
NMeFOSAA	1625792	5909392	1200.00	1198.32	-0.22	±30
8:2FTS	425950	3192034	600.00	589.50	-1.75	±30

* Outside QC Limits.

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Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881

Lab File ID: 16Jun22-30

Date/Time Analyzed: 06/23/2016 07:32

Lab Sample ID: CCV2

Init. Calib. Date/Times: 06/22/2016 23:03 06/23/2016 00:40

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	487296	457254	400.00	365.52	-8.62	±30
PFDA	749709	636071	100.00	101.55	1.55	±30
PFDoA	1117798	1025535	200.00	208.06	4.03	±30
PFHxA	599091	494120	100.00	106.20	6.20	±30
PFHxS	371331	349282	400.00	404.52	1.13	±30
PFNA	696921	641282	100.00	104.20	4.20	±30
PFOA	1032522	897271	100.00	106.83	6.83	±30
PFOS	314506	193822	400.00	380.72	-4.82	±30
PFTeDA	898495	713153	200.00	191.63	-4.19	±30
PFTrDA	982364	858183	200.00	197.66	-1.17	±30
PFUdA	721569	601781	100.00	100.64	0.64	±30
PFHpA	632326	622363	100.00	103.71	3.71	±30
NEtFOSAA	1257032	1366207	400.00	369.13	-7.72	±30
NMeFOSAA	1625792	1480396	400.00	373.76	-6.56	±30
8:2FTS	425950	505207	200.00	224.91	12.45	±30

* Outside QC Limits.

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Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881

Lab File ID: 16Jun22-52

Date/Time Analyzed: 06/23/2016 13:29

Lab Sample ID: CCV3

Init. Calib. Date/Times: 06/22/2016 23:03 06/23/2016 00:40

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	487296	1246587	1200.00	1119.94	-6.67	±30
PFDA	749709	1764042	300.00	293.45	-2.18	±30
PFDoA	1117798	2935821	600.00	573.05	-4.49	±30
PFHxA	599091	1371443	300.00	327.97	9.32	±30
PFHxS	371331	920960	1200.00	1446.45	20.54	±30
PFNA	696921	1626830	300.00	299.03	-0.32	±30
PFOA	1032522	2463383	300.00	338.57	12.86	±30
PFOS	314506	500101	1200.00	1111.64	-7.36	±30
PFTeDA	898495	2020272	600.00	572.59	-4.57	±30
PFTrDA	982364	2484814	600.00	549.86	-8.36	±30
PFUdA	721569	1766680	300.00	311.41	3.80	±30
PFHpA	632326	1546881	300.00	298.53	-0.49	±30
NEtFOSAA	1257032	3620367	1200.00	1233.04	2.75	±30
NMeFOSAA	1625792	4702480	1200.00	1232.91	2.74	±30
8:2FTS	425950	2177913	600.00	713.09	18.85	±30

* Outside QC Limits.

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Form 7
Calibration Verification Summary
LC/MS/MS

Instrument ID: 18881

Lab File ID: 16Jun22-56

Date/Time Analyzed: 06/23/2016 14:34

Lab Sample ID: CCV2

Init. Calib. Date/Times: 06/22/2016 23:03 06/23/2016 00:40

Analytes	Average ICAL Response	CCV Response	Specified Amount	Calculated Amount	% Difference	%Difference Limit
PFBS	487296	469683	400.00	338.31	-15.42	±30
PFDA	749709	666696	100.00	102.24	2.24	±30
PFDoA	1117798	1113147	200.00	219.97	9.98	±30
PFHxA	599091	500359	100.00	108.37	8.37	±30
PFHxS	371331	377146	400.00	412.71	3.18	±30
PFNA	696921	657747	100.00	95.88	-4.12	±30
PFOA	1032522	874259	100.00	102.44	2.44	±30
PFOS	314506	194579	400.00	344.12	-13.97	±30
PFTeDA	898495	791163	200.00	203.78	1.89	±30
PFTrDA	982364	906796	200.00	203.44	1.72	±30
PFUdA	721569	656608	100.00	105.25	5.25	±30
PFHpA	632326	625813	100.00	96.74	-3.26	±30
NEtFOSAA	1257032	1614573	400.00	398.45	-0.39	±30
NMeFOSAA	1625792	2124744	400.00	376.75	-5.81	±30
8:2FTS	425950	1055638	200.00	304.53	52.26 *	±30

* Outside QC Limits.

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Quality Control Summary
Internal Standards
Specialty Services Group
SDG: SXX45
Matrix: Water

Fraction: Miscellaneous Specialty Services

16160012	13C-PFHxA	13C-PFHpA	13C-PFHxS	13C-PFOA
	Area	Area	Area	Area
Average ICAL Response	187636	206524	32708	280193
Upper Limit	281454	309786	49062	420289
Lower Limit	93818	103262	16354	140096
Sample				
BLK16160012	73241 *	174124	27694	216895
LCS16160012	165148	208040	31904	222996
LCSD16160012	184419	215798	34632	248058
8411847	116134	162932	41286	198969
8411847MS	111185	154687	31771	202260
8411848	133730	187791	34885	219846
8411849	172398	213401	38475	262660
8411850	185665	232239	38200	284726
8411851	184403	214109	37364	266520
8411852	193086	243860	41758	324691
8411853	173426	208157	39814	272696
8411854	170292	230519	34257	269517

UPPER LIMIT = + 100% 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

16160012	13C-PFOS	13C-PFNA	13C-PFDA	13C-PFUdA
	Area	Area	Area	Area
Average ICAL Response	15221	300074	229365	214210
Upper Limit	22831	450111	344047	321315
Lower Limit	7610	150037	114682	107105
Sample				
BLK16160012	14448	244452	180723	154171
LCS16160012	16266	298185	228278	209136
LCSD16160012	19969	279411	230346	212887
8411847	18666	263980	208830	213572
8411847MS	15632	236321	193933	194028
8411848	14272	273493	184704	178526
8411849	15865	296878	235823	223916
8411850	17199	336156	252909	252183
8411851	16637	312887	241966	242186
8411852	22023	374619	258772	261301
8411853	18914	324269	222919	254433
8411854	22438	323131	247187	248329

UPPER LIMIT = + 100% 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

16160012	13C-PFDoA	13C-FTS6:2	d3-NMeFOSAA	d3-NEtFOSAA
	Area	Area	Area	Area
Average ICAL Response	209589	109070	93778	75396
Upper Limit	314383	163605	140668	113095
Lower Limit	104794	54535	46889	37698
Sample				
BLK16160012	146216	151848	66166	57839
LCS16160012	211146	89135	101167	87510
LCSD16160012	218778	100140	110060	72376
8411847	197197	189679	72117	75729
8411847MS	180498	195681	69044	73690
8411848	168853	256157 *	91886	78811
8411849	218442	273183 *	107944	105691
8411850	226754	274837 *	128177	115848 *
8411851	217011	282889 *	132230	133180 *
8411852	250486	290416 *	139673	132922 *
8411853	227183	249799 *	106744	116120 *
8411854	222917	255741 *	113398	101575

UPPER LIMIT = + 100% 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

PFAAs by LC/MS/MS

Fraction: PFAAs by LC/MS/MS

10954: PFAAs in Water by LC/MS/MS Analyte Name	Default MDL	Default LOQ	Units
Perfluorooctanoic acid	1	2	ng/l
Perfluorononanoic acid	1	2	ng/l
Perfluorodecanoic acid	1	2	ng/l
Perfluoroundecanoic acid	2	4	ng/l
Perfluorododecanoic acid	3	5	ng/l
Perfluorotridecanoic acid	2	4	ng/l
Perfluorotetradecanoic acid	3	5	ng/l
Perfluorohexanoic acid	1	2	ng/l
Perfluoroheptanoic acid	1	2	ng/l
Perfluorobutanesulfonate	4	10	ng/l
Perfluorohexanesulfonate	4	10	ng/l
Perfluoro-octanesulfonate	5	10	ng/l
8:2 fluorotelomersulfonate	2	4	ng/l
NEtFOSAA	5	8	ng/l
NMeFOSAA	4	8	ng/l

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
SYS	16Jun22-03	2538.79	19099.62	0.133	N/A	6.229908	N/A	N/A
CAL1	16Jun22-04	3169.82	16844.95	0.188	8.000000	7.082587	-11.47	N/A
CAL2	16Jun22-05	11592.55	12775.97	0.907	20.000000	18.181457	-9.09	N/A
CAL4	16Jun22-07	445368.28	18126.91	24.569	400.000000	383.343068	-4.16	N/A
CAL5	16Jun22-08	1176868.13	11695.26	100.628	1200.000000	1557.101909	29.76	N/A
CAL6	16Jun22-09	1275073.67	15856.48	80.413	1600.000000	1245.146515	-22.18	N/A
CAL3	16Jun22-10	117302.71	16024.81	7.320	100.000000	117.144464	17.14	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	430973.65	19311.27	22.317	400.000000	348.585561	-12.85	N/A
ICV1	16Jun22-13_1606230 14534	79964.33	17201.25	4.649	100.000000	75.919746	-24.08	N/A
MB 16160012	16Jun22-15	N/A	14448.15	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	164338.82	16265.63	10.103	N/A	160.098437	N/A	N/A
LCSD 16160012	16Jun22-17	164346.38	19969.44	8.230	N/A	131.185221	N/A	N/A
8411848	16Jun22-19	N/A	14271.72	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	N/A	15864.70	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	17198.80	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	1148118.58	16196.55	70.887	1200.000000	1098.125830	-8.49	N/A
8411851	16Jun22-24	N/A	16637.45	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	N/A	22023.48	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	N/A	18913.57	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	N/A	22438.05	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	40211.44	18665.98	2.154	N/A	37.423942	N/A	N/A
8411847 MS	16Jun22-29	230049.40	15631.57	14.717	N/A	231.296032	N/A	N/A
CCV2	16Jun22-30	457254.35	19528.43	23.415	400.000000	365.524017	-8.62	N/A
CCV3	16Jun22-52	1246587.12	17241.86	72.300	1200.000000	1119.937989	-6.67	N/A
8411851	16Jun22-55	N/A	22007.28	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	469682.92	21693.17	21.651	400.000000	338.307397	-15.42	N/A

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Michele J Smith

JUN 23 2016

Michele J. Smith
Senior Specialist

Jason W. Knight
Senior Chemist

JUN 23 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
SYS	16Jun22-03	4653.54	174391.89	0.027	N/A	1.797839	N/A	N/A
CAL1	16Jun22-04	6731.40	194936.50	0.035	2.000000	2.123991	6.20	N/A
CAL2	16Jun22-05	15973.00	178443.44	0.090	5.000000	4.409289	-11.81	N/A
CAL4	16Jun22-07	505466.36	206305.69	2.450	100.000000	102.525661	2.53	N/A
CAL5	16Jun22-08	1383076.54	177832.15	7.777	300.000000	323.954896	7.98	N/A
CAL6	16Jun22-09	1568126.45	174803.20	8.971	400.000000	373.557499	-6.61	N/A
CAL3	16Jun22-10	115171.33	193495.06	0.595	25.000000	25.428664	1.71	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	494306.11	189671.26	2.606	100.000000	109.011241	9.01	N/A
ICV1	16Jun22-13_1606230 14534	350801.14	160355.36	2.188	100.000000	91.617594	-8.38	N/A
MB 16160012	16Jun22-15	N/A	73241.01	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	733818.75	165147.80	4.443	N/A	185.377418	N/A	N/A
LCSD 16160012	16Jun22-17	770744.18	184418.98	4.179	N/A	174.400370	N/A	N/A
8411848	16Jun22-19	N/A	133730.36	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	82718.30	172397.63	0.480	N/A	20.631902	N/A	N/A
8411850	16Jun22-21	55046.13	185665.46	0.296	N/A	13.011813	N/A	N/A
CCV3	16Jun22-23	1378709.16	183107.75	7.529	300.000000	313.649747	4.55	N/A
8411851	16Jun22-24	32578.60	184402.92	0.177	N/A	8.031974	N/A	N/A
8411852	16Jun22-25	N/A	193085.50	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	20195.43	173425.79	0.116	N/A	5.528917	N/A	N/A
8411854	16Jun22-27	34475.47	170292.07	0.202	N/A	9.103441	N/A	N/A
8411847 BKG	16Jun22-28	N/A	116133.81	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	650231.27	111185.15	5.848	N/A	243.766569	N/A	N/A
CCV2	16Jun22-30	494120.09	194656.79	2.538	100.000000	106.197172	6.20	N/A
CCV3	16Jun22-52	1371442.99	174172.32	7.874	300.000000	327.971334	9.32	N/A
8411851	16Jun22-55	30493.62	157641.20	0.193	N/A	8.728851	N/A	N/A
CCV2	16Jun22-56	500358.67	193135.11	2.591	100.000000	108.371065	8.37	N/A

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Michele J Smith

JUN 2 3 2016

Michele J. Smith
Senior Specialist

Jason W. Knight
Senior Chemist

JUN 2 3 2016

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
SYS	16Jun22-03	2840.02	220259.92	0.013	N/A	1.159208	N/A	N/A
CAL1	16Jun22-04	9234.46	222646.54	0.041	2.000000	2.213289	10.66	N/A
CAL2	16Jun22-05	26576.01	249537.56	0.107	5.000000	4.611368	-7.77	N/A
CAL4	16Jun22-07	608824.08	217359.66	2.801	100.000000	103.982471	3.98	N/A
CAL5	16Jun22-08	1421075.03	167391.35	8.490	300.000000	313.771619	4.59	N/A
CAL6	16Jun22-09	1588671.74	152725.63	10.402	400.000000	384.306618	-3.92	N/A
CAL3	16Jun22-10	139576.61	229481.32	0.608	25.000000	23.114635	-7.54	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	580073.22	210489.85	2.756	100.000000	102.316510	2.32	N/A
ICV1	16Jun22-13_1606230 14534	494883.80	207322.65	2.387	100.000000	88.715329	-11.28	N/A
MB 16160012	16Jun22-15	N/A	174123.75	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	919944.50	208039.88	4.422	N/A	163.762432	N/A	N/A
LCSD 16160012	16Jun22-17	975630.69	215798.37	4.521	N/A	167.415938	N/A	N/A
8411848	16Jun22-19	N/A	187791.10	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	43022.96	213400.98	0.202	N/A	8.118777	N/A	N/A
8411850	16Jun22-21	28899.65	232239.26	0.124	N/A	5.272912	N/A	N/A
CCV3	16Jun22-23	1516792.22	177332.10	8.553	300.000000	316.126798	5.38	N/A
8411851	16Jun22-24	13406.56	214109.08	0.063	N/A	2.992904	N/A	N/A
8411852	16Jun22-25	6696.03	243859.72	0.027	N/A	1.696338	N/A	N/A
8411853	16Jun22-26	11709.37	208156.89	0.056	N/A	2.758243	N/A	N/A
8411854	16Jun22-27	11928.04	230518.56	0.052	N/A	2.591984	N/A	N/A
8411847 BKG	16Jun22-28	26966.91	162931.60	0.166	N/A	6.787598	N/A	N/A
8411847 MS	16Jun22-29	784446.33	154686.89	5.071	N/A	187.705414	N/A	N/A
CCV2	16Jun22-30	622363.14	222791.72	2.793	100.000000	103.705015	3.71	N/A
CCV3	16Jun22-52	1546881.38	191536.30	8.076	300.000000	298.527269	-0.49	N/A
8411851	16Jun22-55	13030.92	239603.67	0.054	N/A	2.689379	N/A	N/A
CCV2	16Jun22-56	625813.41	240266.07	2.605	100.000000	96.741954	-3.26	N/A

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Michele J Smith

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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
SYS	16Jun22-03	1735.88	31845.78	0.055	N/A	8.439387	N/A	N/A
CAL1	16Jun22-04	2112.35	31192.48	0.068	8.000000	8.971465	12.14	N/A
CAL2	16Jun22-05	12098.86	39310.33	0.308	20.000000	18.639948	-6.80	N/A
CAL4	16Jun22-07	350809.90	38528.01	9.105	400.000000	372.965900	-6.76	N/A
CAL5	16Jun22-08	843053.85	23429.76	35.982	1200.000000	1455.446512	21.29	N/A
CAL6	16Jun22-09	941128.39	27632.66	34.059	1600.000000	1377.971105	-13.88	N/A
CAL3	16Jun22-10	78785.33	36156.39	2.179	100.000000	94.005070	-5.99	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	337729.94	33646.07	10.038	400.000000	410.518957	2.63	N/A
ICV1	16Jun22-13_1606230 14534	64556.03	36011.64	1.793	100.000000	78.443720	-21.56	N/A
MB 16160012	16Jun22-15	N/A	27694.45	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	120576.56	31904.30	3.779	N/A	158.458265	N/A	N/A
LCSD 16160012	16Jun22-17	128829.00	34631.53	3.720	N/A	156.068750	N/A	N/A
8411848	16Jun22-19	N/A	34885.02	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	N/A	38474.73	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	38200.40	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	926393.67	27231.13	34.020	1200.000000	1376.404807	14.70	N/A
8411851	16Jun22-24	N/A	37363.58	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	N/A	41757.69	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	3215.79	39813.70	0.081	N/A	9.497106	N/A	N/A
8411854	16Jun22-27	N/A	34256.82	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	41286.01	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	156798.57	31770.70	4.935	N/A	205.016807	N/A	N/A
CCV2	16Jun22-30	349281.85	35320.87	9.889	400.000000	404.521885	1.13	N/A
CCV3	16Jun22-52	920960.35	25754.82	35.759	1200.000000	1446.447885	20.54	N/A
8411851	16Jun22-55	N/A	37256.07	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	377146.38	37369.96	10.092	400.000000	412.714347	3.18	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
SYS	16Jun22-03	5206.85	267877.27	0.019	N/A	1.309317	N/A	N/A
CAL1	16Jun22-04	10001.03	292384.63	0.034	2.000000	1.837925	-8.10	N/A
CAL2	16Jun22-05	33451.82	276766.22	0.121	5.000000	4.939987	-1.20	N/A
CAL4	16Jun22-07	864561.03	301494.68	2.868	100.000000	103.258934	3.26	N/A
CAL5	16Jun22-08	2384983.95	255232.09	9.344	300.000000	335.096209	11.70	N/A
CAL6	16Jun22-09	2698199.09	268121.10	10.063	400.000000	360.832388	-9.79	N/A
CAL3	16Jun22-10	203934.99	287159.02	0.710	25.000000	26.034557	4.14	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	852965.93	275521.88	3.096	100.000000	111.428670	11.43	N/A
ICV1	16Jun22-13_1606230 14534	651978.94	248502.00	2.624	100.000000	94.526849	-5.47	N/A
MB 16160012	16Jun22-15	N/A	216894.66	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	1232465.28	222996.43	5.527	N/A	198.447214	N/A	N/A
LCSD 16160012	16Jun22-17	1276042.24	248057.91	5.144	N/A	184.748145	N/A	N/A
8411848	16Jun22-19	5167.84	219846.21	0.024	N/A	1.454973	N/A	N/A
8411849	16Jun22-20	57916.03	262659.58	0.220	N/A	8.506314	N/A	N/A
8411850	16Jun22-21	34296.14	284726.42	0.120	N/A	4.925177	N/A	N/A
CCV3	16Jun22-23	2502028.80	294253.27	8.503	300.000000	304.978353	1.66	N/A
8411851	16Jun22-24	20189.52	266520.48	0.076	N/A	3.325111	N/A	N/A
8411852	16Jun22-25	6241.21	324691.44	0.019	N/A	1.301605	N/A	N/A
8411853	16Jun22-26	21148.69	272696.38	0.078	N/A	3.389605	N/A	N/A
8411854	16Jun22-27	25066.17	269517.01	0.093	N/A	3.942641	N/A	N/A
8411847 BKG	16Jun22-28	19016.97	198968.69	0.096	N/A	4.034765	N/A	N/A
8411847 MS	16Jun22-29	1252703.27	202260.46	6.194	N/A	222.310971	N/A	N/A
CCV2	16Jun22-30	897270.54	302387.21	2.967	100.000000	106.827953	6.83	N/A
CCV3	16Jun22-52	2463383.00	260915.01	9.441	300.000000	338.566546	12.86	N/A
8411851	16Jun22-55	21614.37	272858.14	0.079	N/A	3.449049	N/A	N/A
CCV2	16Jun22-56	874259.35	307322.30	2.845	100.000000	102.442117	2.44	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
SYS	16Jun22-03	1075.02	19099.62	0.056	N/A	2.660819	N/A	N/A
CAL1	16Jun22-04	1663.74	16844.95	0.099	8.000000	4.288277	-46.40	N/A
CAL2	16Jun22-05	7680.62	12775.97	0.601	20.000000	23.534771	17.67	N/A
CAL4	16Jun22-07	189422.28	18126.91	10.450	400.000000	400.819230	0.20	N/A
CAL5	16Jun22-08	439597.85	11695.26	37.588	1200.000000	1440.429241	20.04	N/A
CAL6	16Jun22-09	551876.86	15856.48	34.804	1600.000000	1333.809473	-16.64	N/A
CAL3	16Jun22-10	52127.50	16024.81	3.253	100.000000	125.119008	25.12	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	171812.92	19311.27	8.897	400.000000	341.335586	-14.67	N/A
ICV1	16Jun22-13_1606230 14534	35559.05	17201.25	2.067	100.000000	79.697183	-20.30	N/A
MB 16160012	16Jun22-15	N/A	14448.15	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	77046.35	16265.63	4.737	N/A	181.962290	N/A	N/A
LCSD 16160012	16Jun22-17	77079.37	19969.44	3.860	N/A	148.370000	N/A	N/A
8411848	16Jun22-19	N/A	14271.72	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	1264.64	15864.70	0.080	N/A	3.558360	N/A	N/A
8411850	16Jun22-21	241.63	17198.80	0.014	N/A	1.042840	N/A	N/A
CCV3	16Jun22-23	527834.03	16196.55	32.589	1200.000000	1248.948462	4.08	N/A
8411851	16Jun22-24	N/A	16637.45	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	N/A	22023.48	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	971.32	18913.57	0.051	N/A	2.471995	N/A	N/A
8411854	16Jun22-27	N/A	22438.05	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	18665.98	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	78263.83	15631.57	5.007	N/A	192.306358	N/A	N/A
CCV2	16Jun22-30	193821.76	19528.43	9.925	400.000000	380.719632	-4.82	N/A
CCV3	16Jun22-52	500100.82	17241.86	29.005	1200.000000	1111.641292	-7.36	N/A
8411851	16Jun22-55	N/A	22007.28	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	194579.26	21693.17	8.970	400.000000	344.116146	-13.97	N/A

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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
SYS	16Jun22-03	4392.91	301503.80	0.015	N/A	1.195879	N/A	N/A
CAL1	16Jun22-04	10958.75	332915.81	0.033	2.000000	2.134908	6.75	N/A
CAL2	16Jun22-05	23649.32	315614.60	0.075	5.000000	4.285172	-14.30	N/A
CAL4	16Jun22-07	626715.82	335185.65	1.870	100.000000	96.144874	-3.86	N/A
CAL5	16Jun22-08	1512835.32	247466.12	6.113	300.000000	313.330698	4.44	N/A
CAL6	16Jun22-09	1834658.17	241878.54	7.585	400.000000	388.654572	-2.84	N/A
CAL3	16Jun22-10	172707.86	327384.02	0.528	25.000000	27.449777	9.80	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	611823.22	307520.47	1.990	100.000000	102.275210	2.28	N/A
ICV1	16Jun22-13_1606230 14534	499555.10	288233.24	1.733	100.000000	89.153927	-10.85	N/A
MB 16160012	16Jun22-15	613.43	244451.83	0.003	N/A	0.578615	N/A	N/A
LCS 16160012	16Jun22-16	960871.82	298185.03	3.222	N/A	165.373566	N/A	N/A
LCSD 16160012	16Jun22-17	999734.29	279410.54	3.578	N/A	183.573822	N/A	N/A
8411848	16Jun22-19	N/A	273492.97	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	5879.72	296877.52	0.020	N/A	1.463817	N/A	N/A
8411850	16Jun22-21	22960.50	336156.23	0.068	N/A	3.945952	N/A	N/A
CCV3	16Jun22-23	1684475.21	294186.95	5.726	300.000000	293.501604	-2.17	N/A
8411851	16Jun22-24	14238.14	312886.93	0.046	N/A	2.779177	N/A	N/A
8411852	16Jun22-25	N/A	374619.21	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	38693.19	324269.07	0.119	N/A	6.557234	N/A	N/A
8411854	16Jun22-27	32015.32	323130.89	0.099	N/A	5.521047	N/A	N/A
8411847 BKG	16Jun22-28	2012.96	263979.69	0.008	N/A	0.840455	N/A	N/A
8411847 MS	16Jun22-29	933197.82	236320.97	3.949	N/A	202.553792	N/A	N/A
CCV2	16Jun22-30	641282.04	316355.92	2.027	100.000000	104.197225	4.20	N/A
CCV3	16Jun22-52	1626829.81	278860.42	5.834	300.000000	299.028217	-0.32	N/A
8411851	16Jun22-55	11272.49	360282.16	0.031	N/A	2.051508	N/A	N/A
CCV2	16Jun22-56	657474.14	352621.89	1.865	100.000000	95.877346	-4.12	N/A

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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
SYS	16Jun22-03	5066.18	207929.42	0.024	N/A	1.891946	N/A	N/A
CAL1	16Jun22-04	6920.07	236014.42	0.029	2.000000	2.082526	4.13	N/A
CAL2	16Jun22-05	25341.75	242301.17	0.105	5.000000	4.977093	-0.46	N/A
CAL4	16Jun22-07	648207.17	256709.82	2.525	100.000000	98.061508	-1.94	N/A
CAL5	16Jun22-08	1748845.96	207151.63	8.442	300.000000	325.623662	8.54	N/A
CAL6	16Jun22-09	1927836.87	196939.62	9.789	400.000000	377.411129	-5.65	N/A
CAL3	16Jun22-10	141101.94	237072.26	0.595	25.000000	23.844083	-4.62	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	616494.59	233614.04	2.639	100.000000	102.441279	2.44	N/A
ICV1	16Jun22-13_1606230 14534	485374.69	208231.17	2.331	100.000000	90.596339	-9.40	N/A
MB 16160012	16Jun22-15	N/A	180723.37	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	956666.37	228278.24	4.191	N/A	162.120867	N/A	N/A
LCSD 16160012	16Jun22-17	938221.89	230346.19	4.073	N/A	157.594618	N/A	N/A
8411848	16Jun22-19	N/A	184704.17	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	5213.01	235823.15	0.022	N/A	1.805060	N/A	N/A
8411850	16Jun22-21	N/A	252908.84	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	1868493.82	248751.85	7.511	300.000000	289.825037	-3.39	N/A
8411851	16Jun22-24	N/A	241966.05	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	N/A	258772.38	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	N/A	222919.27	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	N/A	247186.85	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	208829.99	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	976159.29	193932.70	5.033	N/A	194.528884	N/A	N/A
CCV2	16Jun22-30	636071.12	243166.38	2.616	100.000000	101.550634	1.55	N/A
CCV3	16Jun22-52	1764042.14	231937.97	7.606	300.000000	293.447177	-2.18	N/A
8411851	16Jun22-55	N/A	248892.00	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	666696.19	253140.91	2.634	100.000000	102.239414	2.24	N/A

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LCMSMS ANALYSIS REPORT

Component Name: **8:2FTS**

Summary of Quan Results

Sample ID	Data File Name	Area	ISTD Area	Area Ratio	Specified Amount	Calculated Amount	% Diff	Excluded
SYS	16Jun22-03	6171.33	167036.05	0.037	N/A	4.032242	N/A	N/A
CAL1	16Jun22-04	4797.75	135783.35	0.035	4.000000	3.950321	-1.24	N/A
CAL2	16Jun22-05	19945.57	147786.47	0.135	10.000000	9.012622	-9.87	N/A
CAL4	16Jun22-07	402772.01	117696.92	3.422	200.000000	176.039036	-11.98	N/A
CAL5	16Jun22-08	1039384.23	86223.01	12.055	600.000000	614.672618	2.45	N/A
CAL6	16Jun22-09	986194.85	77303.40	12.757	800.000000	650.385962	-18.70	x
CAL3	16Jun22-10	102604.96	89625.48	1.145	50.000000	60.325403	20.65	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	420881.37	83340.26	5.050	200.000000	258.763133	29.38	N/A
ICV1	16Jun22-13_1606230 14534	200254.23	94526.40	2.119	100.000000	109.800033	9.80	N/A
MB 16160012	16Jun22-15	N/A	151848.01	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	512873.98	89135.16	5.754	N/A	294.521223	N/A	N/A
LCSD 16160012	16Jun22-17	407146.92	100140.07	4.066	N/A	208.744757	N/A	N/A
8411848	16Jun22-19	893.15	256157.05	0.003	N/A	2.332106	N/A	N/A
8411849	16Jun22-20	N/A	273182.90	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	274836.90	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	3192033.98	276148.85	11.559	600.000000	589.495425	-1.75	N/A
8411851	16Jun22-24	N/A	282889.13	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	1464.65	290415.60	0.005	N/A	2.411199	N/A	N/A
8411853	16Jun22-26	N/A	249798.92	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	2312.10	255741.28	0.009	N/A	2.614318	N/A	N/A
8411847 BKG	16Jun22-28	N/A	189679.26	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	617951.13	195680.66	3.158	N/A	162.616824	N/A	N/A
CCV2	16Jun22-30	505206.54	115242.16	4.384	200.000000	224.907785	12.45	N/A
CCV3	16Jun22-52	2177912.91	155659.26	13.992	600.000000	713.092096	18.85	N/A
8411851	16Jun22-55	N/A	245857.25	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	1055638.21	177394.69	5.951	200.000000	304.525951	52.26	N/A

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Michele J Smith

JUN 23 2016

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JUN 23 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
SYS	16Jun22-03	14064.62	118233.47	0.119	N/A	6.768142	N/A	N/A
CAL1	16Jun22-04	23939.44	114101.97	0.210	8.000000	8.833735	10.42	N/A
CAL2	16Jun22-05	74774.32	116107.57	0.644	20.000000	18.717897	-6.41	N/A
CAL4	16Jun22-07	1471089.26	91621.62	16.056	400.000000	383.627402	-4.09	N/A
CAL5	16Jun22-08	3699018.18	76005.76	48.668	1200.000000	1275.735561	6.31	N/A
CAL6	16Jun22-09	4108321.77	72018.32	57.046	1600.000000	1543.267418	-3.55	N/A
CAL3	16Jun22-10	377607.42	92815.42	4.068	100.000000	97.386580	-2.61	N/A
recon	16Jun22-11	1469.77	Undefined	Undefined	N/A	0.000000	N/A	N/A
CCV2	16Jun22-13	1460993.48	95803.41	15.250	400.000000	363.806806	-9.05	N/A
ICV1	16Jun22-13_1606230 14534	413421.73	94013.34	4.397	100.000000	105.015650	5.02	N/A
MB 16160012	16Jun22-15	N/A	66166.33	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	918809.04	101167.16	9.082	N/A	214.963220	N/A	N/A
LCSD 16160012	16Jun22-17	843827.17	110060.25	7.667	N/A	181.478622	N/A	N/A
8411848	16Jun22-19	N/A	91886.07	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	N/A	107944.36	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	128176.89	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	5909391.89	128215.83	46.089	1200.000000	1197.320254	-0.22	N/A
8411851	16Jun22-24	11796.54	132229.68	0.089	N/A	6.092075	N/A	N/A
8411852	16Jun22-25	N/A	139672.89	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	N/A	106743.60	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	N/A	113398.48	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	72116.71	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	852148.44	69043.77	12.342	N/A	293.033370	N/A	N/A
CCV2	16Jun22-30	1480395.84	94563.46	15.655	400.000000	373.756023	-6.56	N/A
CCV3	16Jun22-52	4702480.23	99489.08	47.266	1200.000000	1232.905522	2.74	N/A
8411851	16Jun22-55	1496.15	110976.06	0.013	N/A	4.371166	N/A	N/A
CCV2	16Jun22-56	2124743.89	134675.47	15.777	400.000000	376.749425	-5.81	N/A

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Michele J Smith

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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
SYS	16Jun22-03	7418.73	218393.73	0.034	N/A	1.626704	N/A	N/A
CAL1	16Jun22-04	7634.17	214940.20	0.036	2.000000	1.688371	-15.58	N/A
CAL2	16Jun22-05	26906.03	221036.37	0.122	5.000000	5.122412	2.45	N/A
CAL4	16Jun22-07	604965.70	229550.03	2.635	100.000000	105.253419	5.25	N/A
CAL5	16Jun22-08	1666611.06	206533.36	8.069	300.000000	321.711115	7.24	N/A
CAL6	16Jun22-09	1881860.99	202056.30	9.314	400.000000	371.268266	-7.18	N/A
CAL3	16Jun22-10	141436.05	211144.84	0.670	25.000000	26.956417	7.83	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	600606.85	206499.51	2.909	100.000000	116.130977	16.13	N/A
ICV1	16Jun22-13_1606230 14534	499404.92	213846.17	2.335	100.000000	93.299471	-6.70	N/A
MB 16160012	16Jun22-15	N/A	154170.52	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	957113.57	209135.89	4.577	N/A	182.573901	N/A	N/A
LCSD 16160012	16Jun22-17	992741.04	212886.70	4.663	N/A	186.028356	N/A	N/A
8411848	16Jun22-19	N/A	178525.58	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	N/A	223915.88	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	252183.16	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	1819330.51	242639.97	7.498	300.000000	298.950594	-0.35	N/A
8411851	16Jun22-24	N/A	242186.18	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	N/A	261301.10	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	N/A	254432.81	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	N/A	248329.25	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	213571.84	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	980639.14	194027.68	5.054	N/A	201.598747	N/A	N/A
CCV2	16Jun22-30	601781.47	238841.97	2.520	100.000000	100.638207	0.64	N/A
CCV3	16Jun22-52	1766679.59	226184.58	7.811	300.000000	311.407485	3.80	N/A
8411851	16Jun22-55	N/A	253554.95	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	656607.91	249145.42	2.635	100.000000	105.253371	5.25	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
SYS	16Jun22-03	15445.62	121284.00	0.127	N/A	6.393007	N/A	N/A
CAL1	16Jun22-04	18782.06	99870.86	0.188	8.000000	8.002719	0.03	N/A
CAL2	16Jun22-05	53074.13	90864.42	0.584	20.000000	18.495230	-7.52	N/A
CAL4	16Jun22-07	1116916.66	78215.07	14.280	400.000000	373.284039	-6.68	N/A
CAL5	16Jun22-08	2973563.23	59347.28	50.104	1200.000000	1237.218349	3.10	N/A
CAL6	16Jun22-09	3059511.95	46913.07	65.217	1600.000000	1578.366652	-1.35	N/A
CAL3	16Jun22-10	320345.41	77168.28	4.151	100.000000	112.391992	12.39	N/A
recon	16Jun22-11	1353.17	Undefined	Undefined	N/A	0.000000	N/A	N/A
CCV2	16Jun22-13	1235586.13	83719.00	14.759	400.000000	385.412698	-3.65	N/A
ICV1	16Jun22-13_1606230 14534	302266.51	78166.89	3.867	100.000000	104.947765	4.95	N/A
MB 16160012	16Jun22-15	N/A	57839.31	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	565785.29	87509.92	6.465	N/A	172.730260	N/A	N/A
LCSD 16160012	16Jun22-17	535773.72	72376.38	7.403	N/A	197.041141	N/A	N/A
8411848	16Jun22-19	N/A	78810.70	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	N/A	105690.96	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	115848.44	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	4712189.14	102138.74	46.135	1200.000000	1145.508670	-4.54	N/A
8411851	16Jun22-24	9670.46	133179.60	0.073	N/A	4.941411	N/A	N/A
8411852	16Jun22-25	N/A	132922.42	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	N/A	116119.69	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	N/A	101574.70	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	75729.38	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	551017.06	73689.87	7.478	N/A	198.981147	N/A	N/A
CCV2	16Jun22-30	1366206.58	96782.48	14.116	400.000000	369.129262	-7.72	N/A
CCV3	16Jun22-52	3620367.31	72519.71	49.923	1200.000000	1233.034750	2.75	N/A
8411851	16Jun22-55	670.42	112723.97	0.006	N/A	3.173197	N/A	N/A
CCV2	16Jun22-56	1614573.16	105708.39	15.274	400.000000	398.445455	-0.39	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
SYS	16Jun22-03	8708.71	192787.81	0.045	N/A	3.074537	N/A	N/A
CAL1	16Jun22-04	14836.88	220216.07	0.067	4.000000	4.087487	2.19	N/A
CAL2	16Jun22-05	40699.02	232235.69	0.175	10.000000	9.009252	-9.91	N/A
CAL4	16Jun22-07	1017839.28	222961.46	4.565	200.000000	209.295266	4.65	N/A
CAL5	16Jun22-08	2667056.71	184224.88	14.477	600.000000	661.533166	10.26	N/A
CAL6	16Jun22-09	2717823.29	170276.27	15.961	800.000000	729.244006	-8.84	N/A
CAL3	16Jun22-10	248534.10	227618.60	1.092	50.000000	50.830823	1.66	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	951708.41	208658.37	4.561	200.000000	209.112482	4.56	N/A
ICV1	16Jun22-13_1606230 14534	399580.58	204509.17	1.954	100.000000	90.157798	-9.84	N/A
MB 16160012	16Jun22-15	N/A	146215.85	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	781934.87	211146.47	3.703	N/A	169.975339	N/A	N/A
LCSD 16160012	16Jun22-17	795936.46	218778.05	3.638	N/A	167.001436	N/A	N/A
8411848	16Jun22-19	N/A	168853.49	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	N/A	218441.60	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	226754.02	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	2943776.91	233467.44	12.609	600.000000	576.294940	-3.95	N/A
8411851	16Jun22-24	N/A	217010.69	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	N/A	250486.13	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	N/A	227182.72	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	N/A	222917.24	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	197197.33	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	872911.15	180498.31	4.836	N/A	221.660865	N/A	N/A
CCV2	16Jun22-30	1025535.09	225986.42	4.538	200.000000	208.061025	4.03	N/A
CCV3	16Jun22-52	2935820.85	234155.60	12.538	600.000000	573.054022	-4.49	N/A
8411851	16Jun22-55	N/A	232811.69	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	1113147.23	231952.14	4.799	200.000000	219.969103	9.98	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
SYS	16Jun22-03	6272.70	192787.81	0.033	N/A	3.061185	N/A	N/A
CAL1	16Jun22-04	12679.30	220216.07	0.058	4.000000	4.355394	8.88	N/A
CAL2	16Jun22-05	36681.48	232235.69	0.158	10.000000	9.543256	-4.57	N/A
CAL4	16Jun22-07	815351.11	222961.46	3.657	200.000000	190.390661	-4.80	N/A
CAL5	16Jun22-08	2411484.16	184224.88	13.090	600.000000	677.943277	12.99	N/A
CAL6	16Jun22-09	2413201.53	170276.27	14.172	800.000000	733.886995	-8.26	N/A
CAL3	16Jun22-10	204784.35	227618.60	0.900	50.000000	47.880417	-4.24	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	818564.90	208658.37	3.923	200.000000	204.143059	2.07	N/A
ICV1	16Jun22-13_1606230 14534	302954.22	204509.17	1.481	100.000000	77.945643	-22.05	N/A
MB 16160012	16Jun22-15	N/A	146215.85	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	652050.91	211146.47	3.088	N/A	160.993236	N/A	N/A
LCSD 16160012	16Jun22-17	637186.86	218778.05	2.912	N/A	151.913862	N/A	N/A
8411848	16Jun22-19	N/A	168853.49	N/A	N/A	N/A	N/A	N/A
8411849	16Jun22-20	N/A	218441.60	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	226754.02	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	2428711.41	233467.44	10.403	600.000000	539.057418	-10.16	N/A
8411851	16Jun22-24	N/A	217010.69	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	N/A	250486.13	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	N/A	227182.72	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	N/A	222917.24	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	197197.33	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	758822.01	180498.31	4.204	N/A	218.669315	N/A	N/A
CCV2	16Jun22-30	858183.39	225986.42	3.797	200.000000	197.656929	-1.17	N/A
CCV3	16Jun22-52	2484814.02	234155.60	10.612	600.000000	549.860958	-8.36	N/A
8411851	16Jun22-55	N/A	232811.69	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	906795.87	231952.14	3.909	200.000000	203.441074	1.72	N/A

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JUN 23 2016

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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
SYS	16Jun22-03	3379.59	218393.73	0.015	N/A	1.319508	N/A	N/A
CAL1	16Jun22-04	11039.04	214940.20	0.051	4.000000	3.618549	-9.54	N/A
CAL2	16Jun22-05	33935.51	221036.37	0.154	10.000000	10.164488	1.64	N/A
CAL4	16Jun22-07	774050.77	229550.03	3.372	200.000000	216.370385	8.19	N/A
CAL5	16Jun22-08	2125914.83	206533.36	10.293	600.000000	659.809236	9.97	N/A
CAL6	16Jun22-09	2283679.16	202056.30	11.302	800.000000	724.446237	-9.44	N/A
CAL3	16Jun22-10	162351.00	211144.84	0.769	50.000000	49.591104	-0.82	N/A
recon	16Jun22-11	N/A	Undefined	Undefined	N/A	N/A	N/A	N/A
CCV2	16Jun22-13	738500.67	206499.51	3.576	200.000000	229.456303	14.73	N/A
ICV1	16Jun22-13_1606230 14534	302606.41	213846.17	1.415	100.000000	90.989665	-9.01	N/A
MB 16160012	16Jun22-15	N/A	154170.52	N/A	N/A	N/A	N/A	N/A
LCS 16160012	16Jun22-16	581255.90	209135.89	2.779	N/A	178.395928	N/A	N/A
LCSD 16160012	16Jun22-17	558910.49	212886.70	2.625	N/A	168.533679	N/A	N/A
8411848	16Jun22-19	1584.04	178525.58	0.009	N/A	0.896537	N/A	N/A
8411849	16Jun22-20	N/A	223915.88	N/A	N/A	N/A	N/A	N/A
8411850	16Jun22-21	N/A	252183.16	N/A	N/A	N/A	N/A	N/A
CCV3	16Jun22-23	2043257.61	242639.97	8.421	600.000000	539.848047	-10.03	N/A
8411851	16Jun22-24	N/A	242186.18	N/A	N/A	N/A	N/A	N/A
8411852	16Jun22-25	N/A	261301.10	N/A	N/A	N/A	N/A	N/A
8411853	16Jun22-26	N/A	254432.81	N/A	N/A	N/A	N/A	N/A
8411854	16Jun22-27	N/A	248329.25	N/A	N/A	N/A	N/A	N/A
8411847 BKG	16Jun22-28	N/A	213571.84	N/A	N/A	N/A	N/A	N/A
8411847 MS	16Jun22-29	616423.84	194027.68	3.177	N/A	203.874024	N/A	N/A
CCV2	16Jun22-30	713153.44	238841.97	2.986	200.000000	191.629878	-4.19	N/A
CCV3	16Jun22-52	2020271.26	226184.58	8.932	600.000000	572.588136	-4.57	N/A
8411851	16Jun22-55	N/A	253554.95	N/A	N/A	N/A	N/A	N/A
CCV2	16Jun22-56	791163.06	249145.42	3.176	200.000000	203.779070	1.89	N/A

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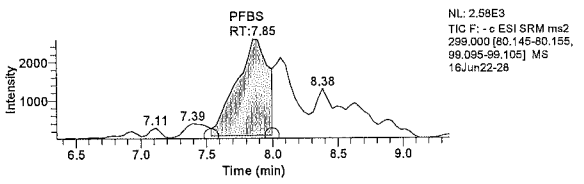
LCMSMS ANALYSIS REPORT

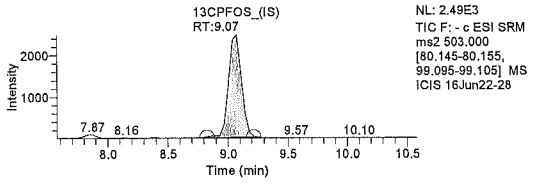
Sample Name:	8411847 BKG	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411847 BKG	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-28	Dilution Factor:	1.00
Acquisition Date:	06/23/16 06:59:45 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:20	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

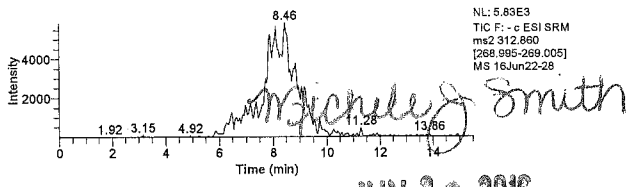
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.11	263979.69	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.82	198968.69	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.82	189679.26	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.47	208829.99	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.68	197197.33	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.57	162931.60	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.25	116133.81	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.53	41286.01	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.07	18665.98	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.93	213571.84	N/A	N/A	N/A
8:2FTS	N/A	N/A	N/A	N/A	N/A	ng/g
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
PFBS	37.424	7.85	40211.44	18665.98	2.154	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	0.840	9.11	2012.96	263979.69	0.008	ng/L
PFOA	4.035	8.82	19016.97	198968.69	0.096	ng/L
PFOS	N/A	N/A	N/A	N/A	N/A	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	6.788	8.56	26966.91	162931.60	0.166	ng/L
d3-NMeFOSAA	N/A	9.72	72116.71	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.01	75729.38	N/A	N/A	N/A

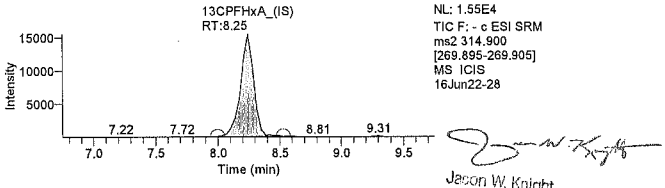
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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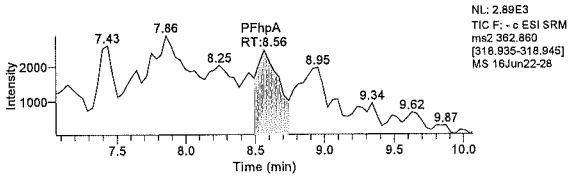

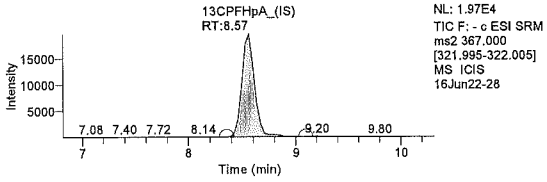

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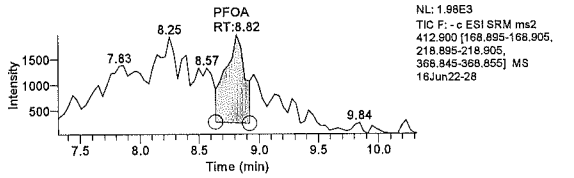

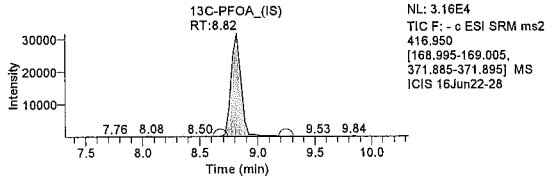

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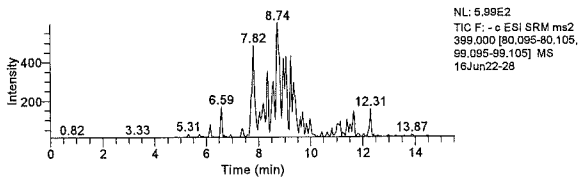
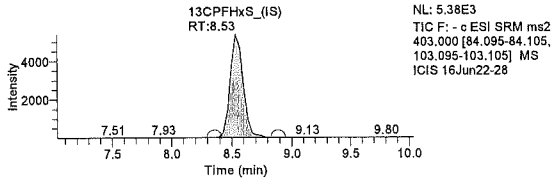
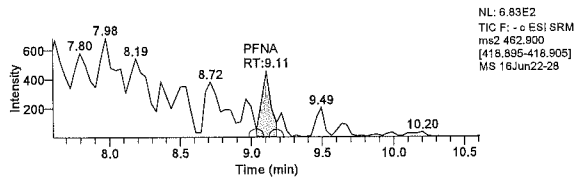
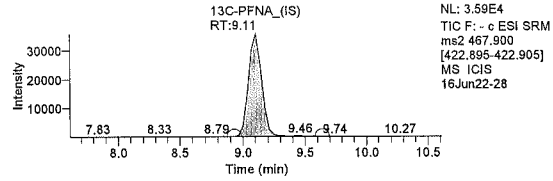


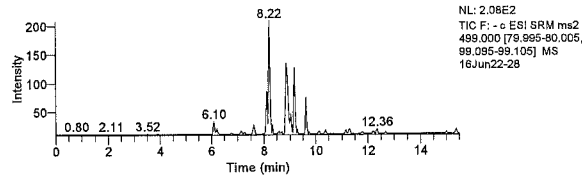


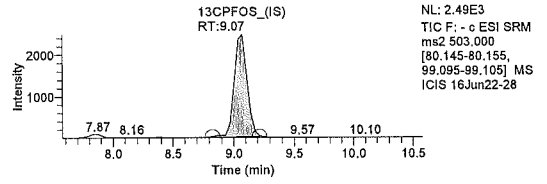
Component Name: PFNA



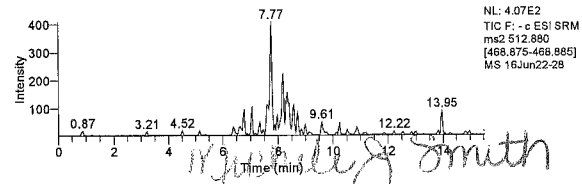


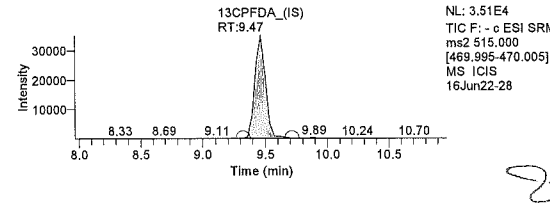
Component Name: PFOS





Component Name: PFDA





Component Name: NMeFOSAA

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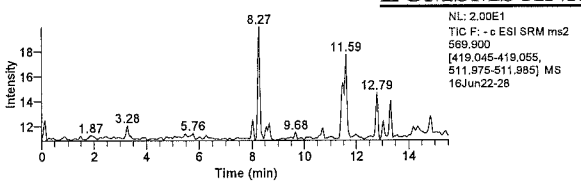
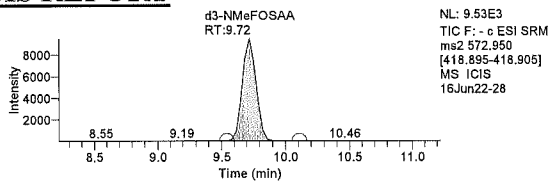
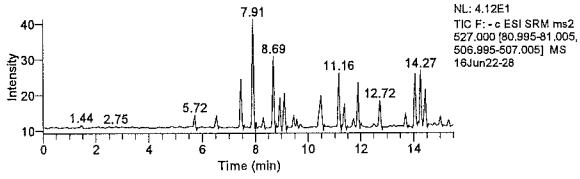
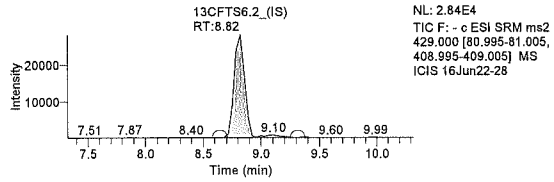


