NAVFAC
Naval Facilities Engineering Command

Groundwater Sample Results, Level 2 Laboratory Report, Level 4 Laboratory Report, Electronic Data Deliverable, Data Validation Report, and the Sample Location Report, SDG 1412121

Norfolk Naval Base
Norfolk, Virginia

July 2019

ANALYTICAL SUMMARY DATA PACKAGE

SDG # 1412121

PROJECT NAME: NSN CTO-WE79
PROJECT LOCATION: NORFOLK, VA
CONTRACT #: N62470-11-D-8012

SUBMITTAL TO:

Juliana Dean
CH2M HILL
5701 Cleveland St, Suite 200
Virginia Beach, VA 23462

SUBMITTAL BY:

Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:

Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 9, 2015
Report Revision #: 01
Revision Date: January 21, 2015
Total # of Pages: 61

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

Sample Delivery Group Case Narrative

Receipt Information:

The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. Samples were subcontracted to Accutest Laboratories for Extractables by GCMS by Method EPA 537 Mod.

Changes to the Revision:

Revision 01: The package was revised to report the samples with DL/LOD/LOQ instead of MDL/MRL.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

Empirical Laboratories, LLC
Certifications/Approvals
(Revised 12/23/2014)

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-14-10
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

Sample Receipt Confirmation

Empirical Labs

Job No: FA20501

NSN Site 20 LTM
Project No: 470612.LT.FI.20

Sample Number	Collected Date	Time	By	Received	TA	Matrix Code	Type	Client Sample ID
FA20501-1	12/05/14	09:45	GB	12/06/14	14	AQ	Ground Water	NBS20-MW10-1214
FA20501-2	12/05/14	14:35	GB	12/06/14	14	AQ	Ground Water	NBS20-MW101-1214
FA20501-3	12/05/14	13:10	GB	12/06/14	14	AQ	Ground Water	NBS20-SW01-1214
FA20501-4	12/05/14	12:15	GB	12/06/14	14	AQ	Ground Water	NBS20-MW21-1214
FA20501-5	12/05/14	10:55	GB	12/06/14	14	AQ	Ground Water	NBS20-MW59-1214
FA20501-6	12/02/14	14:45	GB	12/06/14	14	AQ	Equipment Blank	NBS20-EB120214
FA20501-7	12/03/14	12:00	GB	12/06/14	14	AQ	Equipment Blank	NBS20-EB120314
FA20501-8	12/04/14	17:00	GB	12/06/14	14	AQ	Equipment Blank	NBS20-EB120414
FA20501-3D	12/05/14	13:10	GB	12/06/14	14	AQ	Water Dup/MSD	NBS20-SW01-1214
FA20501-3S	12/05/14	13:10	GB	12/06/14	14	AQ	Water Matrix Spike	NBS20-SW01-1214

Tests: LC537UCMR3

Tests are displayed after the samples to which they apply.

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST® LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20501 PAGE____OF____

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name CH2M Hill
Address 5701 Cleveland St
City VA Beach State VA Zip 23462
Project Contact Juliana Dean E-mail
Phone# 757-671-6335
Sampler(s) Name(s) (Printed) Gwen Buckley

Project Information

Project Name: NSN Site 20 WE79
Street
City State
Project #
Fax #
Client Purchase Order #

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	Total # of Bottles	Other	None	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI Water	MEOH	PFC											Lab Use Only
1	NBS20-MW-10-1214	12/5	0945		GW	2										x											
2	-MW-101-1214		1435													x											
	-SW-1-1214-		1310													x											
3	-SW-1-1214-MS		1310													x											
	-SW-1-1214-SD		1310													x											
4	-MW21-1214		1215													x											
5	-MW59-1214		1055													x											
6	-EB020214	12/2	1445													x											
7	-EB120314	12/3	1200													x											
8	-EB120414	12/4	1700													x											

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- ☐ 10 Days Standard
- ☐ 7 Day RUSH ________
- ☐ 5 Day RUSH ________
- ☐ 3 Day EMERGENCY ________
- ☐ 2 Day EMERGENCY ________
- ☐ 1 Day EMERGENCY ________
- ☐ OTHER ________

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 [signature]	12/5 1900	2 FO	3 FO 12-06-14	11:45	4 [signature]
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20521 CLIENT: CH2M Hill PROJECT: NSW Site 20

DATE/TIME RECEIVED: 12-06-14 11:45 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: ______

AIRBILL NUMBERS: 7721 1786 5896

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM ______ 5-GRAM ______

NUMBER OF 5035 FIELD KITS ? ______

NUMBER OF LAB FILTERED METALS ? ______

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.0
- [ ] CORRECTED TEMPS: 2.4

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT# ______

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS: ______

TECHNICIAN SIGNATURE/DATE RWill 12-07-14 REVIEWER SIGNATURE/DATE Jez Tae 12-7-14

NF 10/14

receipt confirmation 102914.xls

From: (804) 615-9461
Troy Horn

5701 Cleveland St
Ste 200
VIRGINIA BEACH, VA 23462

Origin ID: NTUA

FedEx Express

E

J142214092303uv

Ship Date: 05DEC14
ActWgt: 50.0 LB
CAD: 104174249/INET3550

Delivery Address Bar Code

SHIP TO: (407) 425-6700 BILL THIRD PARTY

Muna Mohammed
Accutest Laboratories
4405 Vineland Rd

ORLANDO, FL 32811

Ref # 470612.lt.fi.20
Invoice #
PO #
Dept #

RELEASE#: 3785346

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 7721 1786 5896
0201

X0 TIXA

32811
FL-US
MCO

522G2/DC75/8AC9

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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WORK ORDER

Printed: 12/10/2014 6:06:06PM

1412121

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**NSN CTO-WE79**	**Project Number:**	**CH2_NSN_WE79**

Report To:	**Invoice To:**
CH2M Hill, Inc.	CH2M Hill, Inc.
Juliana Dean	Accounts Payable
5701 Cleveland Street, Suite 200	P.O.Box 241329
Virginia Beach, VA 23462	Denver, CO 80224-____
Phone: (757) 671-6232	Phone :(303) 771-0952
Fax: (303) 771-0952	Fax: (303) 771-0952

Due to Client: 01/08/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By:	Sonya Gordon	Date Received:	12/06/2014 11:45
Logged In By:	Sonya Gordon	Date Logged In:	12/10/2014 17:54

Samples Received at:	**2.4°C**		
Custody Seals	No	Received On Ice	No
Containers Intact	No		
COC/Labels Agree	No		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
Accutest Laboratories (SUB)					
1412121-01 NBS20-MW10-1214 [Water] Sampled 12/05/2014 09:45 Eastern 'Client Sample'					
SUB_SPECIAL"	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 08:45	Select PFC
1412121-02 NBS20-MW101-1214 [Water] Sampled 12/05/2014 14:35 Eastern 'Client Sample'					
SUB_SPECIAL"	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 13:35	Select PFC
1412121-03 NBS20-SW01-1214 [Water] Sampled 12/05/2014 13:10 Eastern 'Client Sample'					**MS/MSD**
SUB_SPECIAL"	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 12:10	Select PFC
1412121-04 NBS20-MW21-1214 [Water] Sampled 12/05/2014 12:15 Eastern 'Client Sample'					
SUB_SPECIAL"	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 11:15	Select PFC
1412121-05 NBS20-MW59-1214 [Water] Sampled 12/05/2014 10:55 Eastern 'Client Sample'					
SUB_SPECIAL"	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 09:55	Select PFC
1412121-06 NBS20-EB120214 [Water] Sampled 12/02/2014 14:45 Eastern 'Equipment Blank'					
SUB_SPECIAL"	SUB_SPECIALTY	12/31/2014 14:00	20	05/31/2015 13:45	Select PFC

WORK ORDER

1412121

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**NSN CTO-WE79**	**Project Number:**	**CH2_NSN_WE79**

Method	Test Code	Due	TAT	Expires	Comments
Accutest Laboratories (SUB)					
1412121-07 NBS20-EB120314 [Water] Sampled 12/03/2014 12:00 Eastern 'Equipment Blank'					
SUB_SPECIAL1	SUB_SPECIALTY	12/31/2014 14:00	20	06/01/2015 11:00	Select PFC
1412121-08 NBS20-EB120414 [Water] Sampled 12/04/2014 17:00 Eastern 'Equipment Blank'					
SUB_SPECIAL1	SUB_SPECIALTY	12/31/2014 14:00	20	06/02/2015 16:00	Select PFC

Reviewed By

Date

SUBCONTRACT ORDER

Empirical Laboratories, LLC

1412121

SENDING LABORATORY:

Empirical Laboratories, LLC
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Phone: 615.345.1115
Fax: 866.417.0548
Project Manager: Sonya Gordon

RECEIVING LABORATORY:

Accutest Laboratories (SUB)
4405 Vineland Rd
Orlando, FL 32811
Phone :(407) 425-6700
Fax: (407) 425-0707

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: NBS20-MW10-1214				
Reference No: 1412121-01	**Water**	**Sampled: 12/05/2014 09:45**		
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 08:45		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW101-1214				
Reference No: 1412121-02	**Water**	**Sampled: 12/05/2014 14:35**		
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 13:35		Select PFC
Containers Supplied:				
Sample ID: NBS20-SW01-1214				
Reference No: 1412121-03	**Water**	**Sampled: 12/05/2014 13:10**		**MS/MSD**
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 12:10		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW21-1214				
Reference No: 1412121-04	**Water**	**Sampled: 12/05/2014 12:15**		
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 11:15		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW59-1214				
Reference No: 1412121-05	**Water**	**Sampled: 12/05/2014 10:55**		
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 09:55		Select PFC
Containers Supplied:				
Sample ID: NBS20-EB120214				
Reference No: 1412121-06	**Water**	**Sampled: 12/02/2014 14:45**		
SUB_SPECIALTY	12/31/2014 14:00	05/31/2015 13:45		Select PFC
Containers Supplied:				

Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Empirical Laboratories, LLC

1412121

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: NBS20-EB120314				
Reference No: 1412121-07	**Water**	**Sampled: 12/03/2014 12:00**		
SUB_SPECIALTY	12/31/2014 14:00	06/01/2015 11:00		Select PFC
Containers Supplied:				
Sample ID: NBS20-EB120414				
Reference No: 1412121-08	**Water**	**Sampled: 12/04/2014 17:00**		
SUB_SPECIALTY	12/31/2014 14:00	06/02/2015 16:00		Select PFC
Containers Supplied:				

Released By   Date   Received By   Date

Released By   Date   Received By   Date

Sample Delivery Group Assignment Form

CLIENT: CH2M Hill, Inc.
PROJECT NAME: NSN CTO-WE79
SDG #: 1412121

QC LEVEL: Level IV
Report Due: 1/8/2015
Client Sample Count: 5

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	SUB_SPECIALTY
Client Sample	12/5/2014	12/6/2014	1412121-01	NBS20-MW10-1214	Water	X
Client Sample	12/5/2014	12/6/2014	1412121-02	NBS20-MW101-1214	Water	X
Client Sample	12/5/2014	12/6/2014	1412121-03	NBS20-SW01-1214	Water	MS/MSD
Client Sample	12/5/2014	12/6/2014	1412121-04	NBS20-MW21-1214	Water	X
Client Sample	12/5/2014	12/6/2014	1412121-05	NBS20-MW59-1214	Water	X
Equipment Blank	12/2/2014	12/6/2014	1412121-06	NBS20-EB120214	Water	X
Equipment Blank	12/3/2014	12/6/2014	1412121-07	NBS20-EB120314	Water	X
Equipment Blank	12/4/2014	12/6/2014	1412121-08	NBS20-EB120414	Water	X

Subcontractor Data Package

Southeast
ACCUTEST
LABORATORIES

Reissue #1
01/16/15

Technical Report for

Empirical Labs

NSN Site 20 LTM

470612.LT.FI.20

Accutest Job Number: FA20501

Sampling Dates: 12/02/14 - 12/05/14

Report to:

Empirical Labs
621 Mainstream Dr
Suite 270
Nashville, TN 37228

ATTN: DON'T USE CAROLINA EMAIL NO LONGER VALID

Total number of pages in report: **367**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

Test results relate only to samples analyzed.

January 16, 2015

Ms. Sonya Gordon
Empirical Laboratories, LLC
621 Mainstream Dr
Suite 270
Nashville, TN 37228

RE: Accutest job FA20501 Reissue

Dear Ms. Gordon,

The final report for job number FA20501 has been edited to reflect requested corrections. These edits have been incorporated into the revised report.

Data has been reported to LOQ/LOD.

Please feel free to contact us if we can be of further assistance.