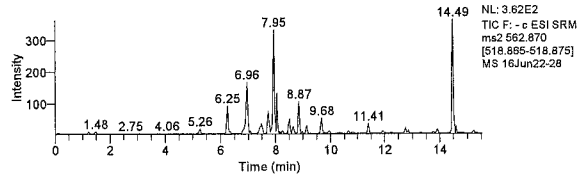


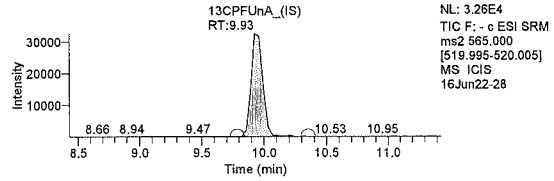
Component Name: 8:2FTS



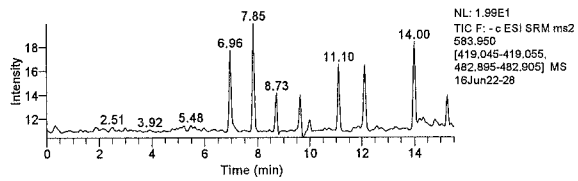


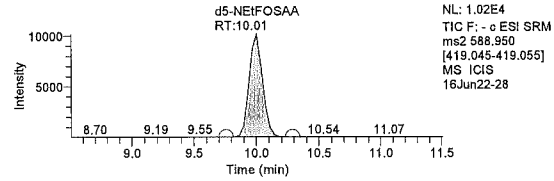
Component Name: PFUdA



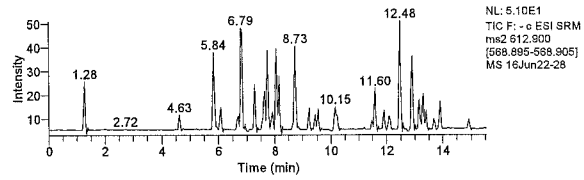


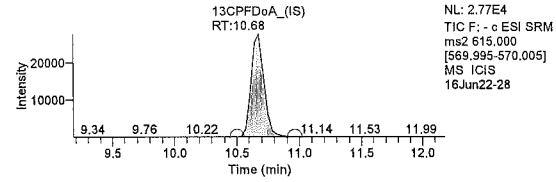
Component Name: NEtFOSAA



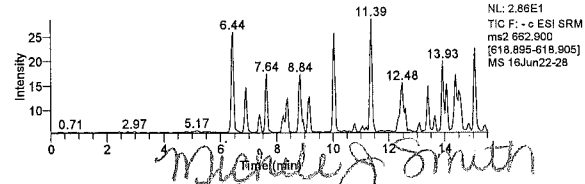


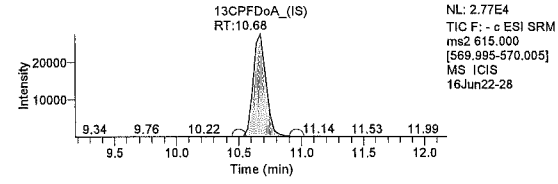
Component Name: PFDoA





Component Name: PFTrDA





Component Name: PFTeDA

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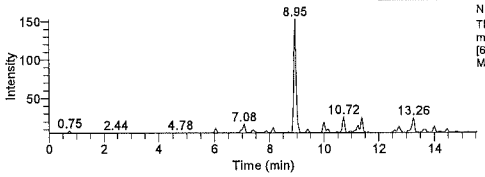

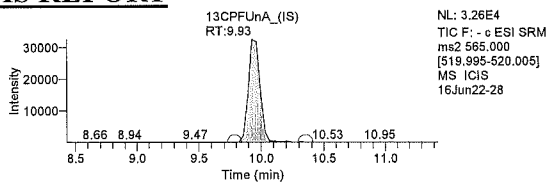

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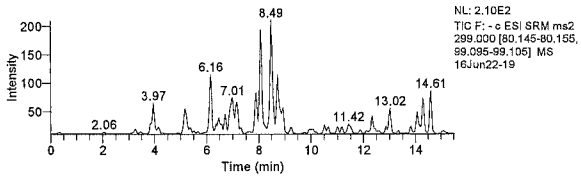
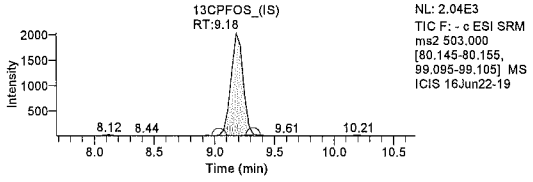
Sample Name:	8411848	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411848	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-19	Dilution Factor:	1.00
Acquisition Date:	06/23/16 04:33:31 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	c:13	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

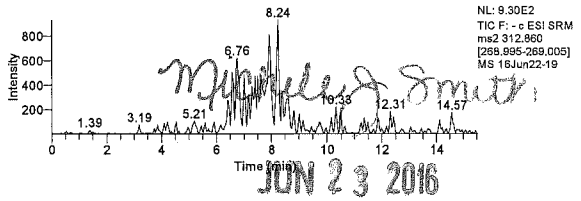
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.21	273492.97	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.93	219846.21	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.93	256157.05	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.78	184704.17	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.75	168853.49	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.64	187791.10	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.32	133730.36	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.64	34885.02	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.18	14271.72	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.18	178525.58	N/A	N/A	N/A
8:2FTS	2.332	9.79	893.15	256157.05	0.003	ng/g
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	N/A	N/A	N/A	N/A	N/A	ng/L
PFOA	1.455	8.89	5167.84	219846.21	0.024	ng/L
PFOS	N/A	N/A	N/A	N/A	N/A	ng/L
PFTeDA	0.897	12.41	1584.04	178525.58	0.009	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	N/A	N/A	N/A	N/A	N/A	ng/L
d3-NMeFOSAA	N/A	9.97	91886.07	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.22	78810.70	N/A	N/A	N/A

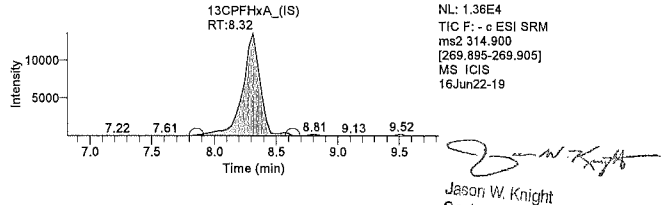
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFHxS

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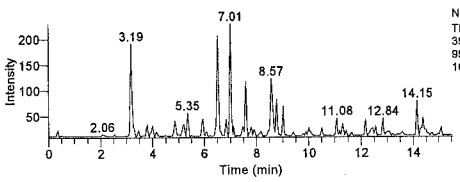
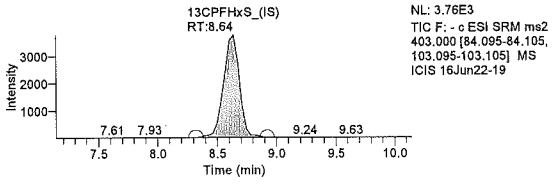
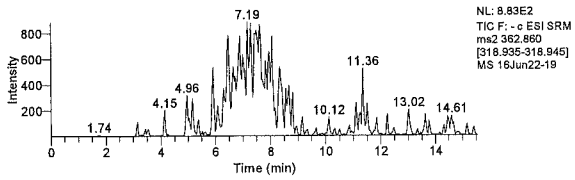
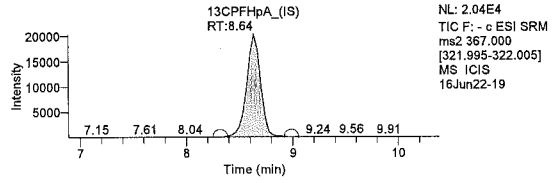


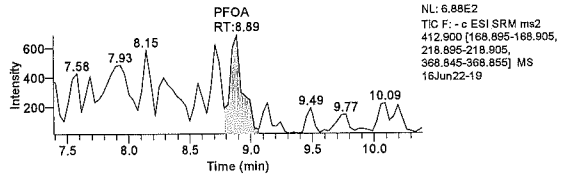


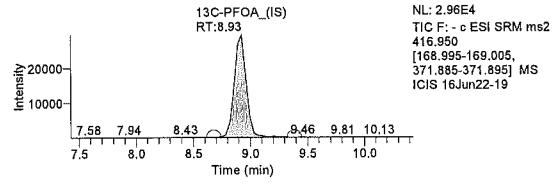
Component Name: PFhpA





Component Name: PFOA





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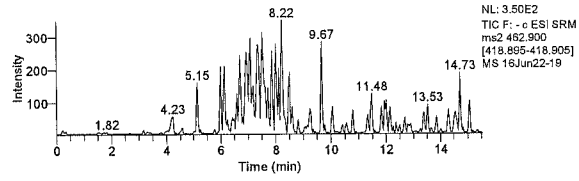
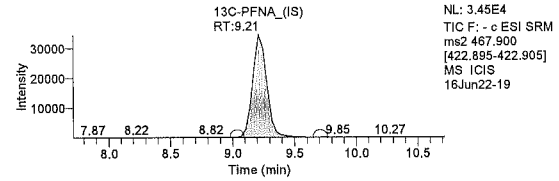
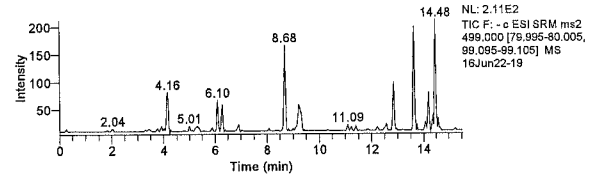
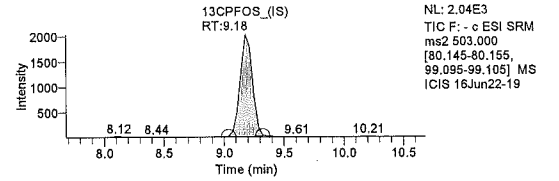


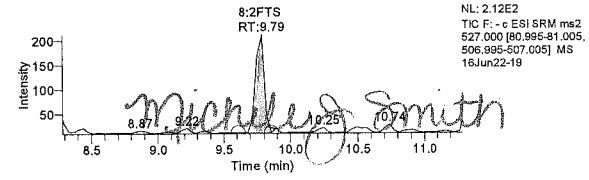


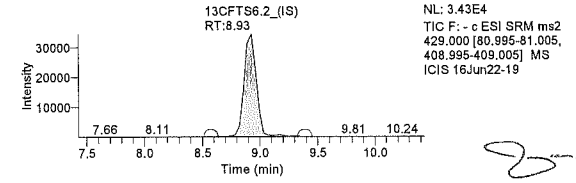
Component Name: PFOS





Component Name: 8:2FTS





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Component Name: PFDA

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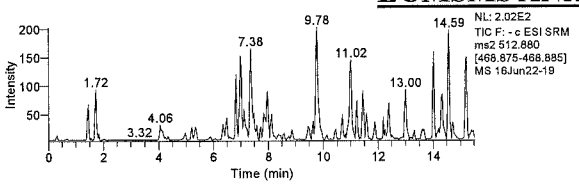
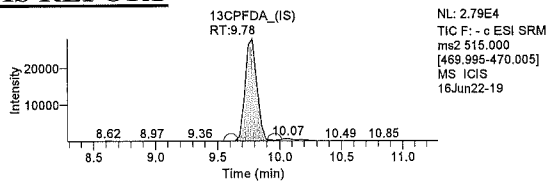
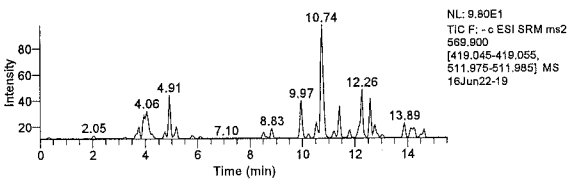
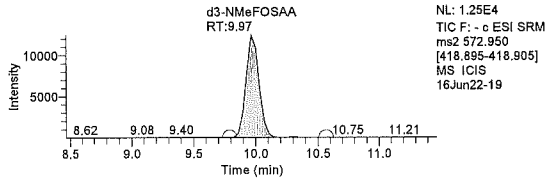


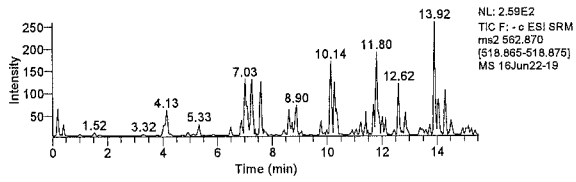


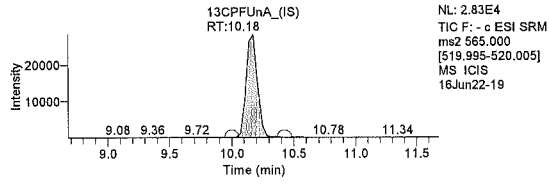
Component Name: NMeFOSAA



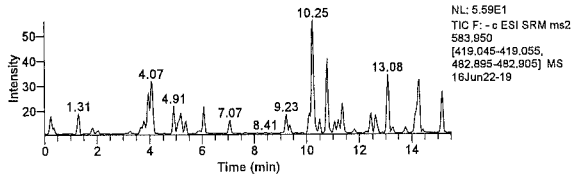


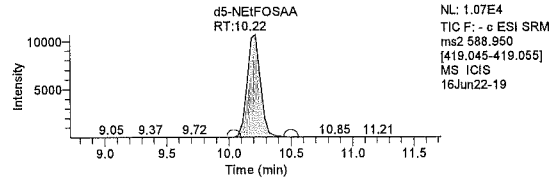
Component Name: PFUdA





Component Name: NEtFOSAA





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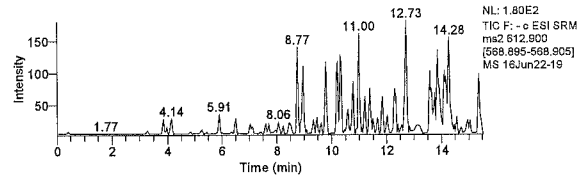
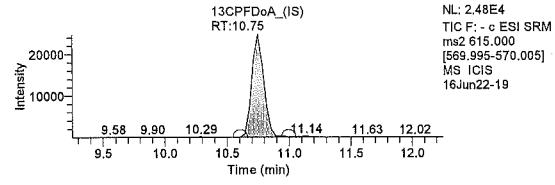
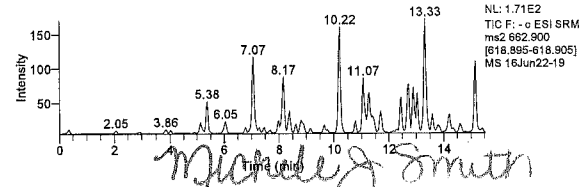
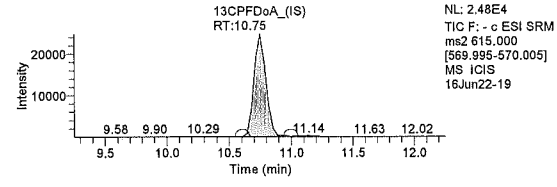




Component Name: PFTrDA





Component Name: PFTeDA

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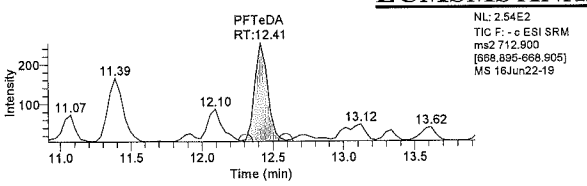

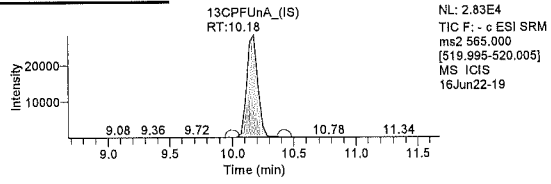

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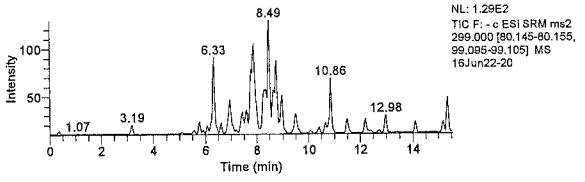
LCMSMS ANALYSIS REPORT

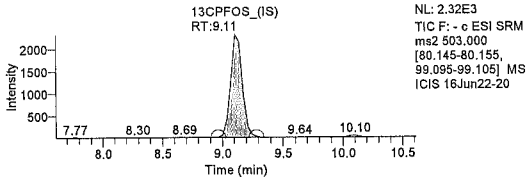
Sample Name:	8411849	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411849	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-20	Dilution Factor:	1.00
Acquisition Date:	06/23/16 04:49:42 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:14	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

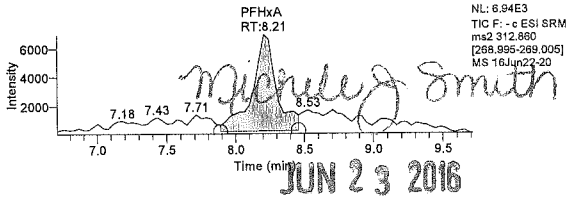
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.14	296877.52	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.89	262659.58	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.89	273182.90	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.50	235823.15	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.64	218441.60	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.57	213400.98	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.24	172397.63	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.57	38474.73	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.11	15864.70	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.00	223915.88	N/A	N/A	N/A
8:2FTS	N/A	N/A	N/A	N/A	N/A	ng/g
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	1.805	9.54	5213.01	235823.15	0.022	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	20.632	8.21	82718.30	172397.63	0.480	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	1.464	9.14	5879.72	296877.52	0.020	ng/L
PFOA	8.506	8.89	57916.03	262659.58	0.220	ng/L
PFOS	3.558	9.14	1264.64	15864.70	0.080	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	8.119	8.56	43022.96	213400.98	0.202	ng/L
d3-NMeFOSAA	N/A	9.76	107944.36	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.04	105690.96	N/A	N/A	N/A

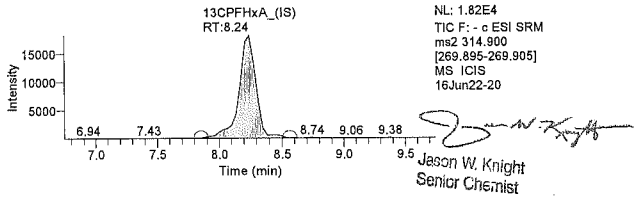
Component Name: PFBS





Component Name: PFHxA





Component Name: PFhpA

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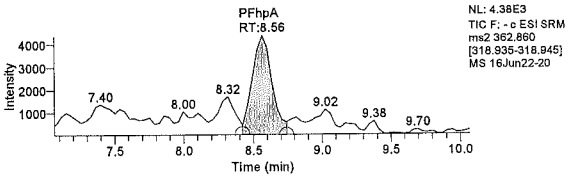
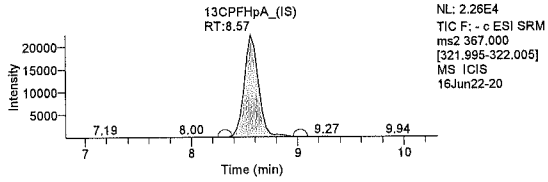
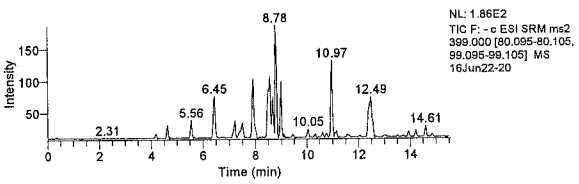
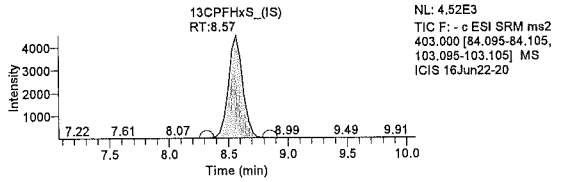


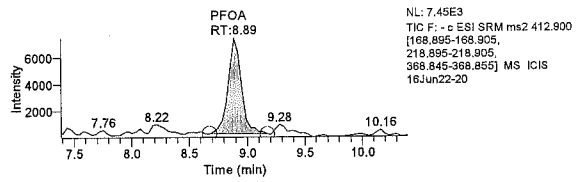


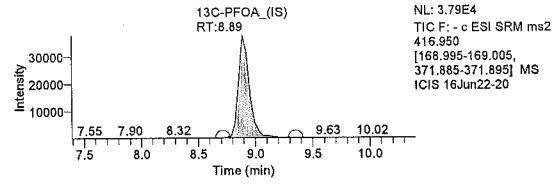
Component Name: PFHxS



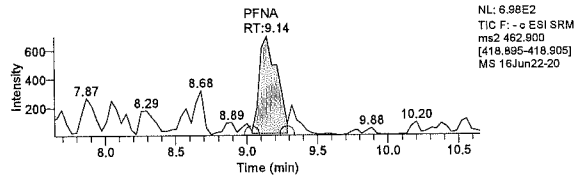


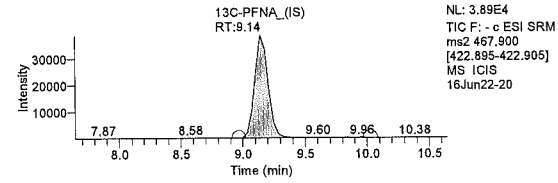
Component Name: PFOA



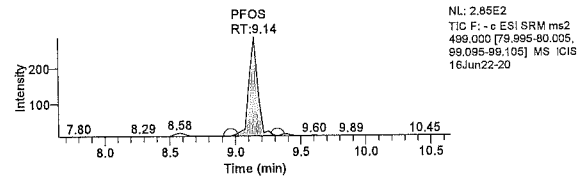


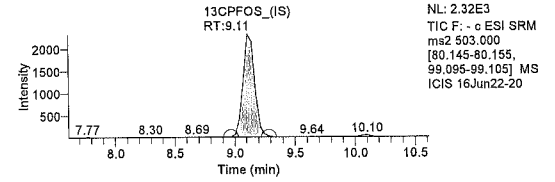
Component Name: PFNA



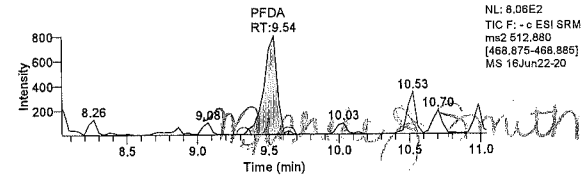


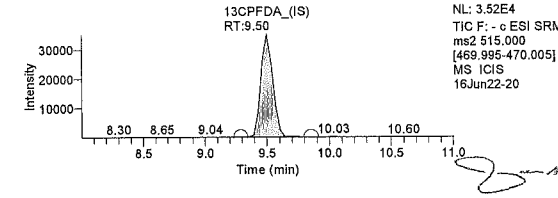
Component Name: PFOS





Component Name: PFDA





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Component Name: NMeFOSAA

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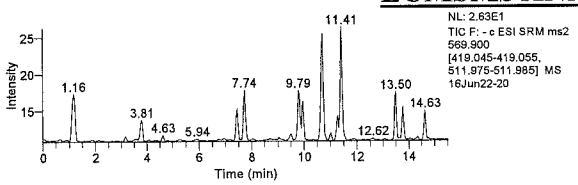
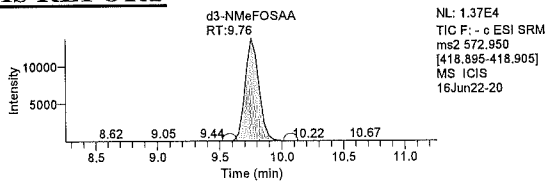
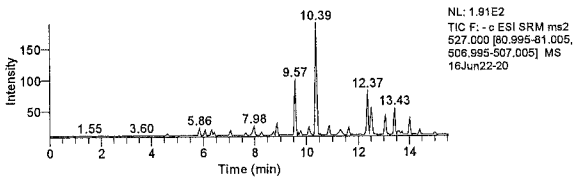
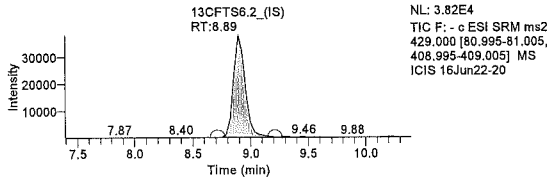


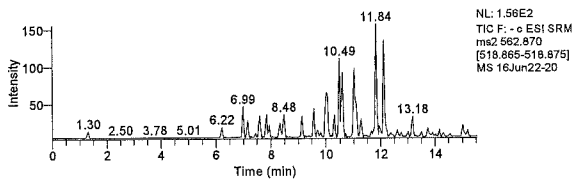


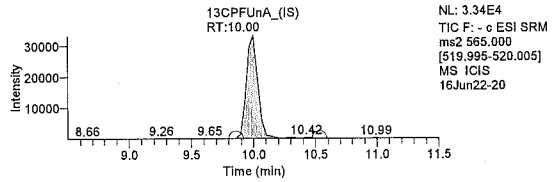
Component Name: 8:2FTS



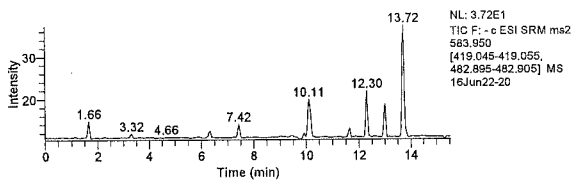


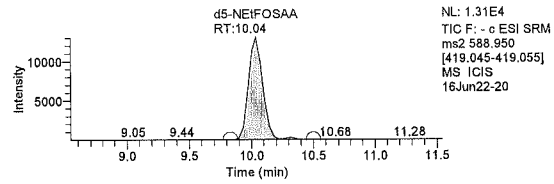
Component Name: PFUdA



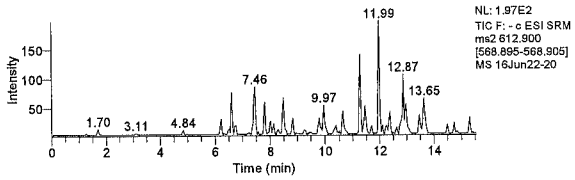


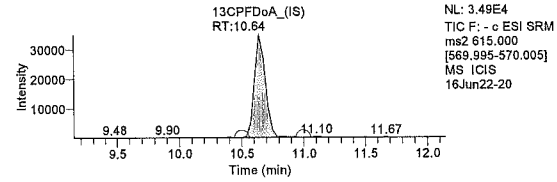
Component Name: NEtFOSAA



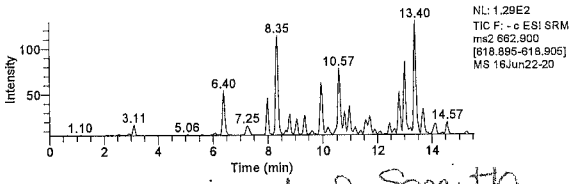


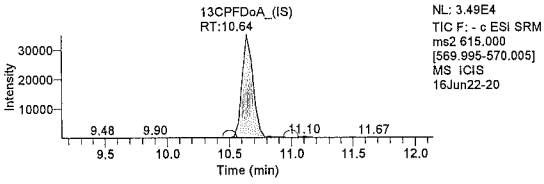
Component Name: PFDoA





Component Name: PFTrDA





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Component Name: PFTeDA

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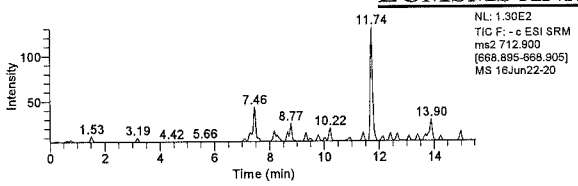

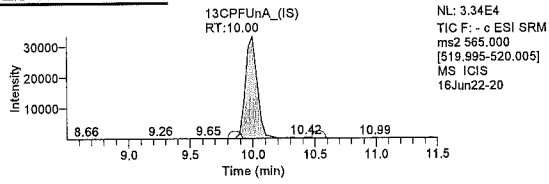

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Jason W. Knight
Senior Chemist

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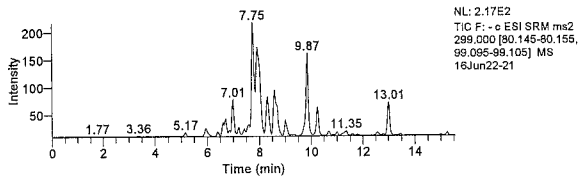
LCMSMS ANALYSIS REPORT

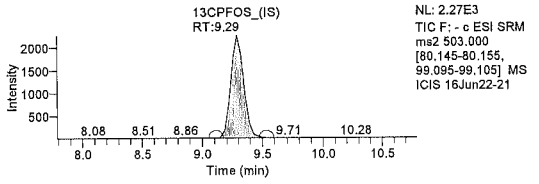
Sample Name:	8411850	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411850	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-21	Dilution Factor:	1.00
Acquisition Date:	06/23/16 05:05:58 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:15	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

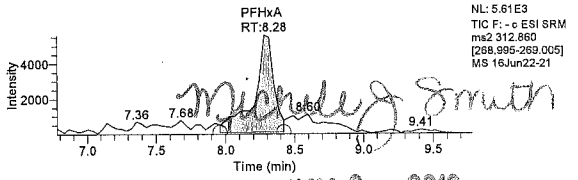
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.32	336156.23	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.89	284726.42	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.89	274836.90	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.57	252908.84	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.43	226754.02	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.64	232239.26	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.28	185665.46	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.64	38200.40	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.29	17198.80	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.93	252183.16	N/A	N/A	N/A
8:2FTS	N/A	N/A	N/A	N/A	N/A	ng/g
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	13.012	8.28	55046.13	185665.46	0.296	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	3.946	9.32	22960.50	336156.23	0.068	ng/L
PFOA	4.925	8.89	34296.14	284726.42	0.120	ng/L
PFOS	1.043	9.29	241.63	17198.80	0.014	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	5.273	8.64	28899.65	232239.26	0.124	ng/L
d3-NMeFOSAA	N/A	9.76	128176.89	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.97	115848.44	N/A	N/A	N/A

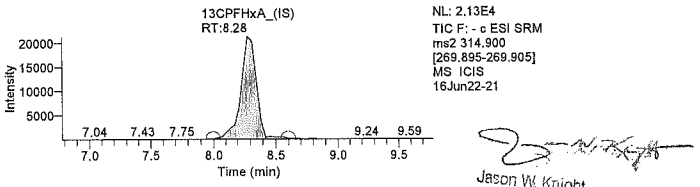
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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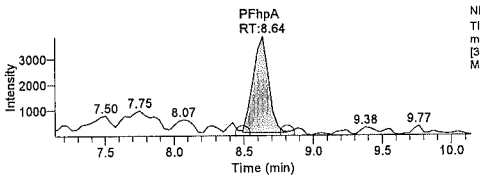
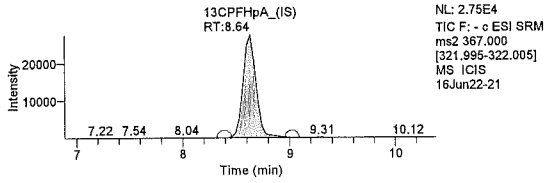
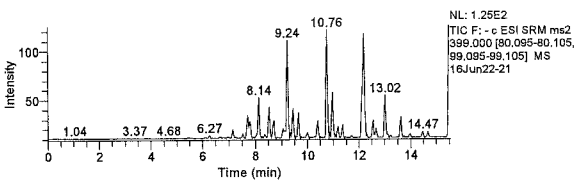
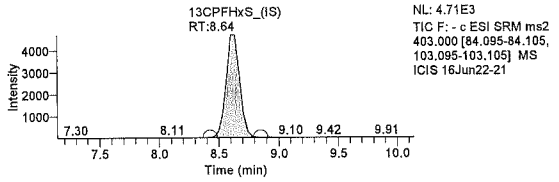


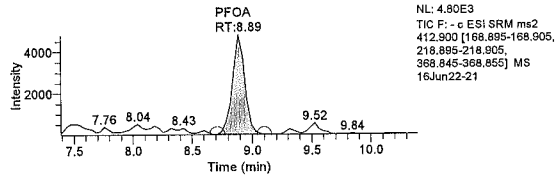


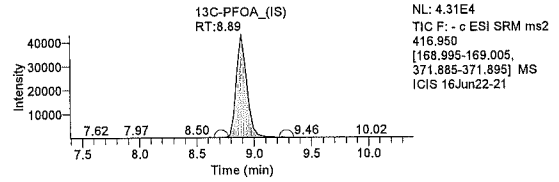
Component Name: PFHxS



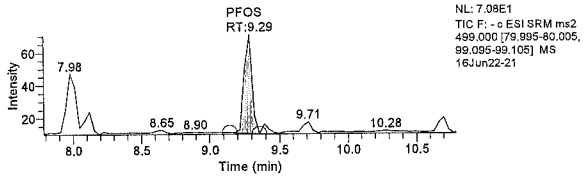


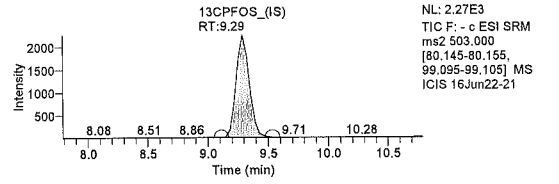
Component Name: PFOA



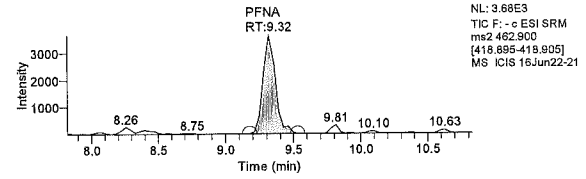


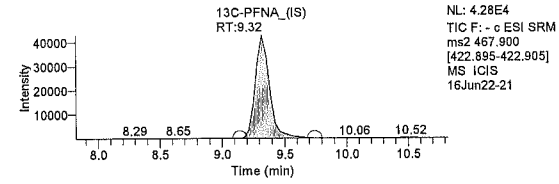
Component Name: PFOS



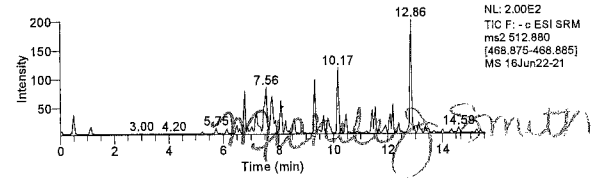


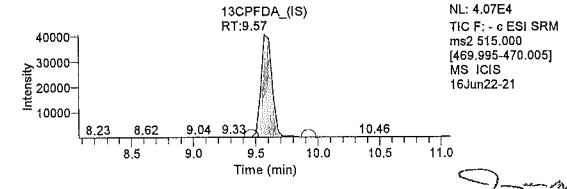
Component Name: PFNA





Component Name: PFDA





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Component Name: NMeFOSAA

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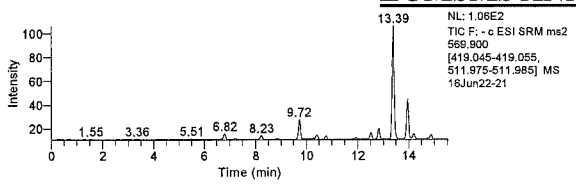
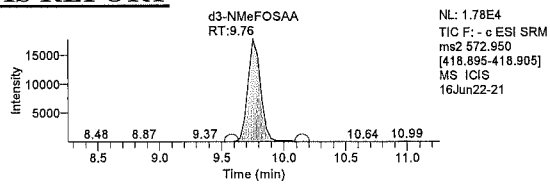
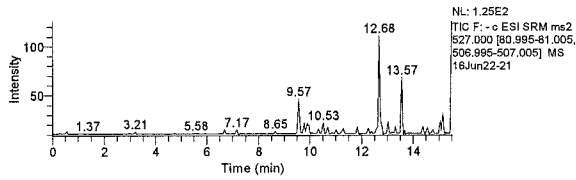
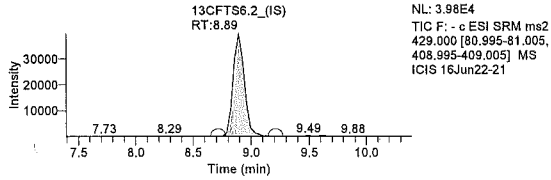


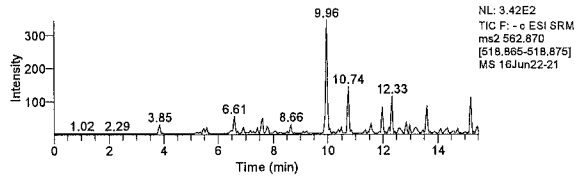


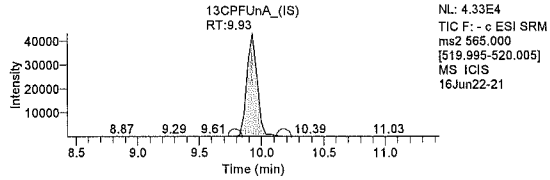
Component Name: 8:2FTS





Component Name: PFUdA





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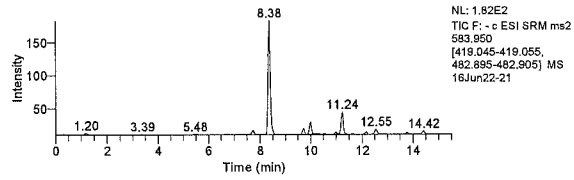
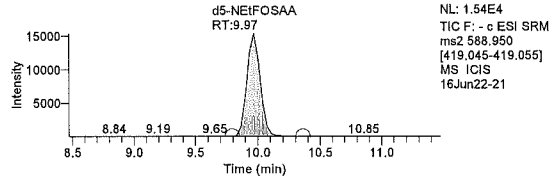
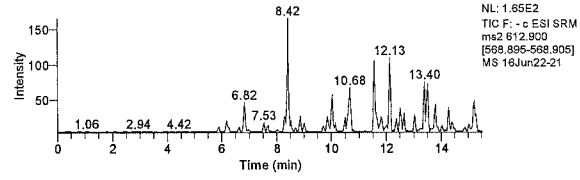
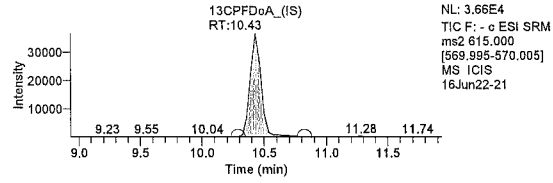


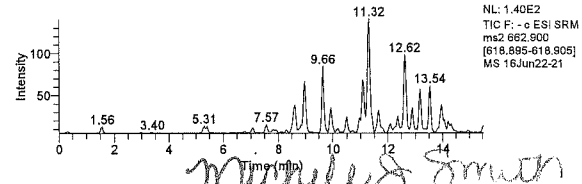


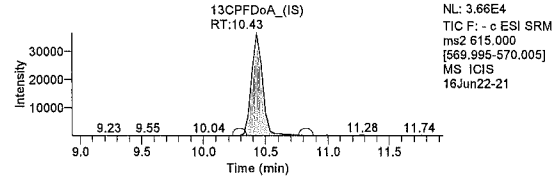
Component Name: PFDoA





Component Name: PFTrDA





Component Name: PFTeDA

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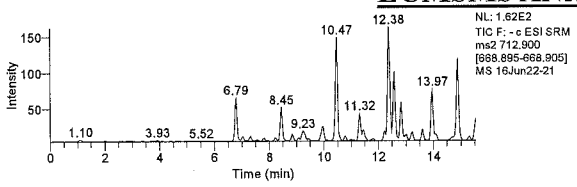

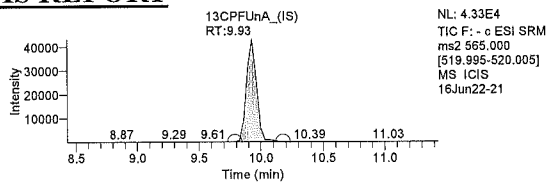

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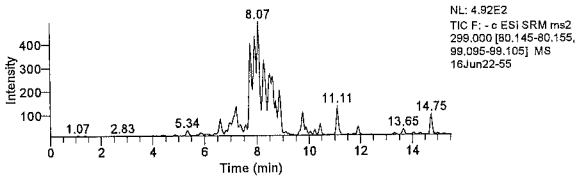
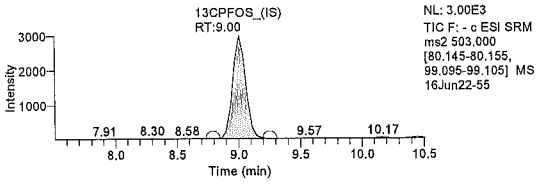
Sample Name:	8411851	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411851	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-55	Dilution Factor:	1.00
Acquisition Date:	06/23/16 02:18:01 PM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:16	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.04	360282.16	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.78	272858.14	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.79	245857.25	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.33	248892.00	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.36	232811.69	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.53	239603.67	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.21	157641.20	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.53	37256.07	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.00	22007.28	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.75	253554.95	N/A	N/A	N/A
8:2FTS	N/A	N/A	N/A	N/A	N/A	ng/g
NEtFOSAA	3.173	8.55	670.42	112723.97	0.006	ng/L
NMeFOSAA	4.371	9.58	1496.15	110976.06	0.013	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	8.729	8.21	30493.62	157641.20	0.193	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	2.052	9.04	11272.49	360282.16	0.031	ng/L
PFOA	3.449	8.78	21614.37	272858.14	0.079	ng/L
PFOS	N/A	N/A	N/A	N/A	N/A	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	2.689	8.49	13030.92	239603.67	0.054	ng/L
d3-NMeFOSAA	N/A	9.54	110976.06	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.79	112723.97	N/A	N/A	N/A

Component Name: PFBS





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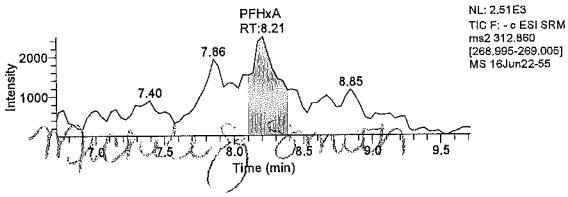

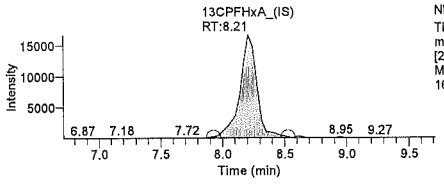

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Component Name: PFhpA

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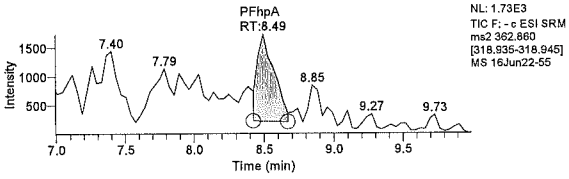
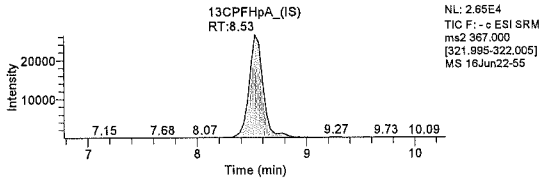
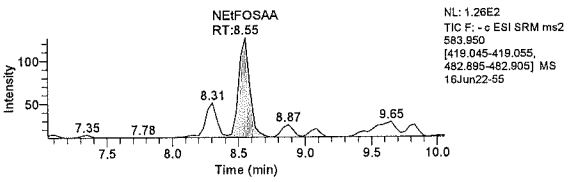
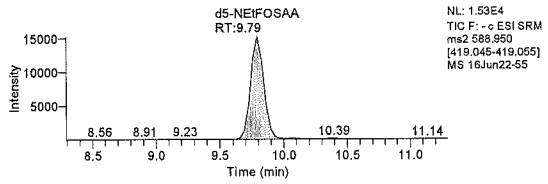


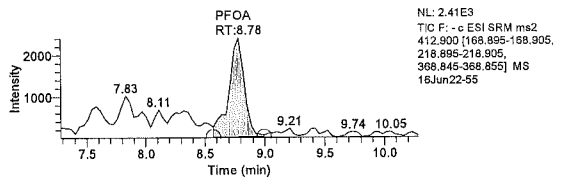


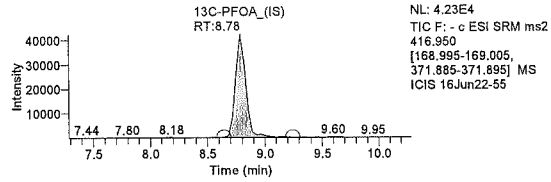
Component Name: NEtFOSAA





Component Name: PFOA





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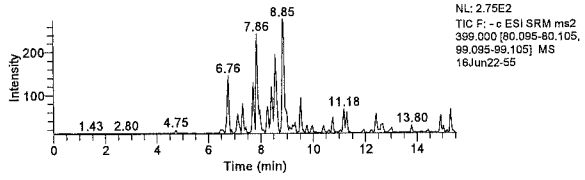

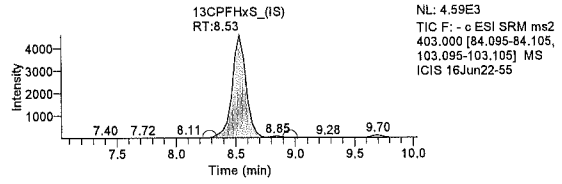

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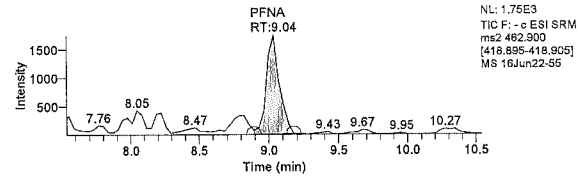
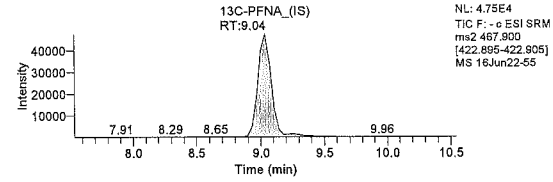
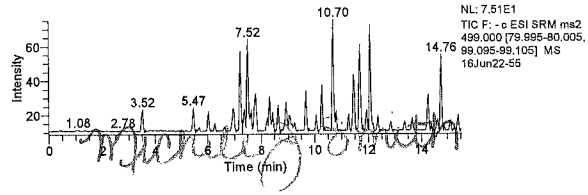
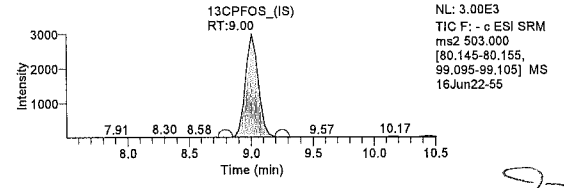




Component Name: PFOS





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Component Name: NMeFOSAA

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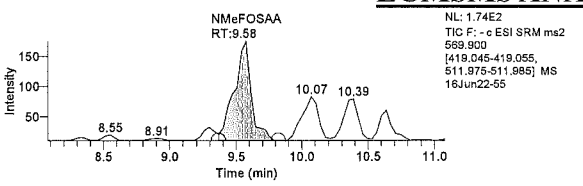

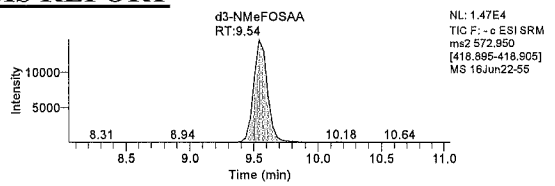

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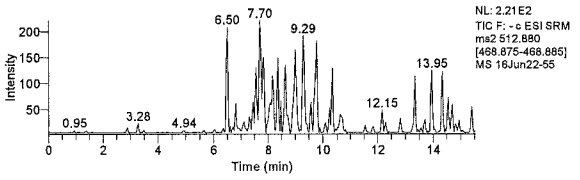
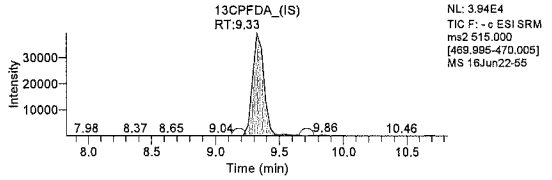
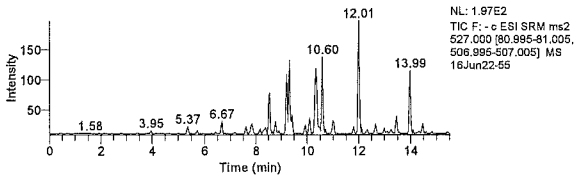
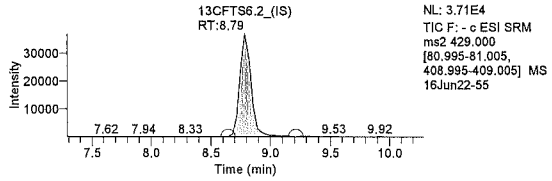


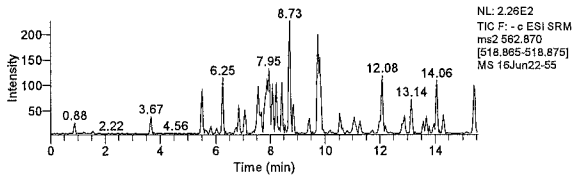


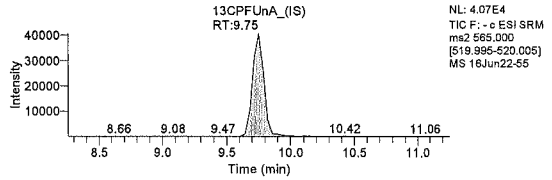
Component Name: 8:2FTS



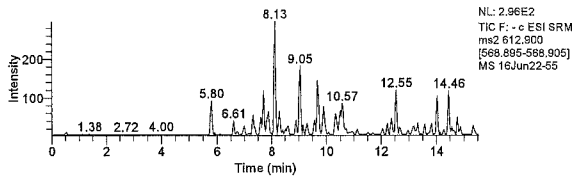


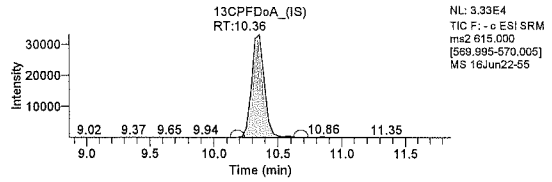
Component Name: PFUdA



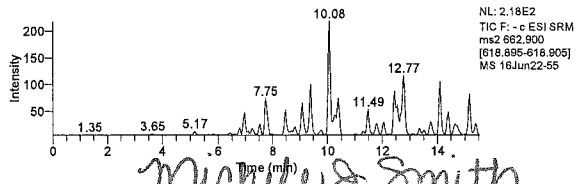


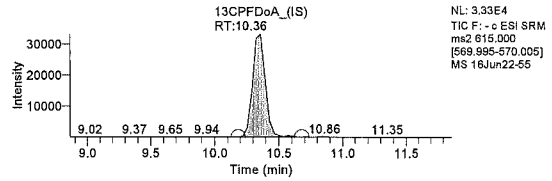
Component Name: PFDoA





Component Name: PFTrDA





Component Name: PFTeDA

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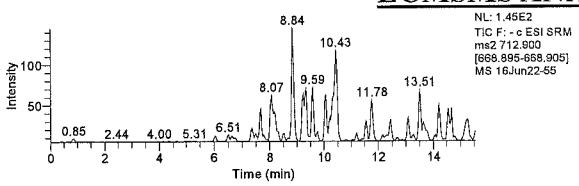

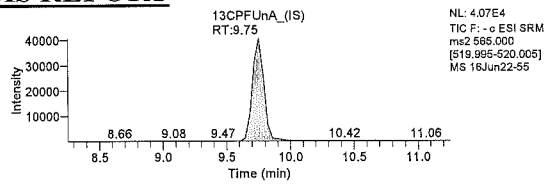

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LCMSMS ANALYSIS REPORT

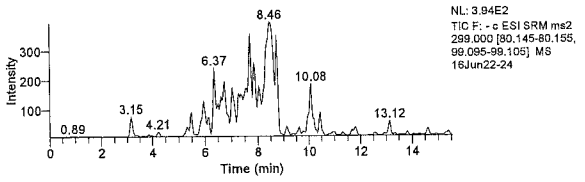
Sample Name:	8411851	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411851	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-24	Dilution Factor:	1.00
Acquisition Date:	06/23/16 05:54:42 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:16	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

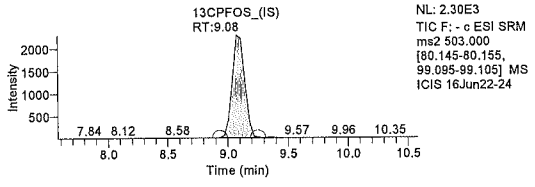
Extracted Ion Chromatogram
Quan Peak Table

Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.14	312886.93	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.86	266520.48	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.86	282889.13	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.50	241966.05	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.89	217010.69	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.60	214109.08	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.25	184402.92	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.57	37363.58	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.08	16637.45	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.00	242186.18	N/A	N/A	N/A
8:2FTS	N/A	N/A	N/A	N/A	N/A	ng/g
* NEtFOSAA	4.941	10.11	9670.46	133179.60	0.073	ng/L
* NMeFOSAA	6.092	9.79	11796.54	132229.68	0.089	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	8.032	8.21	32578.60	184402.92	0.177	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	2.779	9.14	14238.14	312886.93	0.046	ng/L
PFOA	3.325	8.85	20189.52	266520.48	0.076	ng/L
PFOS	N/A	N/A	N/A	N/A	N/A	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	2.993	8.60	13406.56	214109.08	0.063	ng/L
d3-NMeFOSAA	N/A	9.76	132229.68	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.08	133179.60	N/A	N/A	N/A

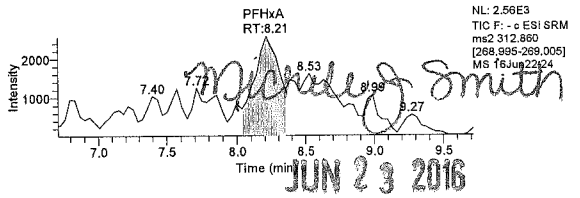
* USE RESULT RESULT SEQ. 55 JWK9524 6/23/16 (POSSIBLE CARRYOVER)

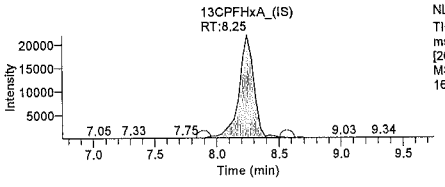
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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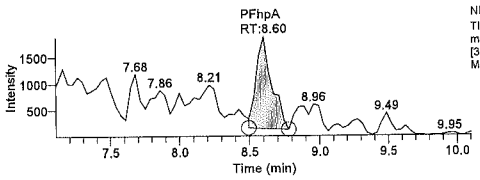
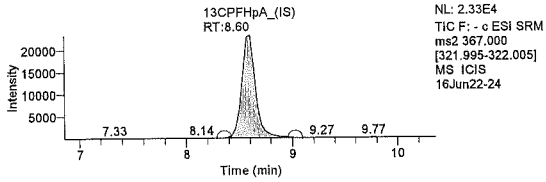
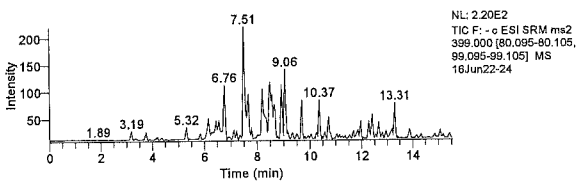
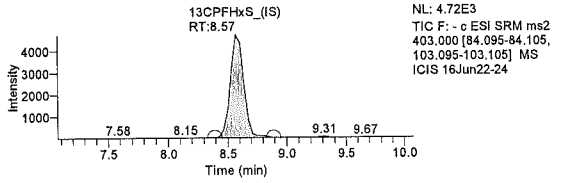


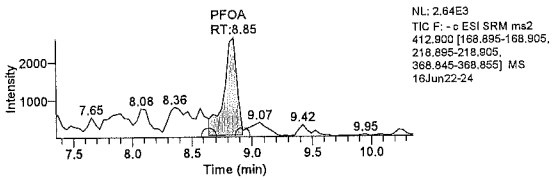


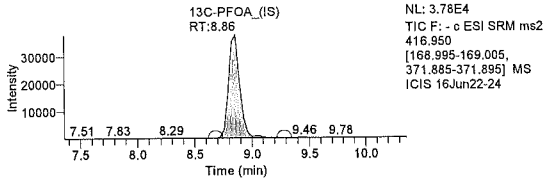
Component Name: PFHxS



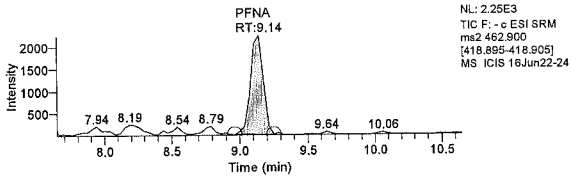


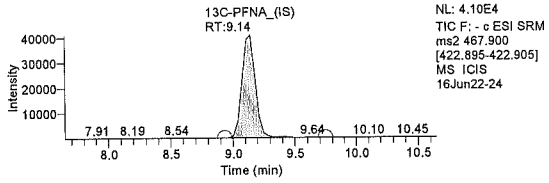
Component Name: PFOA



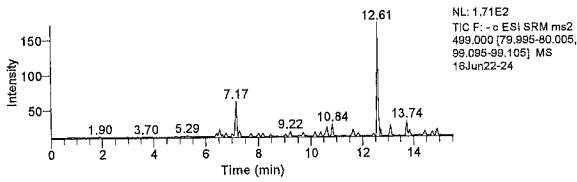


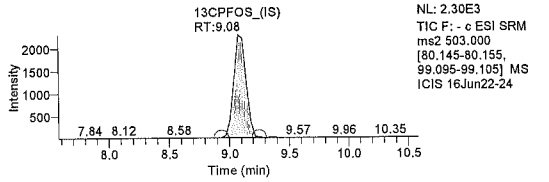
Component Name: PFNA



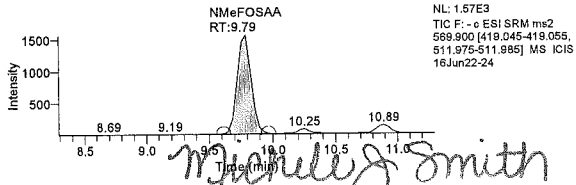


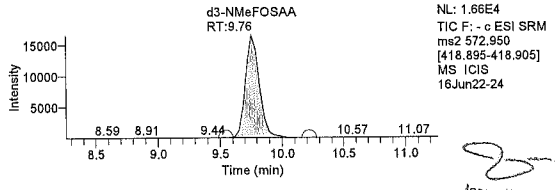
Component Name: PFOS





Component Name: NMeFOSAA





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Component Name: PFDA

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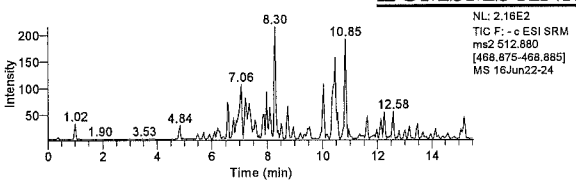

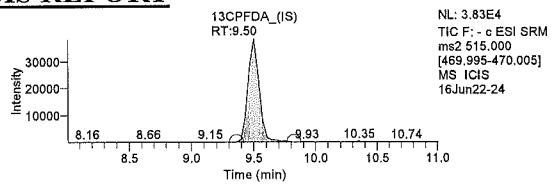

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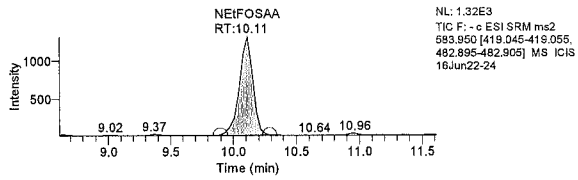
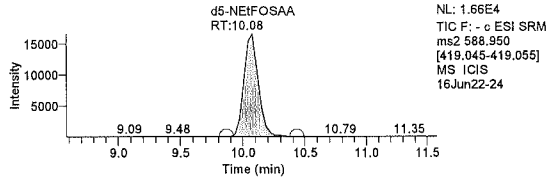
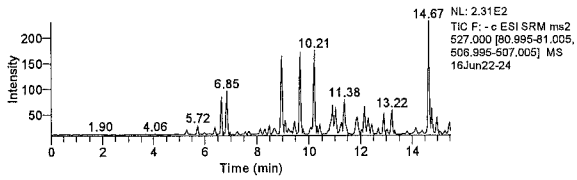
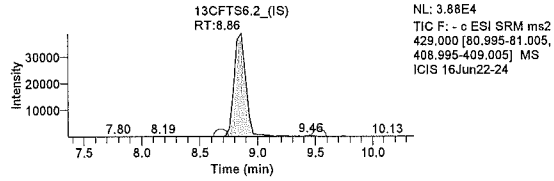


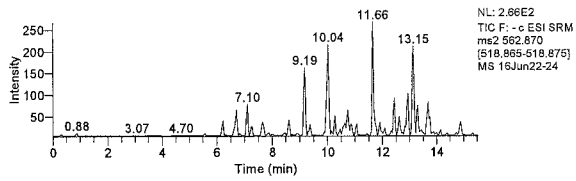


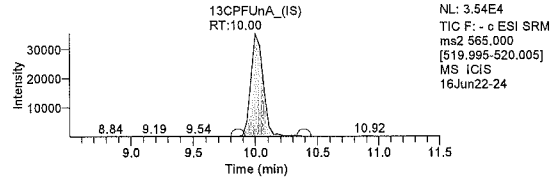
Component Name: 8:2FTS



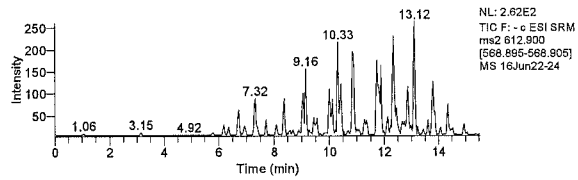


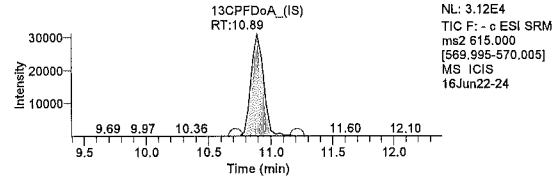
Component Name: PFUdA



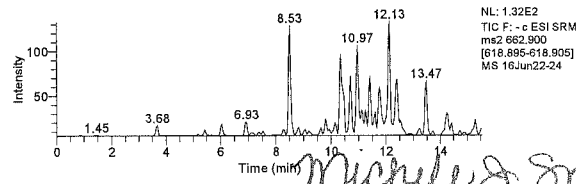


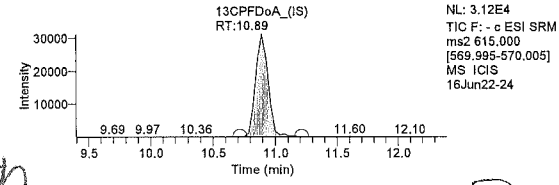
Component Name: PFDoA





Component Name: PFTrDA





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Component Name: PFTeDA

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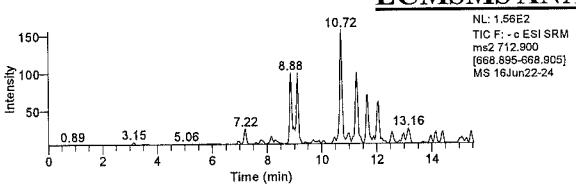

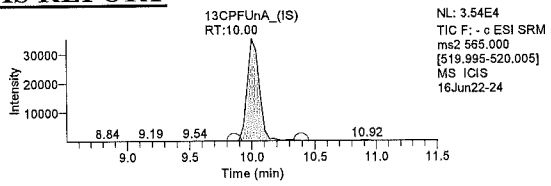

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Senior Chemist

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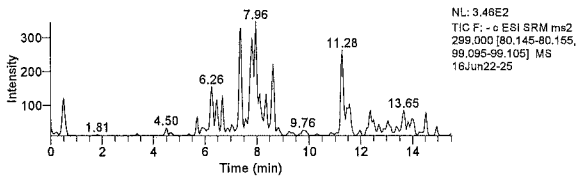
LCMSMS ANALYSIS REPORT

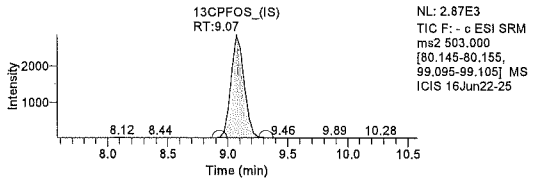
Sample Name:	8411852	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411852	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-25	Dilution Factor:	1.00
Acquisition Date:	06/23/16 06:10:56 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:17	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

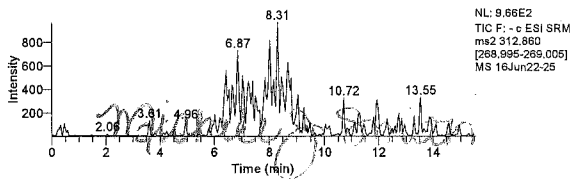
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.11	374619.21	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.82	324691.44	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.86	290415.60	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.46	258772.38	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.57	250486.13	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.56	243859.72	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.21	193085.50	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.57	41757.69	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.07	22023.48	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.93	261301.10	N/A	N/A	N/A
8:2FTS	2.411	9.50	1464.65	290415.60	0.005	ng/g
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	N/A	N/A	N/A	N/A	N/A	ng/L
PFOA	1.302	8.85	6241.21	324691.44	0.019	ng/L
PFOS	N/A	N/A	N/A	N/A	N/A	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	1.696	8.53	6696.03	243859.72	0.027	ng/L
d3-NMeFOSAA	N/A	9.68	139672.89	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.97	132922.42	N/A	N/A	N/A

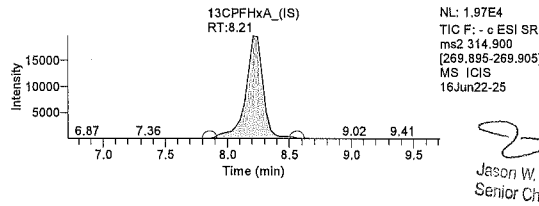
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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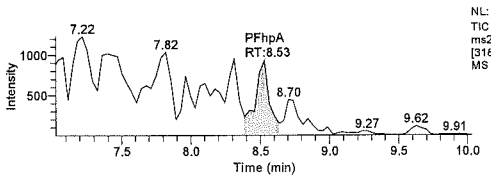

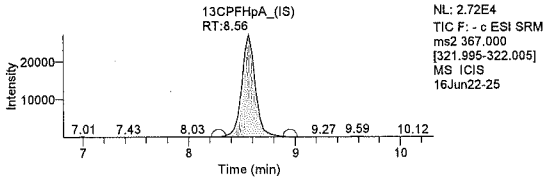

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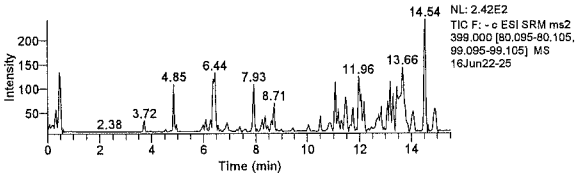

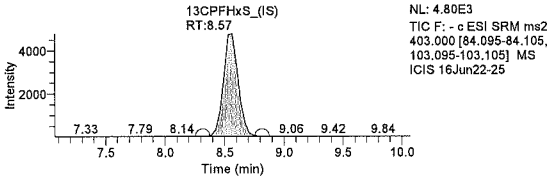

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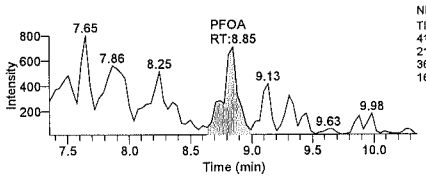
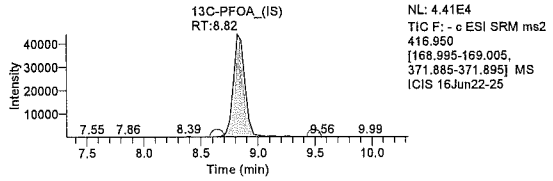
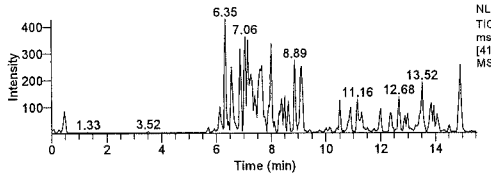
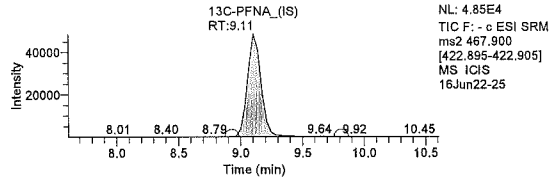


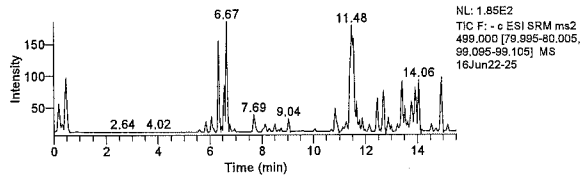


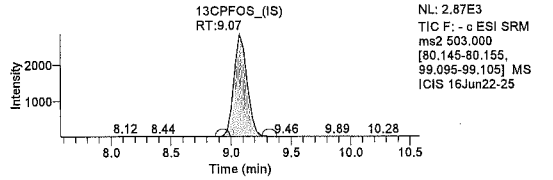
Component Name: PFNA



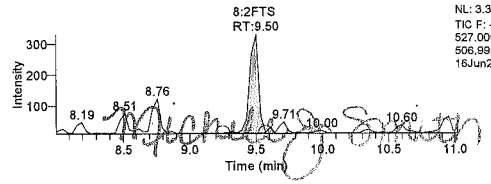


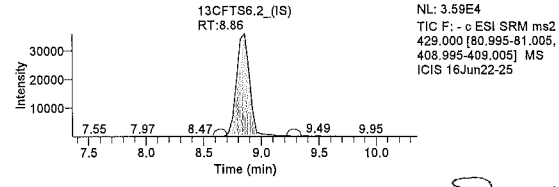
Component Name: PFOS





Component Name: 8:2FTS





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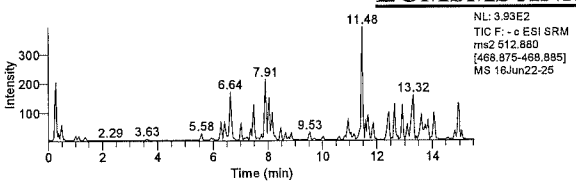

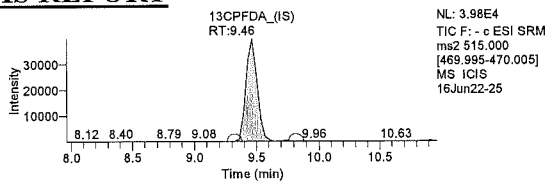

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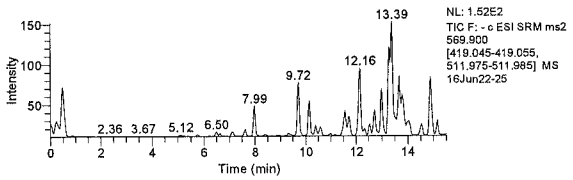
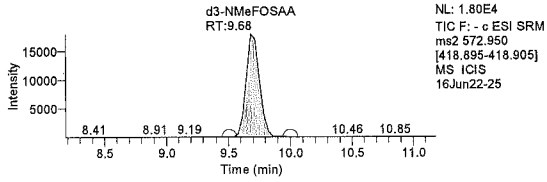
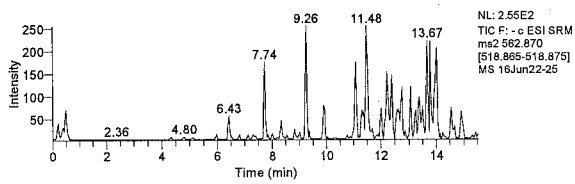
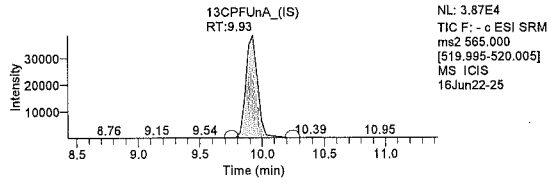




Component Name: PFUdA





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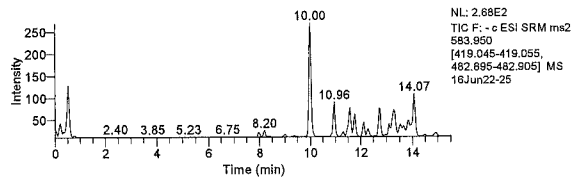
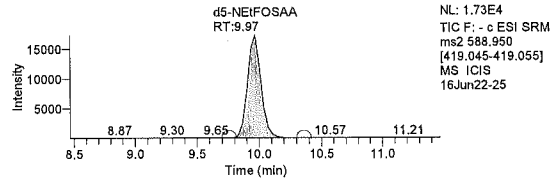
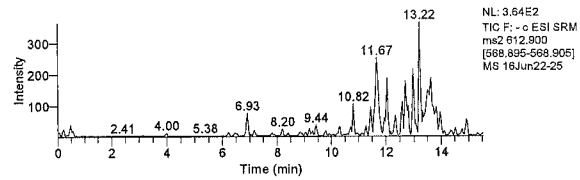
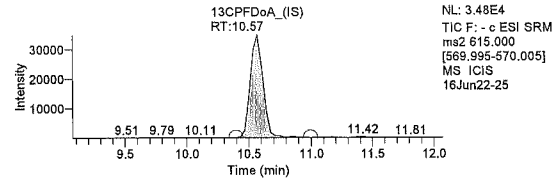


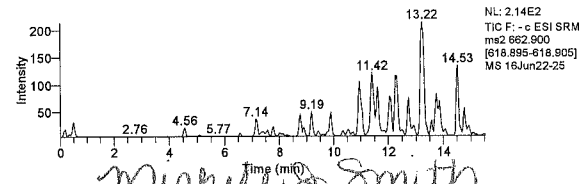


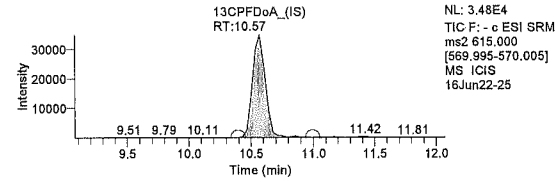
Component Name: PFDoA





Component Name: PFTrDA





Component Name: PFTeDA

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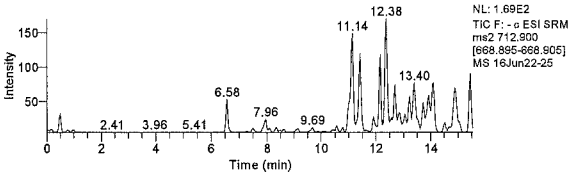

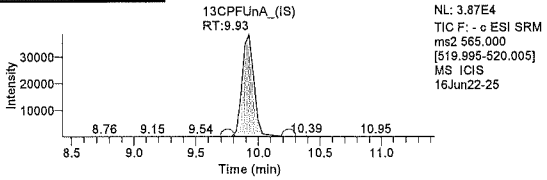

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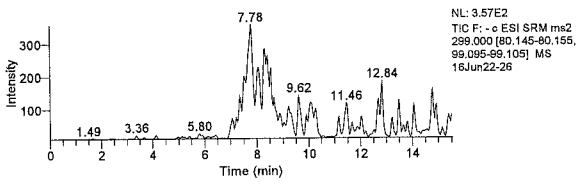
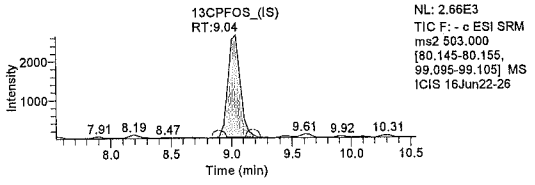
Sample Name:	8411853	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411853	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-26	Dilution Factor:	1.00
Acquisition Date:	06/23/16 06:27:15 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:18	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

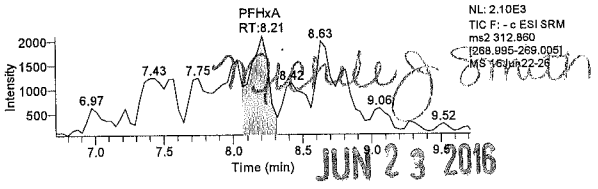
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.04	324269.07	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.79	272696.38	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.79	249798.92	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.40	222919.27	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.54	227182.72	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.53	208156.89	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.21	173425.79	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.53	39813.70	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.04	18913.57	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.82	254432.81	N/A	N/A	N/A
8:2FTS	N/A	N/A	N/A	N/A	N/A	ng/g
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	5.529	8.21	20195.43	173425.79	0.116	ng/L
PFHxS	9.497	8.50	3215.79	39813.70	0.081	ng/L
PFNA	6.557	9.04	38693.19	324269.07	0.119	ng/L
PFOA	3.390	8.78	21148.69	272696.38	0.078	ng/L
PFOS	2.472	9.04	971.32	18913.57	0.051	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	2.758	8.53	11709.37	208156.89	0.056	ng/L
d3-NMeFOSAA	N/A	9.61	106743.60	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.90	116119.69	N/A	N/A	N/A

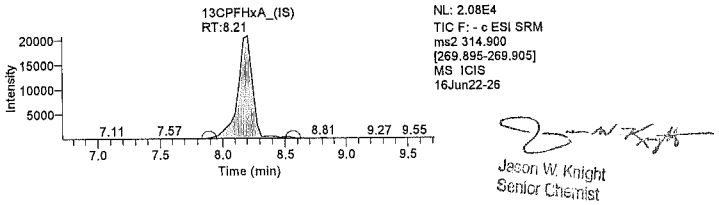
Component Name: PFBS





Component Name: PFHxA





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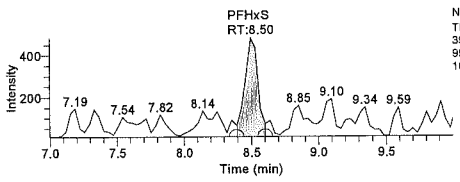
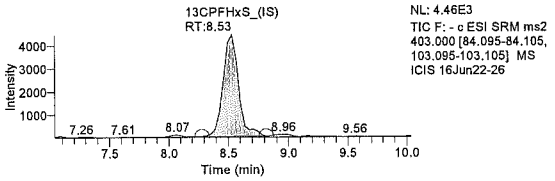
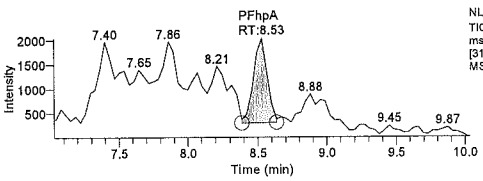
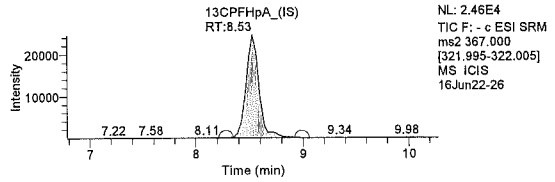


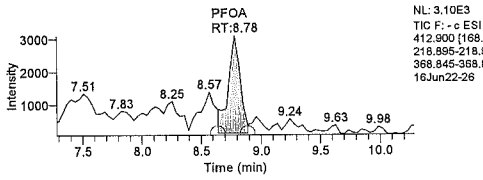


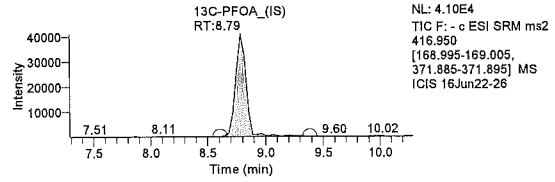
Component Name: PFhpA



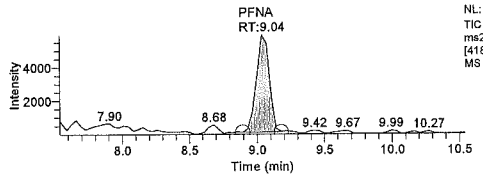


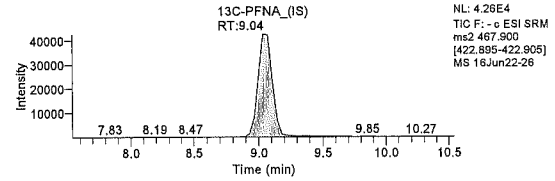
Component Name: PFOA



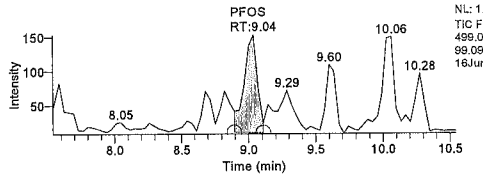


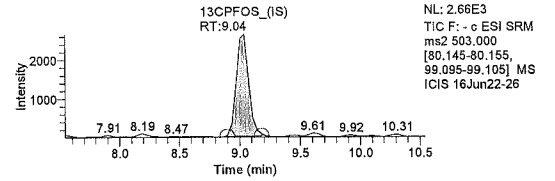
Component Name: PFNA



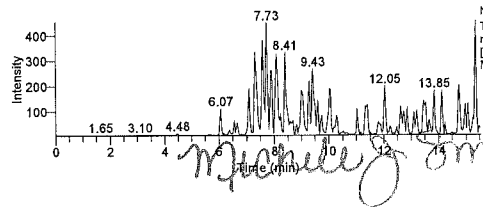


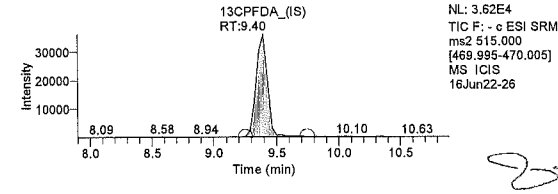
Component Name: PFOS





Component Name: PFDA





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Component Name: NMeFOSAA

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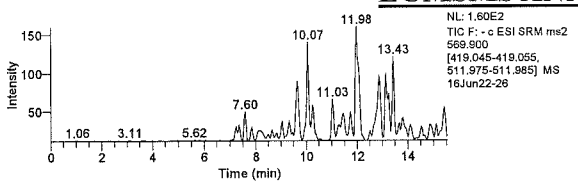
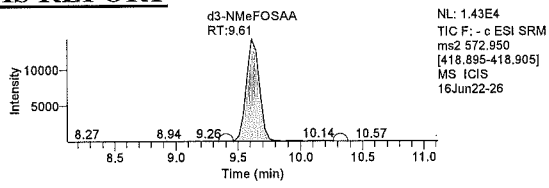
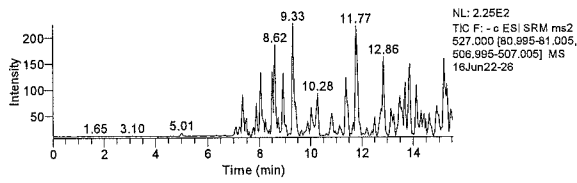
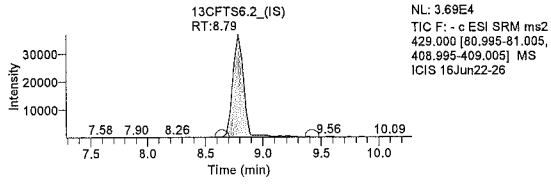


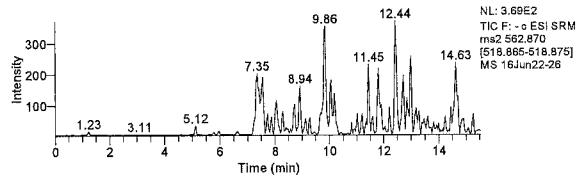


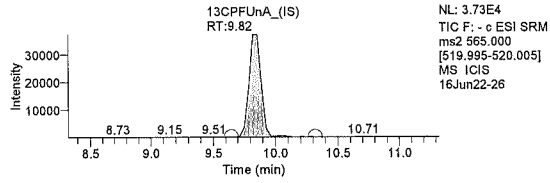
Component Name: 8:2FTS





Component Name: PFUdA





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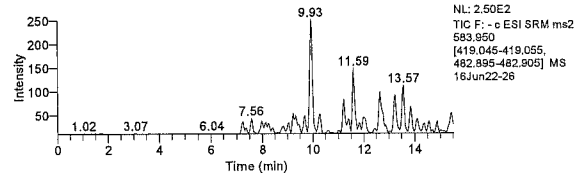

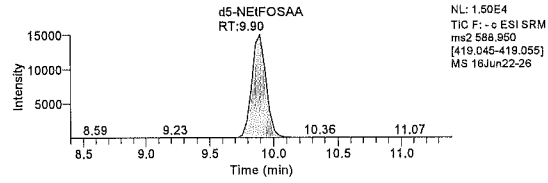

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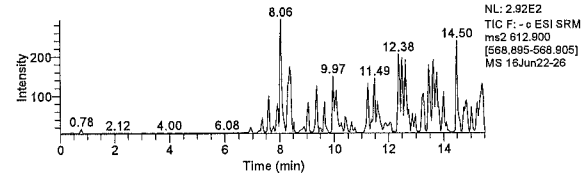

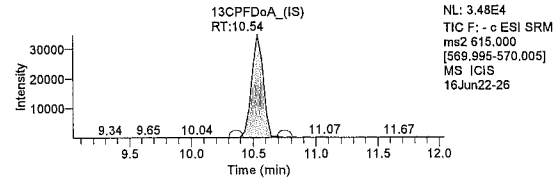

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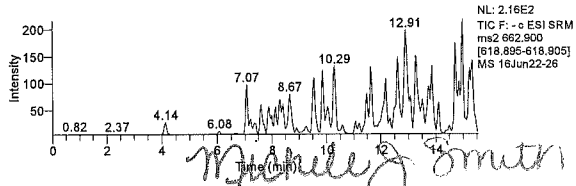

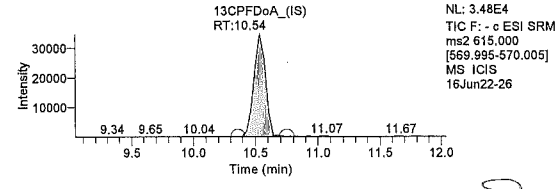

Component Name: PFTeDA

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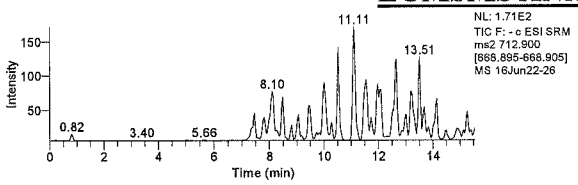

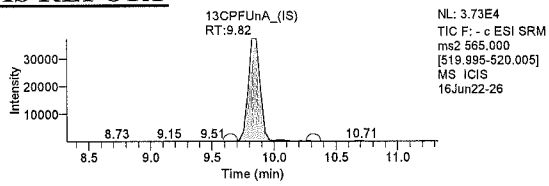

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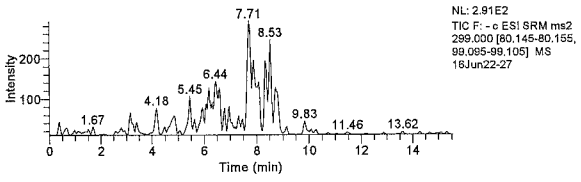
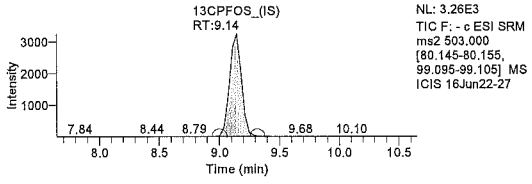
Sample Name:	8411854	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411854	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-27	Dilution Factor:	1.00
Acquisition Date:	06/23/16 06:43:28 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:19	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

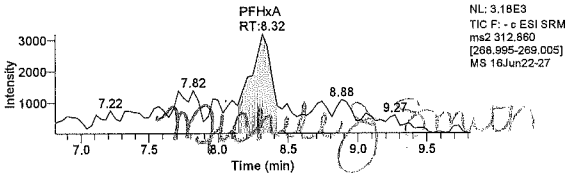
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.18	323130.89	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.93	269517.01	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.96	255741.28	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.43	247186.85	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.47	222917.24	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.67	230518.56	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.32	170292.07	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.67	34256.82	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.14	22438.05	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.89	248329.25	N/A	N/A	N/A
8:2FTS	2.614	9.47	2312.10	255741.28	0.009	ng/g
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	9.103	8.32	34475.47	170292.07	0.202	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	5.521	9.14	32015.32	323130.89	0.099	ng/L
PFOA	3.943	8.96	25066.17	269517.01	0.093	ng/L
PFOS	N/A	N/A	N/A	N/A	N/A	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	2.592	8.71	11928.04	230518.56	0.052	ng/L
d3-NMeFOSAA	N/A	9.68	113398.48	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.93	101574.70	N/A	N/A	N/A

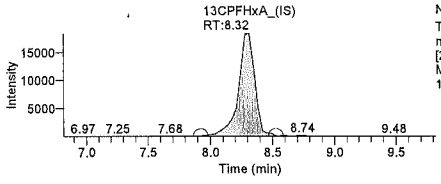
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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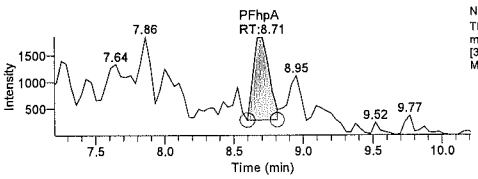

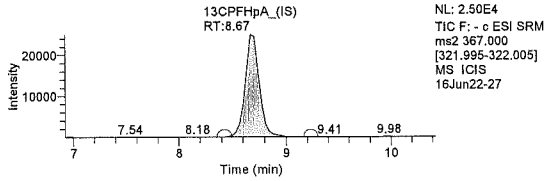

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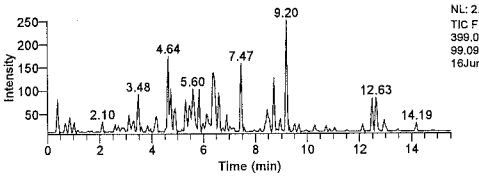

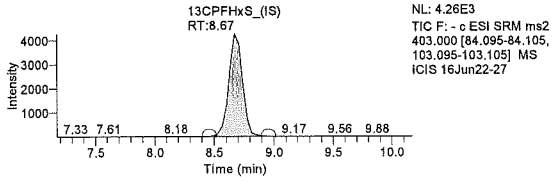

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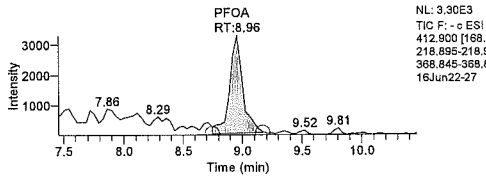

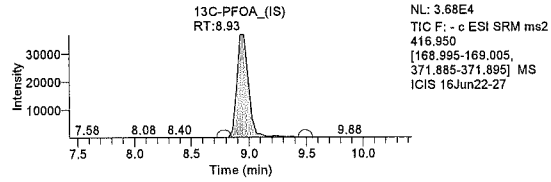

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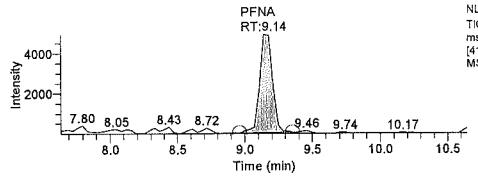
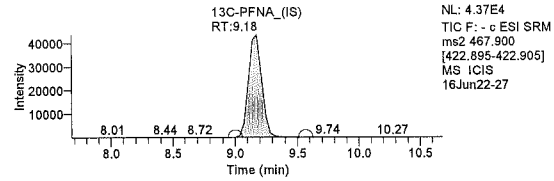
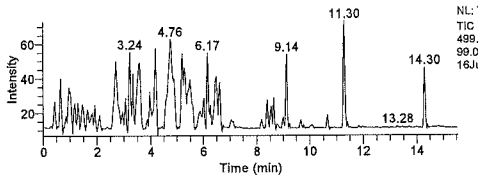
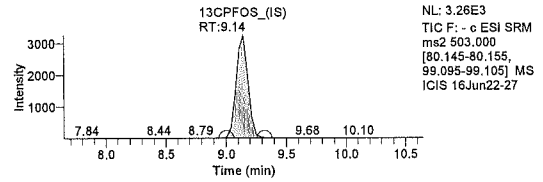




Component Name: PFOS





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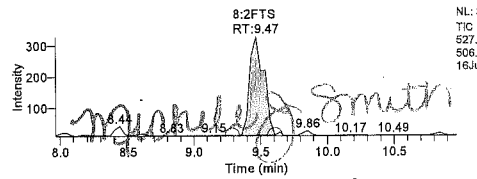

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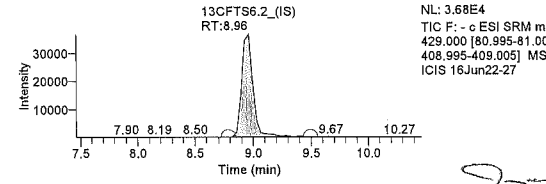

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Component Name: PFDA

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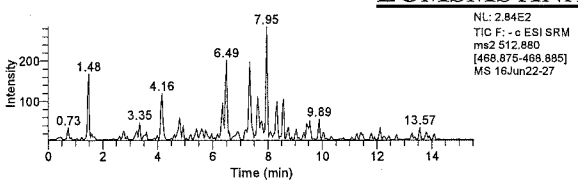

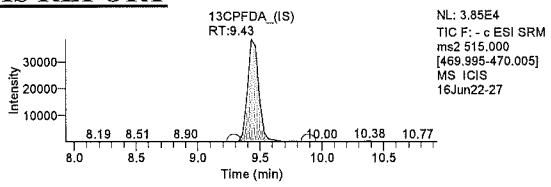

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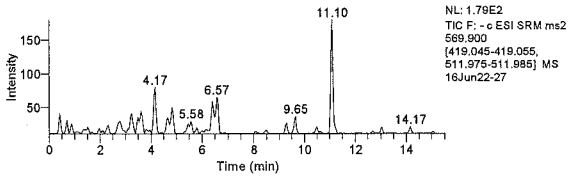

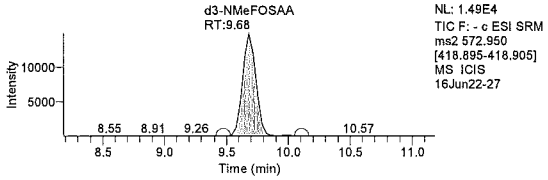

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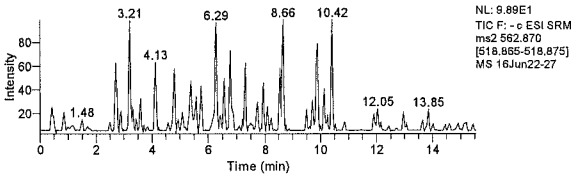
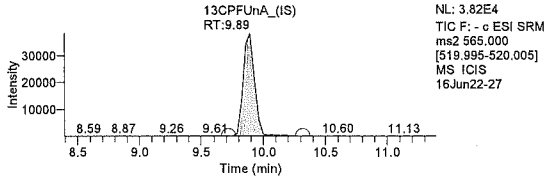
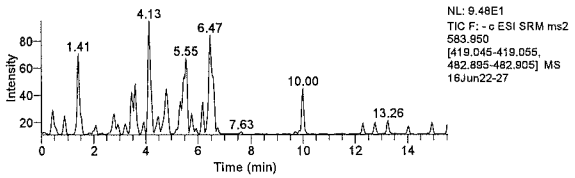
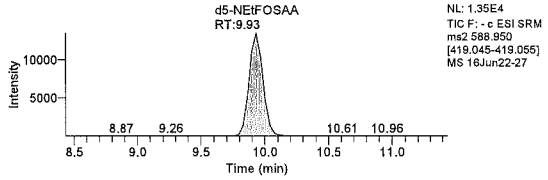




Component Name: NEtFOSAA





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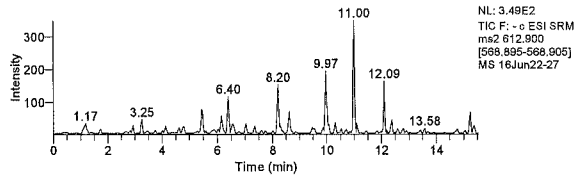

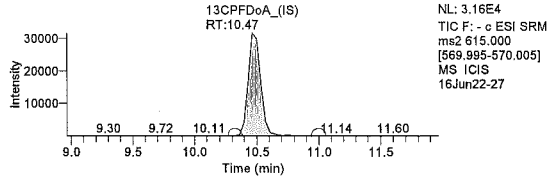

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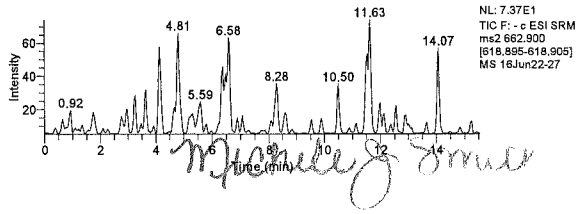

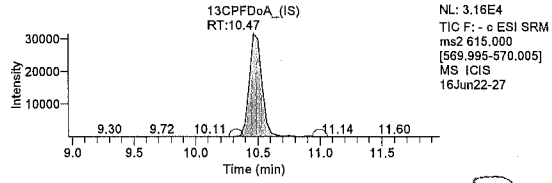

Component Name: PFTeDA

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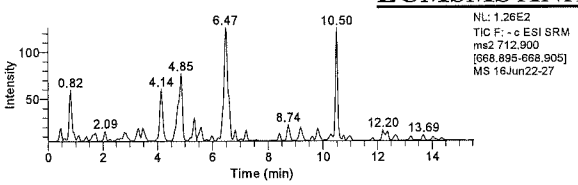

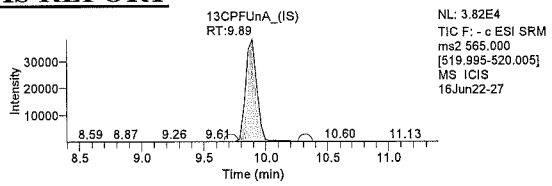

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Standards Data

PFAAs by LC/MS/MS

Sequence Table

File Name	Sample ID	Sample Type	Level	Vial	Inj Vol	Dil Factor	Path	Inst Method	Proc Method
16Jun22-03	SYS	N/A	N/A	c:2	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-04	CAL1	N/A	1	c:3	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-05	CAL2	N/A	2	c:4	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-07	CAL4	N/A	4	c:6	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-08	CAL5	N/A	5	c:7	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-09	CAL6	N/A	6	c:8	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-10	CAL3	N/A	3	c:5	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-11	recon	N/A	N/A	c:1	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-13	CCV2	N/A	2	c:6	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-13_160623014534	ICV1	N/A	ICV1	c:9	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-15	MB 16160012	N/A	N/A	c:10	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-16	LCS 16160012	N/A	N/A	C:11	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-17	LCSD 16160012	N/A	N/A	C:12	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-19	8411848	N/A	N/A	c:13	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-20	8411849	N/A	N/A	C:14	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-21	8411850	N/A	N/A	C:15	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-23	CCV3	N/A	3	C:7	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-24	8411851	N/A	N/A	C:16	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-25	8411852	N/A	N/A	C:17	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-26	8411853	N/A	N/A	C:18	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-27	8411854	N/A	N/A	C:19	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-28	8411847 BKG	N/A	N/A	C:20	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS

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File Name	Sample ID	Sample Type	Level	Vial	Inj Vol	Dil Factor	Path	Inst Method	Proc Method
16Jun22-29	8411847 MS	N/A	N/A	C:21	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-30	CCV2	N/A	2	C:6	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-52	CCV3	N/A	3	C:7	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-55	8411851	N/A	N/A	C:16	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS
16Jun22-56	CCV2	N/A	2	C:6	10.0	1.000	C:\Xcalibur\PFC\2016\16Jun22	C:\Xcalibur\PFC\Acquistion M\HWell	C:\Xcalibur\PFC\Quan M\HWELL_FTS

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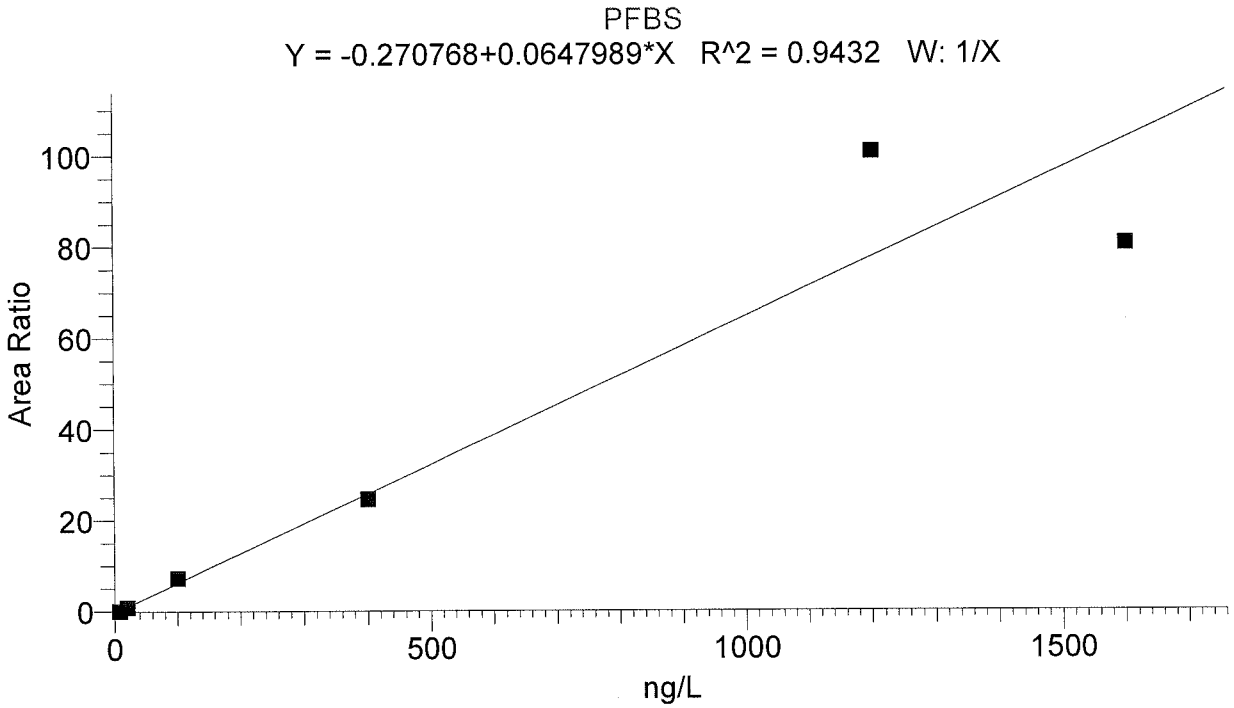
LCMSMS ANALYSIS REPORT

Component Name: **PFBS**



Identification	
Filter:	- c ESI SRM ms2 299.00 [80.14-80.16, 99.09-99.11]
2nd Trace Type:	N/A
Mass Range 2 (m/z):	
Base Peak(BP):	
Retention Time	
Window (sec):	50.00000
RT Reference:	No
Adjust Using:	N/A
Detection Options	
ICIS Smoothing Points:	5
Area Noise Factor:	5
ICIS Constrain Peak Width:	No
ICIS Tailing Factor:	N/A
ICIS Peak Detection	
ICIS Minimum Peak Height (S/N):	25.0
ICIS Window %:	
ICIS Forward:	0
ICIS Match:	0
ICIS Advanced Parameters	
Minimum Peak Width:	3
Area Tail Extension:	5
Component Type:	Target Compound
ISTD Amount:	N/A
ISTD:	13CPFOS_(IS)
Origin:	IgnoreOrigin
Calibration Curve:	Linear
Number of Cal. Levels:	6
Scan Threshold (mAU):	N/A
Limit ScanRange (nm):	N/A

Component Name:	PFBS
1st Trace Type:	TIC
Mass Range 1 (m/z):	
Wavelength Range 2 (nm):	N/A
Expected RT (min):	8.17000
View Width (min):	3.00000
Adjust Expected RT:	No
Peak Detection Algorithm:	ICIS
ICIS Peak Integration	
Baseline Window:	100
Peak Noise Factor:	25
ICIS Peak Height (%):	N/A
ICIS Identify By:	Nearest RT
ICIS Ion Ratio Confirmation:	Disabled
ICIS Qualifier Ion Coelution (min):	N/A
ICIS Spectrum Thresholds	
ICIS Reverse:	0
Noise Method:	Incos
Multiplet Resolution:	10
Area Scan Window:	0
Calibration	
%RSD Calculation Method:	Use calculated amounts
Internal Standard	
ISTD Units:	N/A
Target Compounds	
Weighting:	OneOverX
Response:	Area
Target Units:	ng/L
Number of QC Levels:	5
Peak Purity Options	
Peak Coverage (%):	N/A

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LCMSMS ANALYSIS REPORT

Component Cal Level Table

Cal Level	Amount
1	8.000
2	20.000
3	100.000
4	400.000
5	1200.000
6	1600.000

Component QC Level Table

QC Level	Amount
ICV2	200.000
ICV1	100.000
1	100.000
2	400.000
3	1200.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	7.083	3169.82	16844.95	0.188	-11.47
CAL2	16Jun22-05	18.181	11592.55	12775.97	0.907	-9.09
CAL4	16Jun22-07	383.343	445368.28	18126.91	24.569	-4.16
CAL5	16Jun22-08	1557.102	1176868.13	11695.26	100.628	29.76
CAL6	16Jun22-09	1245.147	1275073.67	15856.48	80.413	-22.18
CAL3	16Jun22-10	117.144	117302.71	16024.81	7.320	17.14
CCV2	16Jun22-13	348.586	430973.65	19311.27	22.317	-12.85
ICV1	16Jun22-13_160623014534	75.920	79964.33	17201.25	4.649	-24.08
CCV3	16Jun22-23	1098.126	1148118.58	16196.55	70.887	-8.49
CCV2	16Jun22-30	365.524	457254.35	19528.43	23.415	-8.62
CCV3	16Jun22-52	1119.938	1246587.12	17241.86	72.300	-6.67
CCV2	16Jun22-56	338.307	469682.92	21693.17	21.651	-15.42

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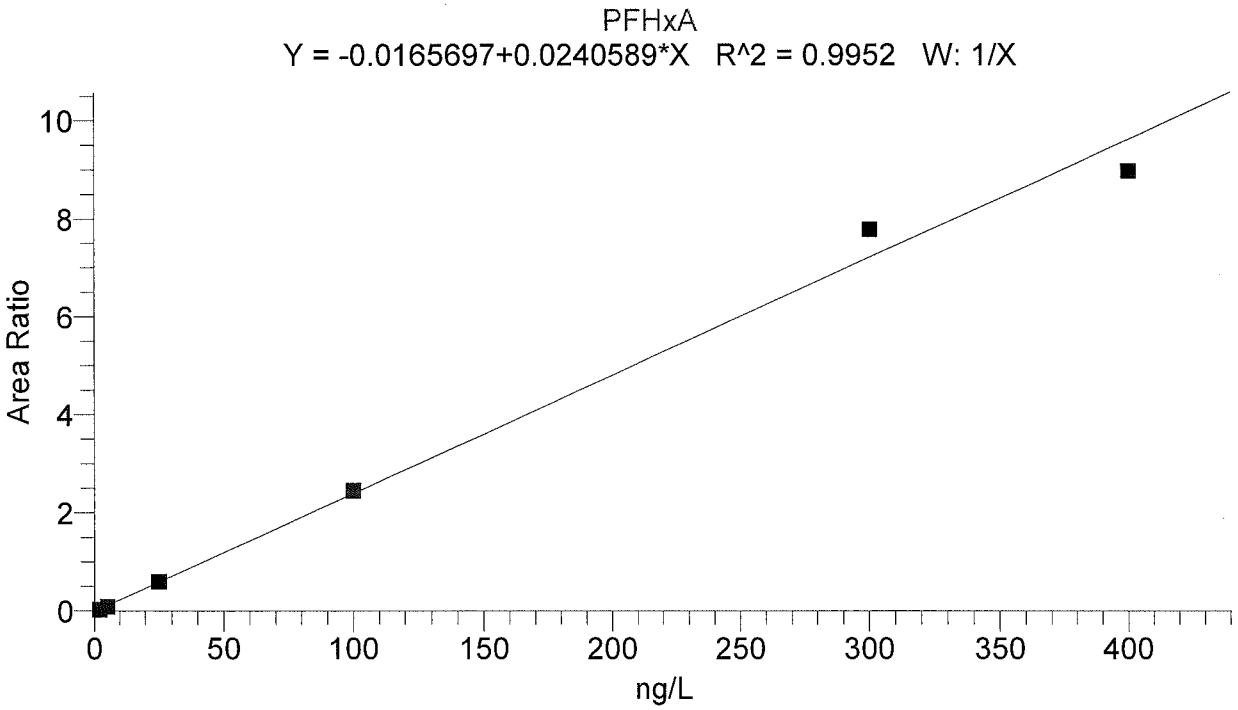
LCMSMS ANALYSIS REPORT

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):	8.50000
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/L
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	2.000
2	5.000
3	25.000
4	100.000
5	300.000
6	400.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	25.000
2	100.000
3	300.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	2.124	6731.40	194936.50	0.035	6.20
CAL2	16Jun22-05	4.409	15973.00	178443.44	0.090	-11.81
CAL4	16Jun22-07	102.526	505466.36	206305.69	2.450	2.53
CAL5	16Jun22-08	323.955	1383076.54	177832.15	7.777	7.98
CAL6	16Jun22-09	373.557	1568126.45	174803.20	8.971	-6.61
CAL3	16Jun22-10	25.429	115171.33	193495.06	0.595	1.71
CCV2	16Jun22-13	109.011	494306.11	189671.26	2.606	9.01
ICV1	16Jun22-13_160623014534	91.618	350801.14	160355.36	2.188	-8.38
CCV3	16Jun22-23	313.650	1378709.16	183107.75	7.529	4.55
CCV2	16Jun22-30	106.197	494120.09	194656.79	2.538	6.20
CCV3	16Jun22-52	327.971	1371442.99	174172.32	7.874	9.32
CCV2	16Jun22-56	108.371	500358.67	193135.11	2.591	8.37

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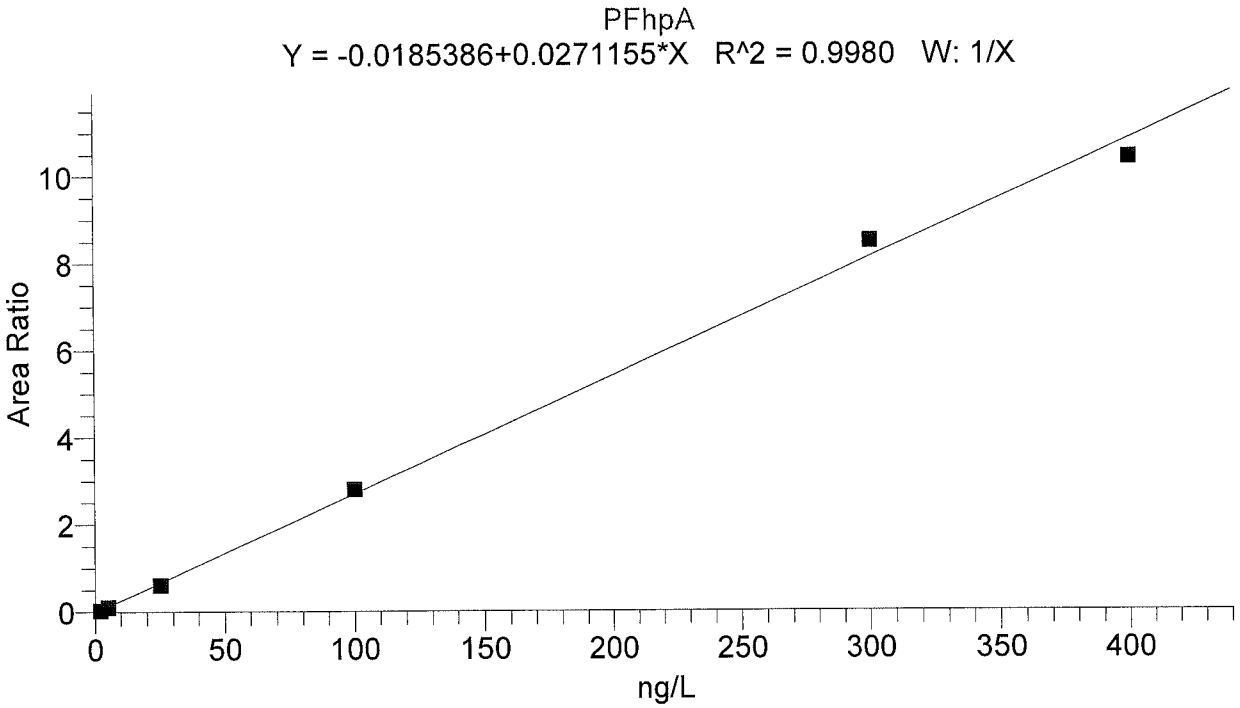
LCMSMS ANALYSIS REPORT

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 1 (m/z):	
Mass Range 2 (m/z):		Wavelength Range 2 (nm):	N/A
Base Peak(BP):			
Retention Time		Expected RT (min):	8.84000
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):	10.0	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/L
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	2.000
2	5.000
3	25.000
4	100.000
5	300.000
6	400.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	25.000
2	100.000
3	300.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	2.213	9234.46	222646.54	0.041	10.66
CAL2	16Jun22-05	4.611	26576.01	249537.56	0.107	-7.77
CAL4	16Jun22-07	103.982	608824.08	217359.66	2.801	3.98
CAL5	16Jun22-08	313.772	1421075.03	167391.35	8.490	4.59
CAL6	16Jun22-09	384.307	1588671.74	152725.63	10.402	-3.92
CAL3	16Jun22-10	23.115	139576.61	229481.32	0.608	-7.54
CCV2	16Jun22-13	102.317	580073.22	210489.85	2.756	2.32
ICV1	16Jun22-13_160623014534	88.715	494883.80	207322.65	2.387	-11.28
CCV3	16Jun22-23	316.127	1516792.22	177332.10	8.553	5.38
CCV2	16Jun22-30	103.705	622363.14	222791.72	2.793	3.71
CCV3	16Jun22-52	298.527	1546881.38	191536.30	8.076	-0.49
CCV2	16Jun22-56	96.742	625813.41	240266.07	2.605	-3.26

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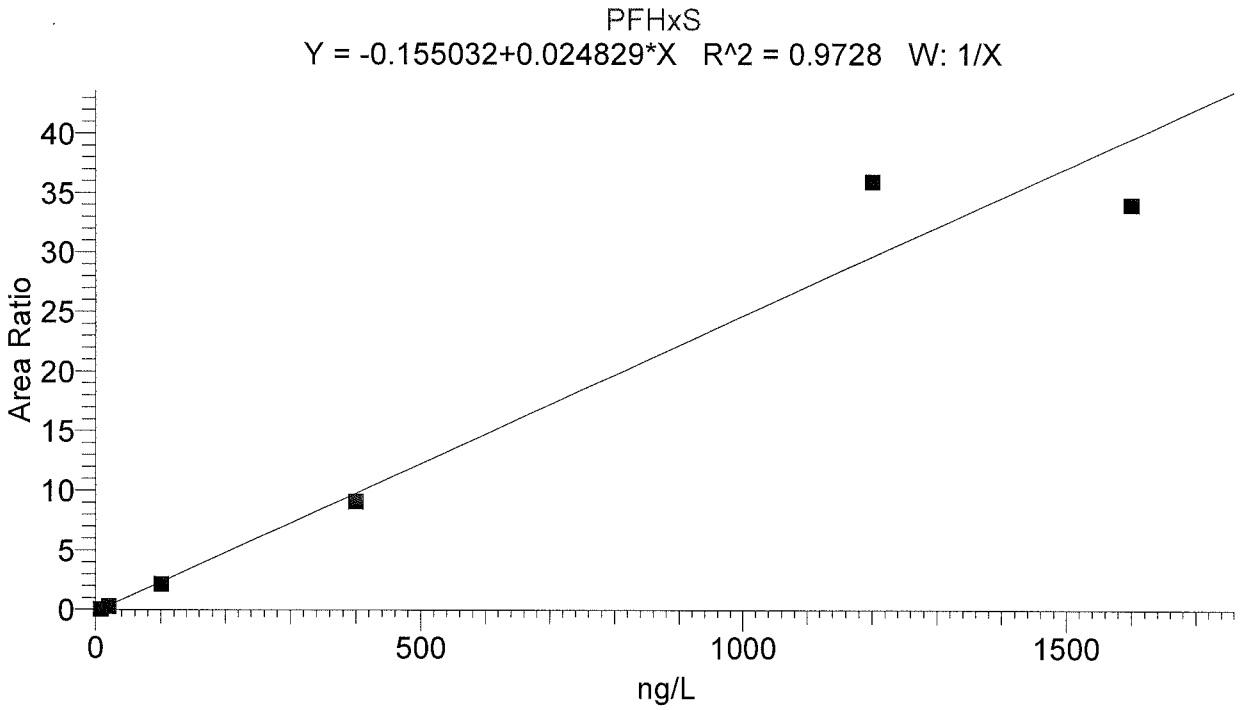
LCMSMS ANALYSIS REPORT

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):	8.84000
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:	30
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):	15.0	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/L
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	8.000
2	20.000
3	100.000
4	400.000
5	1200.000
6	1600.000

Component QC Level Table

QC Level	Amount
ICV2	200.000
ICV1	100.000
1	100.000
2	400.000
3	1200.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	8.971	2112.35	31192.48	0.068	12.14
CAL2	16Jun22-05	18.640	12098.86	39310.33	0.308	-6.80
CAL4	16Jun22-07	372.966	350809.90	38528.01	9.105	-6.76
CAL5	16Jun22-08	1455.447	843053.85	23429.76	35.982	21.29
CAL6	16Jun22-09	1377.971	941128.39	27632.66	34.059	-13.88
CAL3	16Jun22-10	94.005	78785.33	36156.39	2.179	-5.99
CCV2	16Jun22-13	410.519	337729.94	33646.07	10.038	2.63
ICV1	16Jun22-13_160623014534	78.444	64556.03	36011.64	1.793	-21.56
CCV3	16Jun22-23	1376.405	926393.67	27231.13	34.020	14.70
CCV2	16Jun22-30	404.522	349281.85	35320.87	9.889	1.13
CCV3	16Jun22-52	1446.448	920960.35	25754.82	35.759	20.54
CCV2	16Jun22-56	412.714	377146.38	37369.96	10.092	3.18

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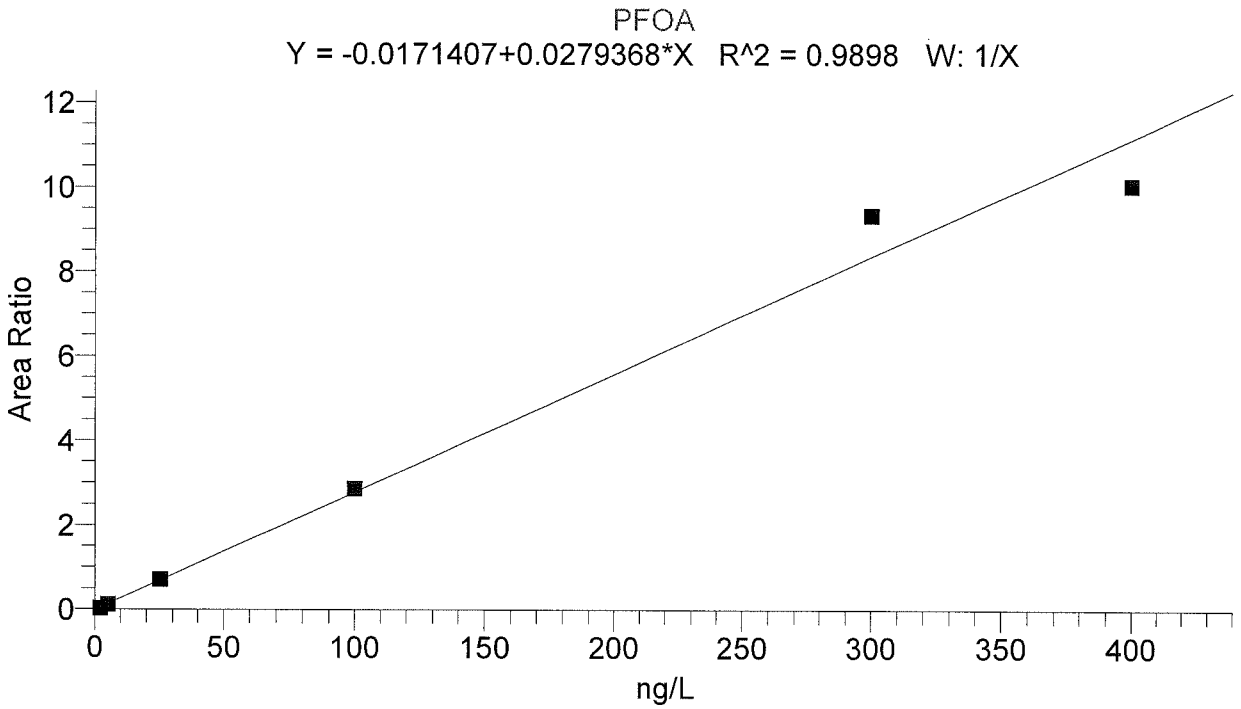
LCMSMS ANALYSIS REPORT

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:	Unknown
		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):	5.0	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/L
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	2.000
2	5.000
3	25.000
4	100.000
5	300.000
6	400.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	25.000
2	100.000
3	300.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	1.838	10001.03	292384.63	0.034	-8.10
CAL2	16Jun22-05	4.940	33451.82	276766.22	0.121	-1.20
CAL4	16Jun22-07	103.259	864561.03	301494.68	2.868	3.26
CAL5	16Jun22-08	335.096	2384983.95	255232.09	9.344	11.70
CAL6	16Jun22-09	360.832	2698199.09	268121.10	10.063	-9.79
CAL3	16Jun22-10	26.035	203934.99	287159.02	0.710	4.14
CCV2	16Jun22-13	111.429	852965.93	275521.88	3.096	11.43
ICV1	16Jun22-13_160623014534	94.527	651978.94	248502.00	2.624	-5.47
CCV3	16Jun22-23	304.978	2502028.80	294253.27	8.503	1.66
CCV2	16Jun22-30	106.828	897270.54	302387.21	2.967	6.83
CCV3	16Jun22-52	338.567	2463383.00	260915.01	9.441	12.86
CCV2	16Jun22-56	102.442	874259.35	307322.30	2.845	2.44

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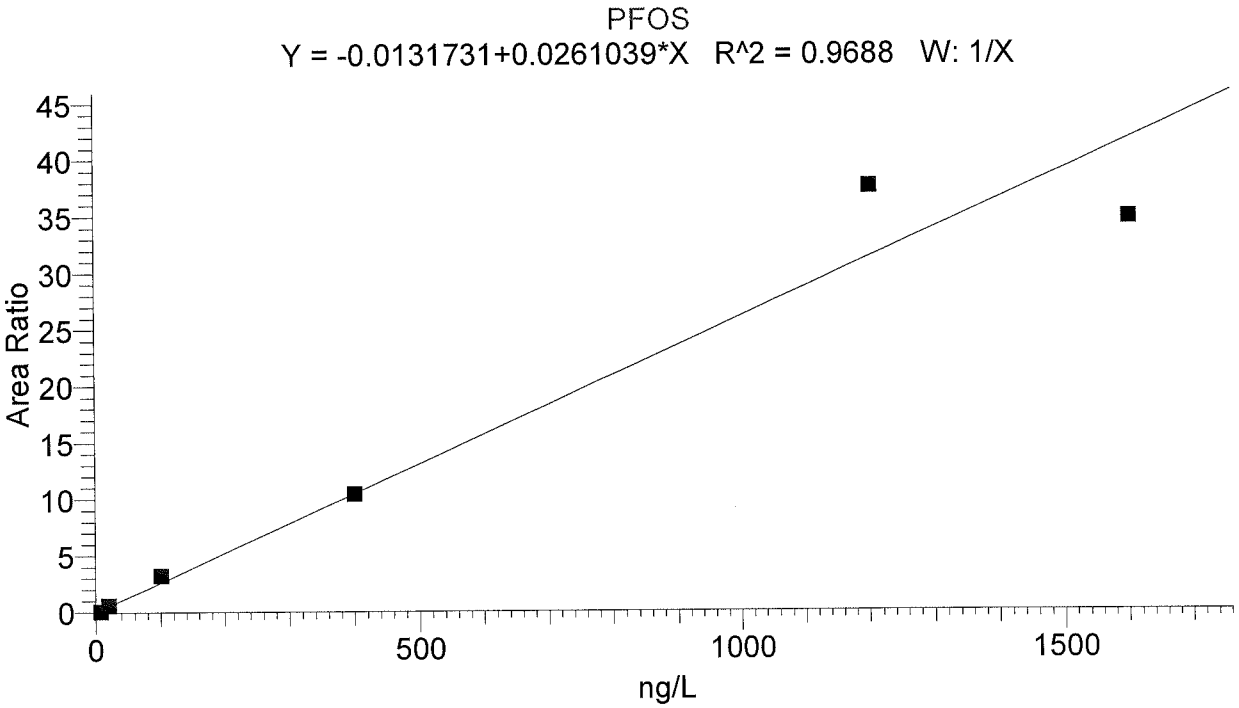
LCMSMS ANALYSIS REPORT

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:	Unknown
		ICIS Peak Integration	
ICIS Smoothing Points:	3	Baseline Window:	100
Area Noise Factor:	2	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):	10.0	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/L
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	8.000
2	20.000
3	100.000
4	400.000
5	1200.000
6	1600.000

Component QC Level Table

QC Level	Amount
ICV2	200.000
ICV1	100.000
1	100.000
2	400.000
3	1200.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	4.288	1663.74	16844.95	0.099	-46.40
CAL2	16Jun22-05	23.535	7680.62	12775.97	0.601	17.67
CAL4	16Jun22-07	400.819	189422.28	18126.91	10.450	0.20
CAL5	16Jun22-08	1440.429	439597.85	11695.26	37.588	20.04
CAL6	16Jun22-09	1333.809	551876.86	15856.48	34.804	-16.64
CAL3	16Jun22-10	125.119	52127.50	16024.81	3.253	25.12
CCV2	16Jun22-13	341.336	171812.92	19311.27	8.897	-14.67
ICV1	16Jun22-13_160623014534	79.697	35559.05	17201.25	2.067	-20.30
CCV3	16Jun22-23	1248.948	527834.03	16196.55	32.589	4.08
CCV2	16Jun22-30	380.720	193821.76	19528.43	9.925	-4.82
CCV3	16Jun22-52	1111.641	500100.82	17241.86	29.005	-7.36
CCV2	16Jun22-56	344.116	194579.26	21693.17	8.970	-13.97

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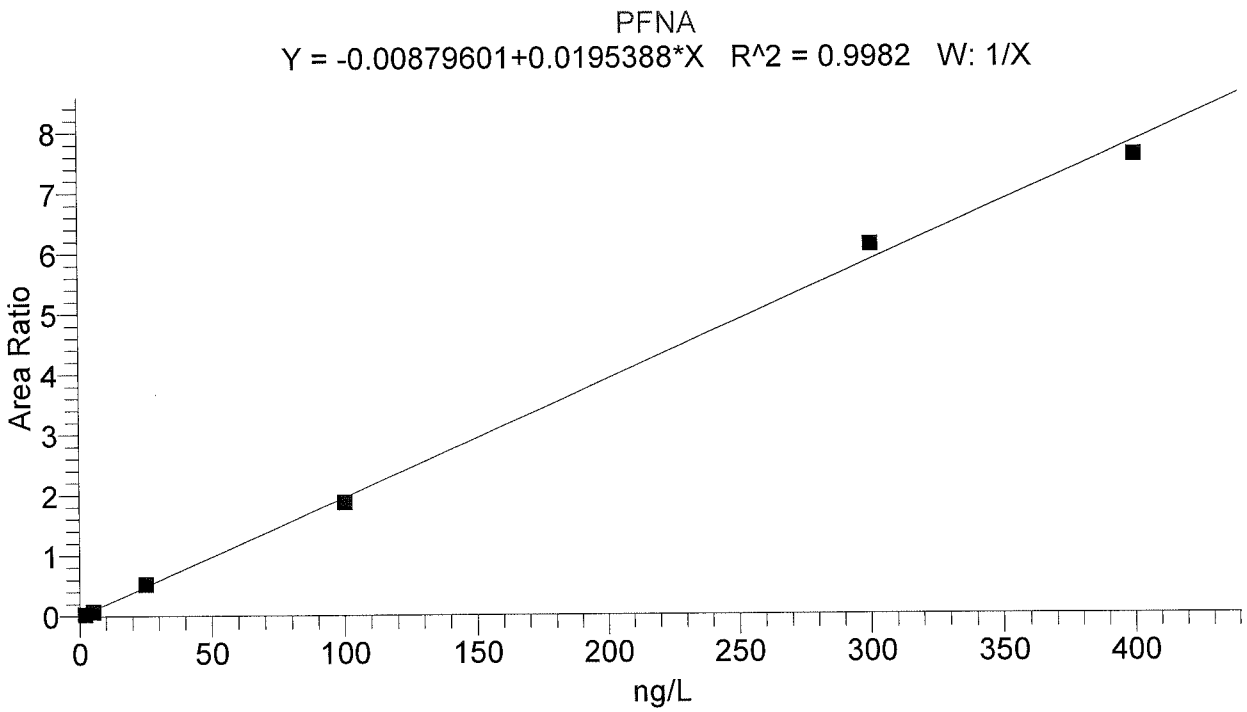
LCMSMS ANALYSIS REPORT

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):	9.45000
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):	10.0	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/L
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	2.000
2	5.000
3	25.000
4	100.000
5	300.000
6	400.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	25.000
2	100.000
3	300.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	2.135	10958.75	332915.81	0.033	6.75
CAL2	16Jun22-05	4.285	23649.32	315614.60	0.075	-14.30
CAL4	16Jun22-07	96.145	626715.82	335185.65	1.870	-3.86
CAL5	16Jun22-08	313.331	1512835.32	247466.12	6.113	4.44
CAL6	16Jun22-09	388.655	1834658.17	241878.54	7.585	-2.84
CAL3	16Jun22-10	27.450	172707.86	327384.02	0.528	9.80
CCV2	16Jun22-13	102.275	611823.22	307520.47	1.990	2.28
ICV1	16Jun22-13_160623014534	89.154	499555.10	288233.24	1.733	-10.85
CCV3	16Jun22-23	293.502	1684475.21	294186.95	5.726	-2.17
CCV2	16Jun22-30	104.197	641282.04	316355.92	2.027	4.20
CCV3	16Jun22-52	299.028	1626829.81	278860.42	5.834	-0.32
CCV2	16Jun22-56	95.877	657474.14	352621.89	1.865	-4.12

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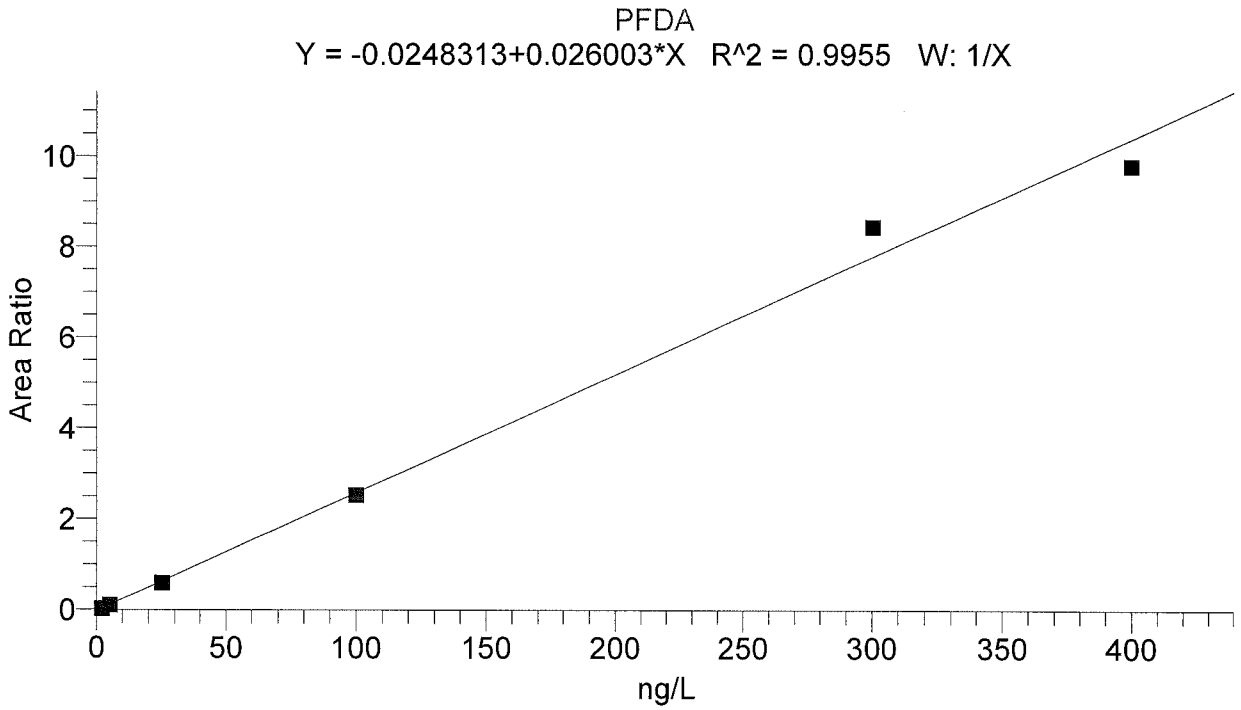
Component Name: **PFDA**



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):	9.86000
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:	50
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):	3.0	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/L
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	2.000
2	5.000
3	25.000
4	100.000
5	300.000
6	400.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	25.000
2	100.000
3	300.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	2.083	6920.07	236014.42	0.029	4.13
CAL2	16Jun22-05	4.977	25341.75	242301.17	0.105	-0.46
CAL4	16Jun22-07	98.062	648207.17	256709.82	2.525	-1.94
CAL5	16Jun22-08	325.624	1748845.96	207151.63	8.442	8.54
CAL6	16Jun22-09	377.411	1927836.87	196939.62	9.789	-5.65
CAL3	16Jun22-10	23.844	141101.94	237072.26	0.595	-4.62
CCV2	16Jun22-13	102.441	616494.59	233614.04	2.639	2.44
ICV1	16Jun22-13_160623014534	90.596	485374.69	208231.17	2.331	-9.40
CCV3	16Jun22-23	289.825	1868493.82	248751.85	7.511	-3.39
CCV2	16Jun22-30	101.551	636071.12	243166.38	2.616	1.55
CCV3	16Jun22-52	293.447	1764042.14	231937.97	7.606	-2.18
CCV2	16Jun22-56	102.239	666696.19	253140.91	2.634	2.24

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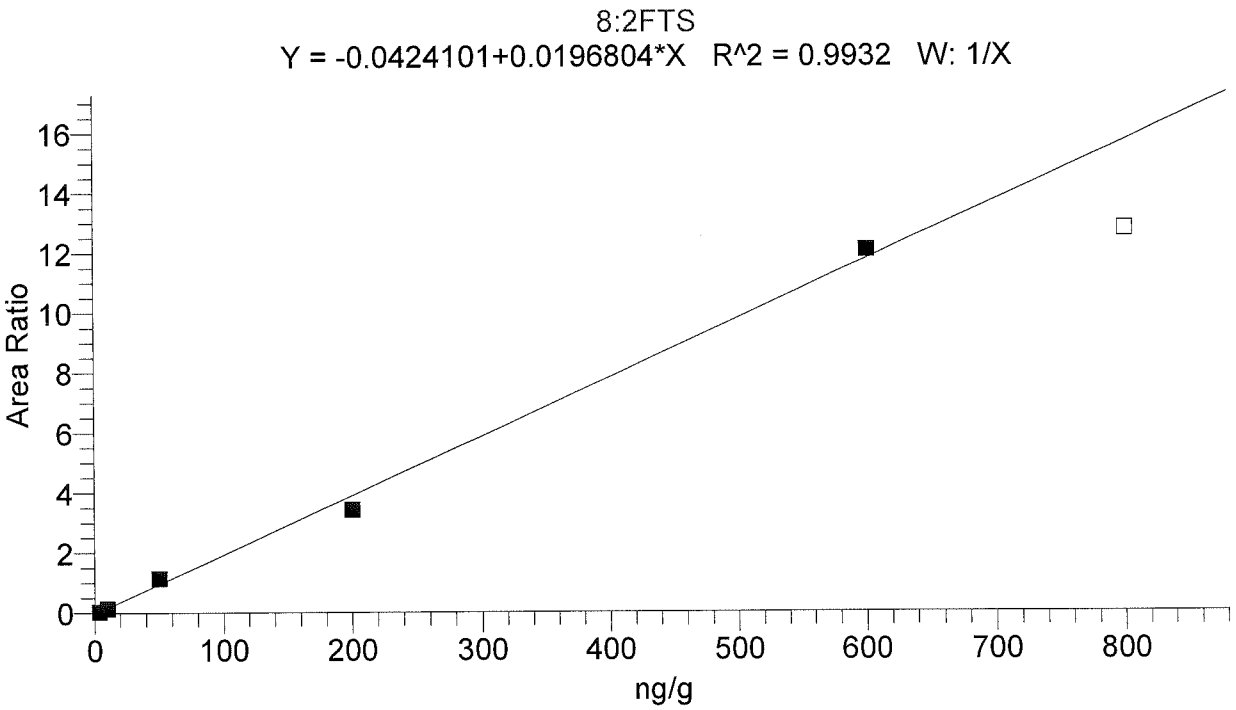
LCMSMS ANALYSIS REPORT

Component Name: **8:2FTS**



Identification		Component Name:	8:2FTS
Filter:	- c ESI SRM ms2 527.00 [81.00-81.00, 507.00-507.01]	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):	10.33000
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:	15	Peak Noise Factor:	30
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):	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:	13CFTS6.2_(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	4.000
2	10.000
3	50.000
4	200.000
5	600.000
6	800.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	50.000
2	200.000
3	600.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	3.950	4797.75	135783.35	0.035	-1.24
CAL2	16Jun22-05	9.013	19945.57	147786.47	0.135	-9.87
CAL4	16Jun22-07	176.039	402772.01	117696.92	3.422	-11.98
CAL5	16Jun22-08	614.673	1039384.23	86223.01	12.055	2.45
CAL6	16Jun22-09	650.386	986194.85	77303.40	12.757	-18.70
CAL3	16Jun22-10	60.325	102604.96	89625.48	1.145	20.65
CCV2	16Jun22-13	258.763	420881.37	83340.26	5.050	29.38
ICV1	16Jun22-13_160623014534	109.800	200254.23	94526.40	2.119	9.80
CCV3	16Jun22-23	589.495	3192033.98	276148.85	11.559	-1.75
CCV2	16Jun22-30	224.908	505206.54	115242.16	4.384	12.45
CCV3	16Jun22-52	713.092	2177912.91	155659.26	13.992	18.85
CCV2	16Jun22-56	304.526	1055638.21	177394.69	5.951	52.26

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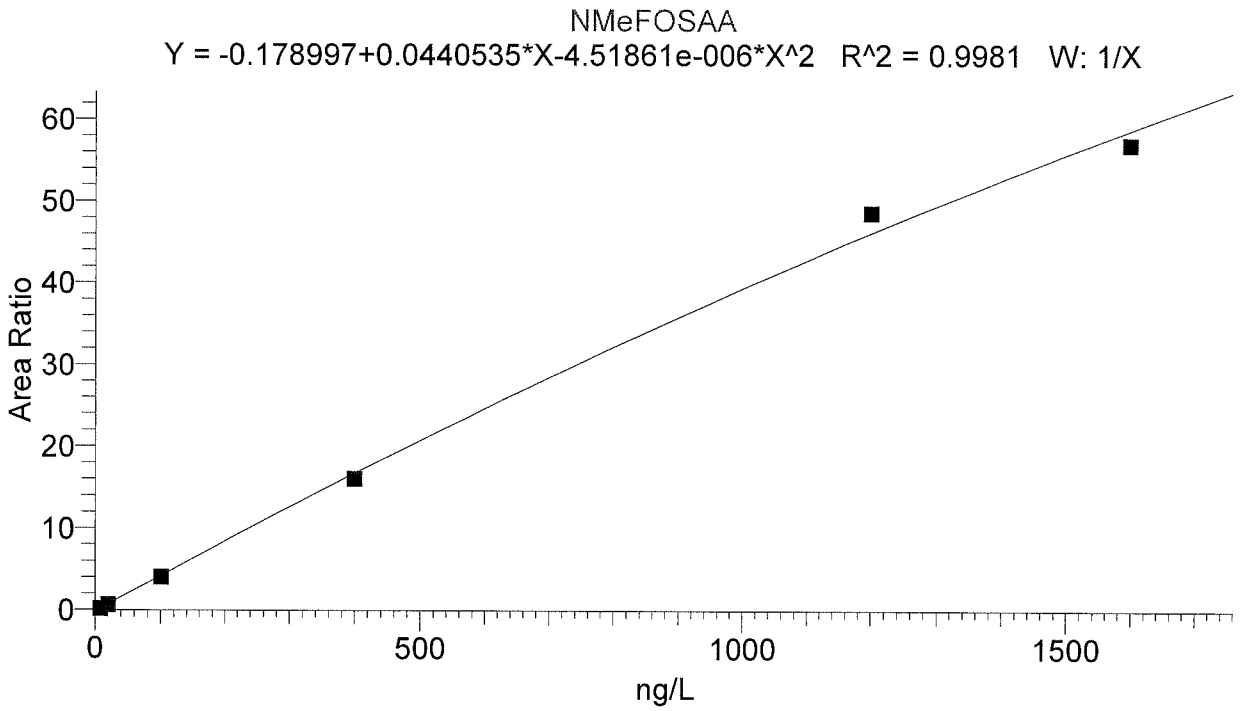
LCMSMS ANALYSIS REPORT

Component Name: **NMeFOSAA**



Identification			
Filter:	- c ESI SRM ms2 569.90 [419.05-419.06, 511.98-511.99]	Component Name:	NMeFOSAA
2nd Trace Type:	N/A	1st Trace Type:	TIC
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):	10.26000
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:	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):	25.0	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:	Quadratic	Target Units:	ng/L
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	8.000
2	20.000
3	100.000
4	400.000
5	1200.000
6	1600.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	100.000
2	400.000
3	1200.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	8.834	23939.44	114101.97	0.210	10.42
CAL2	16Jun22-05	18.718	74774.32	116107.57	0.644	-6.41
CAL4	16Jun22-07	383.627	1471089.26	91621.62	16.056	-4.09
CAL5	16Jun22-08	1275.736	3699018.18	76005.76	48.668	6.31
CAL6	16Jun22-09	1543.267	4108321.77	72018.32	57.046	-3.55
CAL3	16Jun22-10	97.387	377607.42	92815.42	4.068	-2.61
CCV2	16Jun22-13	363.807	1460993.48	95803.41	15.250	-9.05
ICV1	16Jun22-13_160623014534	105.016	413421.73	94013.34	4.397	5.02
CCV3	16Jun22-23	1197.320	5909391.89	128215.83	46.089	-0.22
CCV2	16Jun22-30	373.756	1480395.84	94563.46	15.655	-6.56
CCV3	16Jun22-52	1232.906	4702480.23	99489.08	47.266	2.74
CCV2	16Jun22-56	376.749	2124743.89	134675.47	15.777	-5.81

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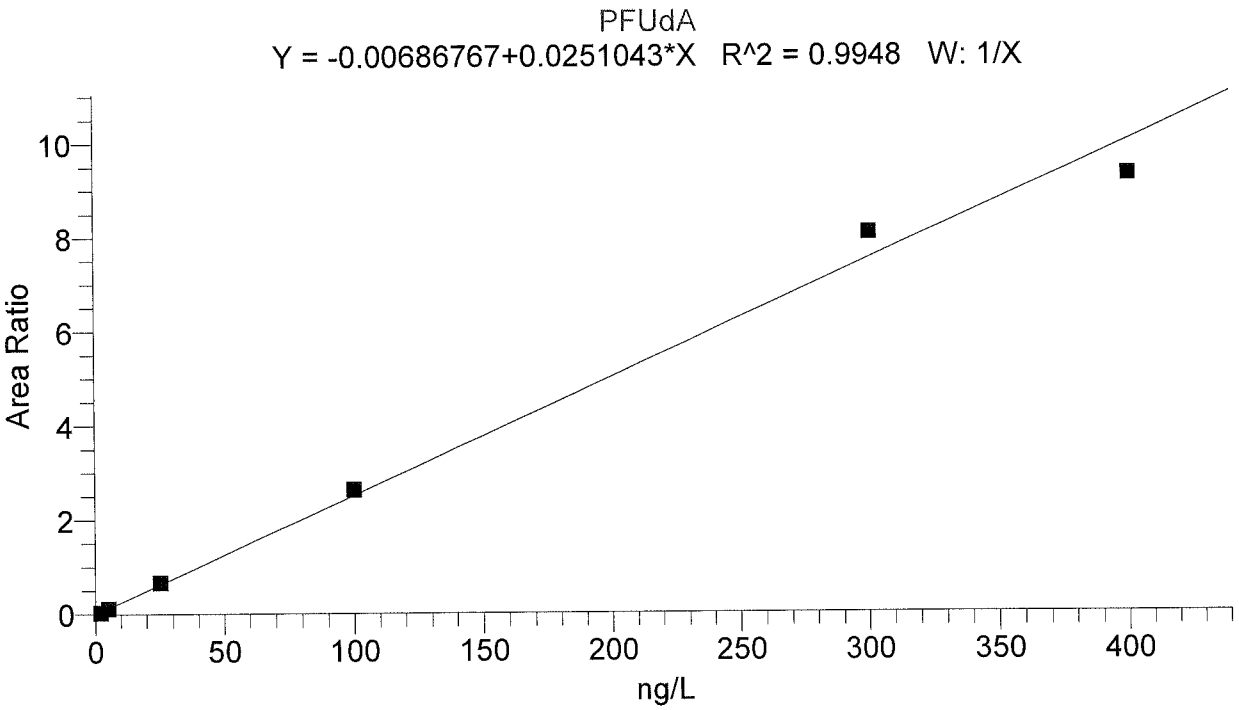
LCMSMS ANALYSIS REPORT

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):	10.64000
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:	13CPFUnA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/L
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	2.000
2	5.000
3	25.000
4	100.000
5	300.000
6	400.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	25.000
2	100.000
3	300.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	1.688	7634.17	214940.20	0.036	-15.58
CAL2	16Jun22-05	5.122	26906.03	221036.37	0.122	2.45
CAL4	16Jun22-07	105.253	604965.70	229550.03	2.635	5.25
CAL5	16Jun22-08	321.711	1666611.06	206533.36	8.069	7.24
CAL6	16Jun22-09	371.268	1881860.99	202056.30	9.314	-7.18
CAL3	16Jun22-10	26.956	141436.05	211144.84	0.670	7.83
CCV2	16Jun22-13	116.131	600606.85	206499.51	2.909	16.13
ICV1	16Jun22-13_160623014534	93.299	499404.92	213846.17	2.335	-6.70
CCV3	16Jun22-23	298.951	1819330.51	242639.97	7.498	-0.35
CCV2	16Jun22-30	100.638	601781.47	238841.97	2.520	0.64
CCV3	16Jun22-52	311.407	1766679.59	226184.58	7.811	3.80
CCV2	16Jun22-56	105.253	656607.91	249145.42	2.635	5.25

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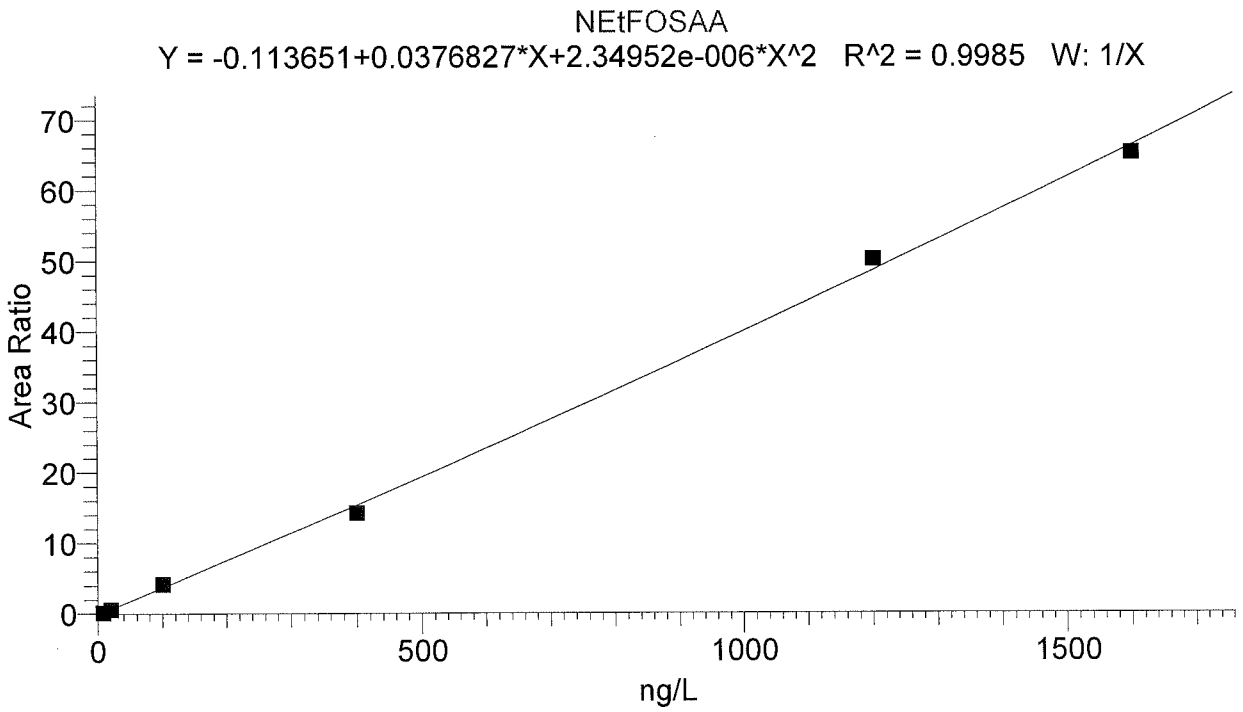
LCMSMS ANALYSIS REPORT

Component Name: **NEtFOSAA**



Identification		Component Name:	NEtFOSAA
Filter:	- c ESI SRM ms2 583.95 [419.05-419.06, 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):	10.68000
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:	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):	25.0	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:	Quadratic	Target Units:	ng/L
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	8.000
2	20.000
3	100.000
4	400.000
5	1200.000
6	1600.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	100.000
2	400.000
3	1200.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	8.003	18782.06	99870.86	0.188	0.03
CAL2	16Jun22-05	18.495	53074.13	90864.42	0.584	-7.52
CAL4	16Jun22-07	373.284	1116916.66	78215.07	14.280	-6.68
CAL5	16Jun22-08	1237.218	2973563.23	59347.28	50.104	3.10
CAL6	16Jun22-09	1578.367	3059511.95	46913.07	65.217	-1.35
CAL3	16Jun22-10	112.392	320345.41	77168.28	4.151	12.39
CCV2	16Jun22-13	385.413	1235586.13	83719.00	14.759	-3.65
ICV1	16Jun22-13_160623014534	104.948	302266.51	78166.89	3.867	4.95
CCV3	16Jun22-23	1145.509	4712189.14	102138.74	46.135	-4.54
CCV2	16Jun22-30	369.129	1366206.58	96782.48	14.116	-7.72
CCV3	16Jun22-52	1233.035	3620367.31	72519.71	49.923	2.75
CCV2	16Jun22-56	398.445	1614573.16	105708.39	15.274	-0.39

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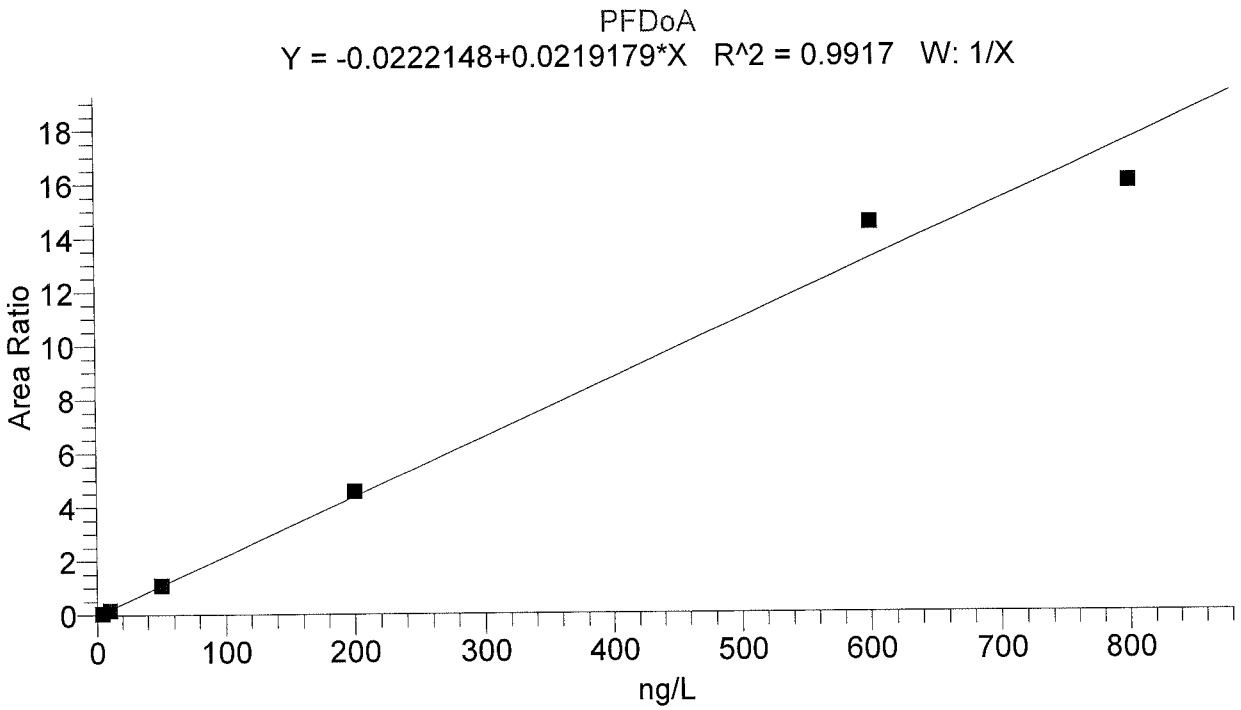
Component Name: **PFDoA**



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):	11.25000
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/L
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	4.000
2	10.000
3	50.000
4	200.000
5	600.000
6	800.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	50.000
2	200.000
3	600.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	4.087	14836.88	220216.07	0.067	2.19
CAL2	16Jun22-05	9.009	40699.02	232235.69	0.175	-9.91
CAL4	16Jun22-07	209.295	1017839.28	222961.46	4.565	4.65
CAL5	16Jun22-08	661.533	2667056.71	184224.88	14.477	10.26
CAL6	16Jun22-09	729.244	2717823.29	170276.27	15.961	-8.84
CAL3	16Jun22-10	50.831	248534.10	227618.60	1.092	1.66
CCV2	16Jun22-13	209.112	951708.41	208658.37	4.561	4.56
ICV1	16Jun22-13_160623014534	90.158	399580.58	204509.17	1.954	-9.84
CCV3	16Jun22-23	576.295	2943776.91	233467.44	12.609	-3.95
CCV2	16Jun22-30	208.061	1025535.09	225986.42	4.538	4.03
CCV3	16Jun22-52	573.054	2935820.85	234155.60	12.538	-4.49
CCV2	16Jun22-56	219.969	1113147.23	231952.14	4.799	9.98