Sincerely,

Accutest Laboratories, SE

Sections: 1 2 3 4 5 6 7

Table of Contents

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Accutest Laboratories

Sample Summary

Empirical Labs

Job No: FA20501

NSN Site 20 LTM
Project No: 470612.LT.FI.20

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20501-1	12/05/14	09:45	GB	12/06/14	AQ	Ground Water	NBS20-MW10-1214
FA20501-2	12/05/14	14:35	GB	12/06/14	AQ	Ground Water	NBS20-MW101-1214
FA20501-3	12/05/14	13:10	GB	12/06/14	AQ	Ground Water	NBS20-SW01-1214
FA20501-3D	12/05/14	13:10	GB	12/06/14	AQ	Water Dup/MSD	NBS20-SW01-1214
FA20501-3S	12/05/14	13:10	GB	12/06/14	AQ	Water Matrix Spike	NBS20-SW01-1214
FA20501-4	12/05/14	12:15	GB	12/06/14	AQ	Ground Water	NBS20-MW21-1214
FA20501-5	12/05/14	10:55	GB	12/06/14	AQ	Ground Water	NBS20-MW59-1214
FA20501-6	12/02/14	14:45	GB	12/06/14	AQ	Equipment Blank	NBS20-EB120214
FA20501-7	12/03/14	12:00	GB	12/06/14	AQ	Equipment Blank	NBS20-EB120314
FA20501-8	12/04/14	17:00	GB	12/06/14	AQ	Equipment Blank	NBS20-EB120414

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Empirical Labs **Job No:** FA20501

Site: NSN Site 20 LTM **Report Date:** 12/22/2014 4:26:50

8 Sample(s) were collected on/between 12/02/2014 and 12/05/2014 and were received at Accutest SE on 12/06/2014 properly preserved, at 2.4 Deg. C and intact. These Samples received an Accutest job number of FA20501. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method EPA 537 MOD

Matrix: AQ **Batch ID:** OP54254

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20443-3MS, FA20443-3MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** OP54279

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA20501-3MS, FA20501-3MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for Perfluorohexanesulfonic acid are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_______________________________________ Date: December 22, 2014

Kim Benham, Client Services (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
FA20501-1	MSSEMI	Q9129.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20501-2	MSSEMI	Q9095.D	Perfluorooctanesulfonic acid
FA20501-3	MSSEMI	Q9096.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA20501-4	MSSEMI	Q9099.D	Perfluorooctanesulfonic acid
OP54254-BS	MSSEMI	Q9038.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
OP54254-MS	MSSEMI	Q9043.D	Perfluorohexanesulfonic acid, Perfluorohexanoic acid, Perfluorooctanesulfonic acid
OP54254-MSD	MSSEMI	Q9044.D	Perfluorohexanesulfonic acid, Perfluorohexanoic acid, Perfluorooctanesulfonic acid
OP54279-BS	MSSEMI	Q9083.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
OP54279-MS	MSSEMI	Q9097.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
OP54279-MSD	MSSEMI	Q9098.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ280-ICV280	MSSEMI	Q8642.D	Perfluorodecanesulfonic acid, Perfluorododecanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid, Perfluoroundecanoic acid
SQ289-CC280	MSSEMI	Q9037.D	13C2-PFDA
SQ290-IC290	MSSEMI	Q9072.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9073.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9074.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9076.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9077.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9078.D	Perfluorotetradecanoic acid
SQ290-ICC290	MSSEMI	Q9075.D	Perfluorotetradecanoic acid
SQ290-ICV290	MSSEMI	Q9080.D	Perfluorododecanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid

20 Manual Integrations were found for FA20501

Summary of Hits

Job Number: FA20501
Account: Empirical Labs
Project: NSN Site 20 LTM
Collected: 12/02/14 thru 12/05/14

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20501-1	**NBS20-MW10-1214**					
Perfluorohexanesulfonic acid		0.0109 J	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0126 J	0.021	0.017	ug/l	EPA 537 MOD
FA20501-2	**NBS20-MW101-1214**					
Perfluorooctanesulfonic acid		0.00830 J	0.020	0.016	ug/l	EPA 537 MOD
FA20501-3	**NBS20-SW01-1214**					
Perfluoroheptanoic acid		0.0269	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0300 J	0.042	0.033	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0202 J	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0988	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0393	0.021	0.017	ug/l	EPA 537 MOD
FA20501-4	**NBS20-MW21-1214**					
Perfluoroheptanoic acid		0.0146 J	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0411	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0510	0.021	0.017	ug/l	EPA 537 MOD

FA20501-5 **NBS20-MW59-1214**

No hits reported in this sample.

FA20501-6 **NBS20-EB120214**

No hits reported in this sample.

FA20501-7 **NBS20-EB120314**

No hits reported in this sample.

FA20501-8 **NBS20-EB120414**

No hits reported in this sample.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-MW10-1214		
Lab Sample ID:	FA20501-1	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9129.D	1	12/21/14	NAF	12/17/14	OP54279	SQ291
Run #2							

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.033 U	0.042	0.033	0.017	ug/l	
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.017 U	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0109	0.021	0.017	0.0083	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.0126	0.021	0.017	0.0083	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	103%		70-130%
	13C2-PFDA	90%		70-130%

U = Not detected   LOD = Limit of Detection   J = Indicates an estimated value
LOQ = Limit of Quantitation   DL = Detection Limit   B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range   N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-MW101-1214		
Lab Sample ID:	FA20501-2	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9095.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.00830	0.020	0.016	0.0080	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	111%		70-130%
	13C2-PFDA	117%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-SW01-1214		
Lab Sample ID:	FA20501-3	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9096.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.0269	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.0300	0.042	0.033	0.017	ug/l	J
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0202	0.021	0.017	0.0083	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0988	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0393	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	119%		70-130%
	13C2-PFDA	114%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	NBS20-MW21-1214		
Lab Sample ID:	FA20501-4	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9099.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.0146	0.021	0.017	0.0083	ug/l	J
335-67-1	Perfluorooctanoic acid	0.033 U	0.042	0.033	0.017	ug/l	
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.017 U	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0411	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0510	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	124%		70-130%
	13C2-PFDA	124%		70-130%

U = Not detected   LOD = Limit of Detection   J = Indicates an estimated value
LOQ = Limit of Quantitation   DL = Detection Limit   B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range   N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-MW59-1214		
Lab Sample ID:	FA20501-5	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9100.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	110%		70-130%
	13C2-PFDA	113%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-EB120214		
Lab Sample ID:	FA20501-6	**Date Sampled:**	12/02/14
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9048.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	121%		70-130%
	13C2-PFDA	104%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	NBS20-EB120314		
Lab Sample ID:	FA20501-7	**Date Sampled:**	12/03/14
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9049.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	119%		70-130%
	13C2-PFDA	98%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	NBS20-EB120414		
Lab Sample ID:	FA20501-8	**Date Sampled:**	12/04/14
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9101.D	1	12/20/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	111%		70-130%
	13C2-PFDA	101%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST LABORATORIES

Accutest Laboratories Southeast
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20501 PAGE____ OF____

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: CH2M Hill
Address: 5701 Cleveland St
City: VA Beach State: VA Zip: 23462
Project Contact: Juliana Dean E-mail:
Phone#: 757-671-6335
Sampler(s) Name(s) (Printed): Gwen Buckley

Project Information

Project Name: NSN Site 20 WE79
Street:
City: State:
Project #:
Fax #:
Client Purchase Order #:

Analytical Information: PFC

Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL - Sludge, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	Total # of Bottles	PFC	LAB USE ONLY
1	NBS20-MW-10-1214	12/5	0945		GW	2	X	
2	-MW-101-1214		1435				X	
3	-SW-1-1214-		1310				X	
	-SW-1-1214-MS		1310				X	
	-SW-1-1214-SD		1310				X	
4	-MW21-1214		1215				X	
5	-MW59-1214		1055				X	
6	-EB020214	12/2	1445				X	
7	-EB120314	12/3	1200				X	
8	-EB120414	12/4	1700				X	

Container information columns: OTHER, NONE, HCl, NaOH, HNO3, H2SO4, NAOH+ZNAC, DI WATER, MEOH

TURNAROUND TIME (Business Days) — Approved By: / Rush Code

- [ ] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 [signature]	12/5 1900	2 FO	3 FO 12-06-14	11:45	4 [signature]
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.4

5.1
5

FA20501: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20501 CLIENT: CH2M Hill PROJECT: NSW Site 20

DATE/TIME RECEIVED: 12-06-14 11:45 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 7721 1786 5896

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM ______ 5-GRAM ______

NUMBER OF 5035 FIELD KITS ? ______

NUMBER OF LAB FILTERED METALS ? ______

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.0
- [ ] CORRECTED TEMPS: 2.4

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT# ______

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE RWilk 12-07-14 REVIEWER SIGNATURE/DATE Jez [illegible] 12-7-14

NF 10/14

receipt confirmation 102914.xls

From: (804) 615-9461
Troy Horn

5701 Cleveland St
Ste 200
VIRGINIA BEACH, VA 23462

Origin ID: NTUA

FedEx. Express

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J14221409230̲3uv

Ship Date: 05DEC14
ActWgt: 50.0 LB
CAD: 104174249/INET3550

Delivery Address Bar Code

SHIP TO: (407) 425-6700 BILL THIRD PARTY
Muna Mohammed
Accutest Laboratories
4405 Vineland Rd

ORLANDO, FL 32811

Ref # 470612.lt.fi.20
Invoice #
PO #
Dept #

RELEASE#: 3785346

SATURDAY 12:00P
PRIORITY OVERNIGHT

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Southeast ACCUTEST LABORATORIES

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GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54254-MB	Q9039.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-6, FA20501-7

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.020	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.040	0.016	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.020	0.0080	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.020	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.020	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.020	0.0080	ug/l	

CAS No.	Surrogate Recoveries		Limits
	13C2-PFHxA	116%	70-130%
	13C2-PFDA	94%	70-130%

Method Blank Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54279-MB	Q9084.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-1, FA20501-2, FA20501-3, FA20501-4, FA20501-5, FA20501-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.020	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.040	0.016	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.020	0.0080	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.020	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.020	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.020	0.0080	ug/l	

CAS No.	Surrogate Recoveries		Limits
	13C2-PFHxA	114%	70-130%
	13C2-PFDA	108%	70-130%

Blank Spike Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54254-BS	Q9038.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-6, FA20501-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-85-9	Perfluoroheptanoic acid	0.16	0.141	88	70-130
335-67-1	Perfluorooctanoic acid	0.16	0.155	97	70-130
375-95-1	Perfluorononanoic acid	0.16	0.124	78	70-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.177	111	70-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.183	114	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.159	99	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
	13C2-PFHxA	126%	70-130%
	13C2-PFDA	99%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54279-BS	Q9083.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-1, FA20501-2, FA20501-3, FA20501-4, FA20501-5, FA20501-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-85-9	Perfluoroheptanoic acid	0.16	0.149	93	70-130
335-67-1	Perfluorooctanoic acid	0.16	0.156	98	70-130
375-95-1	Perfluorononanoic acid	0.16	0.164	103	70-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.180	113	70-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.158	99	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.151	94	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
	13C2-PFHxA	121%	70-130%
	13C2-PFDA	112%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54254-MS	Q9043.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289
OP54254-MSD	Q9044.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289
FA20443-3	Q9082.D	1	12/19/14	NAF	12/16/14	OP54254	SQ290

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-6, FA20501-7

CAS No.	Compound	FA20443-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-85-9	Perfluoroheptanoic acid	0.021	U	0.167	0.148	89	0.16	0.137	86	8	70-130/30
335-67-1	Perfluorooctanoic acid	0.042	U	0.167	0.167	100	0.16	0.154	96	8	70-130/30
375-95-1	Perfluorononanoic acid	0.021	U	0.167	0.137	82	0.16	0.123	77	11	70-130/30
375-73-5	Perfluorobutanesulfonic acid	0.021	U	0.167	0.193	116	0.16	0.176	110	9	70-130/30
355-46-4	Perfluorohexanesulfonic acid	0.021	U	0.167	0.191	115	0.16	0.181	113	5	70-130/30
1763-23-1	Perfluorooctanesulfonic acid	0.021	U	0.167	0.170	102	0.16	0.153	96	11	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	FA20443-3	Limits
	13C2-PFHxA	119%	109%	111%	70-130%
	13C2-PFDA	100%	90%	100%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54279-MS	Q9097.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
OP54279-MSD	Q9098.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
FA20501-3	Q9096.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-1, FA20501-2, FA20501-3, FA20501-4, FA20501-5, FA20501-8