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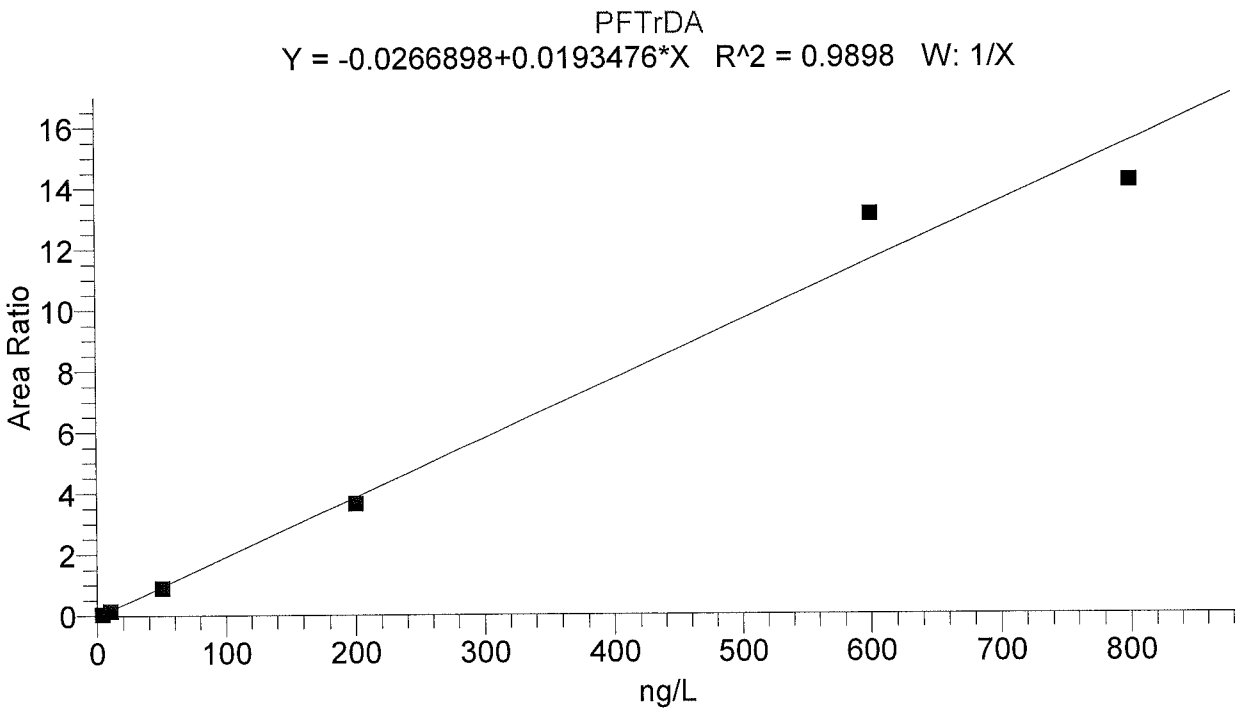
Component Name: **PFTrDA**



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):	12.08000
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:	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):	25.0	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/L
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	4.000
2	10.000
3	50.000
4	200.000
5	600.000
6	800.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	50.000
2	200.000
3	600.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	4.355	12679.30	220216.07	0.058	8.88
CAL2	16Jun22-05	9.543	36681.48	232235.69	0.158	-4.57
CAL4	16Jun22-07	190.391	815351.11	222961.46	3.657	-4.80
CAL5	16Jun22-08	677.943	2411484.16	184224.88	13.090	12.99
CAL6	16Jun22-09	733.887	2413201.53	170276.27	14.172	-8.26
CAL3	16Jun22-10	47.880	204784.35	227618.60	0.900	-4.24
CCV2	16Jun22-13	204.143	818564.90	208658.37	3.923	2.07
ICV1	16Jun22-13_160623014534	77.946	302954.22	204509.17	1.481	-22.05
CCV3	16Jun22-23	539.057	2428711.41	233467.44	10.403	-10.16
CCV2	16Jun22-30	197.657	858183.39	225986.42	3.797	-1.17
CCV3	16Jun22-52	549.861	2484814.02	234155.60	10.612	-8.36
CCV2	16Jun22-56	203.441	906795.87	231952.14	3.909	1.72

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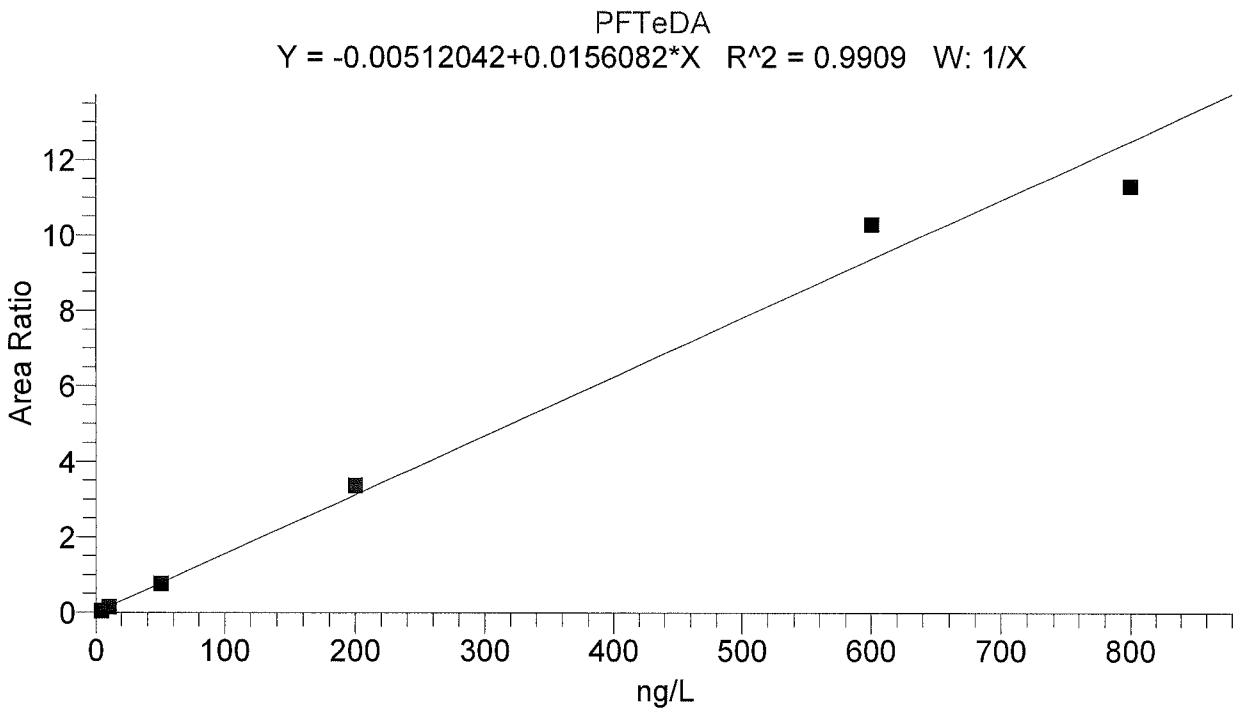
LCMSMS ANALYSIS REPORT

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):	13.10000
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:	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):	25.0	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:	13CPFUnA_(IS)	Weighting:	OneOverX
Origin:	IgnoreOrigin	Response:	Area
Calibration Curve:	Linear	Target Units:	ng/L
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	4.000
2	10.000
3	50.000
4	200.000
5	600.000
6	800.000

Component QC Level Table

QC Level	Amount
ICV1	100.000
ICV2	200.000
1	50.000
2	200.000
3	600.000

ICV & CCV Result Table

Sample ID	Data File Name	Calculated Amount	Area	ISTD Area	Area Ratio	% Diff
CAL1	16Jun22-04	3.619	11039.04	214940.20	0.051	-9.54
CAL2	16Jun22-05	10.164	33935.51	221036.37	0.154	1.64
CAL4	16Jun22-07	216.370	774050.77	229550.03	3.372	8.19
CAL5	16Jun22-08	659.809	2125914.83	206533.36	10.293	9.97
CAL6	16Jun22-09	724.446	2283679.16	202056.30	11.302	-9.44
CAL3	16Jun22-10	49.591	162351.00	211144.84	0.769	-0.82
CCV2	16Jun22-13	229.456	738500.67	206499.51	3.576	14.73
ICV1	16Jun22-13_160623014534	90.990	302606.41	213846.17	1.415	-9.01
CCV3	16Jun22-23	539.848	2043257.61	242639.97	8.421	-10.03
CCV2	16Jun22-30	191.630	713153.44	238841.97	2.986	-4.19
CCV3	16Jun22-52	572.588	2020271.26	226184.58	8.932	-4.57
CCV2	16Jun22-56	203.779	791163.06	249145.42	3.176	1.89

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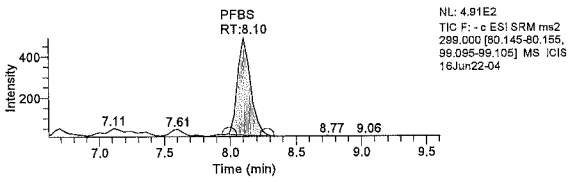
LCMSMS ANALYSIS REPORT

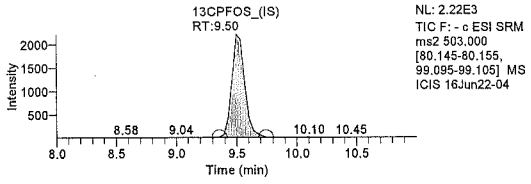
Sample Name:	CAL1	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CAL1	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-04	Dilution Factor:	1.00
Acquisition Date:	06/22/16 11:03:16 PM	Instrument Model:	TSQ Quantum Access
Sample Type:	Std Bracket	Instrument Software Version:	2.5.0.1311
Vial:	c:3	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

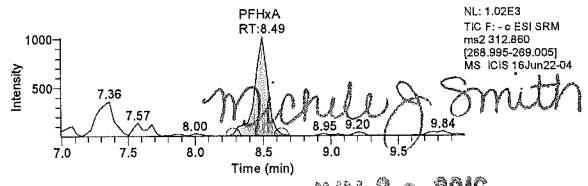
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.57	332915.81	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.14	292384.63	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	9.14	135783.35	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.14	236014.42	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.92	220216.07	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.81	222646.54	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.49	194936.50	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.78	31192.48	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.50	16844.95	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.95	214940.20	N/A	N/A	N/A
8:2FTS	3.950	10.17	4797.75	135783.35	0.035	ng/g
NEtFOSAA	8.003	10.99	18782.06	99870.86	0.188	ng/L
NMeFOSAA	8.834	10.57	23939.44	114101.97	0.210	ng/L
PFBS	7.083	8.10	3169.82	16844.95	0.188	ng/L
PFDA	2.083	10.14	6920.07	236014.42	0.029	ng/L
PFDoA	4.087	11.92	14836.88	220216.07	0.067	ng/L
PFHxA	2.124	8.49	6731.40	194936.50	0.035	ng/L
PFHxS	8.971	8.81	2112.35	31192.48	0.068	ng/L
PFNA	2.135	9.53	10958.75	332915.81	0.033	ng/L
PFOA	1.838	9.14	10001.03	292384.63	0.034	ng/L
PFOS	4.288	9.50	1663.74	16844.95	0.099	ng/L
PFTeDA	3.619	14.57	11039.04	214940.20	0.051	ng/L
PFTrDA	4.355	13.12	12679.30	220216.07	0.058	ng/L
PFUdA	1.688	10.95	7634.17	214940.20	0.036	ng/L
PFhpA	2.213	8.81	9234.46	222646.54	0.041	ng/L
d3-NMeFOSAA	N/A	10.53	114101.97	N/A	N/A	N/A
d5-NEtFOSAA	N/A	11.00	99870.86	N/A	N/A	N/A

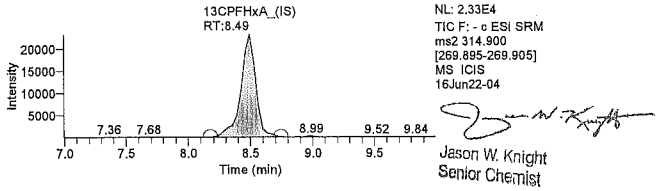
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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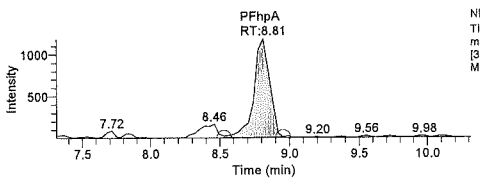

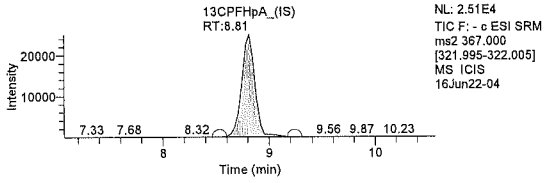

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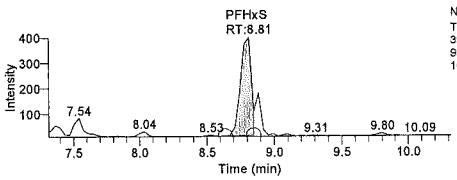

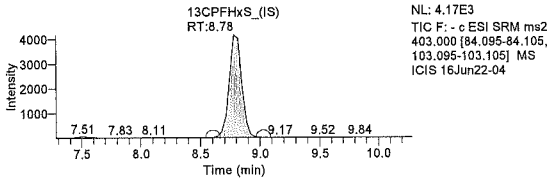

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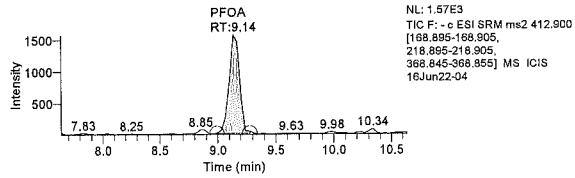

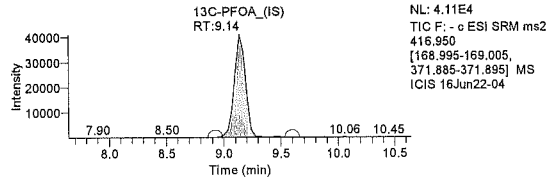

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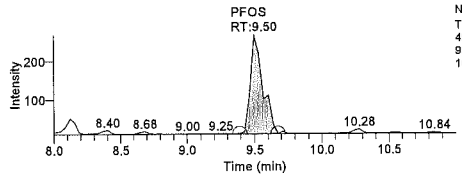

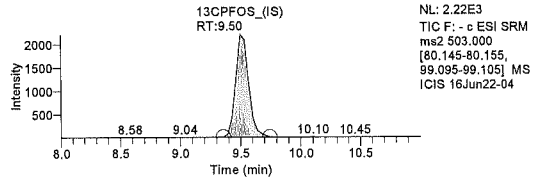

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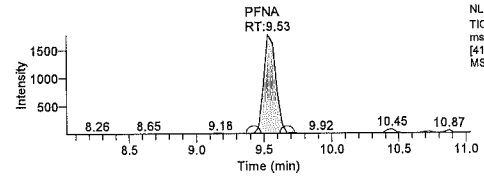

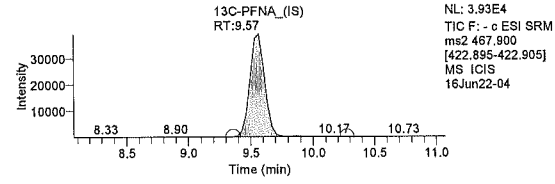

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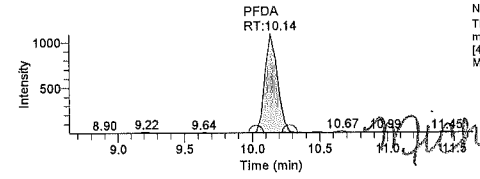

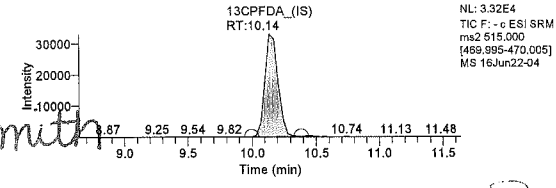

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Component Name: 8:2FTS

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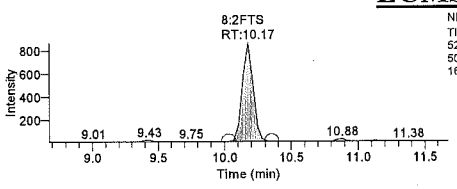

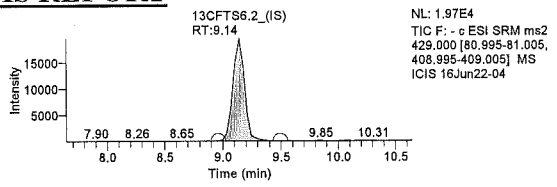

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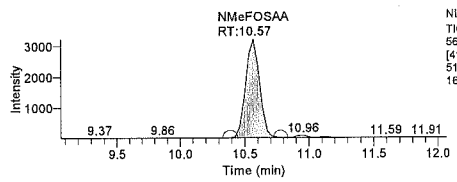

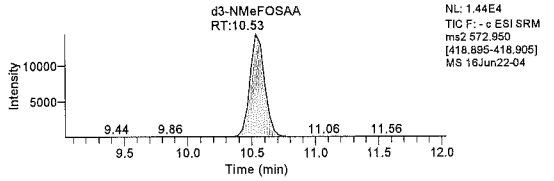

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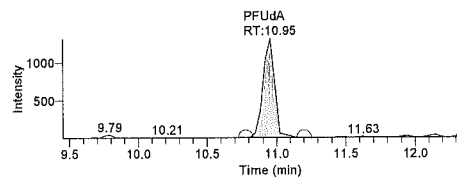

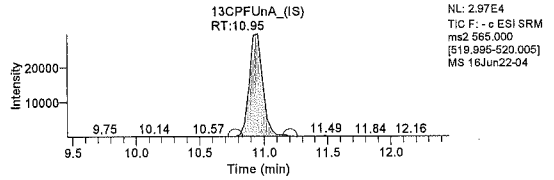

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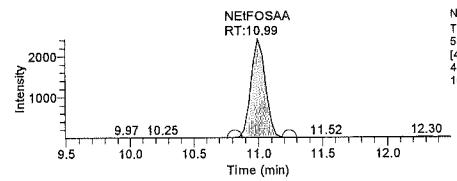

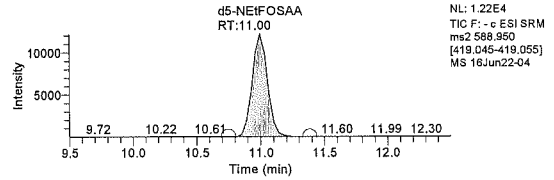

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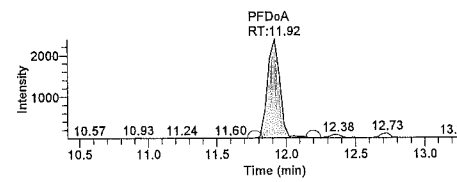

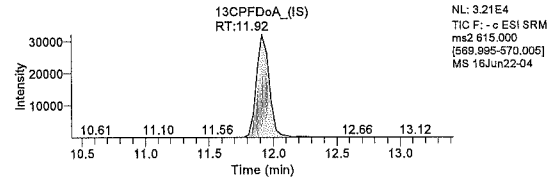

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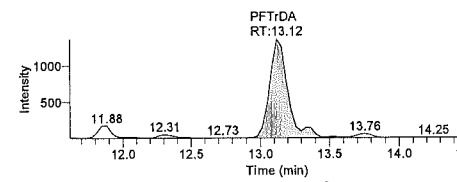

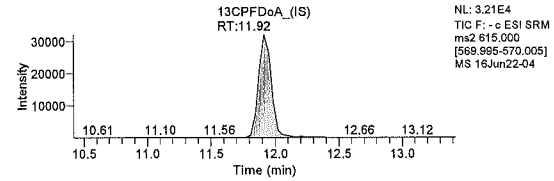

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Component Name: PFTeDA

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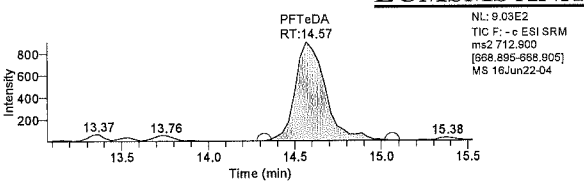

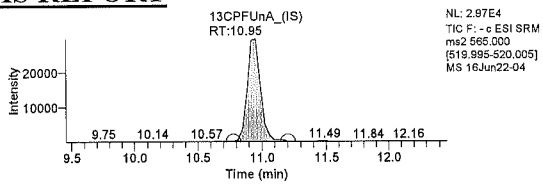

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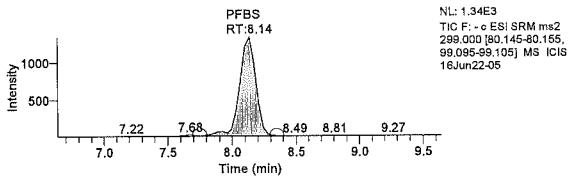
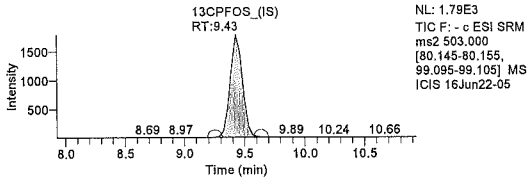
Sample Name:	CAL2	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CAL2	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-05	Dilution Factor:	1.00
Acquisition Date:	06/22/16 11:19:30 PM	Instrument Model:	TSQ Quantum Access
Sample Type:	Std Bracket	Instrument Software Version:	2.5.0.1311
Vial:	c:4	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.50	315614.60	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.14	276766.22	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	9.14	147786.47	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.00	242301.17	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.84	232235.69	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.88	249537.56	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.49	178443.44	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.85	39310.33	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.43	12775.97	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.74	221036.37	N/A	N/A	N/A
8:2FTS	9.013	10.03	19945.57	147786.47	0.135	ng/g
NEtFOSAA	18.495	10.82	53074.13	90864.42	0.584	ng/L
NMeFOSAA	18.718	10.39	74774.32	116107.57	0.644	ng/L
PFBS	18.181	8.14	11592.55	12775.97	0.907	ng/L
PFDA	4.977	9.99	25341.75	242301.17	0.105	ng/L
PFDoA	9.009	11.84	40699.02	232235.69	0.175	ng/L
PFHxA	4.409	8.49	15973.00	178443.44	0.090	ng/L
PFHxS	18.640	8.88	12098.86	39310.33	0.308	ng/L
PFNA	4.285	9.49	23649.32	315614.60	0.075	ng/L
PFOA	4.940	9.13	33451.82	276766.22	0.121	ng/L
PFOS	23.535	9.43	7680.62	12775.97	0.601	ng/L
PFTeDA	10.164	14.74	33935.51	221036.37	0.154	ng/L
PFTrDA	9.543	13.15	36681.48	232235.69	0.158	ng/L
PFUdA	5.122	10.74	26906.03	221036.37	0.122	ng/L
PFhpA	4.611	8.88	26576.01	249537.56	0.107	ng/L
d3-NMeFOSAA	N/A	10.36	116107.57	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.82	90864.42	N/A	N/A	N/A

Component Name: PFBS





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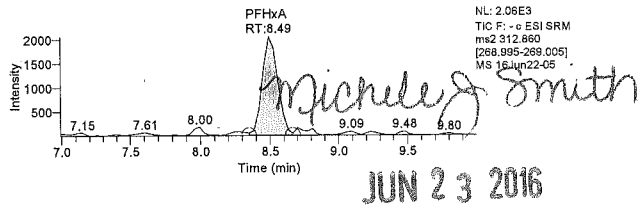

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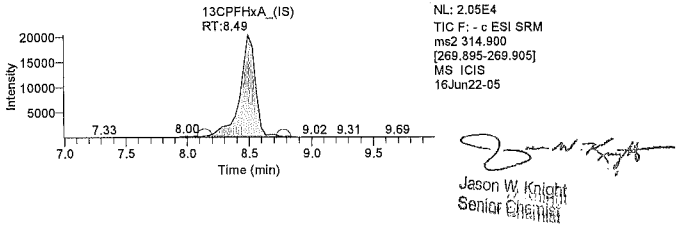

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Component Name: PFhpA

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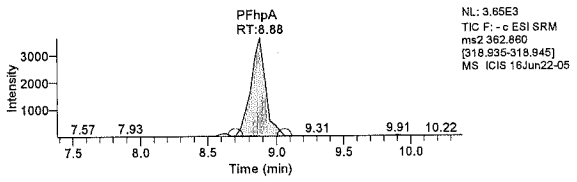

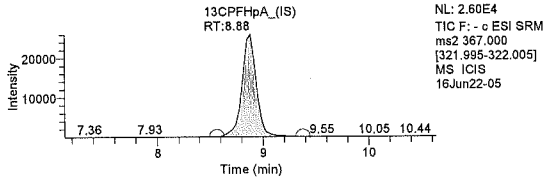

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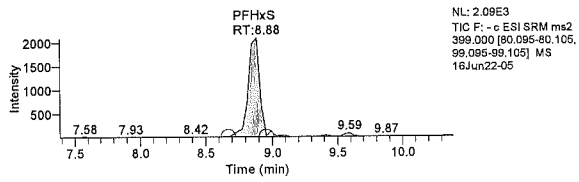

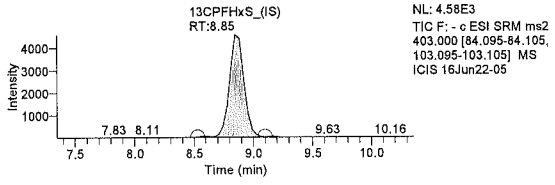

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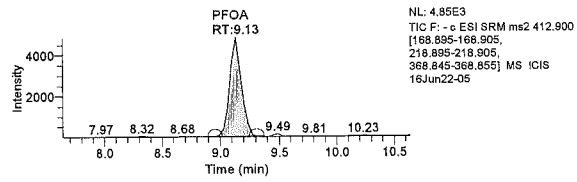

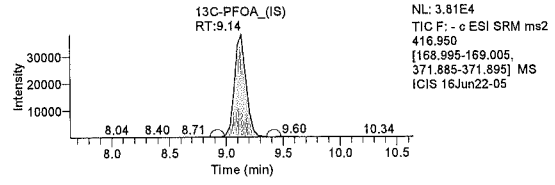

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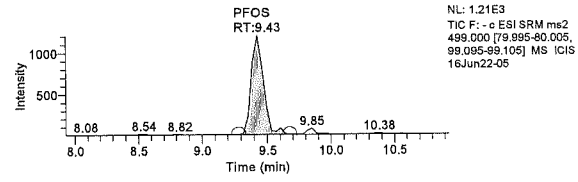

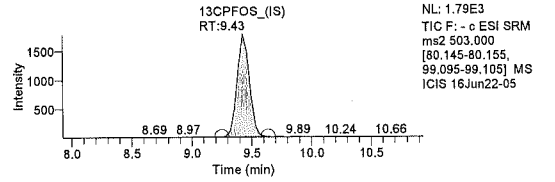

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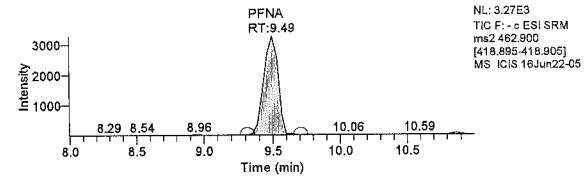

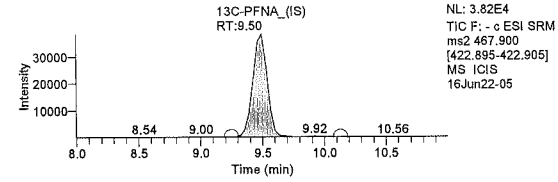

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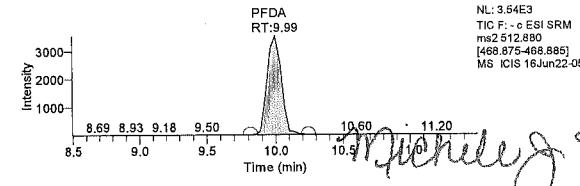

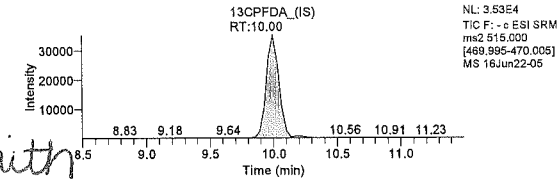

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Component Name: 8:2FTS

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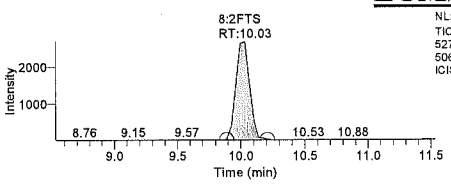

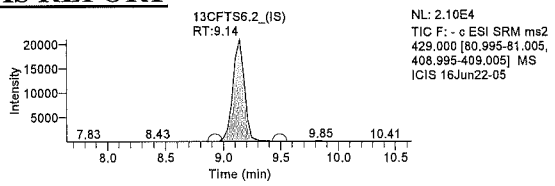

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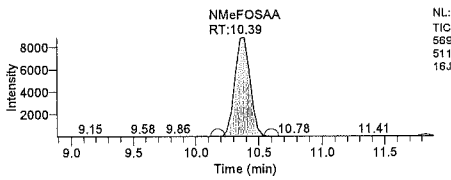

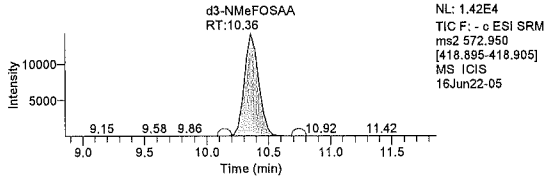

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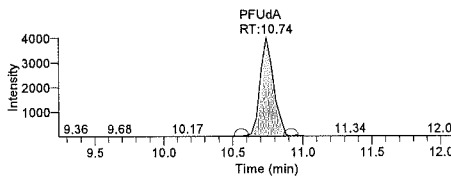

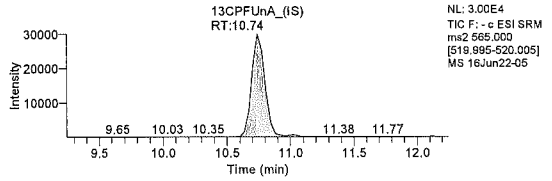

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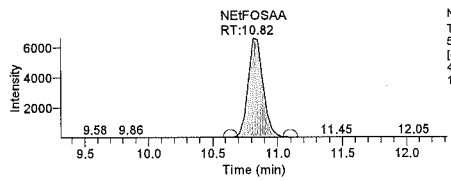
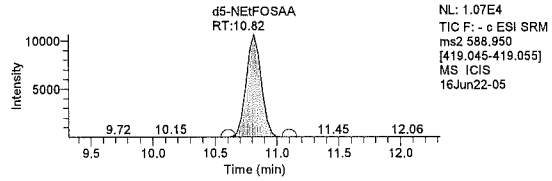
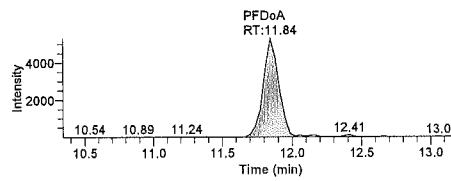
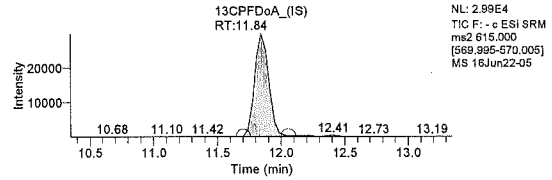


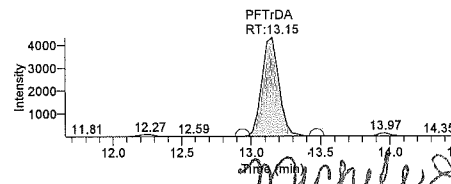


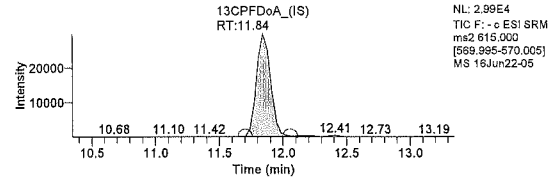
Component Name: PFDoA





Component Name: PFTrDA





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Component Name: PFTeDA

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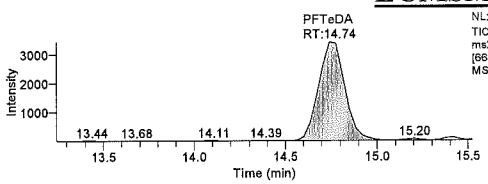

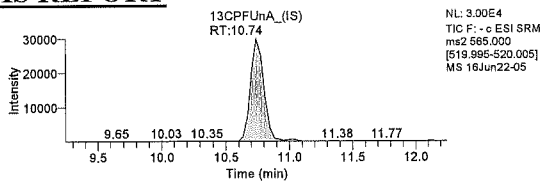

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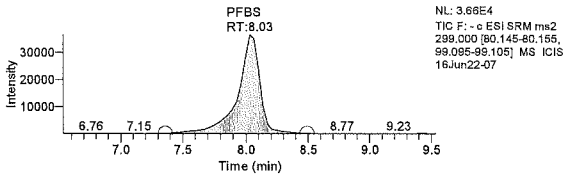
LCMSMS ANALYSIS REPORT

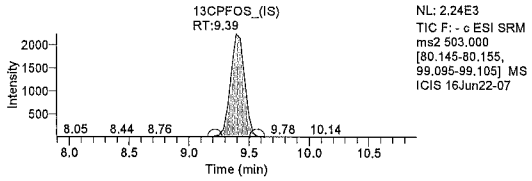
Sample Name:	CAL4	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CAL4	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-07	Dilution Factor:	1.00
Acquisition Date:	06/22/16 11:51:54 PM	Instrument Model:	TSQ Quantum Access
Sample Type:	Std Bracket	Instrument Software Version:	2.5.0.1311
Vial:	c:6	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

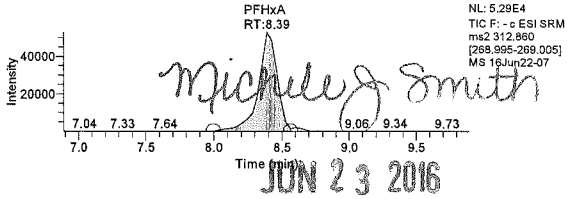
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.46	335185.65	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.03	301494.68	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	9.00	117696.92	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.00	256709.82	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	12.09	222961.46	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.71	217359.66	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.39	206305.69	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.71	38528.01	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.39	18126.91	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.81	229550.03	N/A	N/A	N/A
8:2FTS	176.039	10.00	402772.01	117696.92	3.422	ng/g
NEtFOSAA	373.284	10.89	1116916.66	78215.07	14.280	ng/L
NMeFOSAA	383.627	10.39	1471089.26	91621.62	16.056	ng/L
PFBS	383.343	8.03	445368.28	18126.91	24.569	ng/L
PFDA	98.062	9.96	648207.17	256709.82	2.525	ng/L
PFDoA	209.295	12.09	1017839.28	222961.46	4.565	ng/L
PFHxA	102.526	8.39	505466.36	206305.69	2.450	ng/L
PFHxS	372.966	8.71	350809.90	38528.01	9.105	ng/L
PFNA	96.145	9.46	626715.82	335185.65	1.870	ng/L
PFOA	103.259	9.03	864561.03	301494.68	2.868	ng/L
PFOS	400.819	9.39	189422.28	18126.91	10.450	ng/L
PFTeDA	216.370	14.60	774050.77	229550.03	3.372	ng/L
PFTrDA	190.391	12.98	815351.11	222961.46	3.657	ng/L
PFUdA	105.253	10.81	604965.70	229550.03	2.635	ng/L
PFhpA	103.982	8.71	608824.08	217359.66	2.801	ng/L
d3-NMeFOSAA	N/A	10.36	91621.62	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.85	78215.07	N/A	N/A	N/A

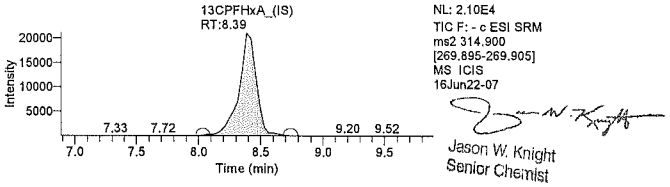
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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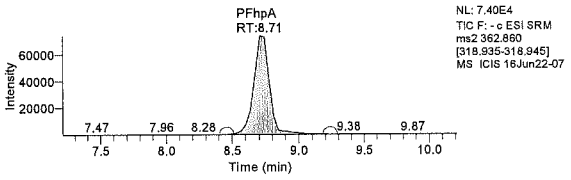
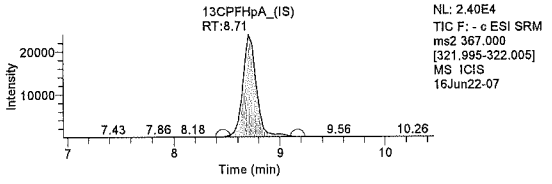
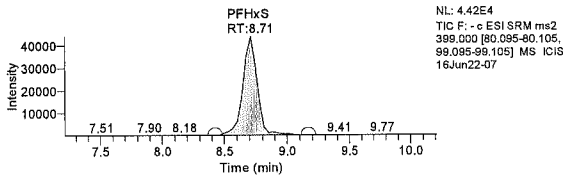
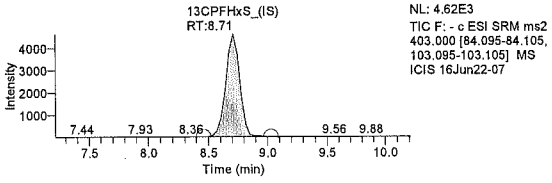


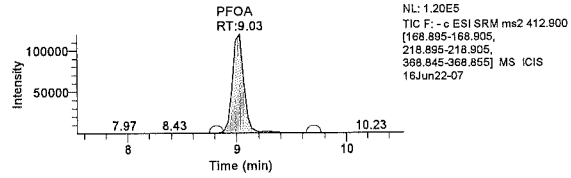


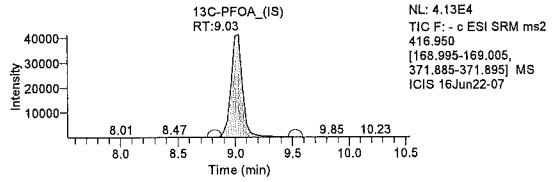
Component Name: PFHxS



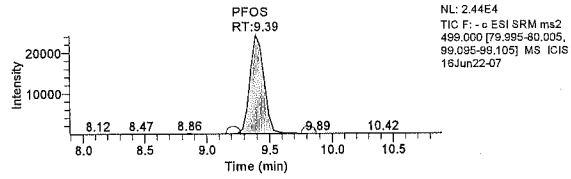


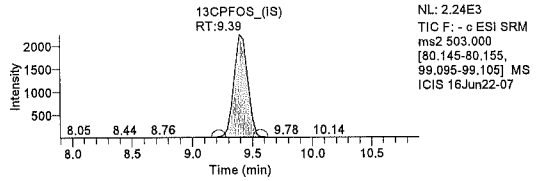
Component Name: PFOA



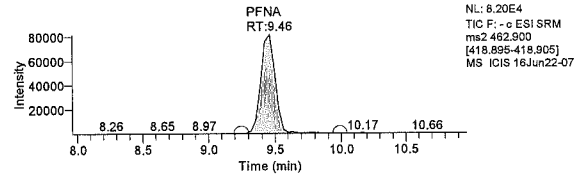


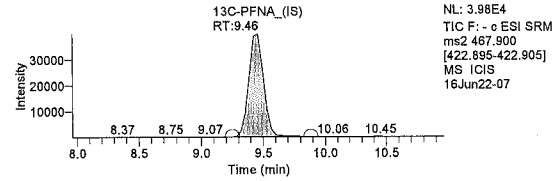
Component Name: PFOS



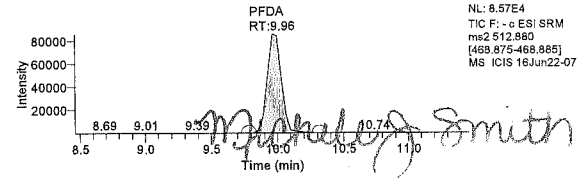


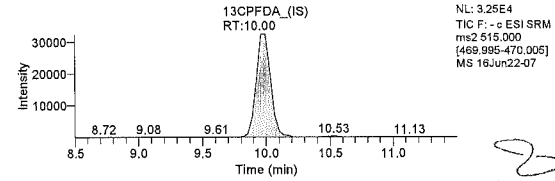
Component Name: PFNA





Component Name: PFDA





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Component Name: 8:2FTS

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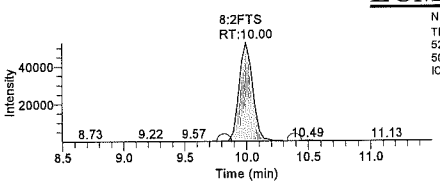
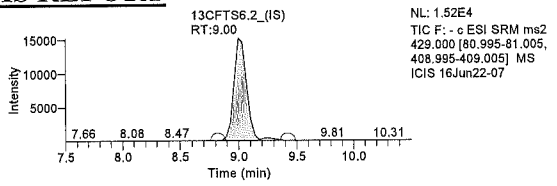
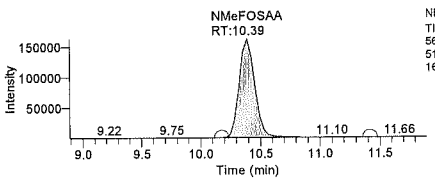
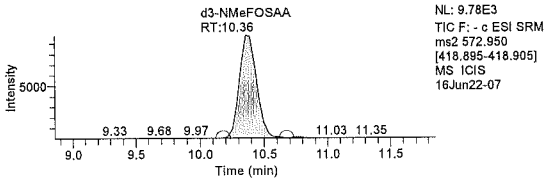




Component Name: NMeFOSAA





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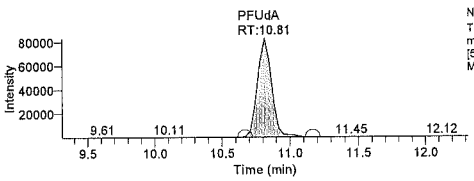
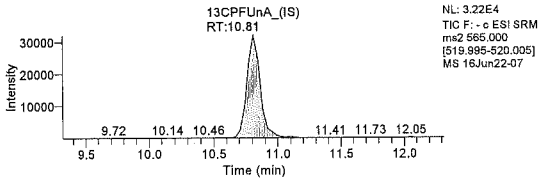
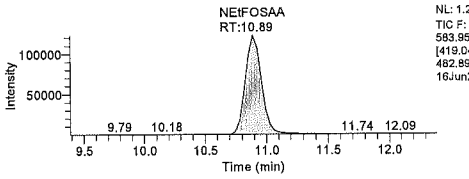
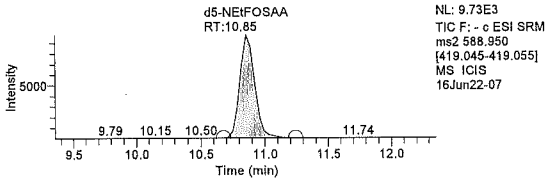


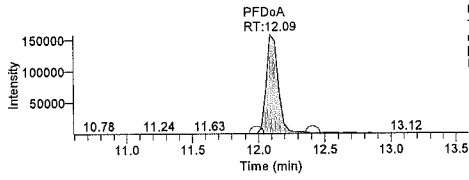


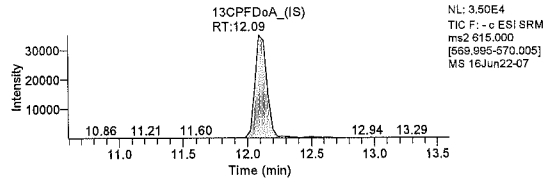
Component Name: NEtFOSAA



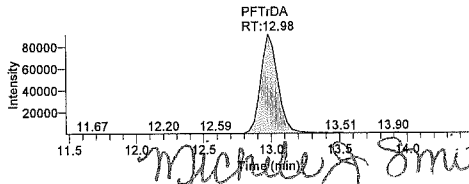


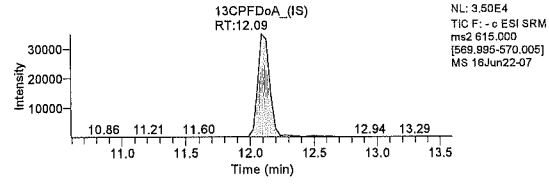
Component Name: PFDoA





Component Name: PFTrDA





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Component Name: PFTeDA

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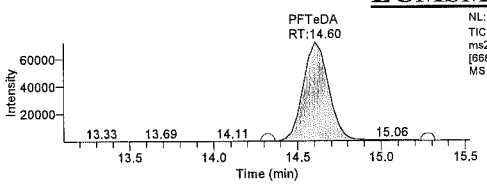

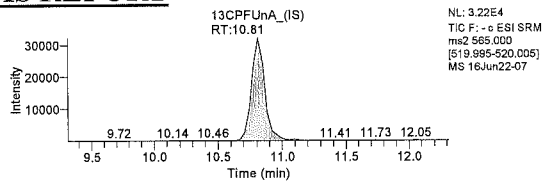

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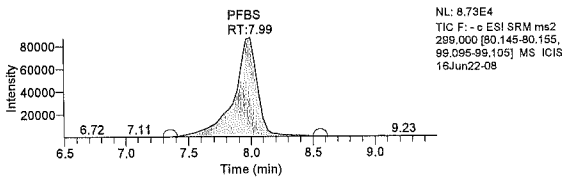
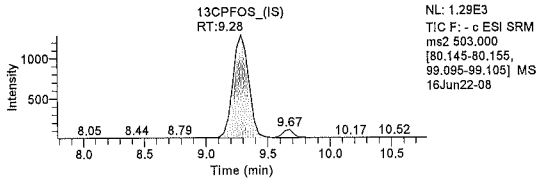
Sample Name:	CAL5	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CAL5	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-08	Dilution Factor:	1.00
Acquisition Date:	06/23/16 12:08:10 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Std Bracket	Instrument Software Version:	2.5.0.1311
Vial:	c:7	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

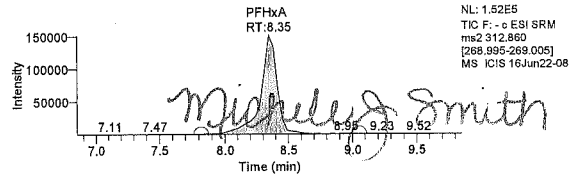
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.32	247466.12	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.96	255232.09	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.96	86223.01	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.82	207151.63	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.74	184224.88	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.67	167391.35	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.35	177832.15	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.67	23429.76	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.28	11695.26	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.63	206533.36	N/A	N/A	N/A
8:2FTS	614.673	9.85	1039384.23	86223.01	12.055	ng/g
NEtFOSAA	1237.218	10.71	2973563.23	59347.28	50.104	ng/L
NMeFOSAA	1275.736	10.25	3699018.18	76005.76	48.668	ng/L
PFBS	1557.102	7.99	1176868.13	11695.26	100.628	ng/L
PFDA	325.624	9.85	1748845.96	207151.63	8.442	ng/L
PFDoA	661.533	11.74	2667056.71	184224.88	14.477	ng/L
PFHxA	323.955	8.35	1383076.54	177832.15	7.777	ng/L
PFHxS	1455.447	8.67	843053.85	23429.76	35.982	ng/L
PFNA	313.331	9.32	1512835.32	247466.12	6.113	ng/L
PFOA	335.096	8.96	2384983.95	255232.09	9.344	ng/L
PFOS	1440.429	9.28	439597.85	11695.26	37.588	ng/L
PFTeDA	659.809	14.81	2125914.83	206533.36	10.293	ng/L
PFTrDA	677.943	13.15	2411484.16	184224.88	13.090	ng/L
PFUdA	321.711	10.63	1666611.06	206533.36	8.069	ng/L
PFhpA	313.772	8.67	1421075.03	167391.35	8.490	ng/L
d3-NMeFOSAA	N/A	10.21	76005.76	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.67	59347.28	N/A	N/A	N/A

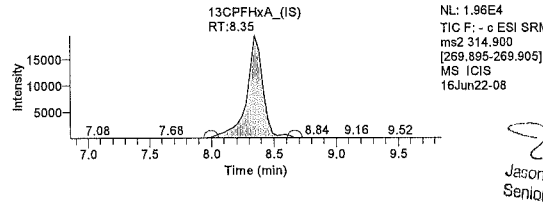
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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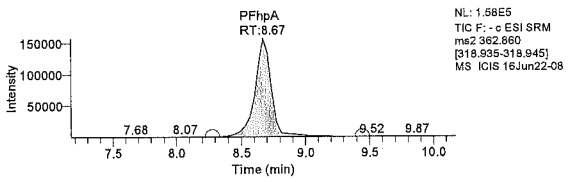

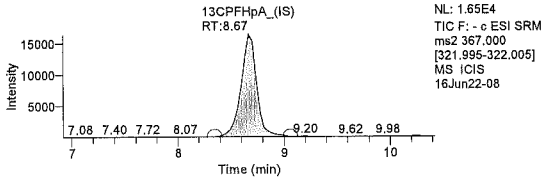

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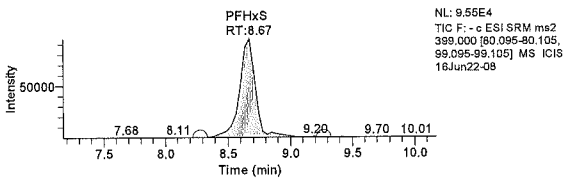

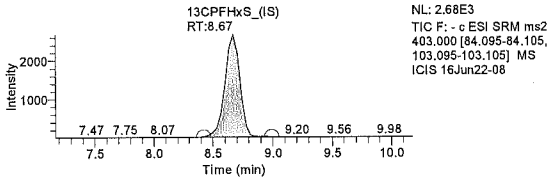

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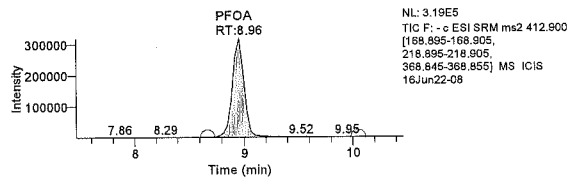

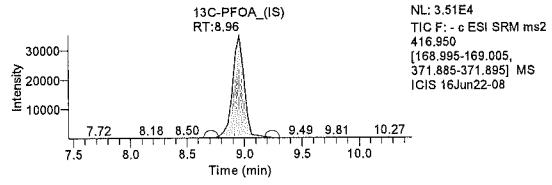

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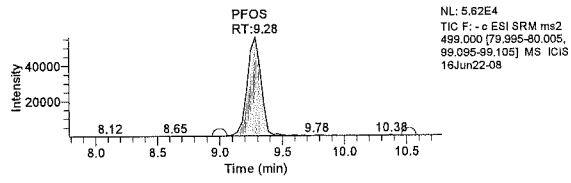

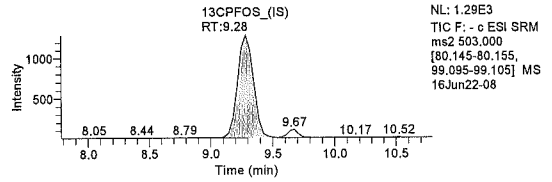

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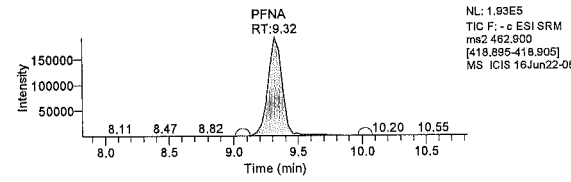

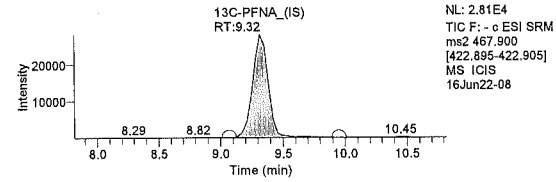

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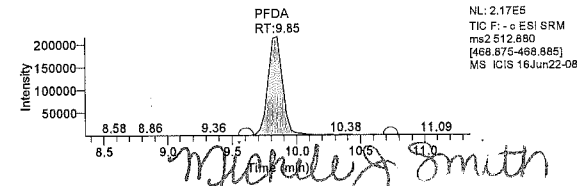

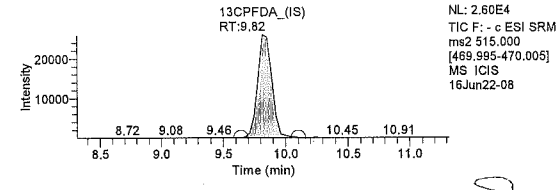

Component Name: 8:2FTS

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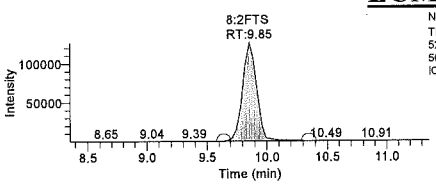

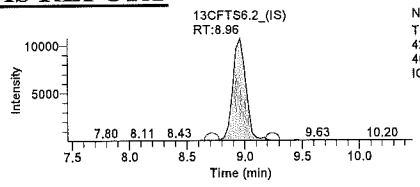

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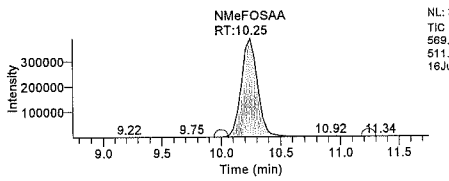

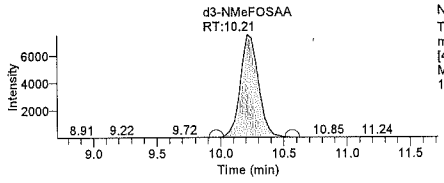

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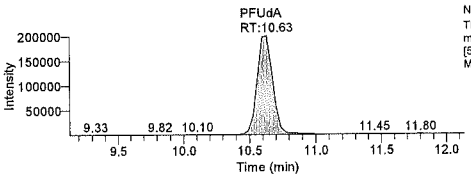

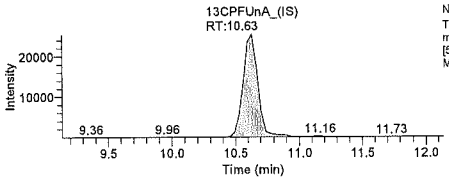

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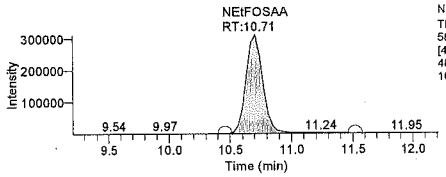

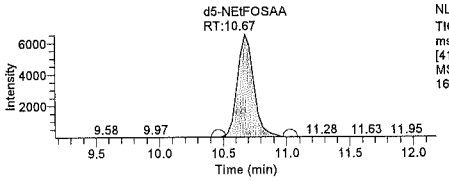

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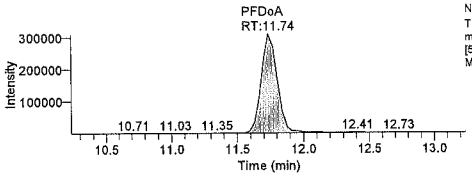

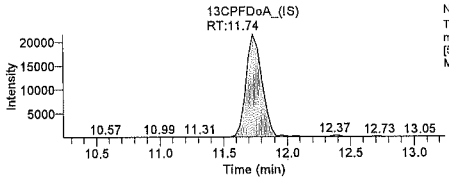

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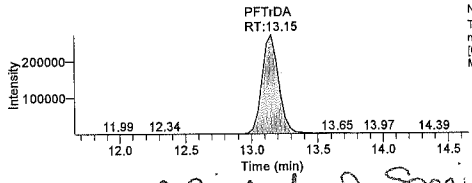

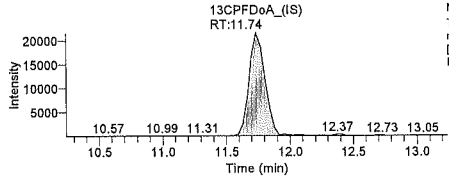

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Component Name: PFTeDA

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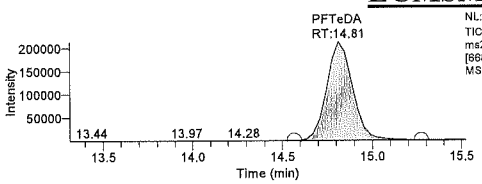

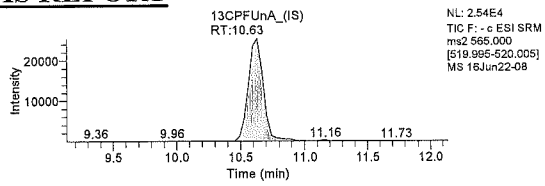

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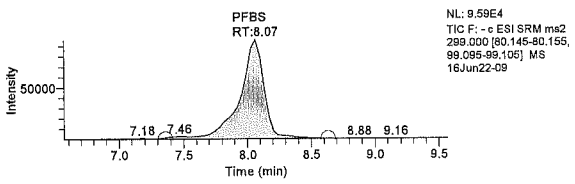
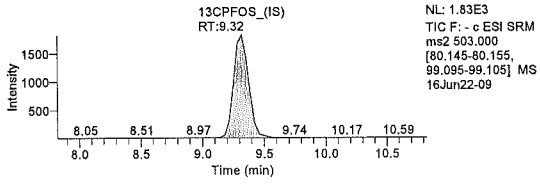
Sample Name:	CAL6	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CAL6	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-09	Dilution Factor:	1.00
Acquisition Date:	06/23/16 12:24:24 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Std Bracket	Instrument Software Version:	2.5.0.1311
Vial:	c:8	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

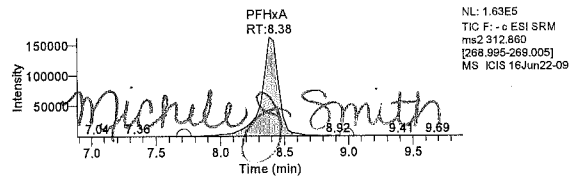
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.39	241878.54	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.96	268121.10	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.96	77303.40	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.96	196939.62	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.81	170276.27	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.67	152725.63	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.42	174803.20	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.67	27632.66	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.32	15856.48	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.71	202056.30	N/A	N/A	N/A
8:2FTS	650.386	10.00	986194.85	77303.40	12.757	ng/g
NEtFOSAA	1578.367	10.78	3059511.95	46913.07	65.217	ng/L
NMeFOSAA	1543.267	10.35	4108321.77	72018.32	57.046	ng/L
PFBS	1245.147	8.07	1275073.67	15856.48	80.413	ng/L
PFDA	377.411	9.96	1927836.87	196939.62	9.789	ng/L
PFDoA	729.244	11.81	2717823.29	170276.27	15.961	ng/L
PFHxA	373.558	8.38	1568126.45	174803.20	8.971	ng/L
PFHxS	1377.971	8.67	941128.39	27632.66	34.059	ng/L
PFNA	388.655	9.39	1834658.17	241878.54	7.585	ng/L
PFOA	360.832	8.96	2698199.09	268121.10	10.063	ng/L
PFOS	1333.809	9.32	551876.86	15856.48	34.804	ng/L
PFTeDA	724.446	14.92	2283679.16	202056.30	11.302	ng/L
PFTrDA	733.887	13.12	2413201.53	170276.27	14.172	ng/L
PFUdA	371.268	10.70	1881860.99	202056.30	9.314	ng/L
PFhpA	384.307	8.70	1588671.74	152725.63	10.402	ng/L
d3-NMeFOSAA	N/A	10.32	72018.32	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.75	46913.07	N/A	N/A	N/A

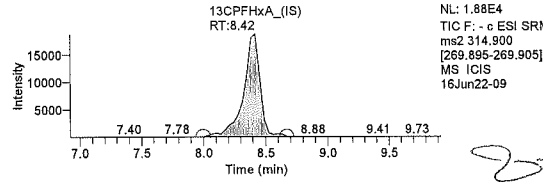
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFHxS

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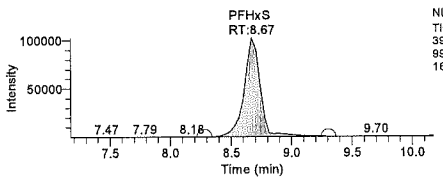

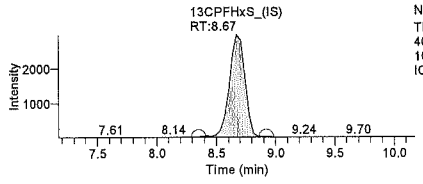

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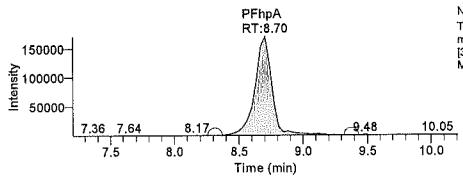

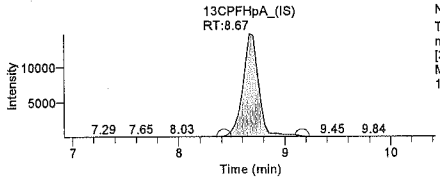

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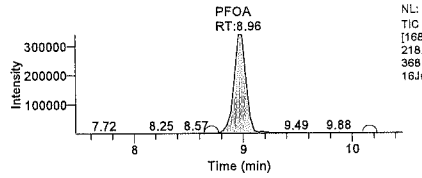

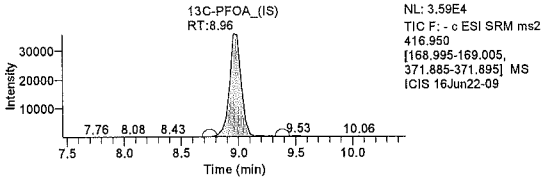

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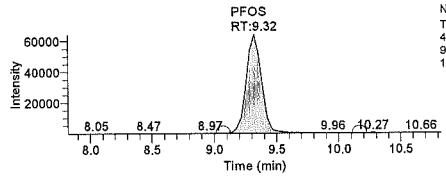

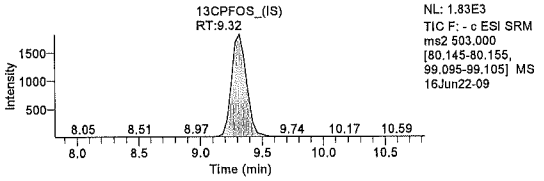

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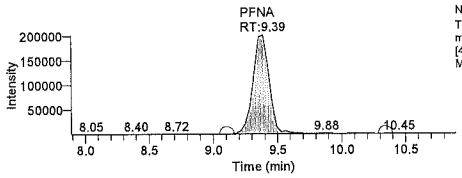

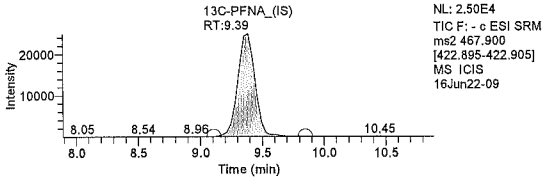

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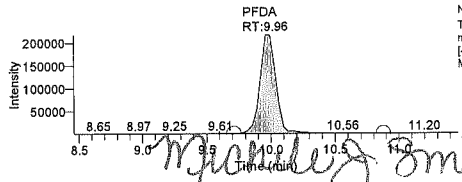

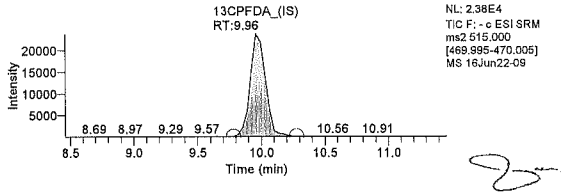

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Component Name: 8:2FTS

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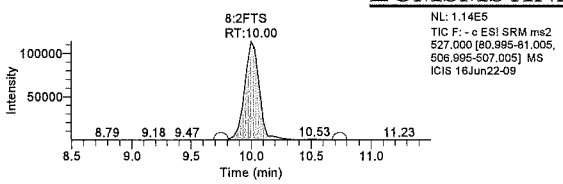

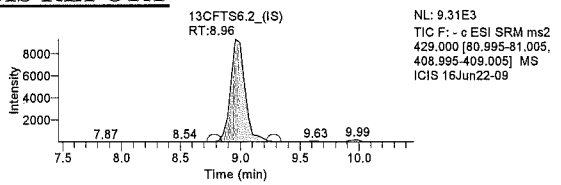

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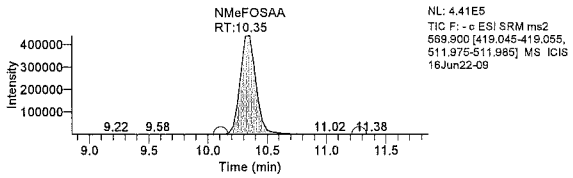

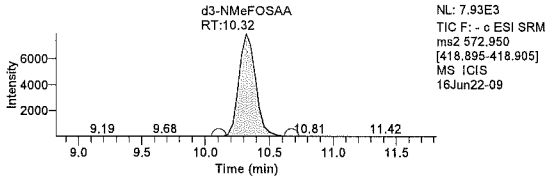

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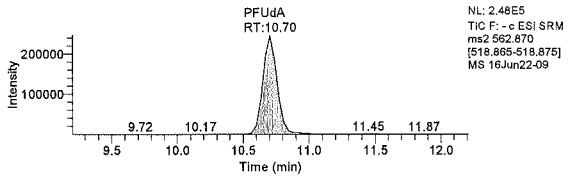

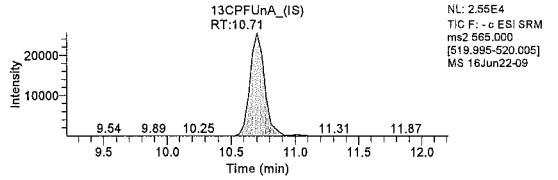

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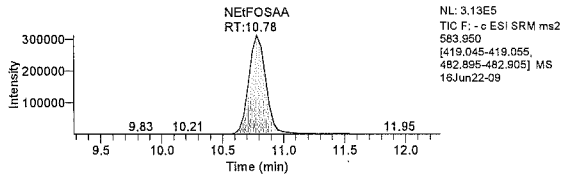
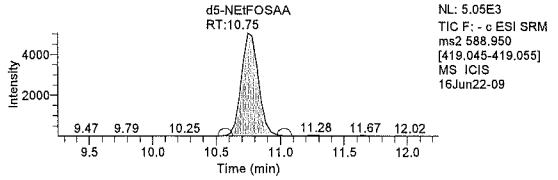
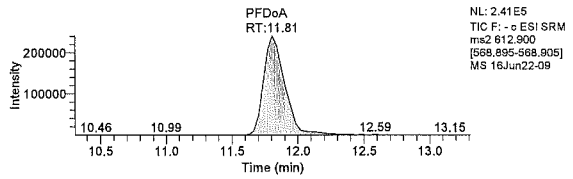
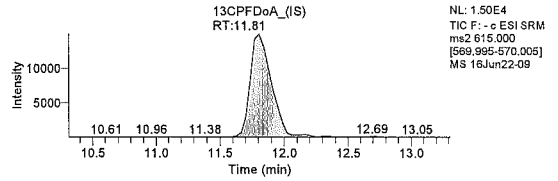


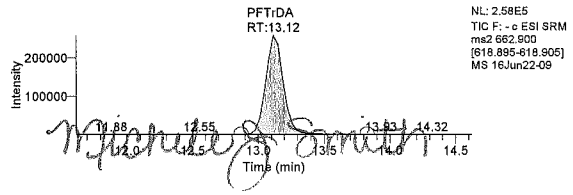


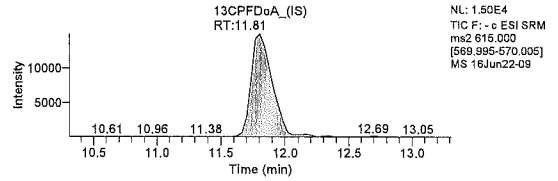
Component Name: PFDoA





Component Name: PFTrDA





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Component Name: PFTeDA

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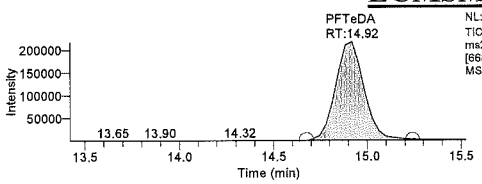

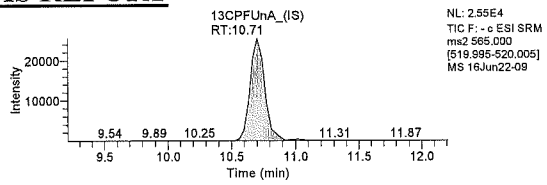

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Jason W. Knight
Senior Chemist

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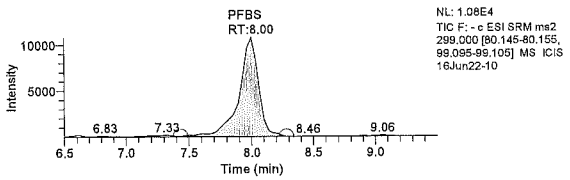
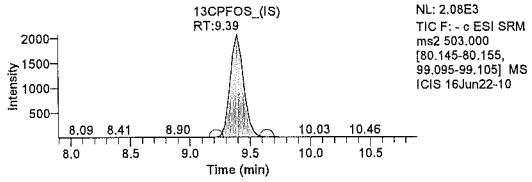
Sample Name:	CAL3	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CAL3	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-10	Dilution Factor:	1.00
Acquisition Date:	06/23/16 12:40:36 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Std Bracket	Instrument Software Version:	2.5.0.1311
Vial:	c:5	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

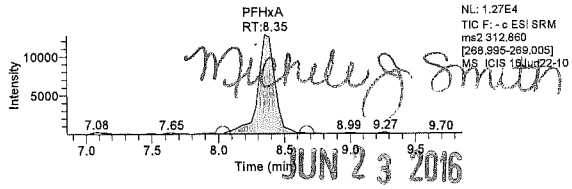
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.46	327384.02	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.00	287159.02	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.97	89625.48	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.03	237072.26	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	12.13	227618.60	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.67	229481.32	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.35	193495.06	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.68	36156.39	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.39	16024.81	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.82	211144.84	N/A	N/A	N/A
8:2FTS	60.325	10.04	102604.96	89625.48	1.145	ng/g
NEtFOSAA	112.392	10.89	320345.41	77168.28	4.151	ng/L
NMeFOSAA	97.387	10.43	377607.42	92815.42	4.068	ng/L
PFBS	117.144	8.00	117302.71	16024.81	7.320	ng/L
PFDA	23.844	10.03	141101.94	237072.26	0.595	ng/L
PFDoA	50.831	12.13	248534.10	227618.60	1.092	ng/L
PFHxA	25.429	8.35	115171.33	193495.06	0.595	ng/L
PFHxS	94.005	8.67	78785.33	36156.39	2.179	ng/L
PFNA	27.450	9.46	172707.86	327384.02	0.528	ng/L
PFOA	26.035	9.00	203934.99	287159.02	0.710	ng/L
PFOS	125.119	9.39	52127.50	16024.81	3.253	ng/L
PFTeDA	49.591	13.65	162351.00	211144.84	0.769	ng/L
PFTrDA	47.880	12.63	204784.35	227618.60	0.900	ng/L
PFUdA	26.956	10.85	141436.05	211144.84	0.670	ng/L
PFhpA	23.115	8.67	139576.61	229481.32	0.608	ng/L
d3-NMeFOSAA	N/A	10.43	92815.42	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.89	77168.28	N/A	N/A	N/A

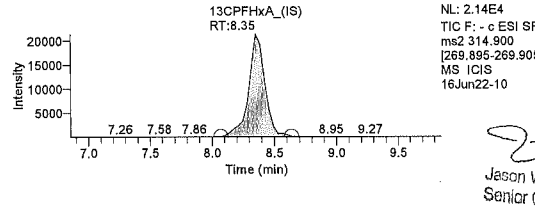
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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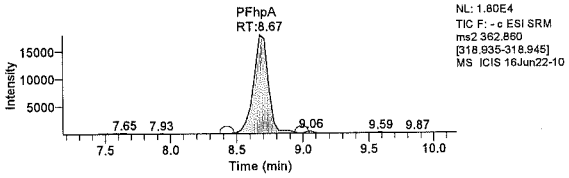
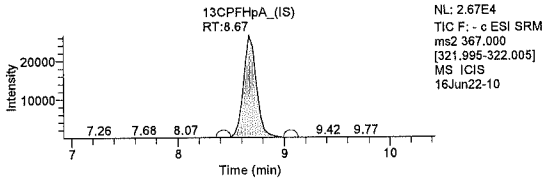
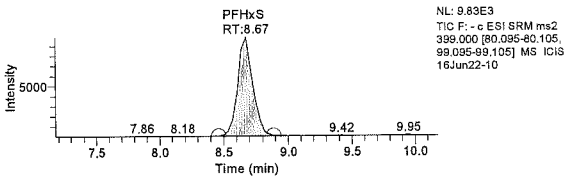
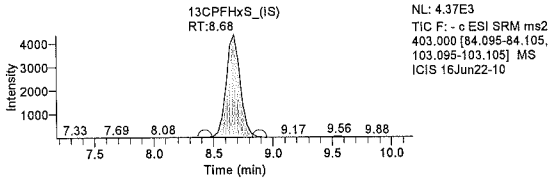


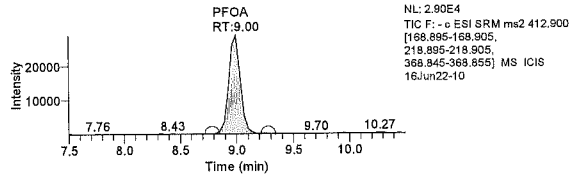


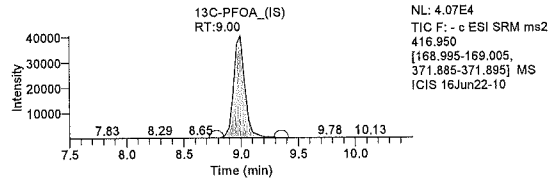
Component Name: PFHxS



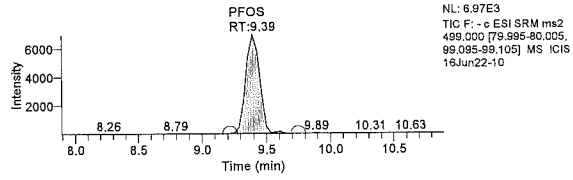


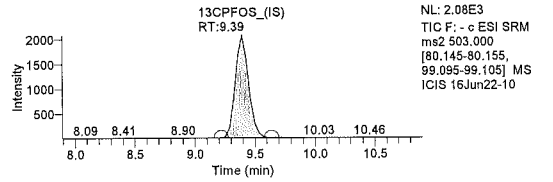
Component Name: PFOA



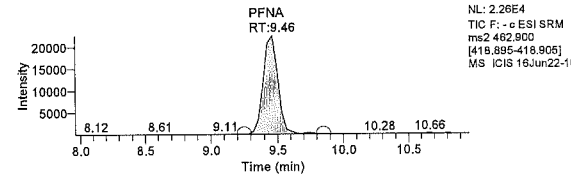


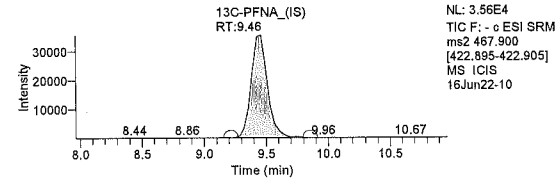
Component Name: PFOS



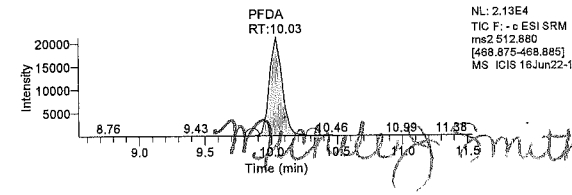


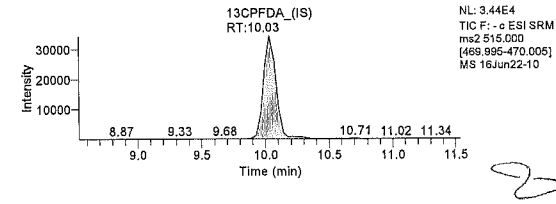
Component Name: PFNA





Component Name: PFDA





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Component Name: 8:2FTS

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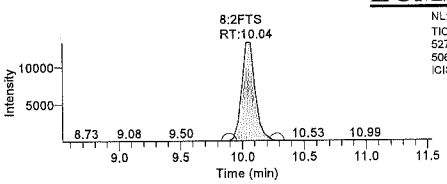
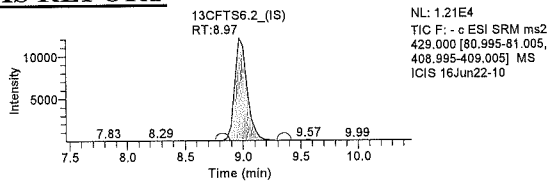
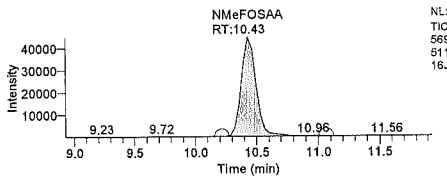
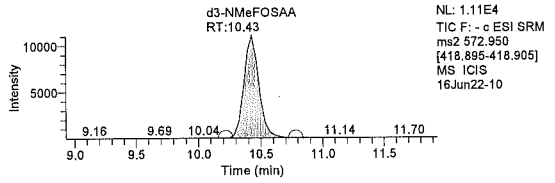




Component Name: NMeFOSAA





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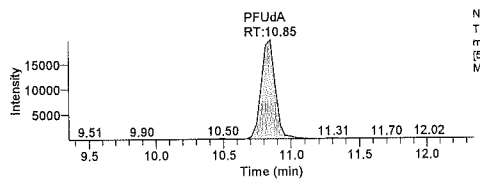
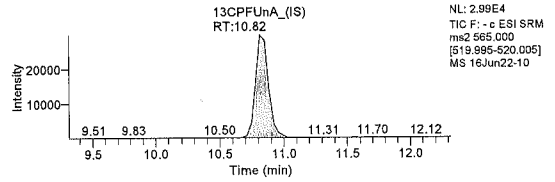
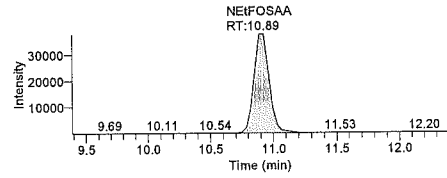
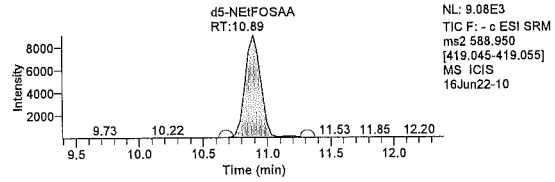


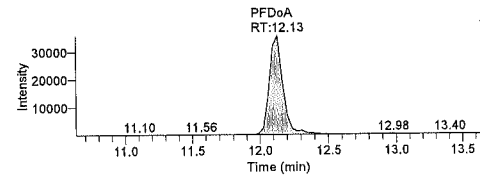


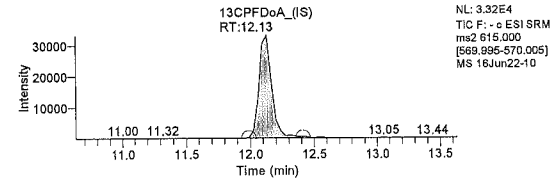
Component Name: NEtFOSAA



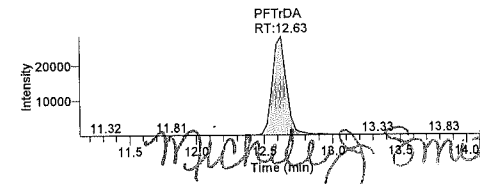


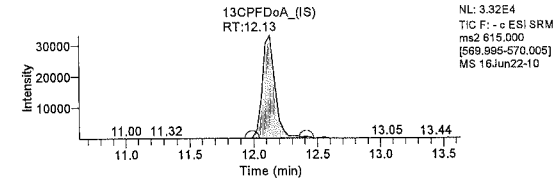
Component Name: PFDoA





Component Name: PFTrDA





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Component Name: PFTeDA

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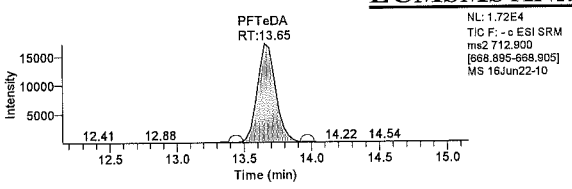

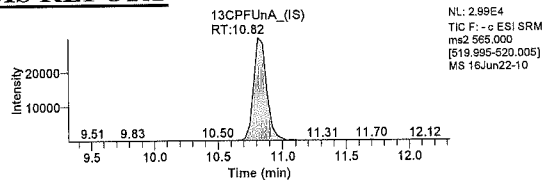

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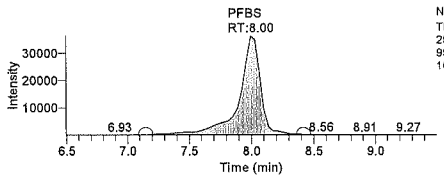
LCMSMS ANALYSIS REPORT

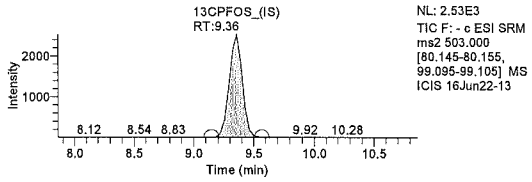
Sample Name:	CCV2	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CCV2	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-13	Dilution Factor:	1.00
Acquisition Date:	06/23/16 01:29:20 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	QC	Instrument Software Version:	2.5.0.1311
Vial:	c:6	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

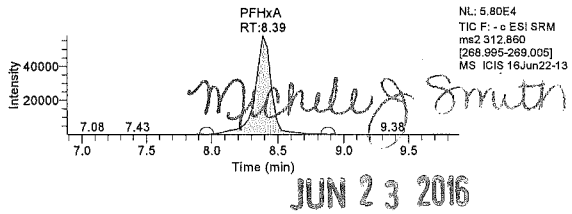
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.39	307520.47	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.00	275521.88	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	9.00	83340.26	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.93	233614.04	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.67	208658.37	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.71	210489.85	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.39	189671.26	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.71	33646.07	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.36	19311.27	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.67	206499.51	N/A	N/A	N/A
8:2FTS	258.763	9.93	420881.37	83340.26	5.050	ng/g
NEtFOSAA	385.413	10.71	1235586.13	83719.00	14.759	ng/L
NMeFOSAA	363.807	10.28	1460993.48	95803.41	15.250	ng/L
PFBS	348.586	8.00	430973.65	19311.27	22.317	ng/L
PFDA	102.441	9.93	616494.59	233614.04	2.639	ng/L
PFDoA	209.112	11.67	951708.41	208658.37	4.561	ng/L
PFHxA	109.011	8.39	494306.11	189671.26	2.606	ng/L
PFHxS	410.519	8.71	337729.94	33646.07	10.038	ng/L
PFNA	102.275	9.39	611823.22	307520.47	1.990	ng/L
PFOA	111.429	8.99	852965.93	275521.88	3.096	ng/L
PFOS	341.336	9.36	171812.92	19311.27	8.897	ng/L
PFTeDA	229.456	14.57	738500.67	206499.51	3.576	ng/L
PFTrDA	204.143	12.94	818564.90	208658.37	3.923	ng/L
PFUdA	116.131	10.64	600606.85	206499.51	2.909	ng/L
PFhpA	102.317	8.71	580073.22	210489.85	2.756	ng/L
d3-NMeFOSAA	N/A	10.29	95803.41	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.71	83719.00	N/A	N/A	N/A

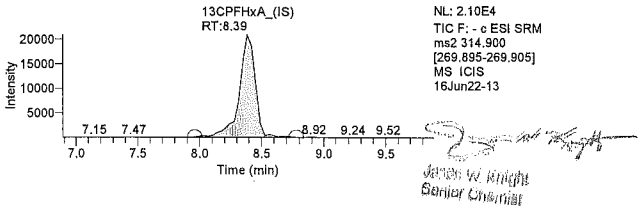
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFHpA

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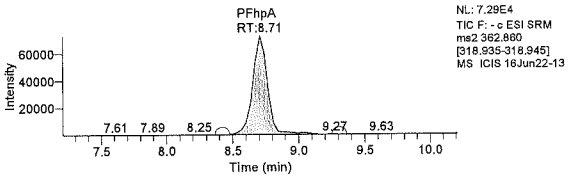

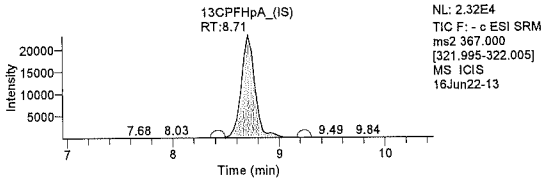

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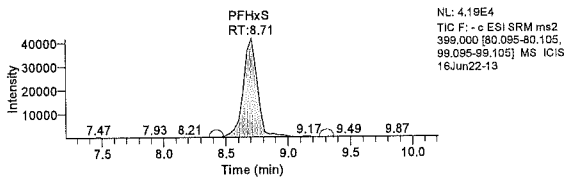

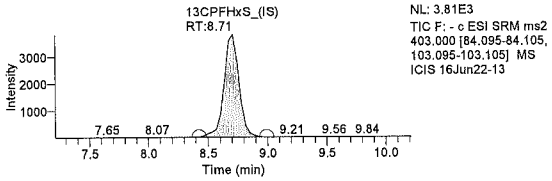

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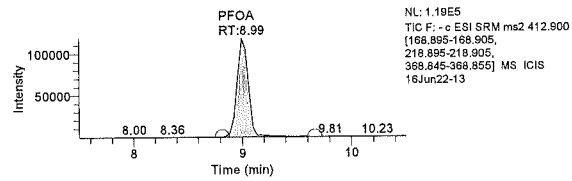

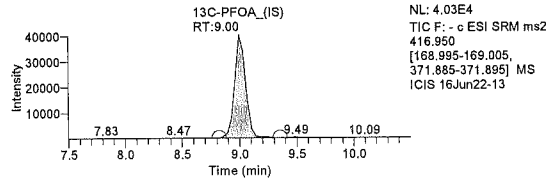

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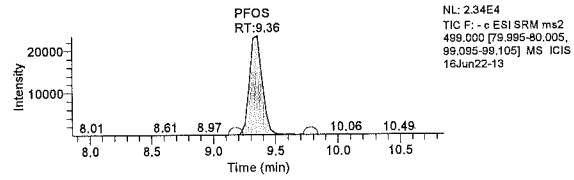

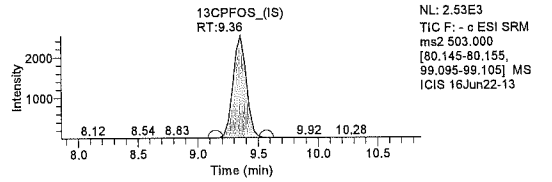

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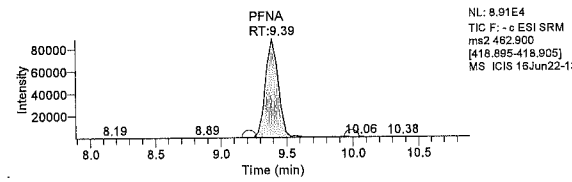

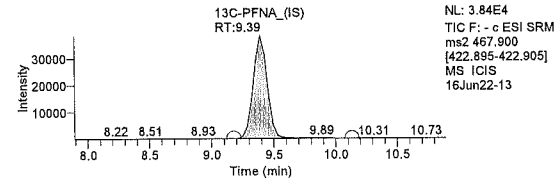

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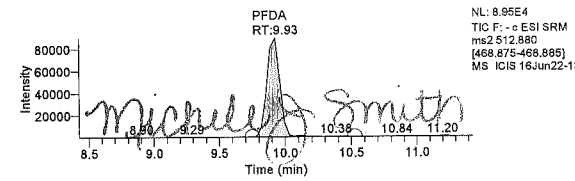

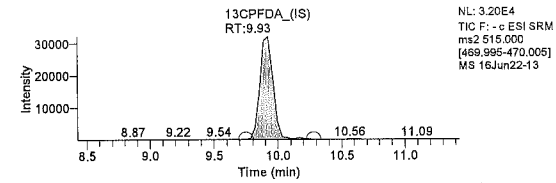

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Component Name: 8:2FTS

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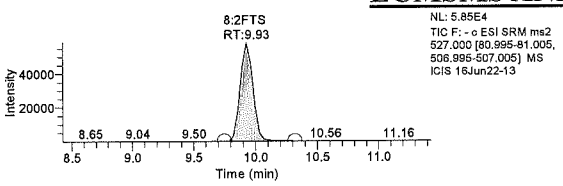

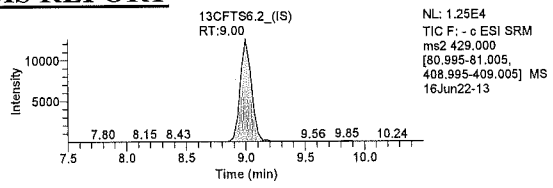

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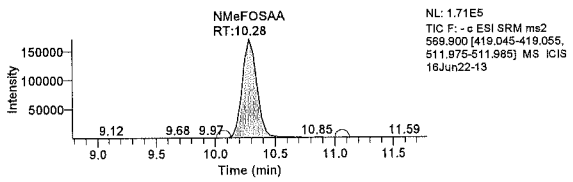

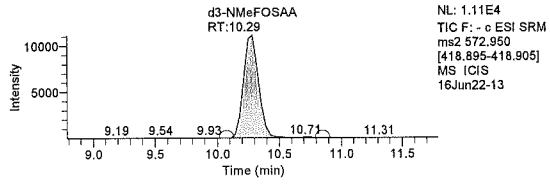

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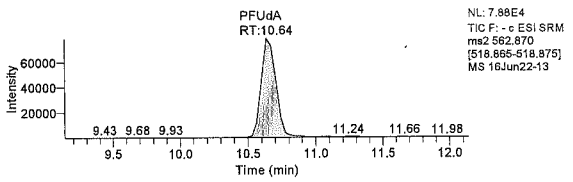

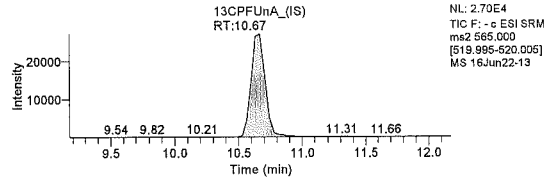

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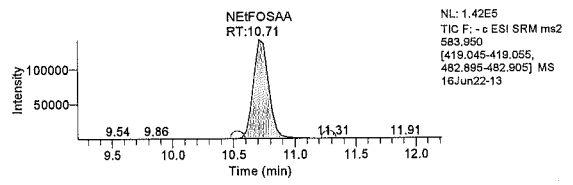

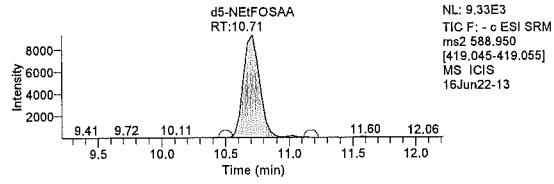

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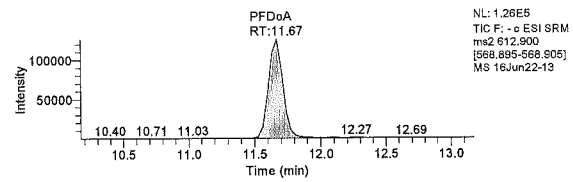

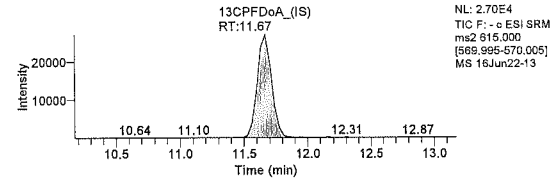

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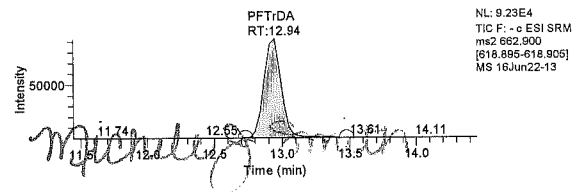

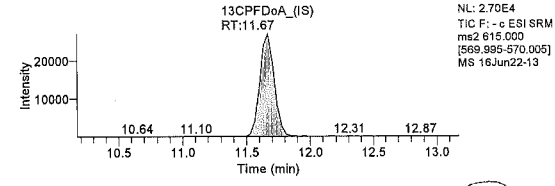

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Component Name: PFTeDA

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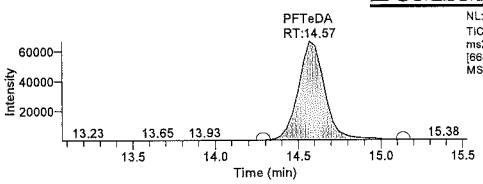

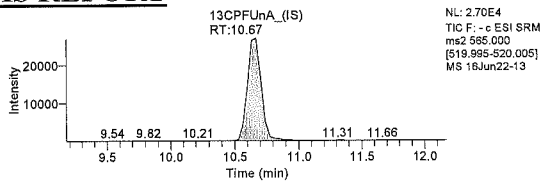

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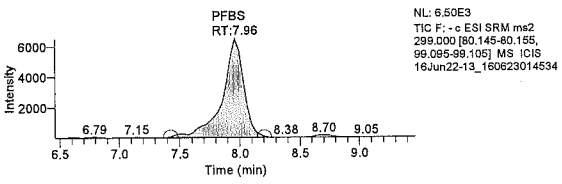
LCMSMS ANALYSIS REPORT

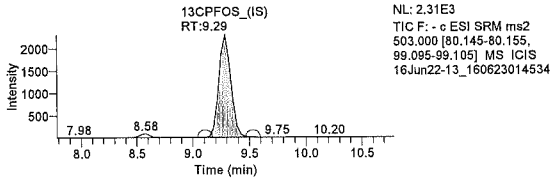
Sample Name:	ICV1	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	ICV1	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-13_160623014534	Dilution Factor:	1.00
		Instrument Model:	TSQ Quantum Access
Acquisition Date:	06/23/16 01:45:34 AM	Instrument Software Version:	2.5.0.1311
Sample Type:	QC	Instrument Serial Number:	TQU01408
Vial:	c:9	Operator:	US19_USR_INS00022
Run Time(min):	15.52		
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

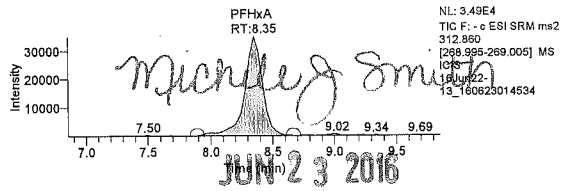
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.32	288233.24	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.96	248502.00	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.96	94526.40	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.82	208231.17	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.60	204509.17	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.67	207322.65	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.35	160355.36	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.67	36011.64	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.29	17201.25	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.53	213846.17	N/A	N/A	N/A
8:2FTS	109.800	9.86	200254.23	94526.40	2.119	ng/g
NEtFOSAA	104.948	10.60	302266.51	78166.89	3.867	ng/L
NMeFOSAA	105.016	10.18	413421.73	94013.34	4.397	ng/L
PFBS	75.920	7.96	79964.33	17201.25	4.649	ng/L
PFDA	90.596	9.82	485374.69	208231.17	2.331	ng/L
PFDoA	90.158	11.60	399580.58	204509.17	1.954	ng/L
PFHxA	91.618	8.35	350801.14	160355.36	2.188	ng/L
PFHxS	78.444	8.67	64556.03	36011.64	1.793	ng/L
PFNA	89.154	9.32	499555.10	288233.24	1.733	ng/L
PFOA	94.527	8.96	651978.94	248502.00	2.624	ng/L
PFOS	79.697	9.28	35559.05	17201.25	2.067	ng/L
PFTeDA	90.990	14.53	302606.41	213846.17	1.415	ng/L
PFTrDA	77.946	12.87	302954.22	204509.17	1.481	ng/L
PFUdA	93.299	10.53	499404.92	213846.17	2.335	ng/L
PFhpA	88.715	8.67	494883.80	207322.65	2.387	ng/L
d3-NMeFOSAA	N/A	10.18	94013.34	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.61	78166.89	N/A	N/A	N/A

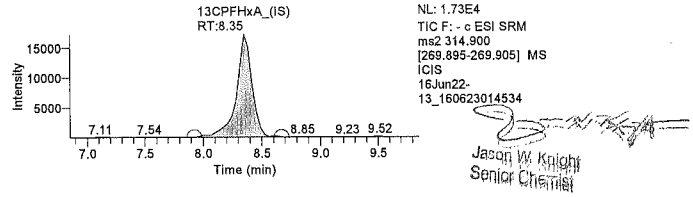
Component Name: PFBS





Component Name: PFHxA





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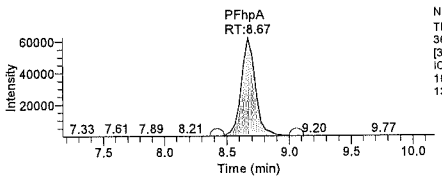
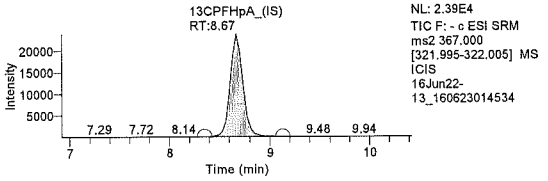
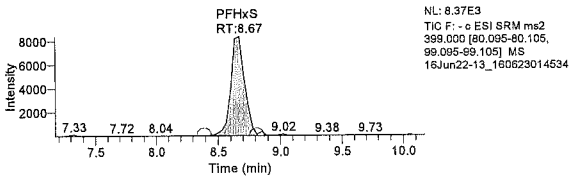
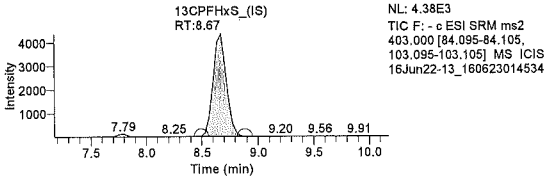
Component Name: PFhpA





Component Name: PFHxS





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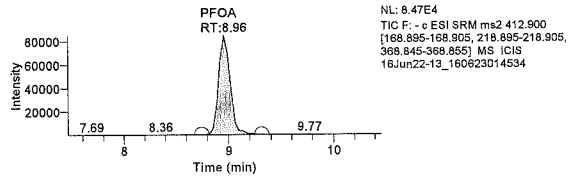
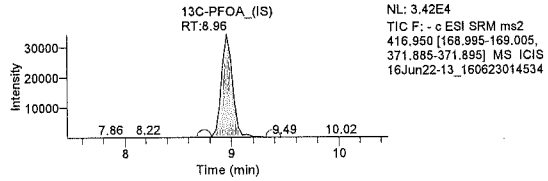
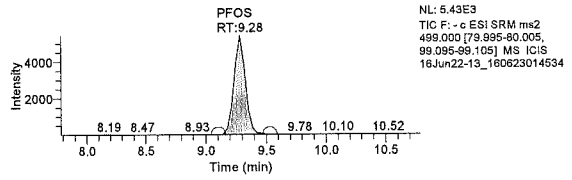
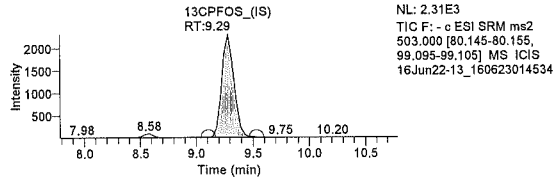




Component Name: PFOS





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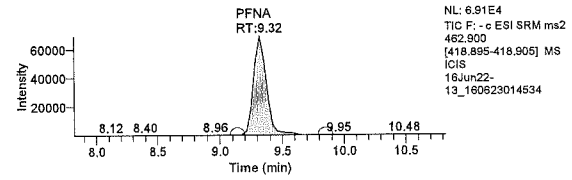

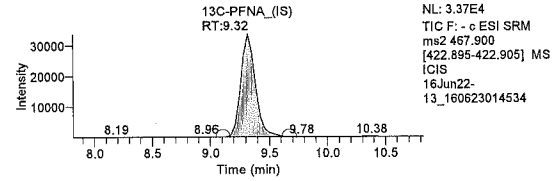

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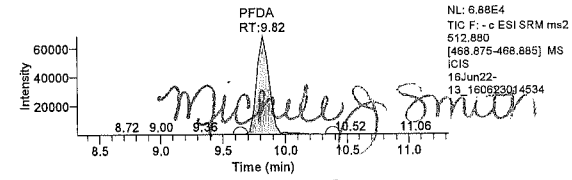

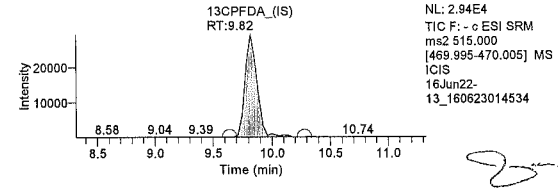

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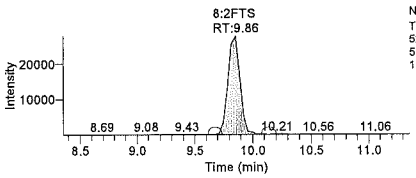
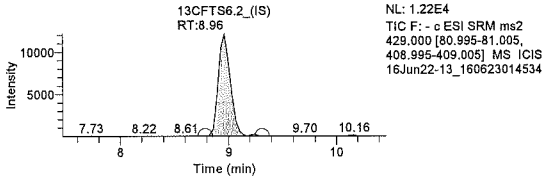
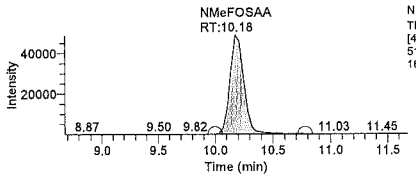
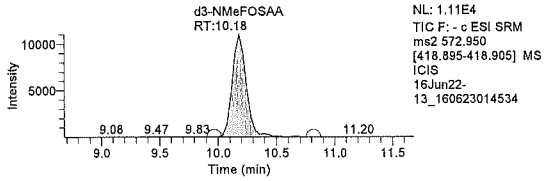
Component Name: 8:2FTS