CAS No.	Compound	FA20501-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-85-9	Perfluoroheptanoic acid	0.0269		0.333	0.347	96	0.333	0.382	107	10	70-130/30
335-67-1	Perfluorooctanoic acid	0.0300	J	0.333	0.368	101	0.333	0.407	113	10	70-130/30
375-95-1	Perfluorononanoic acid	0.021 U		0.333	0.328	98	0.333	0.356	107	8	70-130/30
375-73-5	Perfluorobutanesulfonic acid	0.0202	J	0.333	0.394	112	0.333	0.448	128	13	70-130/30
355-46-4	Perfluorohexanesulfonic acid	0.0988		0.333	0.528	129	0.333	0.579	144*	9	70-130/30
1763-23-1	Perfluorooctanesulfonic acid	0.0393		0.333	0.381	103	0.333	0.426	116	11	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	FA20501-3	Limits
	13C2-PFHxA	123%	126%	119%	70-130%
	13C2-PFDA	126%	127%	114%	70-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ289-CC280	**Injection Date:**	12/18/14
Lab File ID:	Q9037.D	**Injection Time:**	18:11
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	27803	6.28	12737	6.86	70625	9.25
Check Std [b]	21760	6.33	11905	6.92	36885	9.41
Upper Limit [c]	41705	7.33	19106	7.92	105938	10.41
Lower Limit [d]	13902	5.33	6369	5.92	35313	8.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
OP54254-BS	20516	6.33	10870	6.92	35491	9.41
OP54254-MB	25010	6.33	13068	6.92	40890	9.41
ZZZZZZ	22856	6.33	12114	6.92	37652	9.42
ZZZZZZ	24433	6.33	12421	6.92	40477	9.42
OP54254-MS	23248	6.33	12265	6.92	38642	9.44
OP54254-MSD	23857	6.33	12371	6.92	38937	9.44
ZZZZZZ	24142	6.33	12722	6.92	40889	9.44

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ280-ICC280 Q8637.D 12/08/14 14:34. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std: SQ289-CC280 **Injection Date:** 12/18/14
Lab File ID: Q9046.D **Injection Time:** 21:09
Instrument ID: GCMSQ **Method:** EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	27803	6.28	12737	6.86	70625	9.25
Check Std [b]	24039	6.33	13082	6.92	40760	9.45
Upper Limit [c]	41705	7.33	19106	7.92	105938	10.45
Lower Limit [d]	13902	5.33	6369	5.92	35313	8.45

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20501-6	22744	6.33	11801	6.92	38510	9.45
FA20501-7	23059	6.33	11701	6.92	36902	9.45
ZZZZZZ	19530	6.32	10391	6.92	37951	9.44
ZZZZZZ	23739	6.33	11782	6.92	38674	9.44
ZZZZZZ	22511	6.33	11234	6.92	41529	9.44
ZZZZZZ	24311	6.33	12637	6.92	39117	9.45
ZZZZZZ	19401	6.32	9372	6.92	36904	9.44
ZZZZZZ	22806	6.33	11627	6.92	37415	9.45
SQ289-ECC280	24966	6.33	13522	6.92	42609	9.45

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ280-ICC280 Q8637.D 12/08/14 14:34. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ290-ICC290	**Injection Date:**	12/19/14
Lab File ID:	Q9075.D	**Injection Time:**	15:26
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	22591	6.32	12205	6.91	38590	9.37
Check Std [b]	24087	6.32	13164	6.91	40675	9.37
Upper Limit [c]	33887	7.32	18308	7.91	57885	10.37
Lower Limit [d]	11296	5.32	6103	5.91	19295	8.37

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20443-3	22609	6.31	11819	6.89	36267	9.33
OP54279-BS	24942	6.31	12815	6.89	39548	9.33
OP54279-MB	25044	6.31	12747	6.89	37994	9.33
ZZZZZZ	21315	6.31	10263	6.89	34707	9.32
ZZZZZZ	23562	6.32	11388	6.91	37661	9.35
ZZZZZZ	21316	6.31	10423	6.91	34647	9.36
ZZZZZZ	22049	6.32	11037	6.91	36425	9.36
ZZZZZZ	21721	6.32	10743	6.91	35042	9.35
ZZZZZZ	22272	6.32	11435	6.91	33787	9.36

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ290-ICC290 Q9075.D 12/19/14 15:26. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ290-CC290	**Injection Date:**	12/19/14
Lab File ID:	Q9091.D	**Injection Time:**	20:43
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	22591	6.32	12205	6.91	38590	9.37
Check Std [b]	25363	6.32	13813	6.91	40517	9.36
Upper Limit [c]	33887	7.32	18308	7.91	57885	10.36
Lower Limit [d]	11296	5.32	6103	5.91	19295	8.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
ZZZZZZ	22599	6.32	11419	6.91	37459	9.36
FA20501-2	23500	6.31	11892	6.91	35929	9.36
FA20501-3	21454	6.31	10627	6.91	36445	9.36
OP54279-MS	21352	6.31	10540	6.89	36770	9.37
OP54279-MSD	20589	6.31	10054	6.89	34727	9.36
FA20501-4	17595	6.30	8181	6.89	35938	9.36
FA20501-5	24685	6.31	12418	6.91	37551	9.37
FA20501-8	23922	6.32	12378	6.91	35460	9.37

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ290-ICC290 Q9075.D 12/19/14 15:26. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ291-CC290	**Injection Date:**	12/21/14
Lab File ID:	Q9126.D	**Injection Time:**	11:14
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	22591	6.32	12205	6.91	38590	9.37
Check Std [b]	21354	6.30	11925	6.89	36256	9.31
Upper Limit [c]	33887	7.30	18308	7.89	57885	10.31
Lower Limit [d]	11296	5.30	6103	5.89	19295	8.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20501-1	24054	6.31	12470	6.89	36914	9.31
ZZZZZZ	23156	6.31	12135	6.89	37229	9.32
ZZZZZZ	24424	6.31	12793	6.89	38928	9.31
ZZZZZZ	23757	6.31	12420	6.89	37923	9.32
ZZZZZZ	23416	6.31	12252	6.89	37260	9.32
ZZZZZZ	22589	6.31	11883	6.89	36299	9.32
ZZZZZZ	23271	6.31	12472	6.89	37652	9.32
SQ291-ECC290	21642	6.31	11943	6.89	35845	9.32

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ290-ICC290 Q9075.D 12/19/14 15:26. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Surrogate Recovery Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Method: EPA 537 MOD **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA20501-1	Q9129.D	103	90
FA20501-2	Q9095.D	111	117
FA20501-3	Q9096.D	119	114
FA20501-4	Q9099.D	124	124
FA20501-5	Q9100.D	110	113
FA20501-6	Q9048.D	121	104
FA20501-7	Q9049.D	119	98
FA20501-8	Q9101.D	111	101
OP54254-BS	Q9038.D	126	99
OP54254-MB	Q9039.D	116	94
OP54254-MS	Q9043.D	119	100
OP54254-MSD	Q9044.D	109	90
OP54279-BS	Q9083.D	121	112
OP54279-MB	Q9084.D	114	108
OP54279-MS	Q9097.D	123	126
OP54279-MSD	Q9098.D	126	127

Surrogate Compounds	Recovery Limits
S1 = 13C2-PFHxA	70-130%
S2 = 13C2-PFDA	70-130%

Initial Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ280-ICC280
Lab FileID: Q8637.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1208_PFC_SQ280\SQ280.batch.bin

Level ID	Calibration File
1	D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
2	D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
3	D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
4	D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
5	D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
6	D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
7	D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
2) 13C2-PFDoDA	----------------ISTD--------------									
8) PFDA	0.3251	0.3361	0.3301	0.3289	0.3141	0.3053	0.2930	0.3189	4.857	0.9957
9) PFDoDA	0.4603	0.4426	0.4354	0.4603	0.4457	0.4431	0.4509	0.4483	2.093	0.9996
10) PFDS	0.0868	0.0867	0.0857	0.0888	0.0868	0.0862	0.0875	0.0869	1.134	0.9998
19) PFTeDA	0.3909	0.3106	0.2911	0.3109	0.2973	0.3053	0.3113	0.3168	10.599	0.9989
20) PFTrDA	0.4850	0.4312	0.4171	0.4406	0.4255	0.4322	0.4411	0.4390	5.002	0.9994
21) PFUnDA	0.4351	0.4414	0.4386	0.4455	0.4384	0.4272	0.4319	0.4369	1.391	0.9996
4) 13C2-PFOA	----------------ISTD--------------									
1) 13C2-PFDA	0.8288	0.8369	0.8377	0.8875	0.8437	0.8530	0.8521	0.8485	2.265	0.9996
3) 13C2-PFHxA	0.3411	0.3338	0.3260	0.3465	0.3310	0.3220	0.3296	0.3329	2.554	0.9990
6) PFBA	0.2261	0.2312	0.2239	0.2482	0.2386	0.2408	0.2394	0.2355	3.703	0.9995
11) PFHpA	0.3470	0.3502	0.3434	0.3534	0.3361	0.3309	0.3337	0.3421	2.534	0.9992
13) PFHxA	0.3613	0.3553	0.3484	0.3632	0.3463	0.3400	0.3453	0.3514	2.486	0.9992
15) PFNA	0.6051	0.5868	0.5897	0.6312	0.5972	0.6050	0.5986	0.6020	2.434	0.9994
16) PFOA	1.0720	1.0447	0.9968	1.0544	1.0038	1.0085	1.0131	1.0276	2.829	0.9996
18) PFPeA	0.1184	0.1173	0.1165	0.1235	0.1191	0.1206	0.1194	0.1193	1.935	0.9997
5) 13C4-PFOS	----------------ISTD--------------									
7) PFBS	0.2927	0.3054	0.2863	0.3113	0.2949	0.2976	0.2921	0.2972	2.876	0.9991
12) PFHpS	0.5828	0.6032	0.5878	0.6236	0.5903	0.5813	0.5963	0.5950	2.472	0.9991
14) PFHxS	0.4562	0.4748	0.4703	0.4963	0.4710	0.4559	0.4845	0.4727	3.072	0.9977
17) PFOS	1.0080	1.0181	0.9947	1.0553	0.9978	0.9835	1.0032	1.0087	2.305	0.9991

----

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ280-ICV280
Lab FileID: Q8641.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1208_PFC_SQ280\SQ280.batch.bin

```
  Level ID:Calibration File
         1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
         2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
         3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
         4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
         5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
         6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
         7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d
```

Data File: Q8641
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	0.000		
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	0.000		
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	21.132	5.7	105.7
PFBS	20.000	22.749	13.7	113.7
PFDA	20.000	23.915	19.6	119.6
PFDoDA	20.000	24.075	20.4	120.4
PFDS	20.000	23.692	18.5	118.5
PFHpA	20.000	20.775	3.9	103.9
PFHpS	20.000	0.000		
PFHxA	20.000	21.363	6.8	106.8
PFHxS	20.000	21.395	7.0	107.0
PFNA	20.000	19.475	-2.6	97.4
PFOA	20.000	20.861	4.3	104.3
PFOS	20.000	21.021	5.1	105.1
PFPeA	20.000	20.786	3.9	103.9
PFTeDA	20.000	27.964	# 39.8	139.8
PFTrDA	20.000	26.260	# 31.3	131.3
PFUnDA	20.000	22.320	11.6	111.6

CC Criteria: +/- 25%

Initial Calibration Verification

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ280-ICV280
Lab FileID: Q8642.D

```
                    Continuing Calibration Report

Batch: D:\MassHunter\Data\1208_PFC_SQ280\SQ280.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
         2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
         3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
         4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
         5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
         6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
         7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d


Data File: Q8642
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	0.000		
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	0.000		
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	0.000		
PFBS	20.000	23.312	16.6	116.6
PFDA	20.000	0.000		
PFDoDA	20.000	0.000		
PFDS	20.000	0.000		
PFHpA	20.000	18.151	-9.2	90.8
PFHpS	20.000	0.000		
PFHxA	20.000	0.000		
PFHxS	20.000	22.032	10.2	110.2
PFNA	20.000	19.117	-4.4	95.6
PFOA	20.000	18.958	-5.2	94.8
PFOS	20.000	19.895	-0.5	99.5
PFPeA	20.000	0.000		
PFTeDA	20.000	0.000		
PFTrDA	20.000	0.000		
PFUnDA	20.000	0.000		

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample: SQ289-CC280
Lab FileID: Q9037.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1218_PFC_SQ289\SQ289.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
         2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
         3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
         4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
         5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
         6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
         7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d


Data File: Q9037
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	15.019	-24.9	75.1
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.166	-4.2	95.8
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	22.780	13.9	113.9
PFBS	20.000	20.186	0.9	100.9
PFDA	20.000	23.516	17.6	117.6
PFDoDA	20.000	19.780	-1.1	98.9
PFDS	20.000	33.765	# 68.8	168.8
PFHpA	20.000	18.902	-5.5	94.5
PFHpS	20.000	21.055	5.3	105.3
PFHxA	20.000	19.710	-1.4	98.6
PFHxS	20.000	20.779	3.9	103.9
PFNA	20.000	14.691	# -26.5	73.5
PFOA	20.000	20.325	1.6	101.6
PFOS	20.000	20.037	0.2	100.2
PFPeA	20.000	20.725	3.6	103.6
PFTeDA	20.000	16.873	-15.6	84.4
PFTrDA	20.000	18.663	-6.7	93.3
PFUnDA	20.000	21.292	6.5	106.5

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ289-CC280
Lab FileID: Q9046.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1218_PFC_SQ289\SQ289.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
         2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
         3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
         4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
         5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
         6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
         7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d


Data File: Q9046
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	15.947	-20.3	79.7
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	18.442	-7.8	92.2
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	22.099	10.5	110.5
PFBS	20.000	19.800	-1.0	99.0
PFDA	20.000	25.219	# 26.1	126.1
PFDoDA	20.000	19.942	-0.3	99.7
PFDS	20.000	33.988	# 69.9	169.9
PFHpA	20.000	18.918	-5.4	94.6
PFHpS	20.000	20.430	2.2	102.2
PFHxA	20.000	19.204	-4.0	96.0
PFHxS	20.000	21.018	5.1	105.1
PFNA	20.000	15.249	-23.8	76.2
PFOA	20.000	19.902	-0.5	99.5
PFOS	20.000	19.901	-0.5	99.5
PFPeA	20.000	20.065	0.3	100.3
PFTeDA	20.000	17.105	-14.5	85.5
PFTrDA	20.000	19.005	-5.0	95.0
PFUnDA	20.000	22.110	10.5	110.5

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ289-ECC280
Lab FileID: Q9056.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1218_PFC_SQ289\SQ289.batch.bin