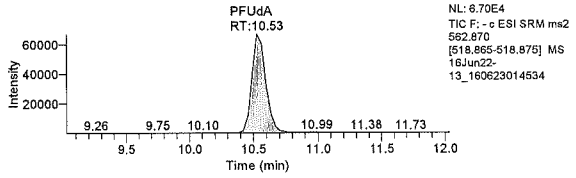


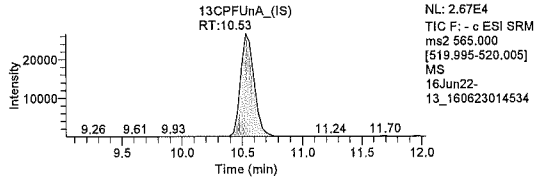
Component Name: NMeFOSAA



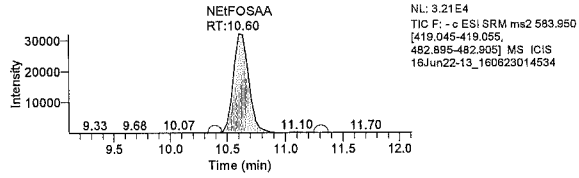


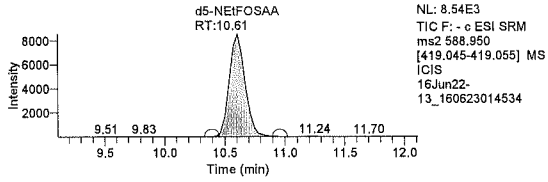
Component Name: PFUdA



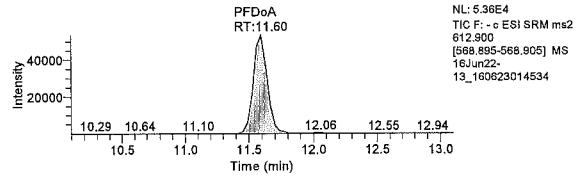


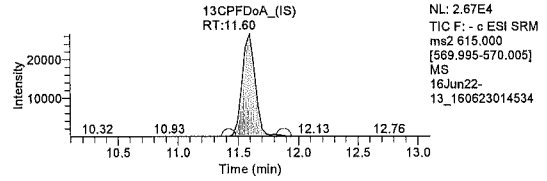
Component Name: NEtFOSAA



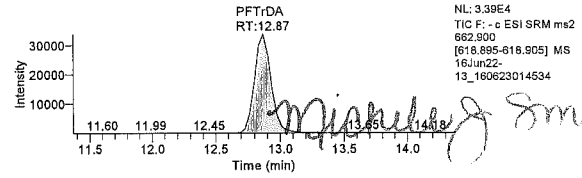


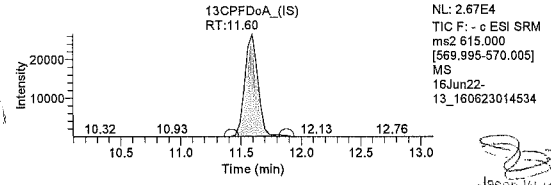
Component Name: PFDoA





Component Name: PFTrDA





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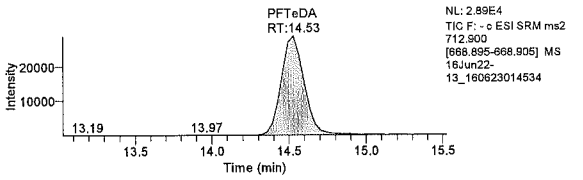
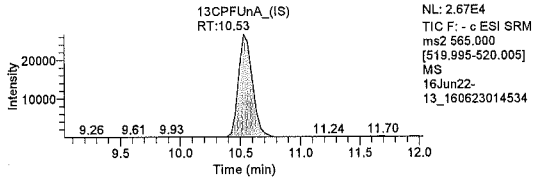
Component Name: PFTeDA





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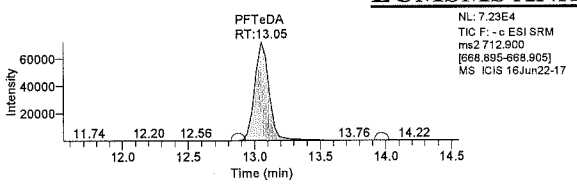

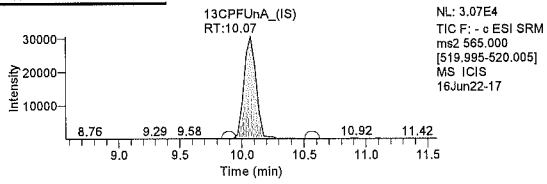

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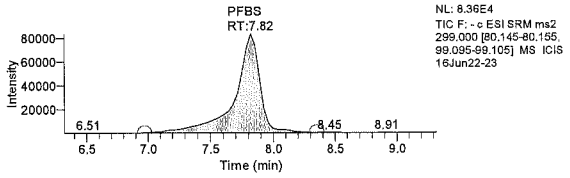
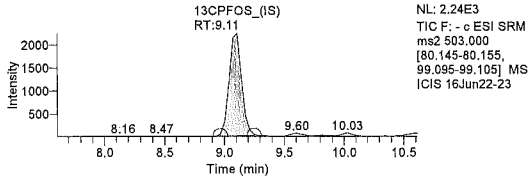
Sample Name:	CCV3	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CCV3	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-23	Dilution Factor:	1.00
Acquisition Date:	06/23/16 05:38:26 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	QC	Instrument Software Version:	2.5.0.1311
Vial:	C:7	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

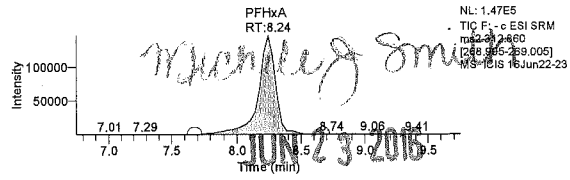
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.14	294186.95	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.86	294253.27	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.86	276148.85	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.47	248751.85	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.64	233467.44	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.53	177332.10	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.25	183107.75	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.53	27231.13	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.11	16196.55	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.93	242639.97	N/A	N/A	N/A
8:2FTS	589.495	9.50	3192033.98	276148.85	11.559	ng/g
NEtFOSAA	1145.509	10.00	4712189.14	102138.74	46.135	ng/L
NMeFOSAA	1197.320	9.72	5909391.89	128215.83	46.089	ng/L
PFBS	1098.126	7.82	1148118.58	16196.55	70.887	ng/L
PFDA	289.825	9.47	1868493.82	248751.85	7.511	ng/L
PFDoA	576.295	10.64	2943776.91	233467.44	12.609	ng/L
PFHxA	313.650	8.24	1378709.16	183107.75	7.529	ng/L
PFHxS	1376.405	8.53	926393.67	27231.13	34.020	ng/L
PFNA	293.502	9.14	1684475.21	294186.95	5.726	ng/L
PFOA	304.978	8.85	2502028.80	294253.27	8.503	ng/L
PFOS	1248.948	9.11	527834.03	16196.55	32.589	ng/L
PFTeDA	539.848	12.87	2043257.61	242639.97	8.421	ng/L
PFTrDA	539.057	11.85	2428711.41	233467.44	10.403	ng/L
PFUdA	298.951	9.93	1819330.51	242639.97	7.498	ng/L
PFhpA	316.127	8.53	1516792.22	177332.10	8.553	ng/L
d3-NMeFOSAA	N/A	9.72	128215.83	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.01	102138.74	N/A	N/A	N/A

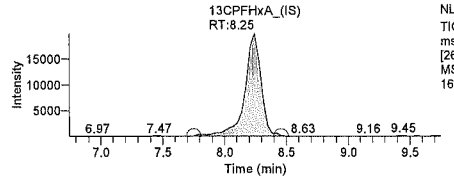
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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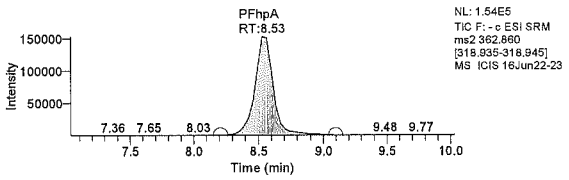
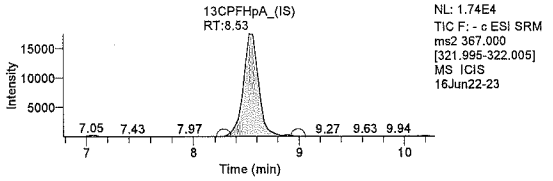
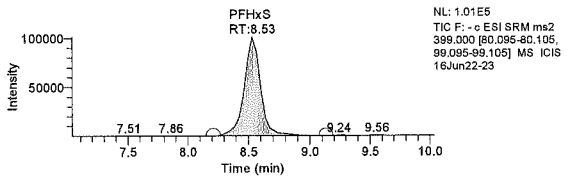
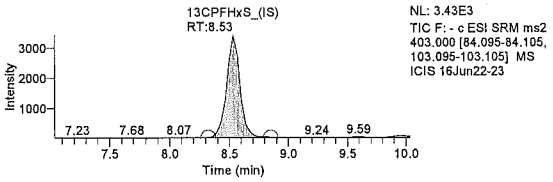


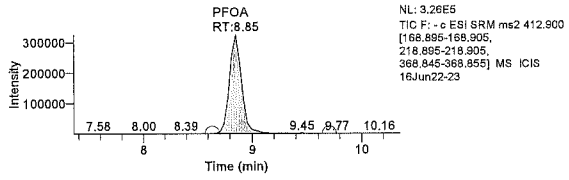


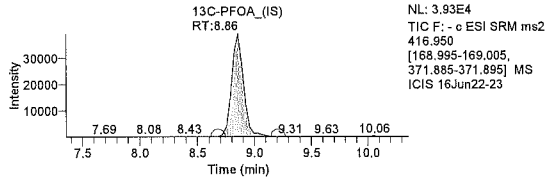
Component Name: PFHxS



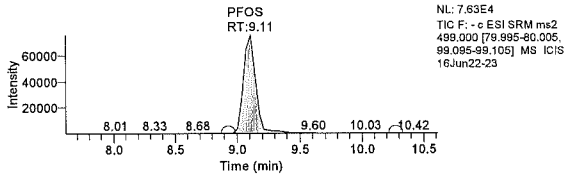


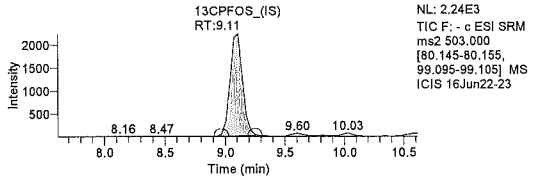
Component Name: PFOA



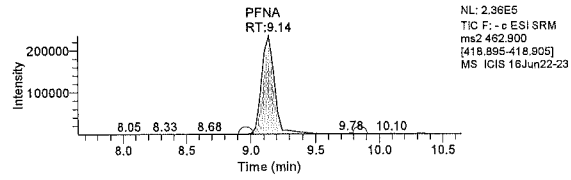


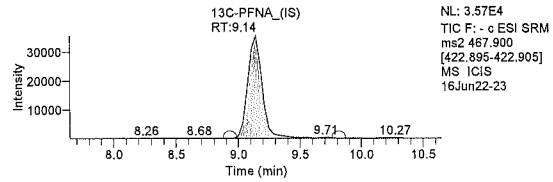
Component Name: PFOS



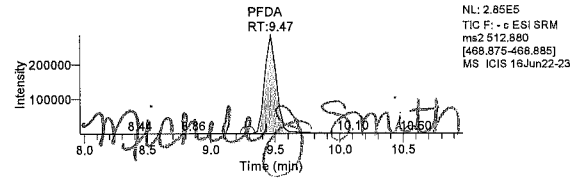


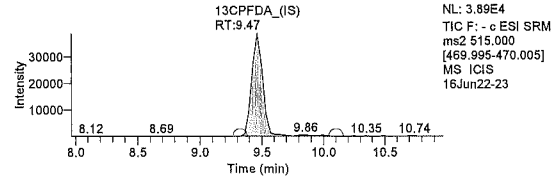
Component Name: PFNA





Component Name: PFDA





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Component Name: 8:2FTS

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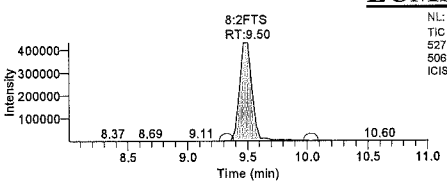
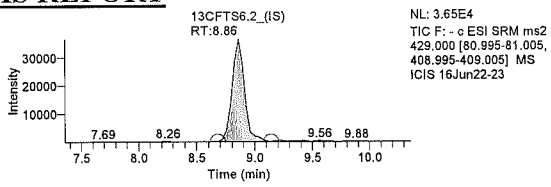
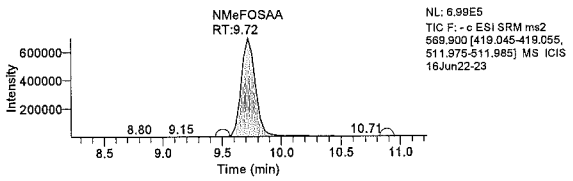
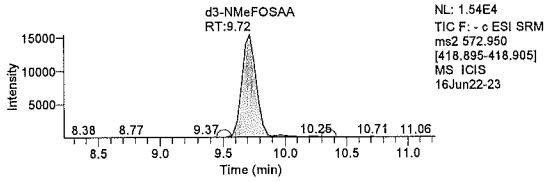




Component Name: NMeFOSAA





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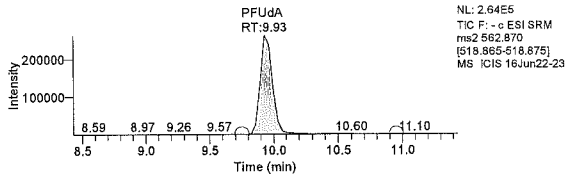
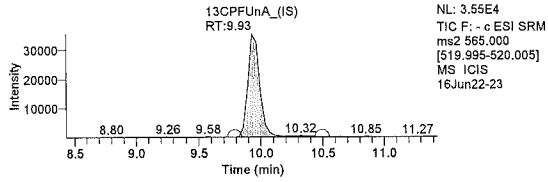
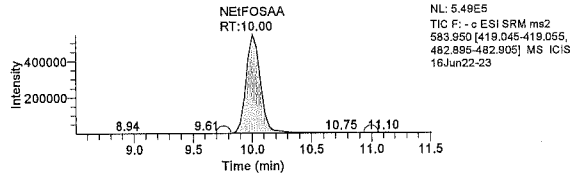
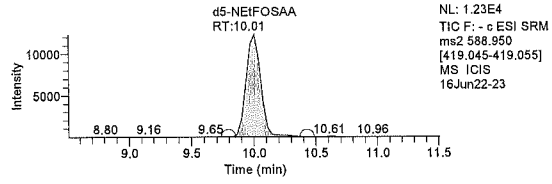


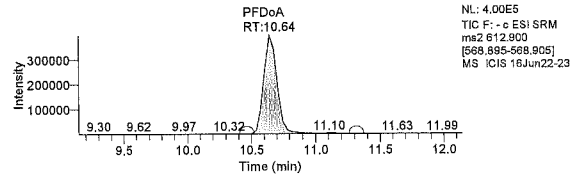


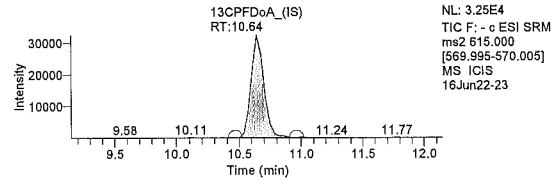
Component Name: NEtFOSAA



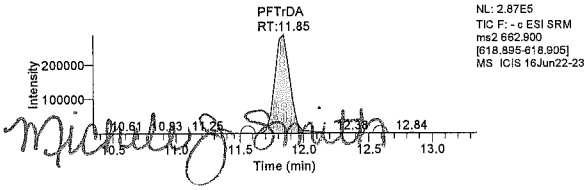


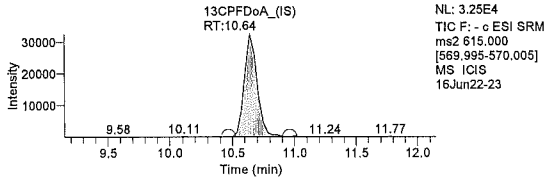
Component Name: PFDoA





Component Name: PFTrDA





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Component Name: PFTeDA

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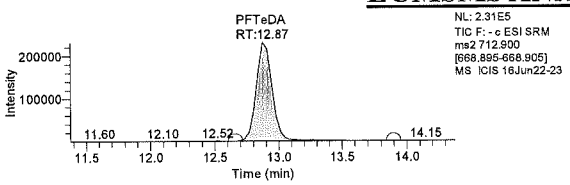

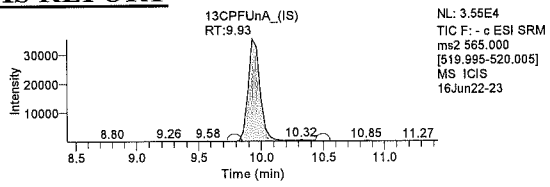

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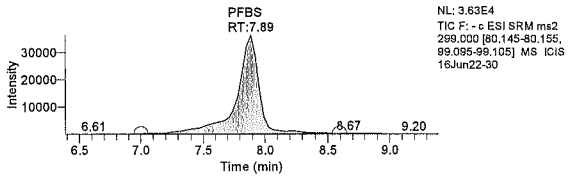
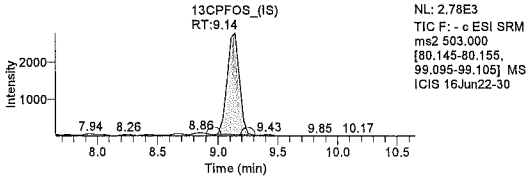
Sample Name:	CCV2	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CCV2	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-30	Dilution Factor:	1.00
Acquisition Date:	06/23/16 07:32:13 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	QC	Instrument Software Version:	2.5.0.1311
Vial:	C:6	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

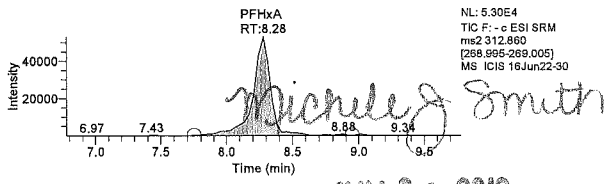
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.18	316355.92	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.85	302387.21	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.89	115242.16	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.54	243166.38	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.68	225986.42	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.60	222791.72	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.28	194656.79	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.60	35320.87	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.14	19528.43	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.10	238841.97	N/A	N/A	N/A
8:2FTS	224.908	9.54	505206.54	115242.16	4.384	ng/g
NEtFOSAA	369.129	10.14	1366206.58	96782.48	14.116	ng/L
NMeFOSAA	373.756	9.89	1480395.84	94563.46	15.655	ng/L
PFBS	365.524	7.89	457254.35	19528.43	23.415	ng/L
PFDA	101.551	9.53	636071.12	243166.38	2.616	ng/L
PFDoA	208.061	10.68	1025535.09	225986.42	4.538	ng/L
PFHxA	106.197	8.28	494120.09	194656.79	2.538	ng/L
PFHxS	404.522	8.60	349281.85	35320.87	9.889	ng/L
PFNA	104.197	9.18	641282.04	316355.92	2.027	ng/L
PFOA	106.828	8.85	897270.54	302387.21	2.967	ng/L
PFOS	380.720	9.14	193821.76	19528.43	9.925	ng/L
PFTeDA	191.630	12.76	713153.44	238841.97	2.986	ng/L
PFTrDA	197.657	11.60	858183.39	225986.42	3.797	ng/L
PFUdA	100.638	10.10	601781.47	238841.97	2.520	ng/L
PFhpA	103.705	8.60	622363.14	222791.72	2.793	ng/L
d3-NMeFOSAA	N/A	9.90	94563.46	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.15	96782.48	N/A	N/A	N/A

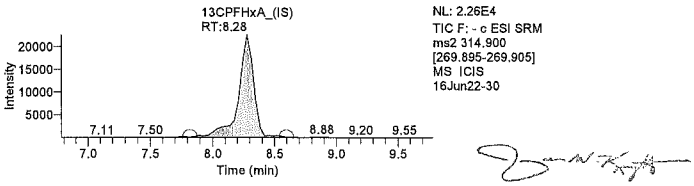
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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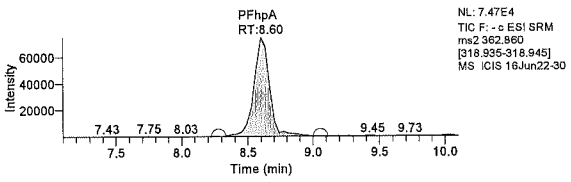

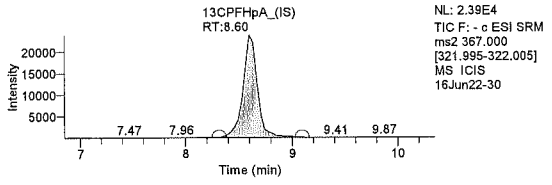

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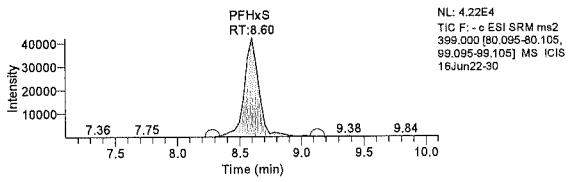

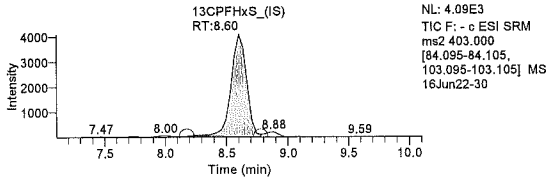

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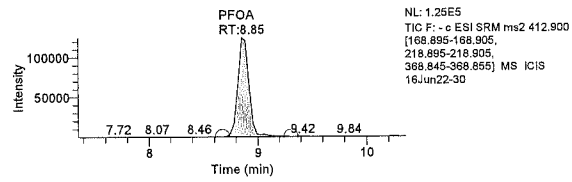

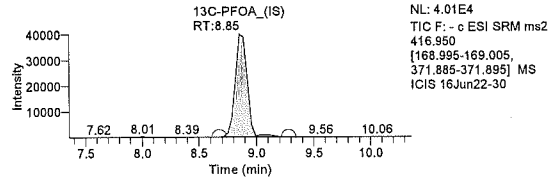

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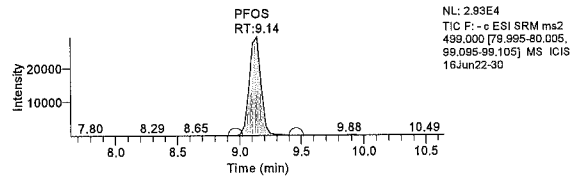

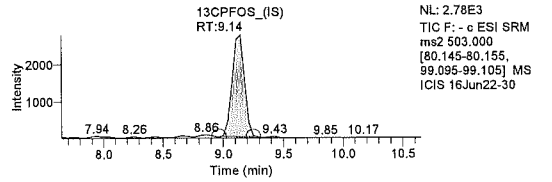

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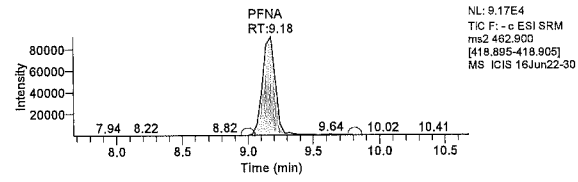

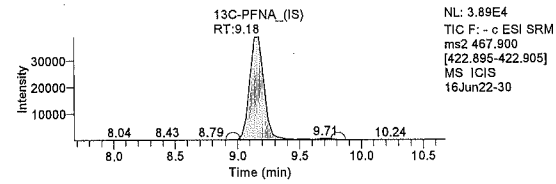

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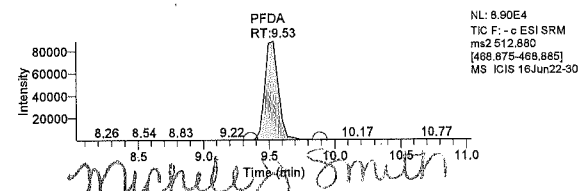

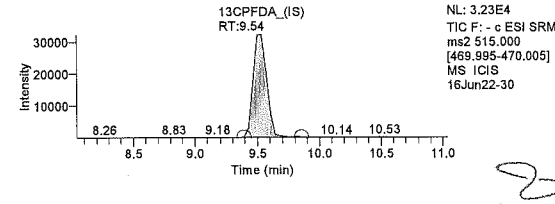

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Component Name: 8:2FTS

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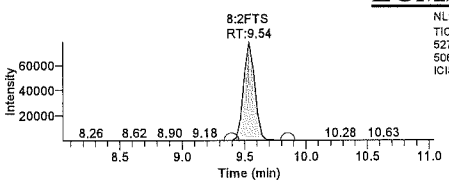

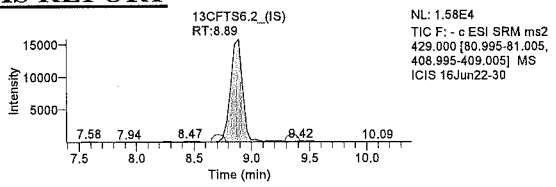

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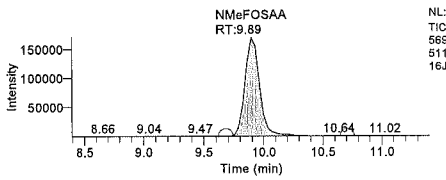

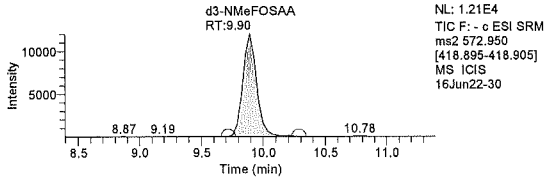

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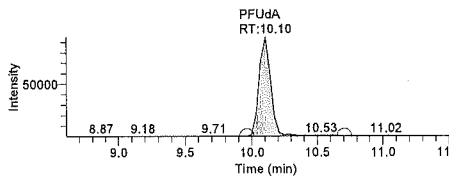

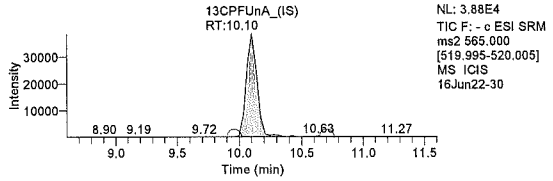

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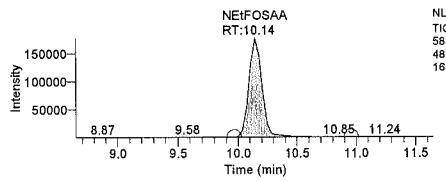

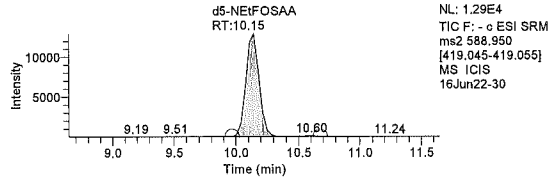

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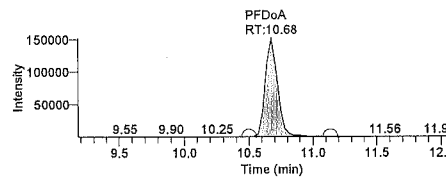

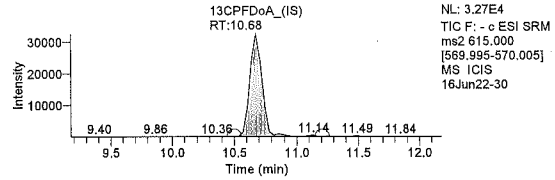

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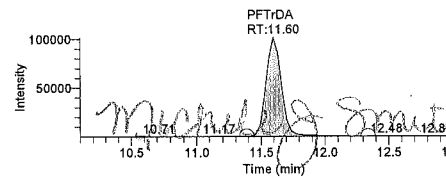

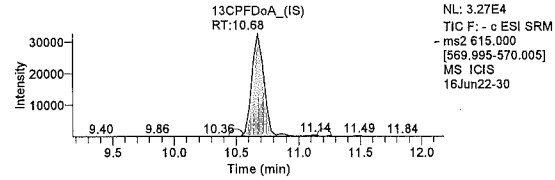

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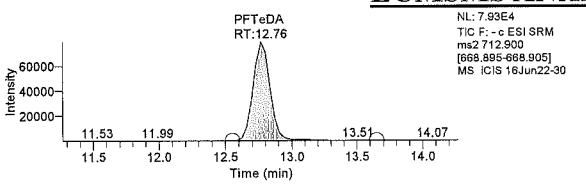

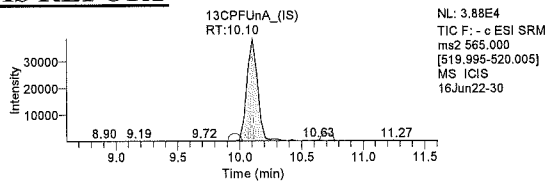

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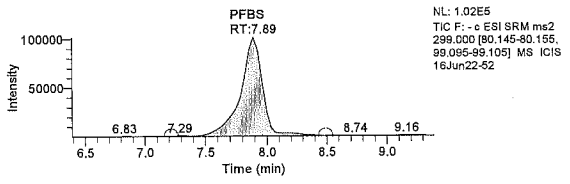
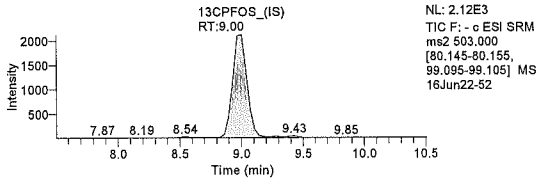
Sample Name:	CCV3	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CCV3	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-52	Dilution Factor:	1.00
Acquisition Date:	06/23/16 01:29:19 PM	Instrument Model:	TSQ Quantum Access
Sample Type:	QC	Instrument Software Version:	2.5.0.1311
Vial:	C:7	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

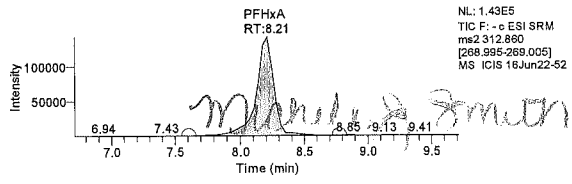
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.04	278860.42	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.75	260915.01	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.75	155659.26	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.36	231937.97	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.50	234155.60	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.49	191536.30	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.21	174172.32	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.50	25754.82	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.00	17241.86	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.82	226184.58	N/A	N/A	N/A
8:2FTS	713.092	9.40	2177912.91	155659.26	13.992	ng/g
NEtFOSAA	1233.035	9.90	3620367.31	72519.71	49.923	ng/L
NMeFOSAA	1232.906	9.61	4702480.23	99489.08	47.266	ng/L
PFBS	1119.938	7.89	1246587.12	17241.86	72.300	ng/L
PFDA	293.447	9.36	1764042.14	231937.97	7.606	ng/L
PFDoA	573.054	10.50	2935820.85	234155.60	12.538	ng/L
PFHxA	327.971	8.21	1371442.99	174172.32	7.874	ng/L
PFHxS	1446.448	8.50	920960.35	25754.82	35.759	ng/L
PFNA	299.028	9.04	1626829.81	278860.42	5.834	ng/L
PFOA	338.567	8.75	2463383.00	260915.01	9.441	ng/L
PFOS	1111.641	9.00	500100.82	17241.86	29.005	ng/L
PFTeDA	572.588	12.77	2020271.26	226184.58	8.932	ng/L
PFTrDA	549.861	11.49	2484814.02	234155.60	10.612	ng/L
PFUdA	311.407	9.82	1766679.59	226184.58	7.811	ng/L
PFhpA	298.527	8.49	1546881.38	191536.30	8.076	ng/L
d3-NMeFOSAA	N/A	9.61	99489.08	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.86	72519.71	N/A	N/A	N/A

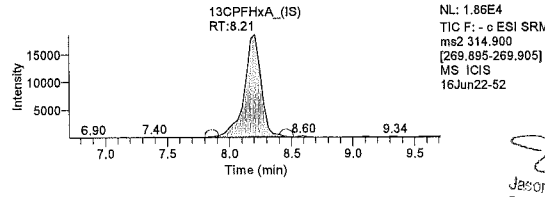
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFhpA

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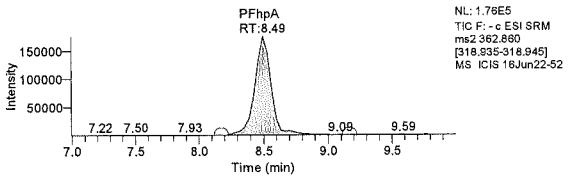
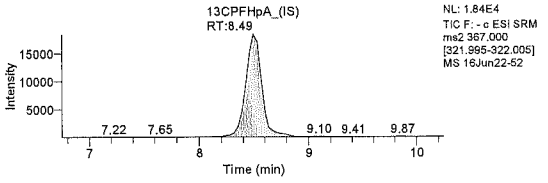
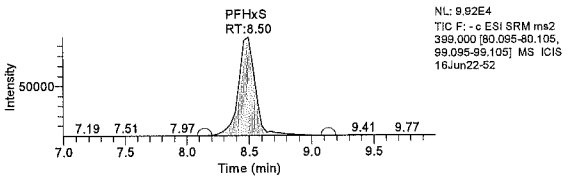
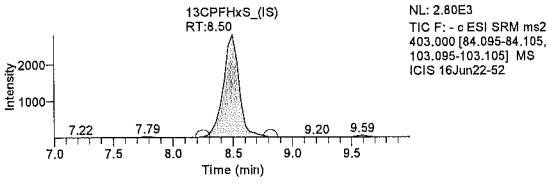


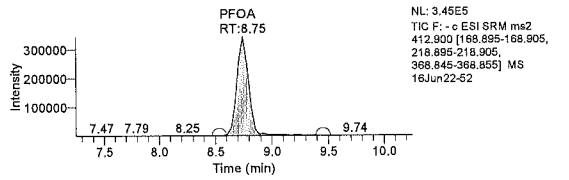


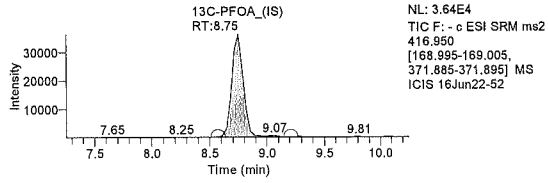
Component Name: PFHxS





Component Name: PFOA





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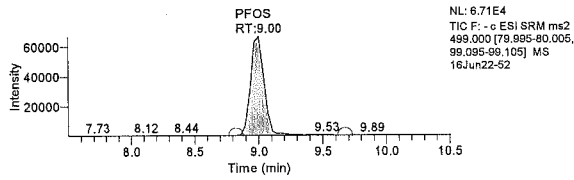

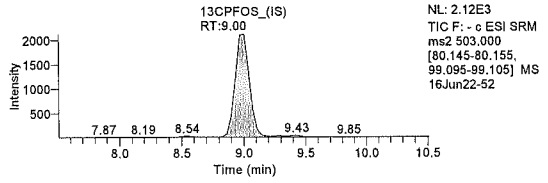

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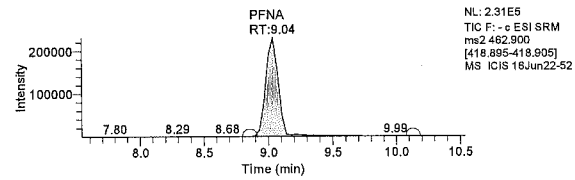

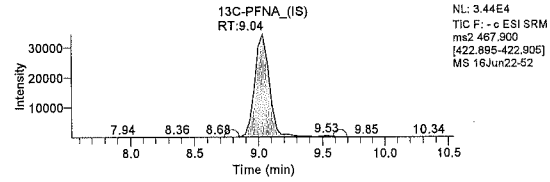

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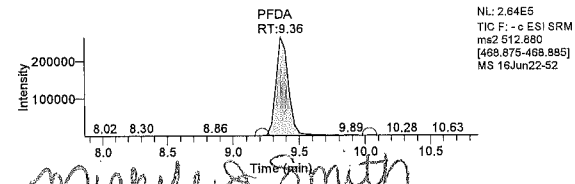

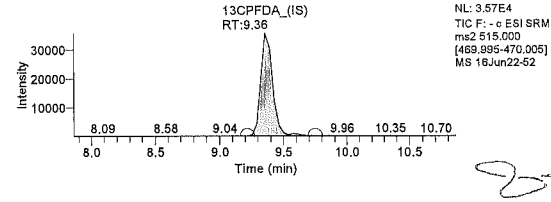

Component Name: 8:2FTS

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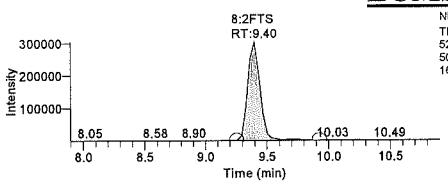

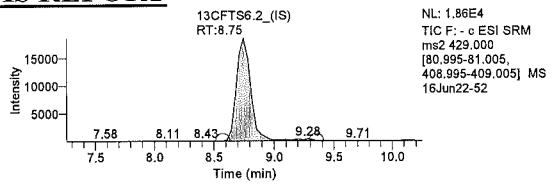

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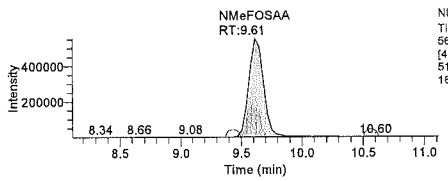
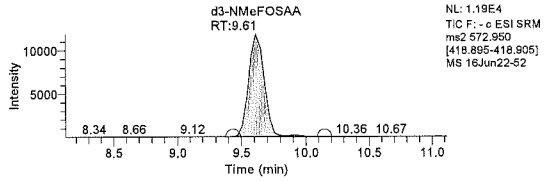
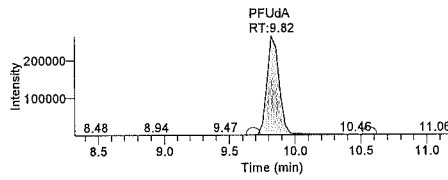
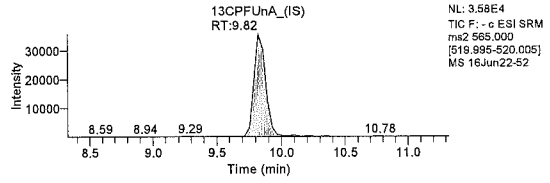


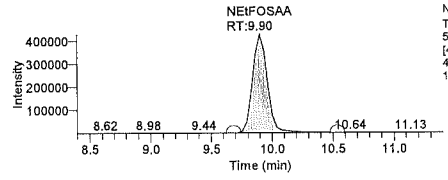


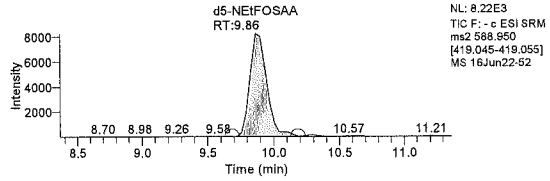
Component Name: PFUdA



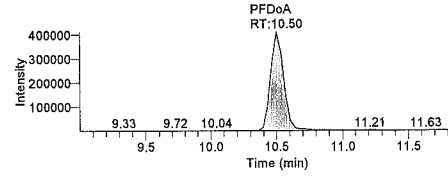


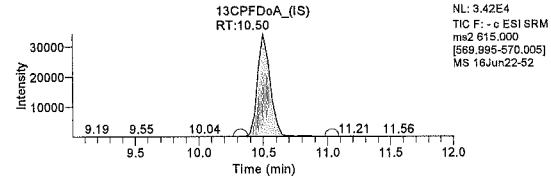
Component Name: NEtFOSAA



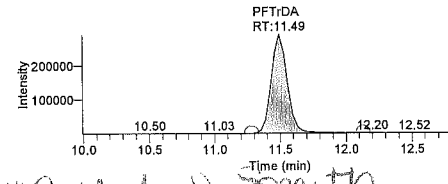


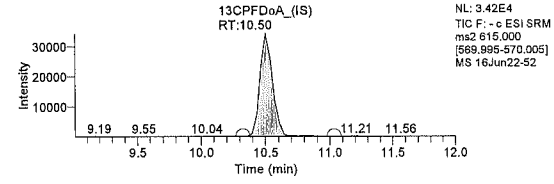
Component Name: PFDoA





Component Name: PFTrDA





Component Name: PFTeDA

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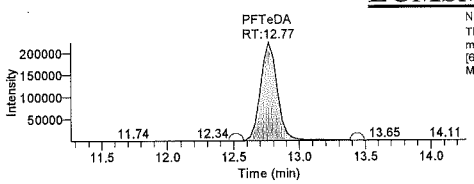

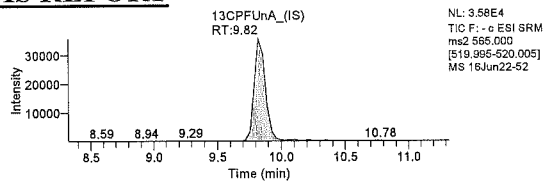

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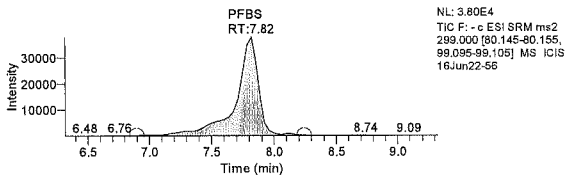
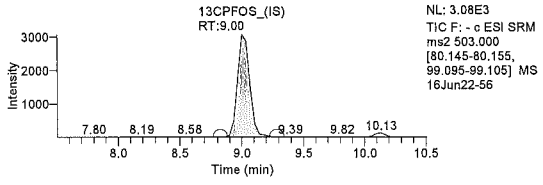
Sample Name:	CCV2	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	CCV2	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-56	Dilution Factor:	1.00
Acquisition Date:	06/23/16 02:34:17 PM	Instrument Model:	TSQ Quantum Access
Sample Type:	QC	Instrument Software Version:	2.5.0.1311
Vial:	C:6	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

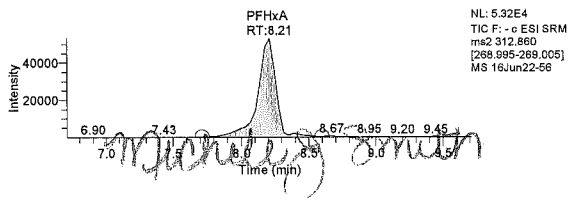
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.04	352621.89	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.78	307322.30	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.79	177394.69	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.36	253140.91	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.43	231952.14	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.53	240266.07	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.21	193135.11	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.53	37369.96	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.00	21693.17	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.75	249145.42	N/A	N/A	N/A
8:2FTS	304.526	9.36	1055638.21	177394.69	5.951	ng/g
NEtFOSAA	398.445	9.79	1614573.16	105708.39	15.274	ng/L
NMeFOSAA	376.749	9.58	2124743.89	134675.47	15.777	ng/L
PFBS	338.307	7.82	469682.92	21693.17	21.651	ng/L
PFDA	102.239	9.36	666696.19	253140.91	2.634	ng/L
PFDoA	219.969	10.43	1113147.23	231952.14	4.799	ng/L
PFHxA	108.371	8.21	500358.67	193135.11	2.591	ng/L
PFHxS	412.714	8.53	377146.38	37369.96	10.092	ng/L
PFNA	95.877	9.03	657474.14	352621.89	1.865	ng/L
PFOA	102.442	8.78	874259.35	307322.30	2.845	ng/L
PFOS	344.116	9.04	194579.26	21693.17	8.970	ng/L
PFTeDA	203.779	12.13	791163.06	249145.42	3.176	ng/L
PFTrDA	203.441	11.07	906795.87	231952.14	3.909	ng/L
PFUdA	105.253	9.75	656607.91	249145.42	2.635	ng/L
PFhpA	96.742	8.56	625813.41	240266.07	2.605	ng/L
d3-NMeFOSAA	N/A	9.54	134675.47	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.79	105708.39	N/A	N/A	N/A

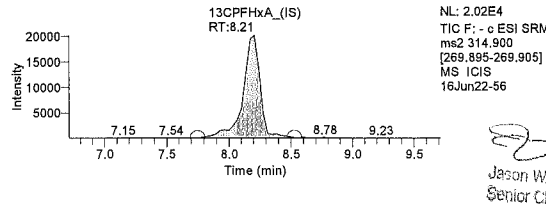
Component Name: PFBS





Component Name: PFHxA





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Component Name: PFHxS

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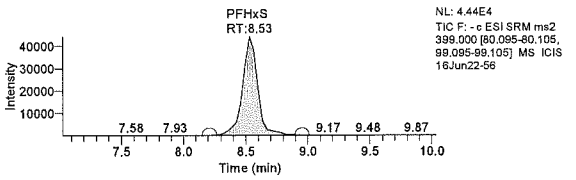
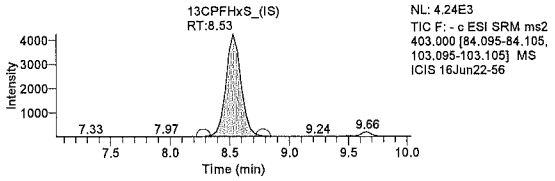
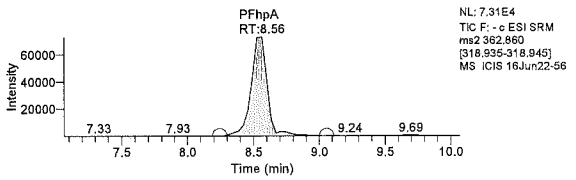
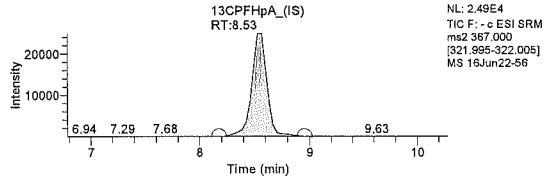


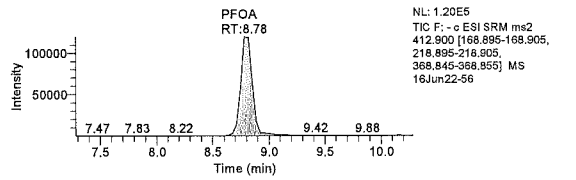


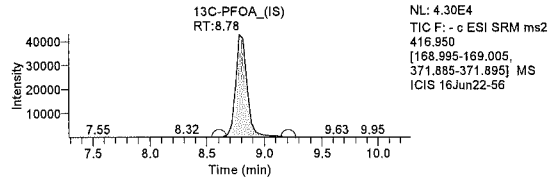
Component Name: PFhpA



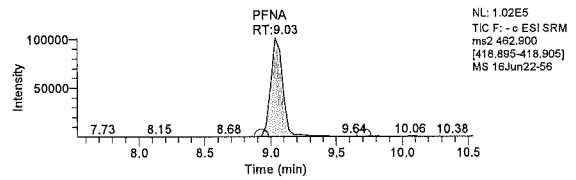


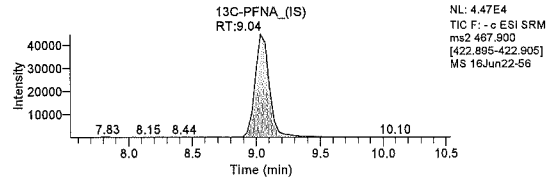
Component Name: PFOA



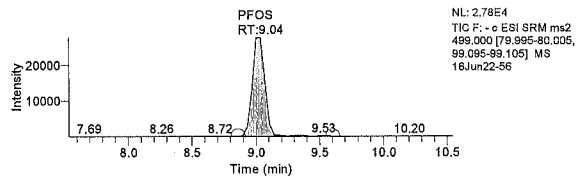


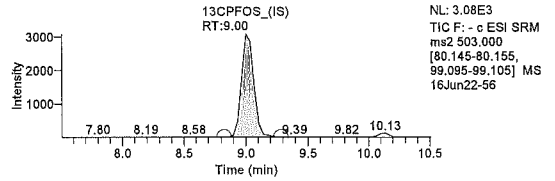
Component Name: PFNA



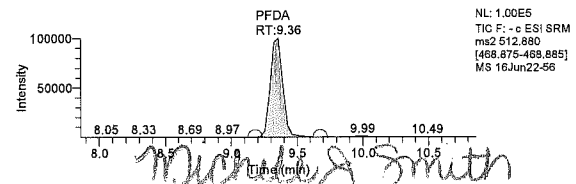


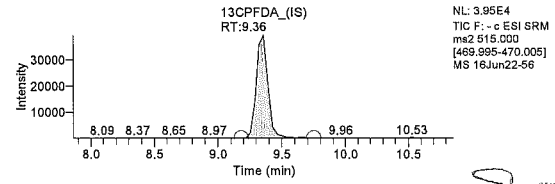
Component Name: PFOS





Component Name: PFDA





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Component Name: 8:2FTS

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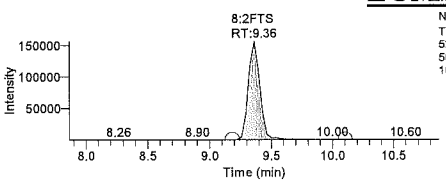
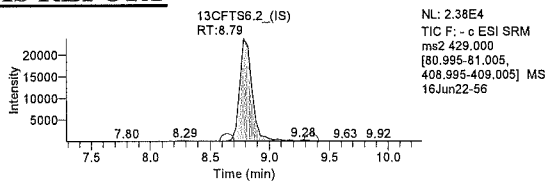
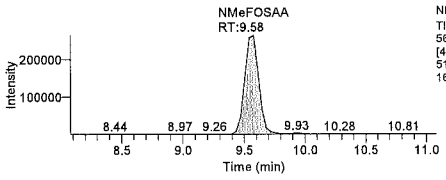
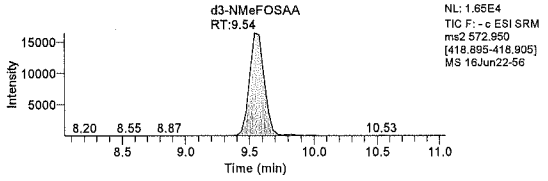


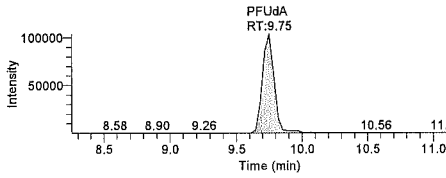


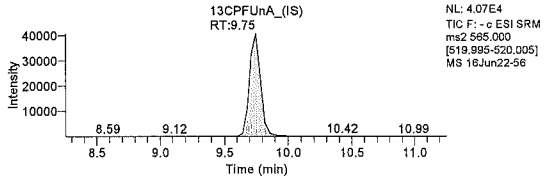
Component Name: NMeFOSAA



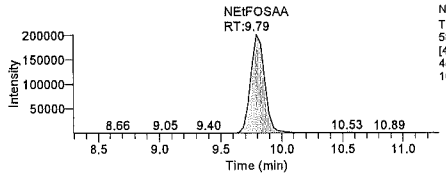


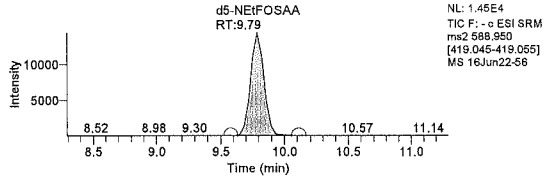
Component Name: PFUdA



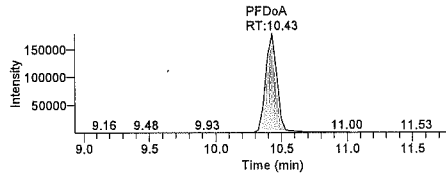


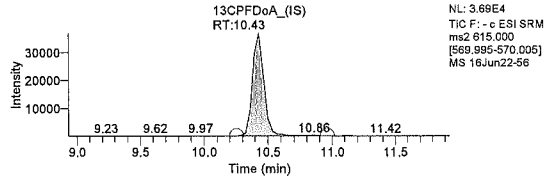
Component Name: NEtFOSAA



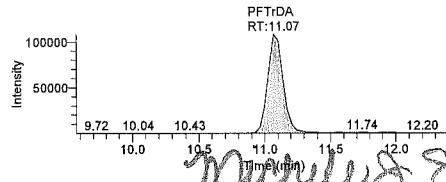


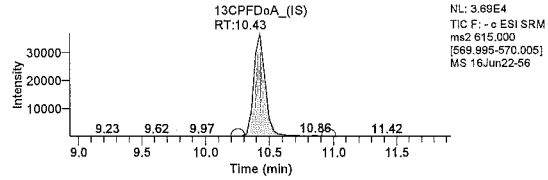
Component Name: PFDoA





Component Name: PFTrDA





Component Name: PFTeDA

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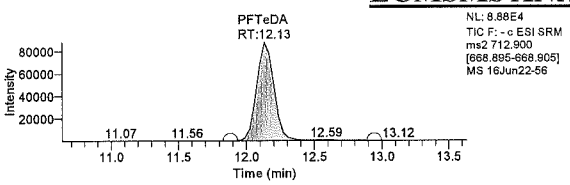