```
  Level ID:Calibration File
         1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
         2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
         3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
         4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
         5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
         6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
         7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d
```

Data File: Q9056
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	16.462	-17.7	82.3
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	18.610	-6.9	93.1
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	22.327	11.6	111.6
PFBS	20.000	19.963	-0.2	99.8
PFDA	20.000	25.775	# 28.9	128.9
PFDoDA	20.000	20.083	0.4	100.4
PFDS	20.000	33.688	# 68.4	168.4
PFHpA	20.000	19.258	-3.7	96.3
PFHpS	20.000	20.668	3.3	103.3
PFHxA	20.000	19.088	-4.6	95.4
PFHxS	20.000	21.405	7.0	107.0
PFNA	20.000	15.652	-21.7	78.3
PFOA	20.000	20.116	0.6	100.6
PFOS	20.000	19.880	-0.6	99.4
PFPeA	20.000	20.172	0.9	100.9
PFTeDA	20.000	16.979	-15.1	84.9
PFTrDA	20.000	19.189	-4.1	95.9
PFUnDA	20.000	22.088	10.4	110.4

CC Criteria: +/- 25%

Initial Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-ICC290
Lab FileID: Q9075.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin

Level ID	Calibration File
1	D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
2	D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
3	D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
4	D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
5	D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
6	D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
7	D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
2) 13C2-PFDoDA	----------------ISTD--------------									
8) PFDA	0.4317	0.3837	0.3778	0.3634	0.3835	0.3522	0.3388	0.3759	7.926	0.9935
9) PFDoDA	0.5151	0.4428	0.4494	0.4352	0.4801	0.4480	0.4423	0.4590	6.237	0.9973
10) PFDS	0.1730	0.1526	0.1518	0.1495	0.1624	0.1506	0.1494	0.1556	5.709	0.9973
19) PFTeDA	0.4038	0.2765	0.2715	0.2641	0.2930	0.2781	0.2831	0.2958	16.401	0.9977
20) PFTrDA	0.5171	0.4138	0.4138	0.4054	0.4456	0.4194	0.4192	0.4335	8.989	0.9980
21) PFUnDA	0.5603	0.4934	0.5008	0.4845	0.5226	0.4854	0.4791	0.5037	5.722	0.9971
4) 13C2-PFOA	----------------ISTD--------------									
1) 13C2-PFDA	0.7556	0.6547	0.6654	0.6480	0.7179	0.6554	0.6452	0.6775	6.261	0.9956
3) 13C2-PFHxA	0.3374	0.2955	0.2988	0.2968	0.3328	0.3033	0.3013	0.3094	5.743	0.9959
6) PFBA	0.2919	0.2573	0.2563	0.2671	0.2982	0.2846	0.2767	0.2760	5.985	0.9970
11) PFHpA	0.3646	0.3123	0.3142	0.3039	0.3375	0.3115	0.3057	0.3214	6.852	0.9962
13) PFHxA	0.3545	0.3104	0.3016	0.3128	0.3456	0.3206	0.3119	0.3225	6.130	0.9960
15) PFNA	0.4972	0.4337	0.4440	0.4319	0.4979	0.4557	0.4530	0.4591	6.039	0.9957
16) PFOA	1.1966	1.0065	1.0205	0.9837	1.1049	1.0032	1.0056	1.0459	7.375	0.9960
18) PFPeA	0.1332	0.1196	0.1131	0.1169	0.1354	0.1248	0.1270	0.1243	6.674	0.9960
5) 13C4-PFOS	----------------ISTD--------------									
7) PFBS	0.3758	0.3218	0.3218	0.3191	0.3656	0.3299	0.3415	0.3393	6.739	0.9958
12) PFHpS	0.7133	0.6200	0.6177	0.5975	0.6842	0.6093	0.6135	0.6365	6.905	0.9945
14) PFHxS	0.5722	0.4896	0.5059	0.4911	0.5436	0.4913	0.5007	0.5135	6.231	0.9964
17) PFOS	1.1274	0.9716	0.9804	0.9617	1.0819	0.9738	0.9846	1.0116	6.451	0.9957

*(value) - Average RF below (value)

6.6.7

6

Initial Calibration Verification

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-ICV290
Lab FileID: Q9079.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d


Data File: Q9079
Type     : QC
Level    : 4

 Cpnd Name                      Exp. Conc  Final Conc    Dev %      Area %
============================== ========== ========== ========== ==========

13C2-PFDA                          20.000
13C2-PFDoDA                           ---    --ISTD--
13C2-PFHxA                         20.000
13C2-PFOA                             ---    --ISTD--
13C4-PFOS                             ---    --ISTD--
PFBA                               20.000      18.654       -6.7       93.3
PFBS                               20.000      19.239       -3.8       96.2
PFDA                               20.000      21.280        6.4      106.4
PFDoDA                             20.000      21.005        5.0      105.0
PFDS                               20.000      21.077        5.4      105.4
PFHpA                              20.000      19.551       -2.2       97.8
PFHpS                              20.000
PFHxA                              20.000      19.418       -2.9       97.1
PFHxS                              20.000      19.648       -1.8       98.2
PFNA                               20.000      18.969       -5.2       94.8
PFOA                               20.000      19.625       -1.9       98.1
PFOS                               20.000      19.663       -1.7       98.3
PFPeA                              20.000      18.884       -5.6       94.4
PFTeDA                             20.000      22.900       14.5      114.5
PFTrDA                             20.000      21.885        9.4      109.4
PFUnDA                             20.000      20.938        4.7      104.7

CC Criteria: +/- 25%
```

Initial Calibration Verification

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-ICV290
Lab FileID: Q9080.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d


Data File: Q9080
Type     : QC
Level    : 4

 Cpnd Name                      Exp. Conc  Final Conc    Dev %      Area %
============================== ========== ========== ========== ==========

13C2-PFDA                          20.000
13C2-PFDoDA                           ---    --ISTD--
13C2-PFHxA                         20.000
13C2-PFOA                             ---    --ISTD--
13C4-PFOS                             ---    --ISTD--
PFBA                               20.000
PFBS                               20.000      22.037       10.2      110.2
PFDA                               20.000
PFDoDA                             20.000
PFDS                               20.000
PFHpA                              20.000      17.819      -10.9       89.1
PFHpS                              20.000
PFHxA                              20.000
PFHxS                              20.000      21.599        8.0      108.0
PFNA                               20.000      19.803       -1.0       99.0
PFOA                               20.000      18.700       -6.5       93.5
PFOS                               20.000      19.055       -4.7       95.3
PFPeA                              20.000
PFTeDA                             20.000
PFTrDA                             20.000
PFUnDA                             20.000

CC Criteria: +/- 25%
```

6.6.9

6

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-CC290
Lab FileID: Q9091.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d

Data File: Q9091
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	19.062	-4.7	95.3
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	18.798	-6.0	94.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	18.492	-7.5	92.5
PFBS	20.000	18.588	-7.1	92.9
PFDA	20.000	21.175	5.9	105.9
PFDoDA	20.000	19.498	-2.5	97.5
PFDS	20.000	20.916	4.6	104.6
PFHpA	20.000	19.600	-2.0	98.0
PFHpS	20.000	19.487	-2.6	97.4
PFHxA	20.000	18.826	-5.9	94.1
PFHxS	20.000	19.643	-1.8	98.2
PFNA	20.000	18.827	-5.9	94.1
PFOA	20.000	19.431	-2.8	97.2
PFOS	20.000	19.640	-1.8	98.2
PFPeA	20.000	18.518	-7.4	92.6
PFTeDA	20.000	17.567	-12.2	87.8
PFTrDA	20.000	18.790	-6.0	94.0
PFUnDA	20.000	19.588	-2.1	97.9

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-CC290
Lab FileID: Q9102.D

```
                    Continuing Calibration Report

Batch: D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d


Data File: Q9102
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	19.346	-3.3	96.7
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.280	-3.6	96.4
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	18.894	-5.5	94.5
PFBS	20.000	19.273	-3.6	96.4
PFDA	20.000	21.277	6.4	106.4
PFDoDA	20.000	19.627	-1.9	98.1
PFDS	20.000	21.013	5.1	105.1
PFHpA	20.000	19.551	-2.2	97.8
PFHpS	20.000	19.136	-4.3	95.7
PFHxA	20.000	19.138	-4.3	95.7
PFHxS	20.000	19.702	-1.5	98.5
PFNA	20.000	19.161	-4.2	95.8
PFOA	20.000	19.349	-3.3	96.7
PFOS	20.000	19.499	-2.5	97.5
PFPeA	20.000	18.851	-5.7	94.3
PFTeDA	20.000	16.518	-17.4	82.6
PFTrDA	20.000	17.726	-11.4	88.6
PFUnDA	20.000	21.053	5.3	105.3

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ291-CC290
Lab FileID: Q9126.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1221_PFC_SQ291\SQ291.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d


Data File: Q9126
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	19.843	-0.8	99.2
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.453	-2.7	97.3
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	19.568	-2.2	97.8
PFBS	20.000	19.589	-2.1	97.9
PFDA	20.000	20.746	3.7	103.7
PFDoDA	20.000	20.475	2.4	102.4
PFDS	20.000	21.707	8.5	108.5
PFHpA	20.000	19.156	-4.2	95.8
PFHpS	20.000	19.951	-0.2	99.8
PFHxA	20.000	19.317	-3.4	96.6
PFHxS	20.000	20.003	0.0	100.0
PFNA	20.000	20.163	0.8	100.8
PFOA	20.000	20.058	0.3	100.3
PFOS	20.000	20.180	0.9	100.9
PFPeA	20.000	20.131	0.7	100.7
PFTeDA	20.000	19.578	-2.1	97.9
PFTrDA	20.000	20.255	1.3	101.3
PFUnDA	20.000	19.307	-3.5	96.5

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample: SQ291-ECC290
Lab FileID: Q9136.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1221_PFC_SQ291\SQ291.batch.bin

```
  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d
```

Data File: Q9136
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	19.707	-1.5	98.5
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	18.996	-5.0	95.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	18.202	-9.0	91.0
PFBS	20.000	18.722	-6.4	93.6
PFDA	20.000	21.104	5.5	105.5
PFDoDA	20.000	19.794	-1.0	99.0
PFDS	20.000	20.968	4.8	104.8
PFHpA	20.000	19.527	-2.4	97.6
PFHpS	20.000	20.181	0.9	100.9
PFHxA	20.000	19.160	-4.2	95.8
PFHxS	20.000	19.920	-0.4	99.6
PFNA	20.000	20.276	1.4	101.4
PFOA	20.000	19.688	-1.6	98.4
PFOS	20.000	20.138	0.7	100.7
PFPeA	20.000	18.705	-6.5	93.5
PFTeDA	20.000	17.807	-11.0	89.0
PFTrDA	20.000	18.910	-5.4	94.6
PFUnDA	20.000	19.154	-4.2	95.8

CC Criteria: +/- 25%

ANALYTICAL DATA PACKAGE
SDG # 1412121

PROJECT NAME: NSN CTO-WE79
PROJECT LOCATION: NORFOLK, VA
CONTRACT #: N62470-11-D-8012

<u>SUBMITTAL TO:</u>
Juliana Dean
CH2M HILL
5701 Cleveland St, Suite 200
Virginia Beach, VA 23462

<u>SUBMITTAL BY:</u>
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

<u>LABORATORY CONTACT PERSON:</u>
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 9, 2015
Report Revision #: 01
Revision Date: January 21, 2015
Total # of Pages: 382

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

Sample Delivery Group Case Narrative

Receipt Information:

The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. Samples were subcontracted to Accutest Laboratories for Extractables by GCMS by Method EPA 537 Mod.

Changes to the Revision:

Revision 01: The package was revised to report the samples with DL/LOD/LOQ instead of MDL/MRL.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

Empirical Laboratories, LLC
Certifications/Approvals
(Revised 12/23/2014)

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-14-10
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

Sample Receipt Confirmation

Empirical Labs

Job No: FA20501

NSN Site 20 LTM
Project No: 470612.LT.FI.20

Sample Number	Collected Date	Time	By	Received	TA	Matrix Code	Type	Client Sample ID
FA20501-1	12/05/14	09:45	GB	12/06/14	14	AQ	Ground Water	NBS20-MW10-1214
FA20501-2	12/05/14	14:35	GB	12/06/14	14	AQ	Ground Water	NBS20-MW101-1214
FA20501-3	12/05/14	13:10	GB	12/06/14	14	AQ	Ground Water	NBS20-SW01-1214
FA20501-4	12/05/14	12:15	GB	12/06/14	14	AQ	Ground Water	NBS20-MW21-1214
FA20501-5	12/05/14	10:55	GB	12/06/14	14	AQ	Ground Water	NBS20-MW59-1214
FA20501-6	12/02/14	14:45	GB	12/06/14	14	AQ	Equipment Blank	NBS20-EB120214
FA20501-7	12/03/14	12:00	GB	12/06/14	14	AQ	Equipment Blank	NBS20-EB120314
FA20501-8	12/04/14	17:00	GB	12/06/14	14	AQ	Equipment Blank	NBS20-EB120414
FA20501-3D	12/05/14	13:10	GB	12/06/14	14	AQ	Water Dup/MSD	NBS20-SW01-1214
FA20501-3S	12/05/14	13:10	GB	12/06/14	14	AQ	Water Matrix Spike	NBS20-SW01-1214

Tests: LC537UCMR3

Tests are displayed after the samples to which they apply.

ACCUTEST LABORATORIES

Accutest Laboratories Southeast
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20501 PAGE____OF____

Accutest Quote # | SKIFF#

Client / Reporting Information	Project Information
Company Name CH2M Hill	Project Name: NSN Site 20 WE79
Address 5701 Cleveland St	Street
City VA Beach State VA Zip 23462	City State
Project Contact Juliana Dean E-mail	Project #
Phone# 757-671-6335	Fax #
Sampler(s) Name(s) (Printed) Gwen Buckley	Client Purchase Order #

Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL - Sludge, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe

Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	PFC	LAB USE ONLY
1	NBS20-MW-10-1214	12/5	0945		GW	2										X	
2	-MW-101-1214		1435													X	
3	-SW-1-1214-		1310													X	
	-SW-1-1214-MS		1310													X	
	-SW-1-1214-SD		1310													X	
4	-MW21-1214		1215													X	
5	-MW59-1214		1055													X	
6	-EBØ20214	12/2	1445													X	
7	-EB120314	12/3	1200													X	
8	-EB120414	12/4	1700													X	

TURNAROUND TIME (Business Days) — Approved By: / Rush Code

- [ ] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 [signature]	12/5 1900	2 FO	3 FO 12-06-14	11:45	4 [signature]
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.4

1412121

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20501 CLIENT: CH2M Hill PROJECT: NSW Site 20

DATE/TIME RECEIVED: 12-06-14 11:45 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 772117865896

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR +0.4
- ☐ OBSERVED TEMPS: 2.0
- ☐ CORRECTED TEMPS: 2.4

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☑ TRIP BLANK NOT PROVIDED
- ☑ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM ____ 5-GRAM ____

NUMBER OF 5035 FIELD KITS ? ____

NUMBER OF LAB FILTERED METALS ? ____

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE RWill 12-07-14 REVIEWER SIGNATURE/DATE Jez 12-7-14

NF 10/14

receipt confirmation 102914.xls

From: (804) 615-9461
Troy Horn

5701 Cleveland St
Ste 200
VIRGINIA BEACH, VA 23462

Origin ID: NTUA

FedEx Express

E

J142214092303uv

Ship Date: 05DEC14
ActWgt: 50.0 LB
CAD: 104174249/INET3550

Delivery Address Bar Code

SHIP TO: (407) 425-6700 BILL THIRD PARTY

Muna Mohammed
Accutest Laboratories
4405 Vineland Rd

ORLANDO, FL 32811

Ref # 470612.lt.fi.20
Invoice #
PO #
Dept #

RELEASE#: 3785346

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 7721 1786 5896
0201

X0 TIXA

32811
FL-US
MCO

522G2/DC75/8AC9

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

WORK ORDER

1412121

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**NSN CTO-WE79**	**Project Number:**	**CH2_NSN_WE79**

Report To:
CH2M Hill, Inc.
Juliana Dean
5701 Cleveland Street, Suite 200
Virginia Beach, VA 23462
Phone: (757) 671-6232
Fax: (303) 771-0952

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Due to Client: 01/08/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Sonya Gordon   Date Received: 12/06/2014 11:45
Logged In By: Sonya Gordon   Date Logged In: 12/10/2014 17:54

Samples Received at: **2.4°C**

Custody Seals	No	Received On Ice	No
Containers Intact	No		
COC/Labels Agree	No		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
Accutest Laboratories (SUB)					
1412121-01 NBS20-MW10-1214 [Water] Sampled 12/05/2014 09:45 Eastern 'Client Sample'					
SUB_SPECIAL	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 08:45	Select PFC
1412121-02 NBS20-MW101-1214 [Water] Sampled 12/05/2014 14:35 Eastern 'Client Sample'					
SUB_SPECIAL	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 13:35	Select PFC
1412121-03 NBS20-SW01-1214 [Water] Sampled 12/05/2014 13:10 Eastern 'Client Sample'					MS/MSD
SUB_SPECIAL	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 12:10	Select PFC
1412121-04 NBS20-MW21-1214 [Water] Sampled 12/05/2014 12:15 Eastern 'Client Sample'					
SUB_SPECIAL	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 11:15	Select PFC
1412121-05 NBS20-MW59-1214 [Water] Sampled 12/05/2014 10:55 Eastern 'Client Sample'					
SUB_SPECIAL	SUB_SPECIALTY	12/31/2014 14:00	20	06/03/2015 09:55	Select PFC
1412121-06 NBS20-EB120214 [Water] Sampled 12/02/2014 14:45 Eastern 'Equipment Blank'					
SUB_SPECIAL	SUB_SPECIALTY	12/31/2014 14:00	20	05/31/2015 13:45	Select PFC

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**NSN CTO-WE79**	**Project Number:**	**CH2_NSN_WE79**

Method	Test Code	Due	TAT	Expires	Comments
Accutest Laboratories (SUB)					
1412121-07 NBS20-EB120314 [Water] Sampled 12/03/2014 12:00 Eastern 'Equipment Blank'					
SUB_SPECIAL	SUB_SPECIALTY	12/31/2014 14:00	20	06/01/2015 11:00	Select PFC
1412121-08 NBS20-EB120414 [Water] Sampled 12/04/2014 17:00 Eastern 'Equipment Blank'					
SUB_SPECIAL	SUB_SPECIALTY	12/31/2014 14:00	20	06/02/2015 16:00	Select PFC

Reviewed By

Date

SUBCONTRACT ORDER

Empirical Laboratories, LLC

1412121

SENDING LABORATORY:	**RECEIVING LABORATORY:**
Empirical Laboratories, LLC	Accutest Laboratories (SUB)
621 Mainstream Drive, Suite 270	4405 Vineland Rd
Nashville, TN 37228	Orlando, FL 32811
Phone: 615.345.1115	Phone :(407) 425-6700
Fax: 866.417.0548	Fax: (407) 425-0707
Project Manager: Sonya Gordon	

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: NBS20-MW10-1214				
Reference No: 1412121-01	**Water**	**Sampled:12/05/2014 09:45**		
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 08:45		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW101-1214				
Reference No: 1412121-02	**Water**	**Sampled:12/05/2014 14:35**		
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 13:35		Select PFC
Containers Supplied:				
Sample ID: NBS20-SW01-1214				
Reference No: 1412121-03	**Water**	**Sampled:12/05/2014 13:10**		**MS/MSD**
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 12:10		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW21-1214				
Reference No: 1412121-04	**Water**	**Sampled:12/05/2014 12:15**		
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 11:15		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW59-1214				
Reference No: 1412121-05	**Water**	**Sampled:12/05/2014 10:55**		
SUB_SPECIALTY	12/31/2014 14:00	06/03/2015 09:55		Select PFC
Containers Supplied:				
Sample ID: NBS20-EB120214				
Reference No: 1412121-06	**Water**	**Sampled:12/02/2014 14:45**		
SUB_SPECIALTY	12/31/2014 14:00	05/31/2015 13:45		Select PFC
Containers Supplied:				

Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Empirical Laboratories, LLC

1412121

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: NBS20-EB120314				
Reference No: 1412121-07	**Water**	**Sampled:12/03/2014 12:00**		
SUB_SPECIALTY	12/31/2014 14:00	06/01/2015 11:00		Select PFC
Containers Supplied:				
Sample ID: NBS20-EB120414				
Reference No: 1412121-08	**Water**	**Sampled:12/04/2014 17:00**		
SUB_SPECIALTY	12/31/2014 14:00	06/02/2015 16:00		Select PFC
Containers Supplied:				

Released By	Date	Received By	Date
Released By	Date	Received By	Date

Sample Delivery Group Assignment Form

CLIENT: CH2M Hill, Inc.
PROJECT NAME: NSN CTO-WE79
SDG #: 1412121

QC LEVEL: Level IV
Report Due: 1/8/2015
Client Sample Count: 5

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	SUB_SPECIALTY
Client Sample	12/5/2014	12/6/2014	1412121-01	NBS20-MW10-1214	Water	X
Client Sample	12/5/2014	12/6/2014	1412121-02	NBS20-MW101-1214	Water	X
Client Sample	12/5/2014	12/6/2014	1412121-03	NBS20-SW01-1214	Water	MS/MSD
Client Sample	12/5/2014	12/6/2014	1412121-04	NBS20-MW21-1214	Water	X
Client Sample	12/5/2014	12/6/2014	1412121-05	NBS20-MW59-1214	Water	X
Equipment Blank	12/2/2014	12/6/2014	1412121-06	NBS20-EB120214	Water	X
Equipment Blank	12/3/2014	12/6/2014	1412121-07	NBS20-EB120314	Water	X
Equipment Blank	12/4/2014	12/6/2014	1412121-08	NBS20-EB120414	Water	X

Subcontractor Data Package

Southeast ACCUTEST LABORATORIES

Reissue #1
01/16/15

Technical Report for

Empirical Labs

NSN Site 20 LTM

470612.LT.FI.20

Accutest Job Number: FA20501

Sampling Dates: 12/02/14 - 12/05/14

Report to:

Empirical Labs
621 Mainstream Dr
Suite 270
Nashville, TN 37228

ATTN: DON'T USE CAROLINA EMAIL NO LONGER VALID

Total number of pages in report: **367**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

Test results relate only to samples analyzed.

January 16, 2015

Ms. Sonya Gordon
Empirical Laboratories, LLC
621 Mainstream Dr
Suite 270
Nashville, TN 37228

RE: Accutest job FA20501 Reissue

Dear Ms. Gordon,

The final report for job number FA20501 has been edited to reflect requested corrections. These edits have been incorporated into the revised report.

Data has been reported to LOQ/LOD.

Please feel free to contact us if we can be of further assistance.