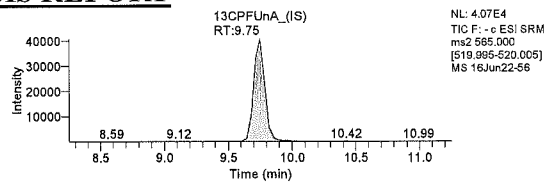

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Raw QC Data

PFAAs by LC/MS/MS

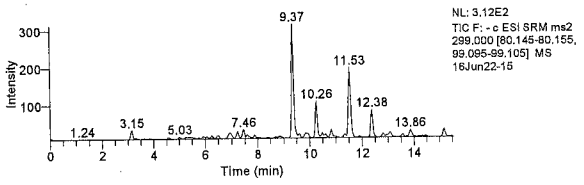
LCMSMS ANALYSIS REPORT

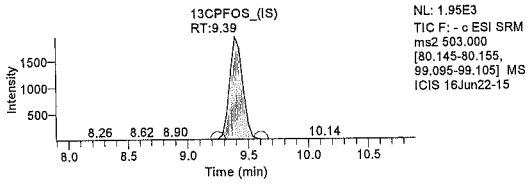
Sample Name:	MB 16160012	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	MB 16160012	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-15	Dilution Factor:	1.00
Acquisition Date:	06/23/16 02:18:02 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	c:10	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

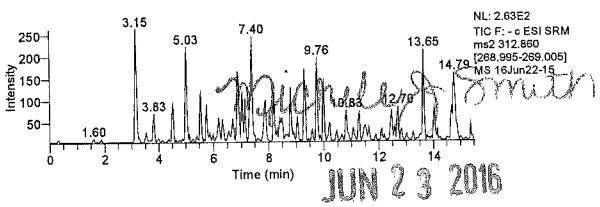
Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.46	244451.83	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	9.07	216894.66	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	9.07	151848.01	N/A	N/A	N/A
13CPFDA_(IS)	N/A	10.00	180723.37	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	11.88	146215.85	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.74	174123.75	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.42	73241.01	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.74	27694.45	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.39	14448.15	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.92	154170.52	N/A	N/A	N/A
8:2FTS	N/A	N/A	N/A	N/A	N/A	ng/g
NEtFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
NMeFOSAA	N/A	N/A	N/A	N/A	N/A	ng/L
PFBS	N/A	N/A	N/A	N/A	N/A	ng/L
PFDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFDoA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxA	N/A	N/A	N/A	N/A	N/A	ng/L
PFHxS	N/A	N/A	N/A	N/A	N/A	ng/L
PFNA	0.579	9.46	613.43	244451.83	0.003	ng/L
PFOA	N/A	N/A	N/A	N/A	N/A	ng/L
PFOS	N/A	N/A	N/A	N/A	N/A	ng/L
PFTeDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFTrDA	N/A	N/A	N/A	N/A	N/A	ng/L
PFUdA	N/A	N/A	N/A	N/A	N/A	ng/L
PFhpA	N/A	N/A	N/A	N/A	N/A	ng/L
d3-NMeFOSAA	N/A	10.39	66166.33	N/A	N/A	N/A
d5-NEtFOSAA	N/A	11.00	57839.31	N/A	N/A	N/A

Component Name: PFBS





Component Name: PFHxA



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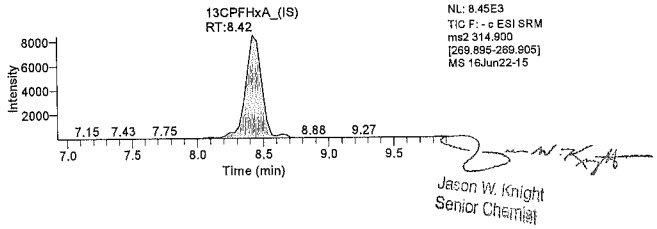

Jason W. Knight
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Component Name: PFHxS

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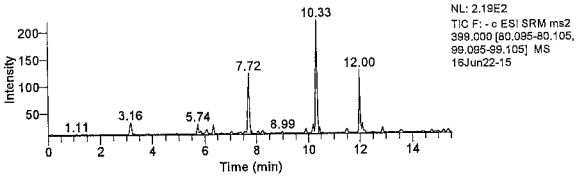

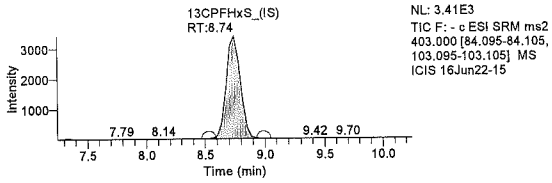

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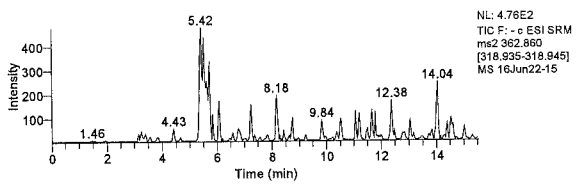

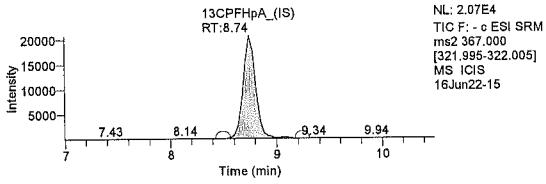

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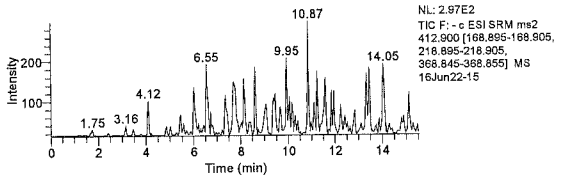
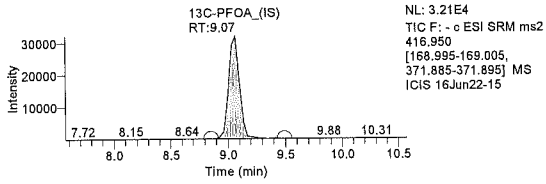
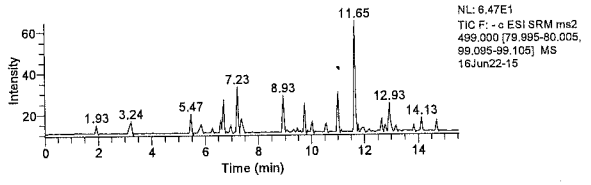
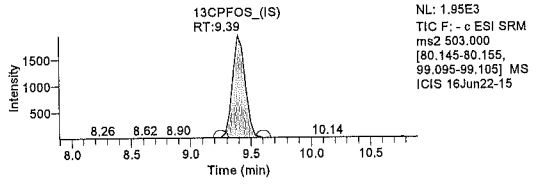




Component Name: PFOS





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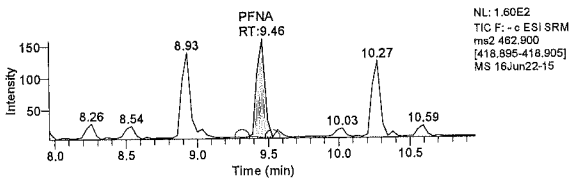

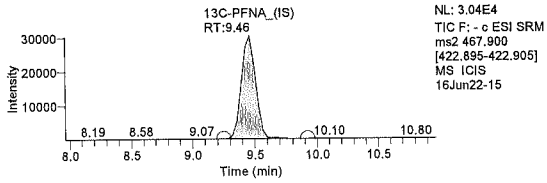

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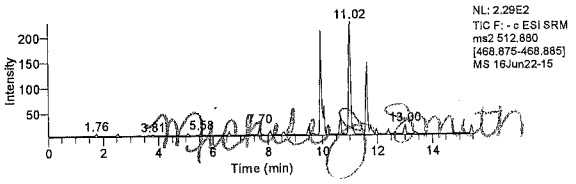

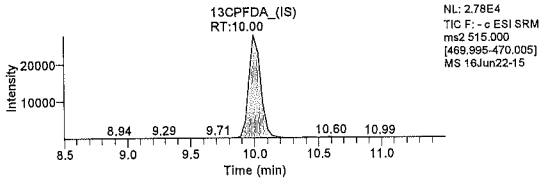

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Component Name: NMeFOSAA

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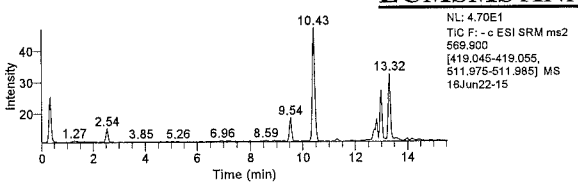
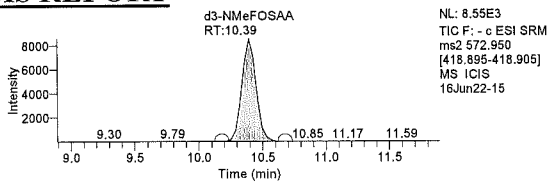
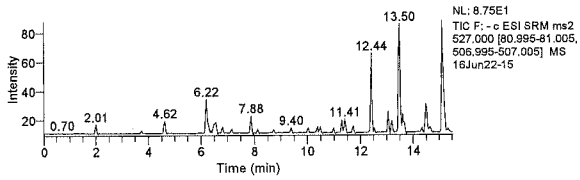
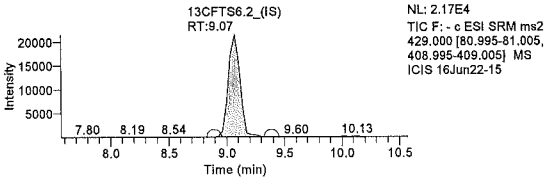




Component Name: 8:2FTS





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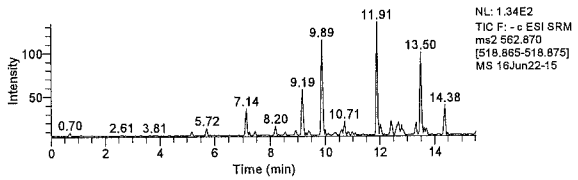

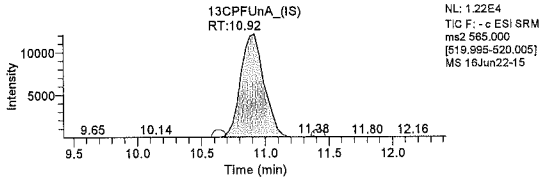

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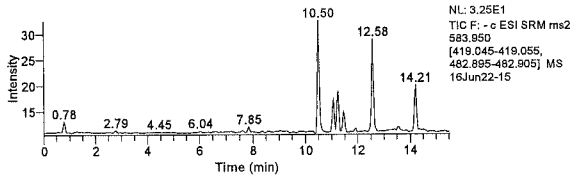

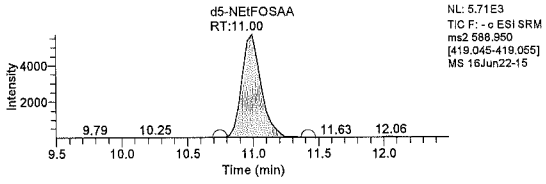

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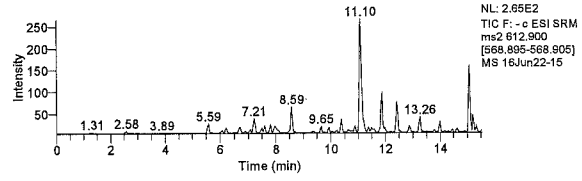

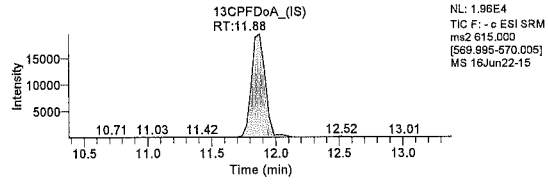

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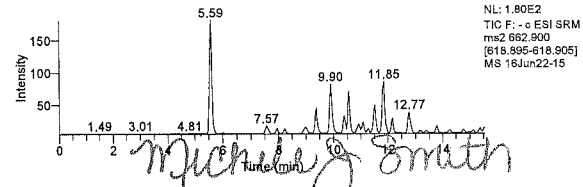

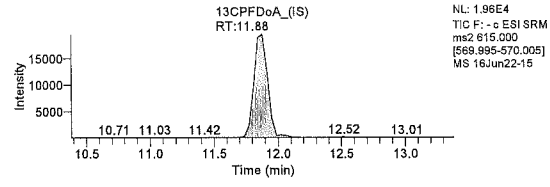

Component Name: PFTeDA

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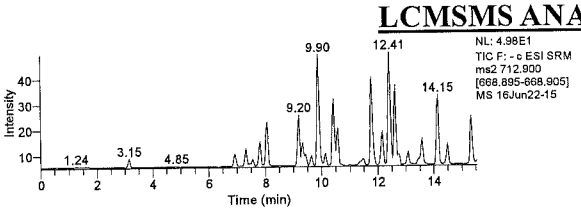

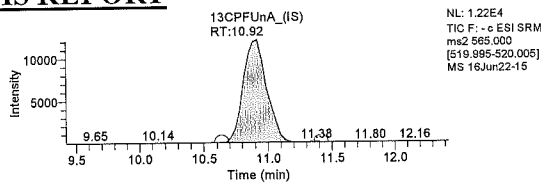

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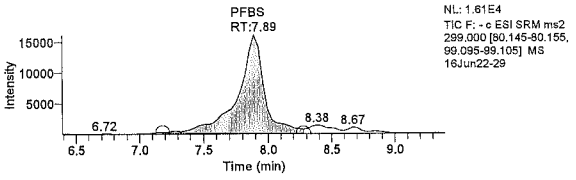
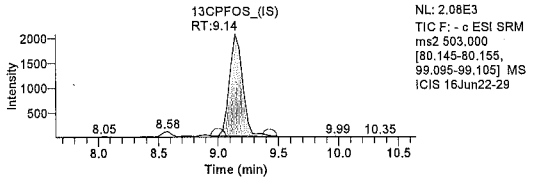
Sample Name:	8411847 MS	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	8411847 MS	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-29	Dilution Factor:	1.00
Acquisition Date:	06/23/16 07:16:01 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:21	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.18	236320.97	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.85	202260.46	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.86	195680.66	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.57	193932.70	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.82	180498.31	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.56	154686.89	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.28	111185.15	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.53	31770.70	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.14	15631.57	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.10	194027.68	N/A	N/A	N/A
8:2FTS	162.617	9.57	617951.13	195680.66	3.158	ng/g
NEtFOSAA	198.981	10.14	551017.06	73689.87	7.478	ng/L
NMeFOSAA	293.033	9.86	852148.44	69043.77	12.342	ng/L
PFBS	231.296	7.89	230049.40	15631.57	14.717	ng/L
PFDA	194.529	9.57	976159.29	193932.70	5.033	ng/L
PFDoA	221.661	10.82	872911.15	180498.31	4.836	ng/L
PFHxA	243.767	8.28	650231.27	111185.15	5.848	ng/L
PFHxS	205.017	8.57	156798.57	31770.70	4.935	ng/L
PFNA	202.554	9.18	933197.82	236320.97	3.949	ng/L
PFOA	222.311	8.82	1252703.27	202260.46	6.194	ng/L
PFOS	192.306	9.14	78263.83	15631.57	5.007	ng/L
PFTeDA	203.874	13.08	616423.84	194027.68	3.177	ng/L
PFTrDA	218.669	12.06	758822.01	180498.31	4.204	ng/L
PFUdA	201.599	10.10	980639.14	194027.68	5.054	ng/L
PFhpA	187.705	8.56	784446.33	154686.89	5.071	ng/L
d3-NMeFOSAA	N/A	9.83	69043.77	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.15	73689.87	N/A	N/A	N/A

Component Name: PFBS





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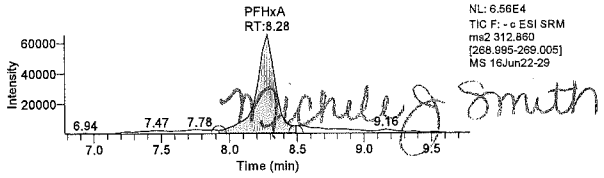

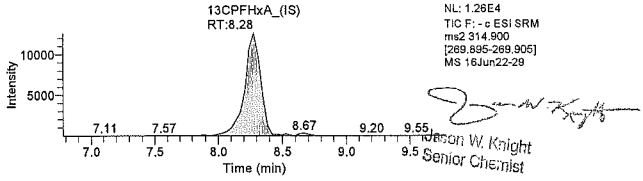

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Component Name: PFhpA

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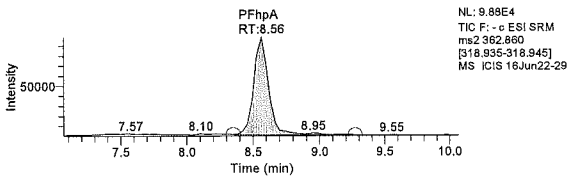
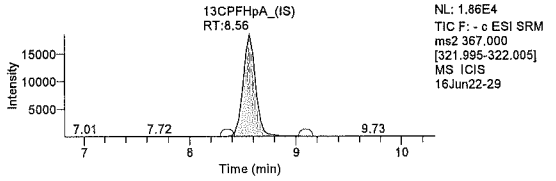
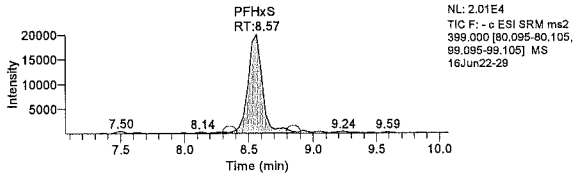
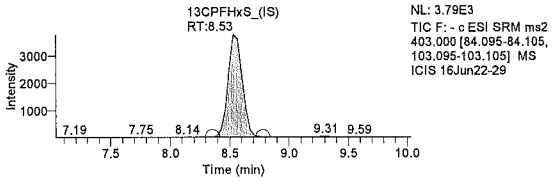




Component Name: PFHxS





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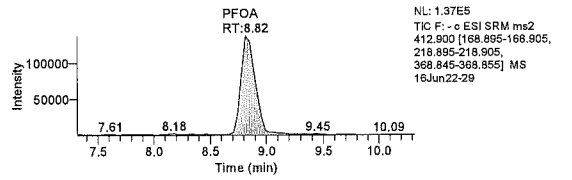
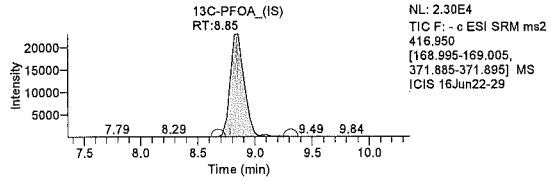
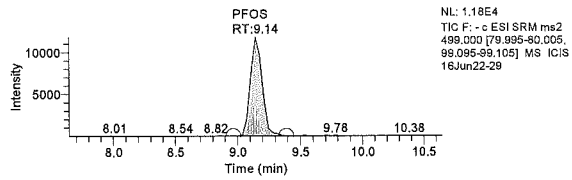
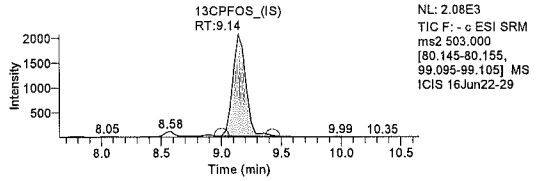




Component Name: PFOS





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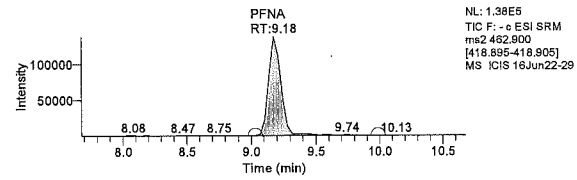
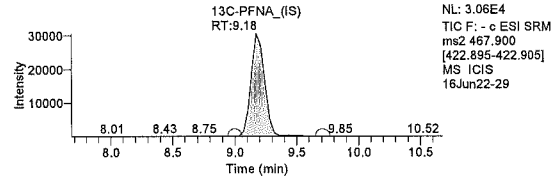
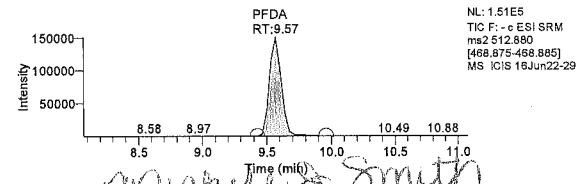
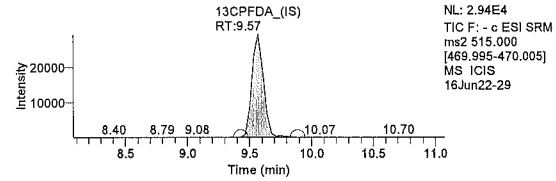




Component Name: PFDA





Component Name: 8:2FTS

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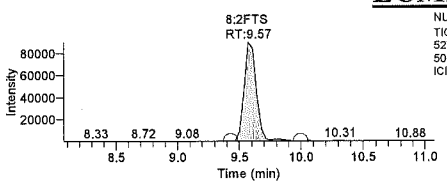

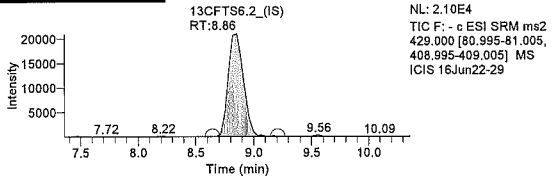

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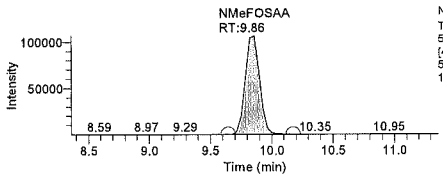
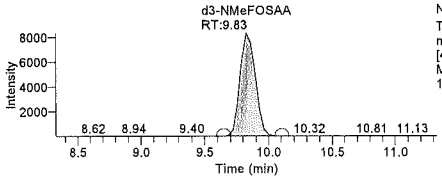
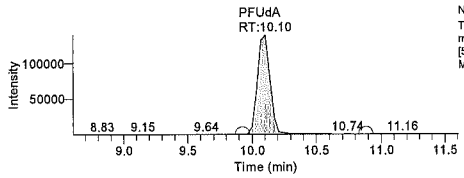
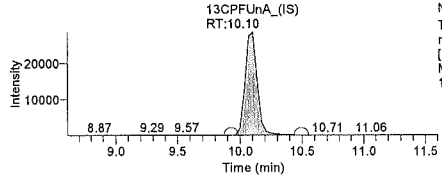


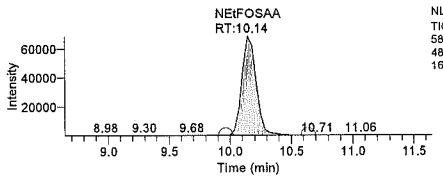


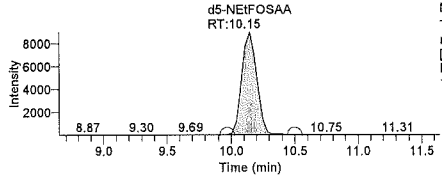
Component Name: PFUdA



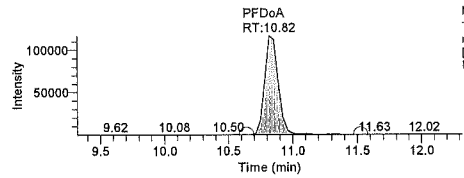


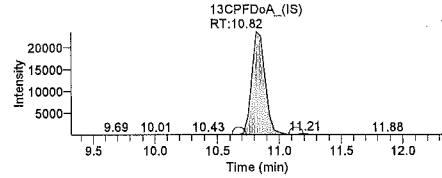
Component Name: NEtFOSAA



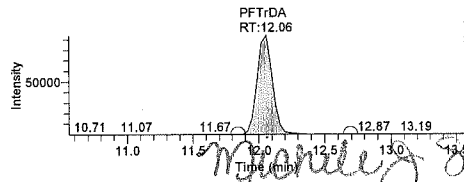


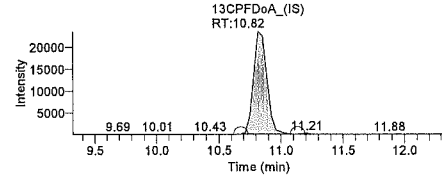
Component Name: PFDoA





Component Name: PFTrDA





Component Name: PFTeDA

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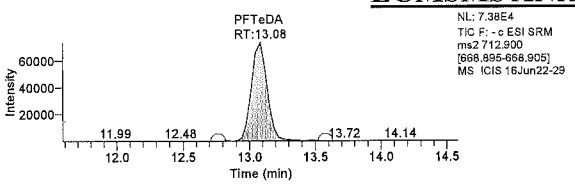

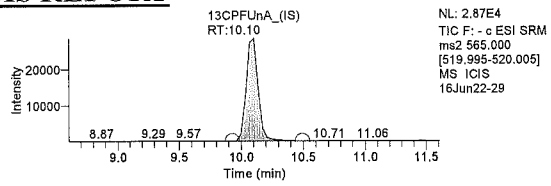

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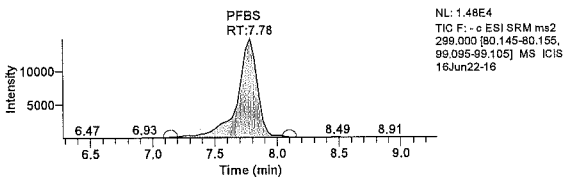
LCMSMS ANALYSIS REPORT

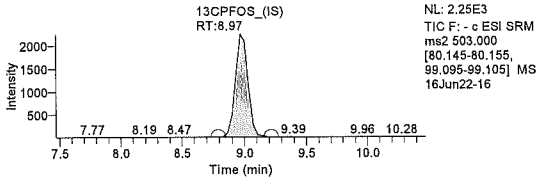
Sample Name:	LCS 16160012	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	LCS 16160012	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-16	Dilution Factor:	1.00
Acquisition Date:	06/23/16 03:44:52 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:11	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.00	298185.03	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.75	222996.43	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.75	89135.16	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.32	228278.24	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.36	211146.47	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.49	208039.88	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.14	165147.80	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.50	31904.30	N/A	N/A	N/A
13CPFOS_(IS)	N/A	8.97	16265.63	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	9.75	209135.89	N/A	N/A	N/A
8:2FTS	294.521	9.33	512873.98	89135.16	5.754	ng/g
NEtFOSAA	172.730	9.79	565785.29	87509.92	6.465	ng/L
NMeFOSAA	214.963	9.54	918809.04	101167.16	9.082	ng/L
PFBS	160.098	7.78	164338.82	16265.63	10.103	ng/L
PFDA	162.121	9.32	956666.37	228278.24	4.191	ng/L
PFDoA	169.975	10.36	781934.87	211146.47	3.703	ng/L
PFHxA	185.377	8.14	733818.75	165147.80	4.443	ng/L
PFHxS	158.458	8.46	120576.56	31904.30	3.779	ng/L
PFNA	165.374	9.00	960871.82	298185.03	3.222	ng/L
PFOA	198.447	8.75	1232465.28	222996.43	5.527	ng/L
PFOS	181.962	8.97	77046.35	16265.63	4.737	ng/L
PFTeDA	178.396	12.45	581255.90	209135.89	2.779	ng/L
PFTrDA	160.993	11.25	652050.91	211146.47	3.088	ng/L
PFUdA	182.574	9.75	957113.57	209135.89	4.577	ng/L
PFhpA	163.762	8.49	919944.50	208039.88	4.422	ng/L
d3-NMeFOSAA	N/A	9.54	101167.16	N/A	N/A	N/A
d5-NEtFOSAA	N/A	9.79	87509.92	N/A	N/A	N/A

Component Name: PFBS





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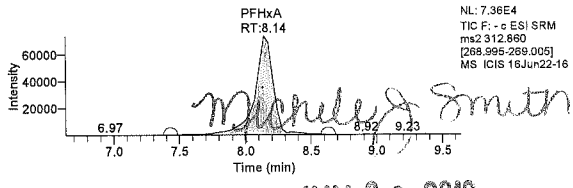

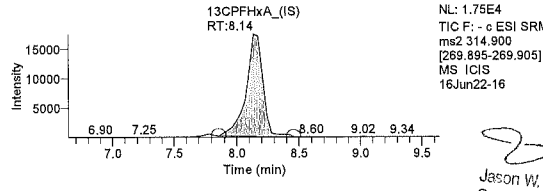

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Component Name: PFHxS

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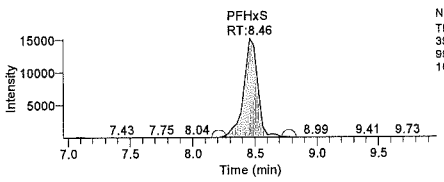
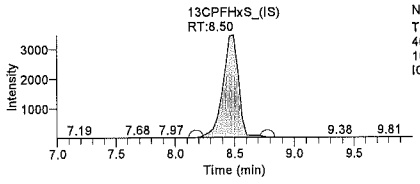
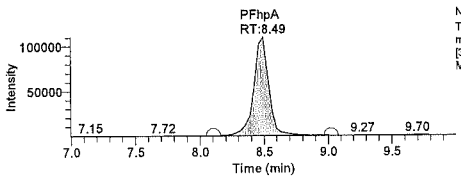
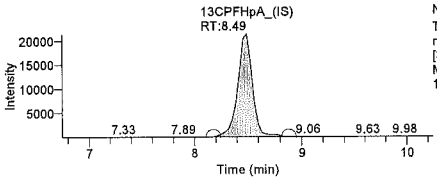


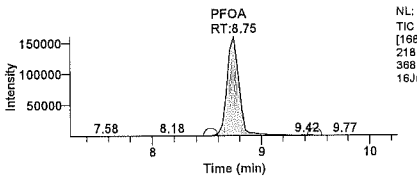


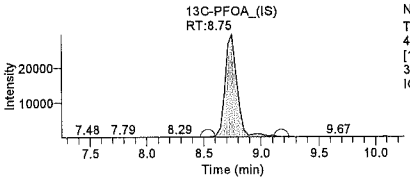
Component Name: PFhpA



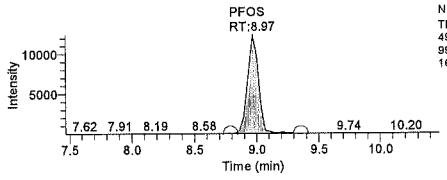


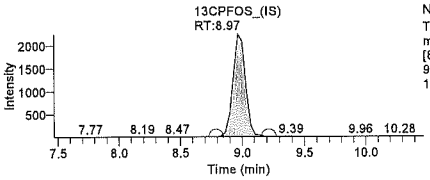
Component Name: PFOA



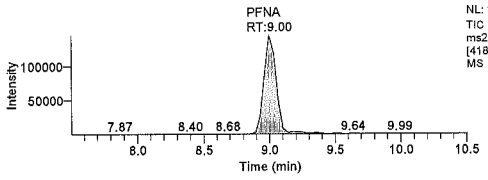


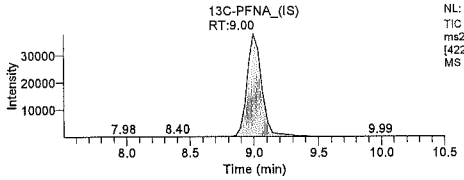
Component Name: PFOS



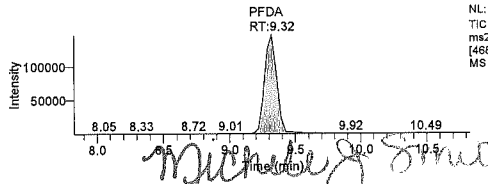


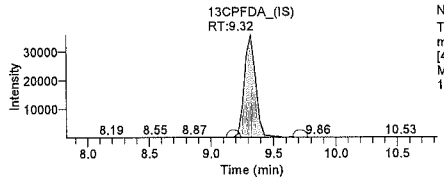
Component Name: PFNA





Component Name: PFDA





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Component Name: 8:2FTS

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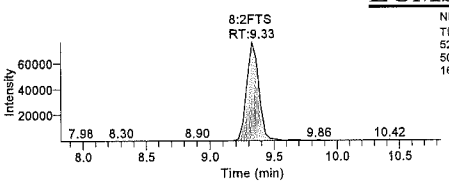
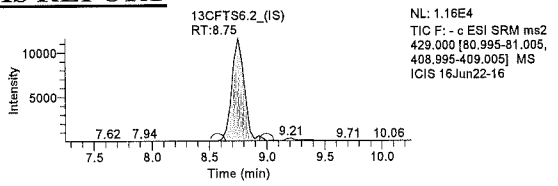
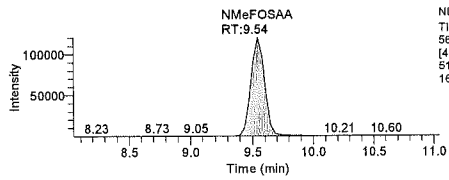
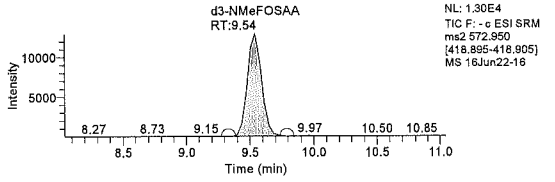


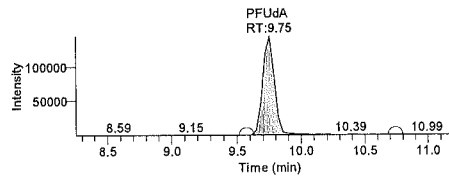


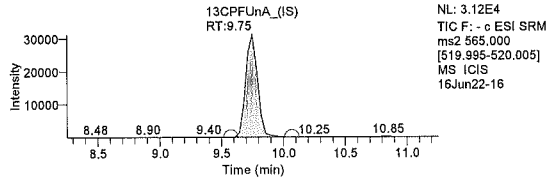
Component Name: NMeFOSAA



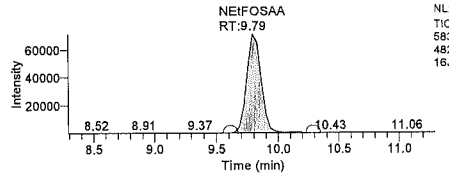


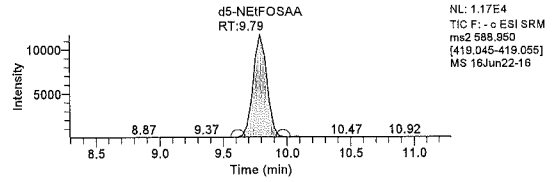
Component Name: PFUdA



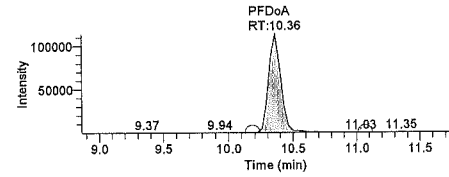


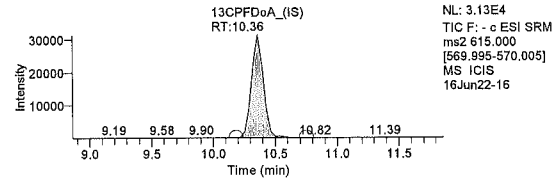
Component Name: NEtFOSAA



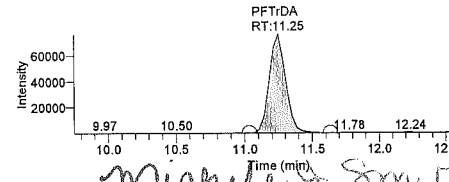


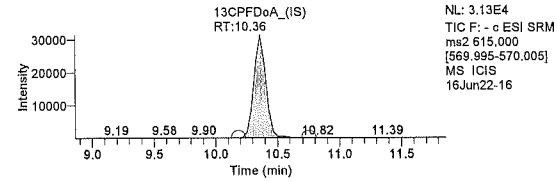
Component Name: PFDoA





Component Name: PFTrDA





Component Name: PFTeDA

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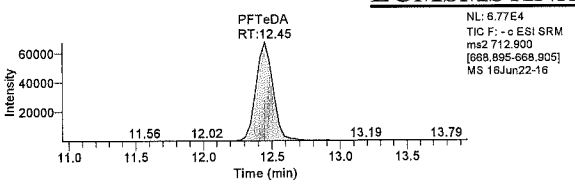

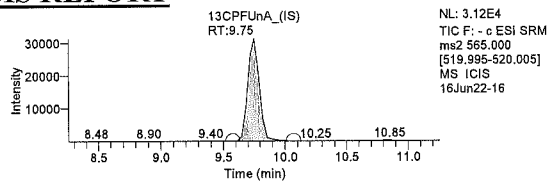

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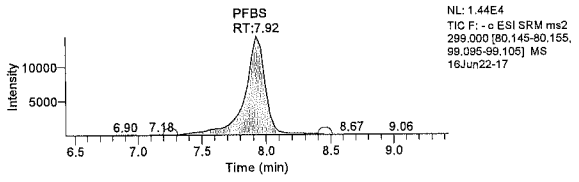
LCMSMS ANALYSIS REPORT

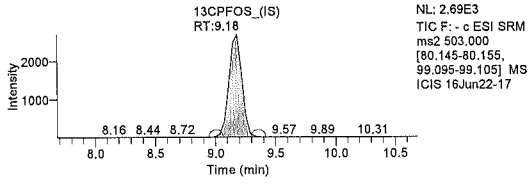
Sample Name:	LCSD 16160012	Original Data Path:	C:\Xcalibur\PFC\2016\16Jun22
Sample ID:	LCSD 16160012	Instrument Method:	C:\Xcalibur\PFC\Acquistion M\HWell
Data File:	16Jun22-17	Dilution Factor:	1.00
Acquisition Date:	06/23/16 04:01:04 AM	Instrument Model:	TSQ Quantum Access
Sample Type:	Unknown	Instrument Software Version:	2.5.0.1311
Vial:	C:12	Instrument Serial Number:	TQU01408
Run Time(min):	15.52	Operator:	US19_USR_INS00022
Injection Volume(µl):	10.00		

Extracted Ion Chromatogram
Quan Peak Table

Component Name	Calculated Amount	RT	Response	ISTD Response	Response Ratio	Units
13C-PFNA_(IS)	N/A	9.18	279410.54	N/A	N/A	N/A
13C-PFOA_(IS)	N/A	8.96	248057.91	N/A	N/A	N/A
13CFTS6.2_(IS)	N/A	8.96	100140.07	N/A	N/A	N/A
13CPFDA_(IS)	N/A	9.54	230346.19	N/A	N/A	N/A
13CPFDoA_(IS)	N/A	10.79	218778.05	N/A	N/A	N/A
13CPFHpA_(IS)	N/A	8.71	215798.37	N/A	N/A	N/A
13CPFHxA_(IS)	N/A	8.32	184418.98	N/A	N/A	N/A
13CPFHxS_(IS)	N/A	8.71	34631.53	N/A	N/A	N/A
13CPFOS_(IS)	N/A	9.18	19969.44	N/A	N/A	N/A
13CPFUnA_(IS)	N/A	10.07	212886.70	N/A	N/A	N/A
8:2FTS	208.745	9.57	407146.92	100140.07	4.066	ng/g
NEtFOSAA	197.041	10.15	535773.72	72376.38	7.403	ng/L
NMeFOSAA	181.479	9.83	843827.17	110060.25	7.667	ng/L
PFBS	131.185	7.92	164346.38	19969.44	8.230	ng/L
PFDA	157.595	9.54	938221.89	230346.19	4.073	ng/L
PFDoA	167.001	10.78	795936.46	218778.05	3.638	ng/L
PFHxA	174.400	8.32	770744.18	184418.98	4.179	ng/L
PFHxS	156.069	8.71	128829.00	34631.53	3.720	ng/L
PFNA	183.574	9.18	999734.29	279410.54	3.578	ng/L
PFOA	184.748	8.96	1276042.24	248057.91	5.144	ng/L
PFOS	148.370	9.14	77079.37	19969.44	3.860	ng/L
PFTeDA	168.534	13.05	558910.49	212886.70	2.625	ng/L
PFTrDA	151.914	11.78	637186.86	218778.05	2.912	ng/L
PFUdA	186.028	10.07	992741.04	212886.70	4.663	ng/L
PFhpA	167.416	8.71	975630.69	215798.37	4.521	ng/L
d3-NMeFOSAA	N/A	9.83	110060.25	N/A	N/A	N/A
d5-NEtFOSAA	N/A	10.11	72376.38	N/A	N/A	N/A

Component Name: PFBS





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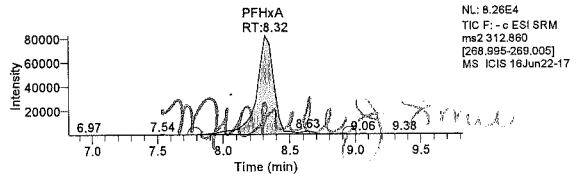

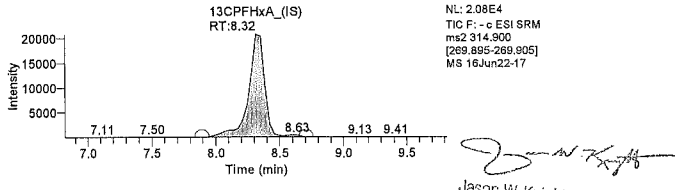

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Jason W. Knight
Senior Chemist

Component Name: PFhpA

Michele M. Corman
Senior Specialist

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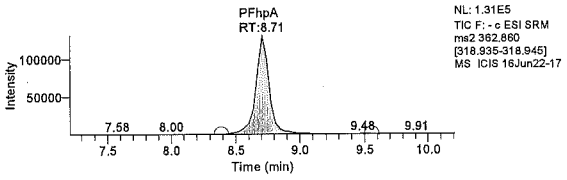

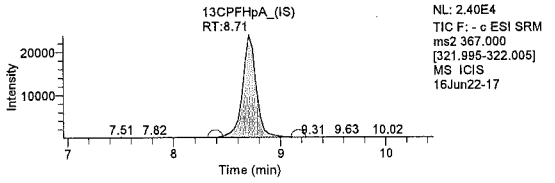

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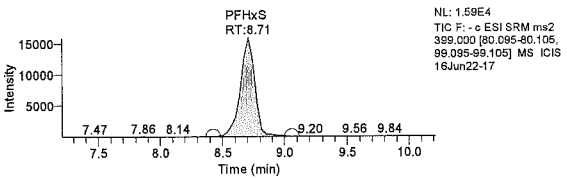

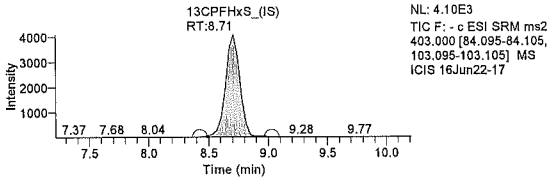

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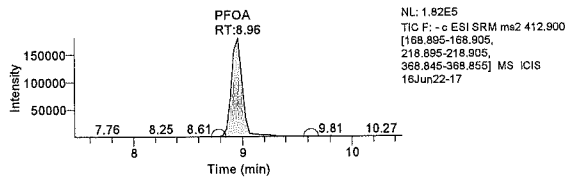
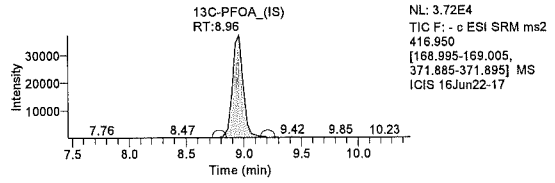
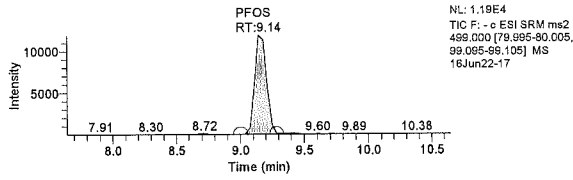
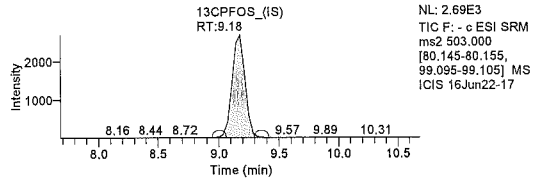




Component Name: PFOS





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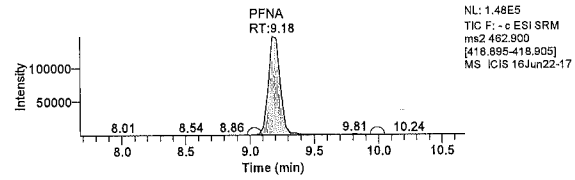

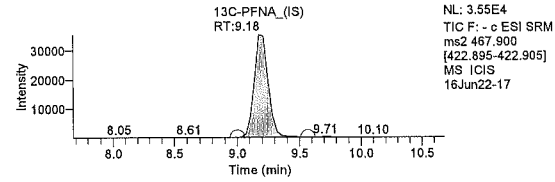

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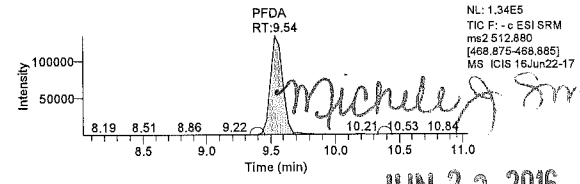

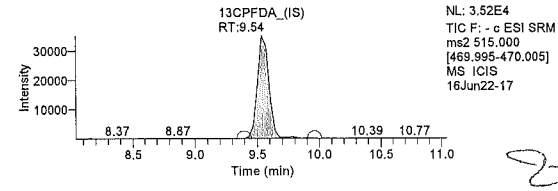

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Michele Smith
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Jason W. Knight
Senior Chemist

Component Name: 8:2FTS

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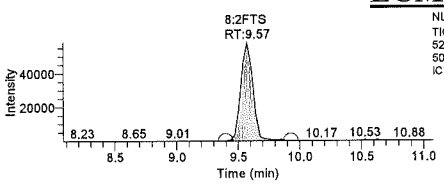

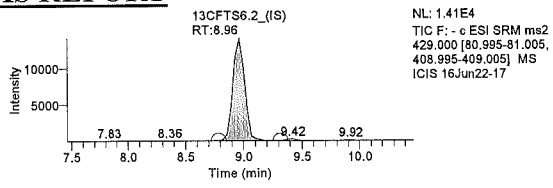

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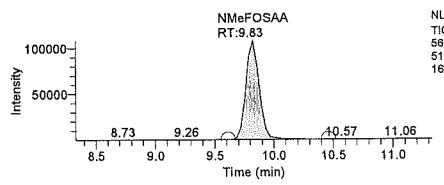

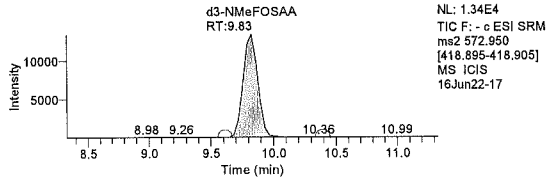

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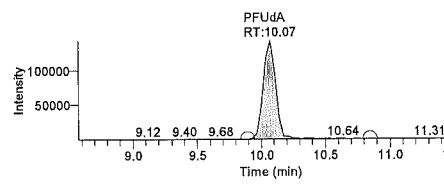
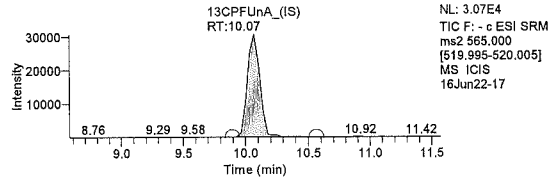
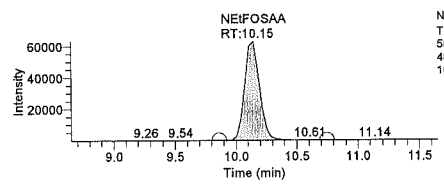
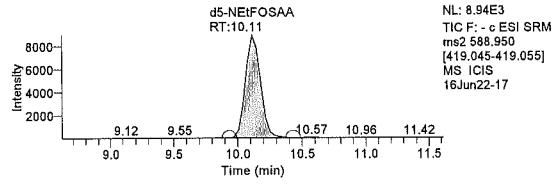


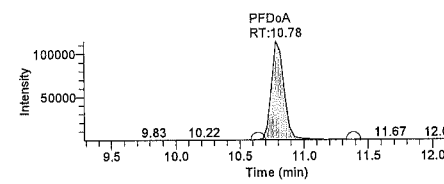


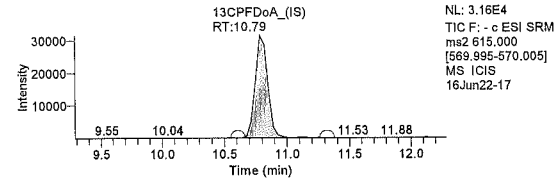
Component Name: NEtFOSAA





Component Name: PFDoA





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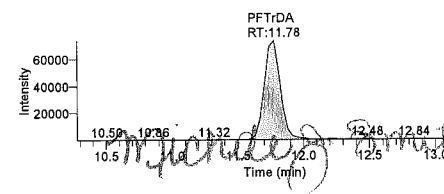

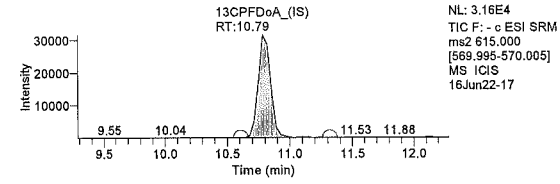

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Component Name: PFTeDA

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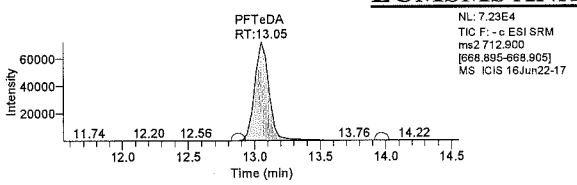

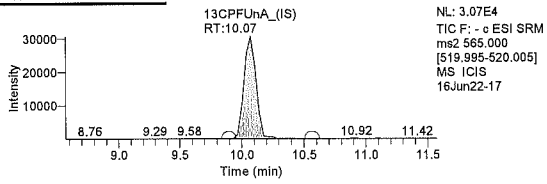

Michele J. Simms

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Michele J. Simms
Senior Specialist

Jason W. Knight
Senior Chemist

JUN 23 2016

Preparation Logs

PFAAs by LC/MS/MS

Organic Extraction Batchlog Assigned to: 9524 Jason Knight Reviewed by: _____ Start Date: 06/14/16 Start time: 10:00

16160012

Tech 1: JWK9524 Tech 2: DW 102162

Dept: 37 Prep Analysis: 14091 PFAA Water Prep PFAAs in Water by LC/MS/MS

QC	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH	pH	BC	Comments
8411847MS	14281MS	99.96 to	⑤ 229282-97A	0.025	235002-2A	0.04	1			201a	
BLANKA	BLK160012	100	↓	0.025	N/A	N/A	1				
LCSA	OPR160012	100		0.025	235002-2A	0.04	1				
LCSDA		100	↓	0.025	↓	0.04	1				

Solvent Used	Lot No.
MeOH/WATER 96:4	159749

⑤③ DW/102162 6/14/16

Sample #	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	FV (mL)	pH	pH	BC	Comments	Analyses	List	Due Date	Prio
18411847	14281	99.73	229282-97A	0.025	1			201a		10954	19725	06/27/2016	N
28411848	14282	99.98	↓	0.025	1			201a		10954	19725	06/27/2016	N
38411849	14283	99.87		0.025	1			201a		10954	19725	06/27/2016	N
48411850	14284	100.06		0.025	1			201a		10954	19725	06/27/2016	N
58411851	14285	99.77		0.025	1			201a		10954	19725	06/27/2016	N
68411852	14286	100.05		0.025	1			201a		10954	19725	06/27/2016	N
78411853	14287	99.79		0.025	1			201a		10954	19725	06/27/2016	N
88411854	14288	100.41	↓	0.025	1			201a		10954	19725	06/27/2016	N

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Rack ID:		Work Station		Micro Temp 100?	
Internal Standard		Balance #	1/2/1/1/2/2		

S-bath ID	C	S-bath ID	C	N-Evap	C	M-vap	C	16160012

Documented temps are NIST corrected.

DF = Dilution Factor FV = Final Volume