Sincerely,

Accutest Laboratories, SE

Florida ♦ 4405 Vineland Road ♦ Suite C-15 ♦ Orlando, FL 32811 ♦ tel: 407 425-6700 ♦ fax: 407 425-0707 ♦ htpp:/www.accutest.com

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Sample Summary

Empirical Labs

Job No: FA20501

NSN Site 20 LTM
Project No: 470612.LT.FI.20

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA20501-1	12/05/14	09:45 GB	12/06/14	AQ	Ground Water	NBS20-MW10-1214
FA20501-2	12/05/14	14:35 GB	12/06/14	AQ	Ground Water	NBS20-MW101-1214
FA20501-3	12/05/14	13:10 GB	12/06/14	AQ	Ground Water	NBS20-SW01-1214
FA20501-3D	12/05/14	13:10 GB	12/06/14	AQ	Water Dup/MSD	NBS20-SW01-1214
FA20501-3S	12/05/14	13:10 GB	12/06/14	AQ	Water Matrix Spike	NBS20-SW01-1214
FA20501-4	12/05/14	12:15 GB	12/06/14	AQ	Ground Water	NBS20-MW21-1214
FA20501-5	12/05/14	10:55 GB	12/06/14	AQ	Ground Water	NBS20-MW59-1214
FA20501-6	12/02/14	14:45 GB	12/06/14	AQ	Equipment Blank	NBS20-EB120214
FA20501-7	12/03/14	12:00 GB	12/06/14	AQ	Equipment Blank	NBS20-EB120314
FA20501-8	12/04/14	17:00 GB	12/06/14	AQ	Equipment Blank	NBS20-EB120414

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Empirical Labs **Job No:** FA20501

Site: NSN Site 20 LTM **Report Date:** 12/22/2014 4:26:50

8 Sample(s) were collected on/between 12/02/2014 and 12/05/2014 and were received at Accutest SE on 12/06/2014 properly preserved, at 2.4 Deg. C and intact. These Samples received an Accutest job number of FA20501. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method EPA 537 MOD

Matrix: AQ **Batch ID:** OP54254

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20443-3MS, FA20443-3MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** OP54279

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA20501-3MS, FA20501-3MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for Perfluorohexanesulfonic acid are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

______________________________________ Date: December 22, 2014

Kim Benham, Client Services (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
FA20501-1	MSSEMI	Q9129.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20501-2	MSSEMI	Q9095.D	Perfluorooctanesulfonic acid
FA20501-3	MSSEMI	Q9096.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA20501-4	MSSEMI	Q9099.D	Perfluorooctanesulfonic acid
OP54254-BS	MSSEMI	Q9038.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
OP54254-MS	MSSEMI	Q9043.D	Perfluorohexanesulfonic acid, Perfluorohexanoic acid, Perfluorooctanesulfonic acid
OP54254-MSD	MSSEMI	Q9044.D	Perfluorohexanesulfonic acid, Perfluorohexanoic acid, Perfluorooctanesulfonic acid
OP54279-BS	MSSEMI	Q9083.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
OP54279-MS	MSSEMI	Q9097.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
OP54279-MSD	MSSEMI	Q9098.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ280-ICV280	MSSEMI	Q8642.D	Perfluorodecanesulfonic acid, Perfluorododecanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid, Perfluoroundecanoic acid
SQ289-CC280	MSSEMI	Q9037.D	13C2-PFDA
SQ290-IC290	MSSEMI	Q9072.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9073.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9074.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9076.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9077.D	Perfluorotetradecanoic acid
SQ290-IC290	MSSEMI	Q9078.D	Perfluorotetradecanoic acid
SQ290-ICC290	MSSEMI	Q9075.D	Perfluorotetradecanoic acid
SQ290-ICV290	MSSEMI	Q9080.D	Perfluorododecanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid

20 Manual Integrations were found for FA20501

Summary of Hits

Job Number: FA20501
Account: Empirical Labs
Project: NSN Site 20 LTM
Collected: 12/02/14 thru 12/05/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20501-1	**NBS20-MW10-1214**					
Perfluorohexanesulfonic acid		0.0109 J	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0126 J	0.021	0.017	ug/l	EPA 537 MOD
FA20501-2	**NBS20-MW101-1214**					
Perfluorooctanesulfonic acid		0.00830 J	0.020	0.016	ug/l	EPA 537 MOD
FA20501-3	**NBS20-SW01-1214**					
Perfluoroheptanoic acid		0.0269	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0300 J	0.042	0.033	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0202 J	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0988	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0393	0.021	0.017	ug/l	EPA 537 MOD
FA20501-4	**NBS20-MW21-1214**					
Perfluoroheptanoic acid		0.0146 J	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0411	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0510	0.021	0.017	ug/l	EPA 537 MOD

FA20501-5 **NBS20-MW59-1214**

No hits reported in this sample.

FA20501-6 **NBS20-EB120214**

No hits reported in this sample.

FA20501-7 **NBS20-EB120314**

No hits reported in this sample.

FA20501-8 **NBS20-EB120414**

No hits reported in this sample.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-MW10-1214		
Lab Sample ID:	FA20501-1	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9129.D	1	12/21/14	NAF	12/17/14	OP54279	SQ291
Run #2							

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.033 U	0.042	0.033	0.017	ug/l	
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.017 U	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0109	0.021	0.017	0.0083	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.0126	0.021	0.017	0.0083	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	103%		70-130%
	13C2-PFDA	90%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-MW101-1214		
Lab Sample ID:	FA20501-2	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9095.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.00830	0.020	0.016	0.0080	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	111%		70-130%
	13C2-PFDA	117%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-SW01-1214		
Lab Sample ID:	FA20501-3	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9096.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.0269	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.0300	0.042	0.033	0.017	ug/l	J
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0202	0.021	0.017	0.0083	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0988	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0393	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	119%		70-130%
	13C2-PFDA	114%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-MW21-1214		
Lab Sample ID:	FA20501-4	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9099.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.0146	0.021	0.017	0.0083	ug/l	J
335-67-1	Perfluorooctanoic acid	0.033 U	0.042	0.033	0.017	ug/l	
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.017 U	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0411	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0510	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	124%		70-130%
	13C2-PFDA	124%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-MW59-1214		
Lab Sample ID:	FA20501-5	**Date Sampled:**	12/05/14
Matrix:	AQ - Ground Water	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9100.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
	PERFLUOROALKYLCARBOXYLIC ACIDS						
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
	PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	110%		70-130%
	13C2-PFDA	113%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	NBS20-EB120214		
Lab Sample ID:	FA20501-6	**Date Sampled:**	12/02/14
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9048.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	121%		70-130%
	13C2-PFDA	104%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	NBS20-EB120314		
Lab Sample ID:	FA20501-7	**Date Sampled:**	12/03/14
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9049.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	119%		70-130%
	13C2-PFDA	98%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	NBS20-EB120414		
Lab Sample ID:	FA20501-8	**Date Sampled:**	12/04/14
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/14
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	NSN Site 20 LTM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9101.D	1	12/20/14	NAF	12/17/14	OP54279	SQ290
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.032 U	0.040	0.032	0.016	ug/l	
375-95-1	Perfluorononanoic acid	0.016 U	0.020	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.016 U	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	111%		70-130%
	13C2-PFDA	101%		70-130%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Southeast
ACCUTEST
LABORATORIES

5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST LABORATORIES

Accutest Laboratories Southeast
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20501 PAGE ___ OF ___

Accutest Quote # SKIFF#

Client / Reporting Information

Company Name CH2M Hill
Address 5701 Cleveland St
City VA Beach State VA Zip 23462
Project Contact Juliana Dean E-mail
Phone# 757-671-6335
Sampler(s) Name(s) (Printed) Gwen Buckley

Project Information

Project Name: NSN Site 20 WE79
Street
City State
Project #
Fax #
Client Purchase Order #

Analytical Information: PFC

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	Total # of Bottles	Other	None	HCl	HOPN	HNO3	H2SO4	NAOH+ZNAC	DI Water	MeOH	PFC	LAB USE ONLY
1	NBS20-MW-10-1214	12/5	0945		GW	2										X	
2	-MW-101-1214		1435													X	
3	-SW-1-1214-		1310													X	
	-SW-1-1214-MS		1310													X	
	-SW-1-1214-SD		1310													X	
4	-MW21-1214		1215													X	
5	-MW59-1214		1055													X	
6	-EB020214	12/2	1445													X	
7	-EB120314	12/3	1200													X	
8	-EB120414	12/4	1700													X	

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

TURNAROUND TIME (Business Days) Approved By: / Rush Code

- ☐ 10 Days Standard
- ☐ 7 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☐ OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 [signature]	12/5 1900	2 FO	3 FO 12-06-14	11:45	4 [signature]
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.4

5.1
5

FA20501: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20501 CLIENT: CH2M HILL PROJECT: NSW Site 20

DATE/TIME RECEIVED: 12-06-14 11:45 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 772117865896

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.0
- [ ] CORRECTED TEMPS: 2.4

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE [signature] 12-07-14 REVIEWER SIGNATURE/DATE [signature] 12-7-14

NF 10/14 receipt confirmation 102914.xls

FA20501: Chain of Custody
Page 2 of 3

From: (804) 615-9461
Troy Horn

5701 Cleveland St
Ste 200
VIRGINIA BEACH, VA 23462

Origin ID: NTUA

FedEx. Express

E

J14221409230300

Ship Date: 05DEC14
ActWgt: 50.0 LB
CAD: 104174249/INET3550

Delivery Address Bar Code

SHIP TO: (407) 425-6700 BILL THIRD PARTY
Muna Mohammed
Accutest Laboratories
4405 Vineland Rd

ORLANDO, FL 32811

Ref # 470612.lt.fi.20
Invoice #
PO #
Dept #

RELEASE#: 3785346

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0201 **7721 1786 5896**

X0 TIXA

32811
FL-US
MCO

522G2/DC75/6AC9

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54254-MB	Q9039.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-6, FA20501-7

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.020	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.040	0.016	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.020	0.0080	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.020	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.020	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.020	0.0080	ug/l	

CAS No.	Surrogate Recoveries		Limits
	13C2-PFHxA	116%	70-130%
	13C2-PFDA	94%	70-130%

Method Blank Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54279-MB	Q9084.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-1, FA20501-2, FA20501-3, FA20501-4, FA20501-5, FA20501-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.020	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.040	0.016	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.020	0.0080	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.020	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.020	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.020	0.0080	ug/l	

CAS No.	Surrogate Recoveries		Limits
	13C2-PFHxA	114%	70-130%
	13C2-PFDA	108%	70-130%

Blank Spike Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54254-BS	Q9038.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-6, FA20501-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-85-9	Perfluoroheptanoic acid	0.16	0.141	88	70-130
335-67-1	Perfluorooctanoic acid	0.16	0.155	97	70-130
375-95-1	Perfluorononanoic acid	0.16	0.124	78	70-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.177	111	70-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.183	114	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.159	99	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
	13C2-PFHxA	126%	70-130%
	13C2-PFDA	99%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54279-BS	Q9083.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-1, FA20501-2, FA20501-3, FA20501-4, FA20501-5, FA20501-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-85-9	Perfluoroheptanoic acid	0.16	0.149	93	70-130
335-67-1	Perfluorooctanoic acid	0.16	0.156	98	70-130
375-95-1	Perfluorononanoic acid	0.16	0.164	103	70-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.180	113	70-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.158	99	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.151	94	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
	13C2-PFHxA	121%	70-130%
	13C2-PFDA	112%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54254-MS	Q9043.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289
OP54254-MSD	Q9044.D	1	12/18/14	NAF	12/16/14	OP54254	SQ289
FA20443-3	Q9082.D	1	12/19/14	NAF	12/16/14	OP54254	SQ290

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-6, FA20501-7

CAS No.	Compound	FA20443-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-85-9	Perfluoroheptanoic acid	0.021	U	0.167	0.148	89	0.16	0.137	86	8	70-130/30
335-67-1	Perfluorooctanoic acid	0.042	U	0.167	0.167	100	0.16	0.154	96	8	70-130/30
375-95-1	Perfluorononanoic acid	0.021	U	0.167	0.137	82	0.16	0.123	77	11	70-130/30
375-73-5	Perfluorobutanesulfonic acid	0.021	U	0.167	0.193	116	0.16	0.176	110	9	70-130/30
355-46-4	Perfluorohexanesulfonic acid	0.021	U	0.167	0.191	115	0.16	0.181	113	5	70-130/30
1763-23-1	Perfluorooctanesulfonic acid	0.021	U	0.167	0.170	102	0.16	0.153	96	11	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	FA20443-3	Limits
	13C2-PFHxA	119%	109%	111%	70-130%
	13C2-PFDA	100%	90%	100%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54279-MS	Q9097.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
OP54279-MSD	Q9098.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290
FA20501-3	Q9096.D	1	12/19/14	NAF	12/17/14	OP54279	SQ290

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA20501-1, FA20501-2, FA20501-3, FA20501-4, FA20501-5, FA20501-8

CAS No.	Compound	FA20501-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-85-9	Perfluoroheptanoic acid	0.0269		0.333	0.347	96	0.333	0.382	107	10	70-130/30
335-67-1	Perfluorooctanoic acid	0.0300	J	0.333	0.368	101	0.333	0.407	113	10	70-130/30
375-95-1	Perfluorononanoic acid	0.021	U	0.333	0.328	98	0.333	0.356	107	8	70-130/30
375-73-5	Perfluorobutanesulfonic acid	0.0202	J	0.333	0.394	112	0.333	0.448	128	13	70-130/30
355-46-4	Perfluorohexanesulfonic acid	0.0988		0.333	0.528	129	0.333	0.579	144*	9	70-130/30
1763-23-1	Perfluorooctanesulfonic acid	0.0393		0.333	0.381	103	0.333	0.426	116	11	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	FA20501-3	Limits
	13C2-PFHxA	123%	126%	119%	70-130%
	13C2-PFDA	126%	127%	114%	70-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ289-CC280	**Injection Date:**	12/18/14
Lab File ID:	Q9037.D	**Injection Time:**	18:11
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	27803	6.28	12737	6.86	70625	9.25
Check Std [b]	21760	6.33	11905	6.92	36885	9.41
Upper Limit [c]	41705	7.33	19106	7.92	105938	10.41
Lower Limit [d]	13902	5.33	6369	5.92	35313	8.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
OP54254-BS	20516	6.33	10870	6.92	35491	9.41
OP54254-MB	25010	6.33	13068	6.92	40890	9.41
ZZZZZZ	22856	6.33	12114	6.92	37652	9.42
ZZZZZZ	24433	6.33	12421	6.92	40477	9.42
OP54254-MS	23248	6.33	12265	6.92	38642	9.44
OP54254-MSD	23857	6.33	12371	6.92	38937	9.44
ZZZZZZ	24142	6.33	12722	6.92	40889	9.44

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ280-ICC280 Q8637.D 12/08/14 14:34. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std: SQ289-CC280
Lab File ID: Q9046.D
Instrument ID: GCMSQ
Injection Date: 12/18/14
Injection Time: 21:09
Method: EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	27803	6.28	12737	6.86	70625	9.25
Check Std [b]	24039	6.33	13082	6.92	40760	9.45
Upper Limit [c]	41705	7.33	19106	7.92	105938	10.45
Lower Limit [d]	13902	5.33	6369	5.92	35313	8.45

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20501-6	22744	6.33	11801	6.92	38510	9.45
FA20501-7	23059	6.33	11701	6.92	36902	9.45
ZZZZZZ	19530	6.32	10391	6.92	37951	9.44
ZZZZZZ	23739	6.33	11782	6.92	38674	9.44
ZZZZZZ	22511	6.33	11234	6.92	41529	9.44
ZZZZZZ	24311	6.33	12637	6.92	39117	9.45
ZZZZZZ	19401	6.32	9372	6.92	36904	9.44
ZZZZZZ	22806	6.33	11627	6.92	37415	9.45
SQ289-ECC280	24966	6.33	13522	6.92	42609	9.45

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ280-ICC280 Q8637.D 12/08/14 14:34. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ290-ICC290	**Injection Date:**	12/19/14
Lab File ID:	Q9075.D	**Injection Time:**	15:26
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	22591	6.32	12205	6.91	38590	9.37
Check Std [b]	24087	6.32	13164	6.91	40675	9.37
Upper Limit [c]	33887	7.32	18308	7.91	57885	10.37
Lower Limit [d]	11296	5.32	6103	5.91	19295	8.37

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20443-3	22609	6.31	11819	6.89	36267	9.33
OP54279-BS	24942	6.31	12815	6.89	39548	9.33
OP54279-MB	25044	6.31	12747	6.89	37994	9.33
ZZZZZZ	21315	6.31	10263	6.89	34707	9.32
ZZZZZZ	23562	6.32	11388	6.91	37661	9.35
ZZZZZZ	21316	6.31	10423	6.91	34647	9.36
ZZZZZZ	22049	6.32	11037	6.91	36425	9.36
ZZZZZZ	21721	6.32	10743	6.91	35042	9.35
ZZZZZZ	22272	6.32	11435	6.91	33787	9.36

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ290-ICC290 Q9075.D 12/19/14 15:26. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ290-CC290	**Injection Date:**	12/19/14
Lab File ID:	Q9091.D	**Injection Time:**	20:43
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	22591	6.32	12205	6.91	38590	9.37
Check Std [b]	25363	6.32	13813	6.91	40517	9.36
Upper Limit [c]	33887	7.32	18308	7.91	57885	10.36
Lower Limit [d]	11296	5.32	6103	5.91	19295	8.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
ZZZZZZ	22599	6.32	11419	6.91	37459	9.36
FA20501-2	23500	6.31	11892	6.91	35929	9.36
FA20501-3	21454	6.31	10627	6.91	36445	9.36
OP54279-MS	21352	6.31	10540	6.89	36770	9.37
OP54279-MSD	20589	6.31	10054	6.89	34727	9.36
FA20501-4	17595	6.30	8181	6.89	35938	9.36
FA20501-5	24685	6.31	12418	6.91	37551	9.37
FA20501-8	23922	6.32	12378	6.91	35460	9.37

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ290-ICC290 Q9075.D 12/19/14 15:26. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std: SQ291-CC290 **Injection Date:** 12/21/14
Lab File ID: Q9126.D **Injection Time:** 11:14
Instrument ID: GCMSQ **Method:** EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	22591	6.32	12205	6.91	38590	9.37
Check Std [b]	21354	6.30	11925	6.89	36256	9.31
Upper Limit [c]	33887	7.30	18308	7.89	57885	10.31
Lower Limit [d]	11296	5.30	6103	5.89	19295	8.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20501-1	24054	6.31	12470	6.89	36914	9.31
ZZZZZZ	23156	6.31	12135	6.89	37229	9.32
ZZZZZZ	24424	6.31	12793	6.89	38928	9.31
ZZZZZZ	23757	6.31	12420	6.89	37923	9.32
ZZZZZZ	23416	6.31	12252	6.89	37260	9.32
ZZZZZZ	22589	6.31	11883	6.89	36299	9.32
ZZZZZZ	23271	6.31	12472	6.89	37652	9.32
SQ291-ECC290	21642	6.31	11943	6.89	35845	9.32

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS
IS 3 = 13C2-PFDoDA

(a) Initial Cal is: SQ290-ICC290 Q9075.D 12/19/14 15:26. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Surrogate Recovery Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Method: EPA 537 MOD **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA20501-1	Q9129.D	103	90
FA20501-2	Q9095.D	111	117
FA20501-3	Q9096.D	119	114
FA20501-4	Q9099.D	124	124
FA20501-5	Q9100.D	110	113
FA20501-6	Q9048.D	121	104
FA20501-7	Q9049.D	119	98
FA20501-8	Q9101.D	111	101
OP54254-BS	Q9038.D	126	99
OP54254-MB	Q9039.D	116	94
OP54254-MS	Q9043.D	119	100
OP54254-MSD	Q9044.D	109	90
OP54279-BS	Q9083.D	121	112
OP54279-MB	Q9084.D	114	108
OP54279-MS	Q9097.D	123	126
OP54279-MSD	Q9098.D	126	127

Surrogate Compounds	Recovery Limits
S1 = 13C2-PFHxA	70-130%
S2 = 13C2-PFDA	70-130%

Initial Calibration Summary

Job Number: FA20501 **Sample:** SQ280-ICC280
Account: ELTNN Empirical Labs **Lab FileID:** Q8637.D
Project: NSN Site 20 LTM

```
Initial Calibration ReSponse Factors - D:\MassHunter\Data\1208_PFC_SQ280\SQ280.batch.bin


  Level ID : Calibration File
        1  : D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
        2  : D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
        3  : D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
        4  : D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
        5  : D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
        6  : D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
        7  : D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d
```

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
2) 13C2-PFDoDA	----------------ISTD--------------									
8) PFDA	0.3251	0.3361	0.3301	0.3289	0.3141	0.3053	0.2930	0.3189	4.857	0.9957
9) PFDoDA	0.4603	0.4426	0.4354	0.4603	0.4457	0.4431	0.4509	0.4483	2.093	0.9996
10) PFDS	0.0868	0.0867	0.0857	0.0888	0.0868	0.0862	0.0875	0.0869	1.134	0.9998
19) PFTeDA	0.3909	0.3106	0.2911	0.3109	0.2973	0.3053	0.3113	0.3168	10.599	0.9989
20) PFTrDA	0.4850	0.4312	0.4171	0.4406	0.4255	0.4322	0.4411	0.4390	5.002	0.9994
21) PFUnDA	0.4351	0.4414	0.4386	0.4455	0.4384	0.4272	0.4319	0.4369	1.391	0.9996
4) 13C2-PFOA	----------------ISTD--------------									
1) 13C2-PFDA	0.8288	0.8369	0.8377	0.8875	0.8437	0.8530	0.8521	0.8485	2.265	0.9996
3) 13C2-PFHxA	0.3411	0.3338	0.3260	0.3465	0.3310	0.3220	0.3296	0.3329	2.554	0.9990
6) PFBA	0.2261	0.2312	0.2239	0.2482	0.2386	0.2408	0.2394	0.2355	3.703	0.9995
11) PFHpA	0.3470	0.3502	0.3434	0.3534	0.3361	0.3309	0.3337	0.3421	2.534	0.9992
13) PFHxA	0.3613	0.3553	0.3484	0.3632	0.3463	0.3400	0.3453	0.3514	2.486	0.9992
15) PFNA	0.6051	0.5868	0.5897	0.6312	0.5972	0.6050	0.5986	0.6020	2.434	0.9994
16) PFOA	1.0720	1.0447	0.9968	1.0544	1.0038	1.0085	1.0131	1.0276	2.829	0.9996
18) PFPeA	0.1184	0.1173	0.1165	0.1235	0.1191	0.1206	0.1194	0.1193	1.935	0.9997
5) 13C4-PFOS	----------------ISTD--------------									
7) PFBS	0.2927	0.3054	0.2863	0.3113	0.2949	0.2976	0.2921	0.2972	2.876	0.9991
12) PFHpS	0.5828	0.6032	0.5878	0.6236	0.5903	0.5813	0.5963	0.5950	2.472	0.9991
14) PFHxS	0.4562	0.4748	0.4703	0.4963	0.4710	0.4559	0.4845	0.4727	3.072	0.9977
17) PFOS	1.0080	1.0181	0.9947	1.0553	0.9978	0.9835	1.0032	1.0087	2.305	0.9991

```
---------------------------------------------------
 *(value) - Average RF below (value)
```

6.6.1

6

Initial Calibration Verification

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ280-ICV280
Lab FileID: Q8641.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1208_PFC_SQ280\SQ280.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
         2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
         3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
         4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
         5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
         6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
         7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d


Data File: Q8641
Type     : QC
Level    : 4

 Cpnd Name                      Exp. Conc  Final Conc    Dev %      Area %
============================== ========== ========== ========== ==========

13C2-PFDA                          20.000      0.000
13C2-PFDoDA                           ---    --ISTD--
13C2-PFHxA                         20.000      0.000
13C2-PFOA                             ---    --ISTD--
13C4-PFOS                             ---    --ISTD--
PFBA                               20.000     21.132        5.7      105.7
PFBS                               20.000     22.749       13.7      113.7
PFDA                               20.000     23.915       19.6      119.6
PFDoDA                             20.000     24.075       20.4      120.4
PFDS                               20.000     23.692       18.5      118.5
PFHpA                              20.000     20.775        3.9      103.9
PFHpS                              20.000      0.000
PFHxA                              20.000     21.363        6.8      106.8
PFHxS                              20.000     21.395        7.0      107.0
PFNA                               20.000     19.475       -2.6       97.4
PFOA                               20.000     20.861        4.3      104.3
PFOS                               20.000     21.021        5.1      105.1
PFPeA                              20.000     20.786        3.9      103.9
PFTeDA                             20.000     27.964     # 39.8      139.8
PFTrDA                             20.000     26.260     # 31.3      131.3
PFUnDA                             20.000     22.320       11.6      111.6

CC Criteria: +/- 25%
```

6.6.2

6

Initial Calibration Verification

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ280-ICV280
Lab FileID: Q8642.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1208_PFC_SQ280\SQ280.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d

Data File: Q8642
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	0.000		
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	0.000		
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	0.000		
PFBS	20.000	23.312	16.6	116.6
PFDA	20.000	0.000		
PFDoDA	20.000	0.000		
PFDS	20.000	0.000		
PFHpA	20.000	18.151	-9.2	90.8
PFHpS	20.000	0.000		
PFHxA	20.000	0.000		
PFHxS	20.000	22.032	10.2	110.2
PFNA	20.000	19.117	-4.4	95.6
PFOA	20.000	18.958	-5.2	94.8
PFOS	20.000	19.895	-0.5	99.5
PFPeA	20.000	0.000		
PFTeDA	20.000	0.000		
PFTrDA	20.000	0.000		
PFUnDA	20.000	0.000		

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ289-CC280
Lab FileID: Q9037.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1218_PFC_SQ289\SQ289.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d

Data File: Q9037
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	15.019	-24.9	75.1
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.166	-4.2	95.8
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	22.780	13.9	113.9
PFBS	20.000	20.186	0.9	100.9
PFDA	20.000	23.516	17.6	117.6
PFDoDA	20.000	19.780	-1.1	98.9
PFDS	20.000	33.765	# 68.8	168.8
PFHpA	20.000	18.902	-5.5	94.5
PFHpS	20.000	21.055	5.3	105.3
PFHxA	20.000	19.710	-1.4	98.6
PFHxS	20.000	20.779	3.9	103.9
PFNA	20.000	14.691	# -26.5	73.5
PFOA	20.000	20.325	1.6	101.6
PFOS	20.000	20.037	0.2	100.2
PFPeA	20.000	20.725	3.6	103.6
PFTeDA	20.000	16.873	-15.6	84.4
PFTrDA	20.000	18.663	-6.7	93.3
PFUnDA	20.000	21.292	6.5	106.5

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ289-CC280
Lab FileID: Q9046.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1218_PFC_SQ289\SQ289.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
         2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
         3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
         4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
         5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
         6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
         7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d


Data File: Q9046
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	15.947	-20.3	79.7
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	18.442	-7.8	92.2
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	22.099	10.5	110.5
PFBS	20.000	19.800	-1.0	99.0
PFDA	20.000	25.219	# 26.1	126.1
PFDoDA	20.000	19.942	-0.3	99.7
PFDS	20.000	33.988	# 69.9	169.9
PFHpA	20.000	18.918	-5.4	94.6
PFHpS	20.000	20.430	2.2	102.2
PFHxA	20.000	19.204	-4.0	96.0
PFHxS	20.000	21.018	5.1	105.1
PFNA	20.000	15.249	-23.8	76.2
PFOA	20.000	19.902	-0.5	99.5
PFOS	20.000	19.901	-0.5	99.5
PFPeA	20.000	20.065	0.3	100.3
PFTeDA	20.000	17.105	-14.5	85.5
PFTrDA	20.000	19.005	-5.0	95.0
PFUnDA	20.000	22.110	10.5	110.5

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ289-ECC280
Lab FileID: Q9056.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1218_PFC_SQ289\SQ289.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
         2:D:\MassHunter\Data\1208_PFC_SQ280\Q8635.d
         3:D:\MassHunter\Data\1208_PFC_SQ280\Q8636.d
         4:D:\MassHunter\Data\1208_PFC_SQ280\Q8637.d
         5:D:\MassHunter\Data\1208_PFC_SQ280\Q8638.d
         6:D:\MassHunter\Data\1208_PFC_SQ280\Q8639.d
         7:D:\MassHunter\Data\1208_PFC_SQ280\Q8640.d


Data File: Q9056
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	16.462	-17.7	82.3
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	18.610	-6.9	93.1
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	22.327	11.6	111.6
PFBS	20.000	19.963	-0.2	99.8
PFDA	20.000	25.775	# 28.9	128.9
PFDoDA	20.000	20.083	0.4	100.4
PFDS	20.000	33.688	# 68.4	168.4
PFHpA	20.000	19.258	-3.7	96.3
PFHpS	20.000	20.668	3.3	103.3
PFHxA	20.000	19.088	-4.6	95.4
PFHxS	20.000	21.405	7.0	107.0
PFNA	20.000	15.652	-21.7	78.3
PFOA	20.000	20.116	0.6	100.6
PFOS	20.000	19.880	-0.6	99.4
PFPeA	20.000	20.172	0.9	100.9
PFTeDA	20.000	16.979	-15.1	84.9
PFTrDA	20.000	19.189	-4.1	95.9
PFUnDA	20.000	22.088	10.4	110.4

CC Criteria: +/- 25%

Initial Calibration Summary

Job Number: FA20501 **Sample:** SQ290-ICC290
Account: ELTNN Empirical Labs **Lab FileID:** Q9075.D
Project: NSN Site 20 LTM

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin

Level ID	Calibration File
1	D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
2	D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
3	D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
4	D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
5	D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
6	D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
7	D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
2) 13C2-PFDoDA	----------------ISTD--------------									
8) PFDA	0.4317	0.3837	0.3778	0.3634	0.3835	0.3522	0.3388	0.3759	7.926	0.9935
9) PFDoDA	0.5151	0.4428	0.4494	0.4352	0.4801	0.4480	0.4423	0.4590	6.237	0.9973
10) PFDS	0.1730	0.1526	0.1518	0.1495	0.1624	0.1506	0.1494	0.1556	5.709	0.9973
19) PFTeDA	0.4038	0.2765	0.2715	0.2641	0.2930	0.2781	0.2831	0.2958	16.401	0.9977
20) PFTrDA	0.5171	0.4138	0.4138	0.4054	0.4456	0.4194	0.4192	0.4335	8.989	0.9980
21) PFUnDA	0.5603	0.4934	0.5008	0.4845	0.5226	0.4854	0.4791	0.5037	5.722	0.9971
4) 13C2-PFOA	----------------ISTD--------------									
1) 13C2-PFDA	0.7556	0.6547	0.6654	0.6480	0.7179	0.6554	0.6452	0.6775	6.261	0.9956
3) 13C2-PFHxA	0.3374	0.2955	0.2988	0.2968	0.3328	0.3033	0.3013	0.3094	5.743	0.9959
6) PFBA	0.2919	0.2573	0.2563	0.2671	0.2982	0.2846	0.2767	0.2760	5.985	0.9970
11) PFHpA	0.3646	0.3123	0.3142	0.3039	0.3375	0.3115	0.3057	0.3214	6.852	0.9962
13) PFHxA	0.3545	0.3104	0.3016	0.3128	0.3456	0.3206	0.3119	0.3225	6.130	0.9960
15) PFNA	0.4972	0.4337	0.4440	0.4319	0.4979	0.4557	0.4530	0.4591	6.039	0.9957
16) PFOA	1.1966	1.0065	1.0205	0.9837	1.1049	1.0032	1.0056	1.0459	7.375	0.9960
18) PFPeA	0.1332	0.1196	0.1131	0.1169	0.1354	0.1248	0.1270	0.1243	6.674	0.9960
5) 13C4-PFOS	----------------ISTD--------------									
7) PFBS	0.3758	0.3218	0.3218	0.3191	0.3656	0.3299	0.3415	0.3393	6.739	0.9958
12) PFHpS	0.7133	0.6200	0.6177	0.5975	0.6842	0.6093	0.6135	0.6365	6.905	0.9945
14) PFHxS	0.5722	0.4896	0.5059	0.4911	0.5436	0.4913	0.5007	0.5135	6.231	0.9964
17) PFOS	1.1274	0.9716	0.9804	0.9617	1.0819	0.9738	0.9846	1.0116	6.451	0.9957

----

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-ICV290
Lab FileID: Q9079.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d


Data File: Q9079
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000			
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000			
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	18.654	-6.7	93.3
PFBS	20.000	19.239	-3.8	96.2
PFDA	20.000	21.280	6.4	106.4
PFDoDA	20.000	21.005	5.0	105.0
PFDS	20.000	21.077	5.4	105.4
PFHpA	20.000	19.551	-2.2	97.8
PFHpS	20.000			
PFHxA	20.000	19.418	-2.9	97.1
PFHxS	20.000	19.648	-1.8	98.2
PFNA	20.000	18.969	-5.2	94.8
PFOA	20.000	19.625	-1.9	98.1
PFOS	20.000	19.663	-1.7	98.3
PFPeA	20.000	18.884	-5.6	94.4
PFTeDA	20.000	22.900	14.5	114.5
PFTrDA	20.000	21.885	9.4	109.4
PFUnDA	20.000	20.938	4.7	104.7

CC Criteria: +/- 25%

Initial Calibration Verification

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-ICV290
Lab FileID: Q9080.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin

```
  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d
```

Data File: Q9080
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000			
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000			
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000			
PFBS	20.000	22.037	10.2	110.2
PFDA	20.000			
PFDoDA	20.000			
PFDS	20.000			
PFHpA	20.000	17.819	-10.9	89.1
PFHpS	20.000			
PFHxA	20.000			
PFHxS	20.000	21.599	8.0	108.0
PFNA	20.000	19.803	-1.0	99.0
PFOA	20.000	18.700	-6.5	93.5
PFOS	20.000	19.055	-4.7	95.3
PFPeA	20.000			
PFTeDA	20.000			
PFTrDA	20.000			
PFUnDA	20.000			

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-CC290
Lab FileID: Q9091.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin

```
Level ID:Calibration File
       1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
       2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
       3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
       4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
       5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
       6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
       7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d
```

Data File: Q9091
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	19.062	-4.7	95.3
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	18.798	-6.0	94.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	18.492	-7.5	92.5
PFBS	20.000	18.588	-7.1	92.9
PFDA	20.000	21.175	5.9	105.9
PFDoDA	20.000	19.498	-2.5	97.5
PFDS	20.000	20.916	4.6	104.6
PFHpA	20.000	19.600	-2.0	98.0
PFHpS	20.000	19.487	-2.6	97.4
PFHxA	20.000	18.826	-5.9	94.1
PFHxS	20.000	19.643	-1.8	98.2
PFNA	20.000	18.827	-5.9	94.1
PFOA	20.000	19.431	-2.8	97.2
PFOS	20.000	19.640	-1.8	98.2
PFPeA	20.000	18.518	-7.4	92.6
PFTeDA	20.000	17.567	-12.2	87.8
PFTrDA	20.000	18.790	-6.0	94.0
PFUnDA	20.000	19.588	-2.1	97.9

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ290-CC290
Lab FileID: Q9102.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1219_PFC_SQ290\SQ290.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d


Data File: Q9102
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	19.346	-3.3	96.7
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.280	-3.6	96.4
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	18.894	-5.5	94.5
PFBS	20.000	19.273	-3.6	96.4
PFDA	20.000	21.277	6.4	106.4
PFDoDA	20.000	19.627	-1.9	98.1
PFDS	20.000	21.013	5.1	105.1
PFHpA	20.000	19.551	-2.2	97.8
PFHpS	20.000	19.136	-4.3	95.7
PFHxA	20.000	19.138	-4.3	95.7
PFHxS	20.000	19.702	-1.5	98.5
PFNA	20.000	19.161	-4.2	95.8
PFOA	20.000	19.349	-3.3	96.7
PFOS	20.000	19.499	-2.5	97.5
PFPeA	20.000	18.851	-5.7	94.3
PFTeDA	20.000	16.518	-17.4	82.6
PFTrDA	20.000	17.726	-11.4	88.6
PFUnDA	20.000	21.053	5.3	105.3

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ291-CC290
Lab FileID: Q9126.D

```
                     Continuing Calibration Report

Batch: D:\MassHunter\Data\1221_PFC_SQ291\SQ291.batch.bin


  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d


Data File: Q9126
Type     : QC
Level    : 4
```

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	19.843	-0.8	99.2
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.453	-2.7	97.3
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	19.568	-2.2	97.8
PFBS	20.000	19.589	-2.1	97.9
PFDA	20.000	20.746	3.7	103.7
PFDoDA	20.000	20.475	2.4	102.4
PFDS	20.000	21.707	8.5	108.5
PFHpA	20.000	19.156	-4.2	95.8
PFHpS	20.000	19.951	-0.2	99.8
PFHxA	20.000	19.317	-3.4	96.6
PFHxS	20.000	20.003	0.0	100.0
PFNA	20.000	20.163	0.8	100.8
PFOA	20.000	20.058	0.3	100.3
PFOS	20.000	20.180	0.9	100.9
PFPeA	20.000	20.131	0.7	100.7
PFTeDA	20.000	19.578	-2.1	97.9
PFTrDA	20.000	20.255	1.3	101.3
PFUnDA	20.000	19.307	-3.5	96.5

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20501
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample: SQ291-ECC290
Lab FileID: Q9136.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1221_PFC_SQ291\SQ291.batch.bin

```
  Level ID:Calibration File
         1:D:\MassHunter\Data\1219_PFC_SQ290\Q9072.d
         2:D:\MassHunter\Data\1219_PFC_SQ290\Q9073.d
         3:D:\MassHunter\Data\1219_PFC_SQ290\Q9074.d
         4:D:\MassHunter\Data\1219_PFC_SQ290\Q9075.d
         5:D:\MassHunter\Data\1219_PFC_SQ290\Q9076.d
         6:D:\MassHunter\Data\1219_PFC_SQ290\Q9077.d
         7:D:\MassHunter\Data\1219_PFC_SQ290\Q9078.d
```

Data File: Q9136
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	19.707	-1.5	98.5
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	18.996	-5.0	95.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	18.202	-9.0	91.0
PFBS	20.000	18.722	-6.4	93.6
PFDA	20.000	21.104	5.5	105.5
PFDoDA	20.000	19.794	-1.0	99.0
PFDS	20.000	20.968	4.8	104.8
PFHpA	20.000	19.527	-2.4	97.6
PFHpS	20.000	20.181	0.9	100.9
PFHxA	20.000	19.160	-4.2	95.8
PFHxS	20.000	19.920	-0.4	99.6
PFNA	20.000	20.276	1.4	101.4
PFOA	20.000	19.688	-1.6	98.4
PFOS	20.000	20.138	0.7	100.7
PFPeA	20.000	18.705	-6.5	93.5
PFTeDA	20.000	17.807	-11.0	89.0
PFTrDA	20.000	18.910	-5.4	94.6
PFUnDA	20.000	19.154	-4.2	95.8

CC Criteria: +/- 25%

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q9129.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-21 12:14
Sample Name	:	FA20501-1
Vial	:	Vial 4
Sample Info	:	OP54279,SQ291,120,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ291.batch.bin
Last Calib Update	:	2014-12-19 16:57

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.308	415.0 -> 370.0	24054	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	12470	20.000	µg/L		-0.012
13C2-PFDoDA	9.309	615.0 -> 570.0	36914	20.000	µg/L		-0.063
System Monitoring Compounds							
13C2-PFHxA	4.804	315.0 -> 270.0	7632	20.69	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 103.47%				
13C2-PFDA	7.608	515.0 -> 470.0	14261	17.95	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 89.73%				
Target Compounds							**Qvalue**
PFHxS	5.617	399.0 -> 80.0	413	1.313	µg/L	m	93
PFOA	6.311	413.0 -> 369.0	648	0.528	µg/L		81
PFOS	6.885	499.0 -> 80.0	938	1.510	µg/L	m	99

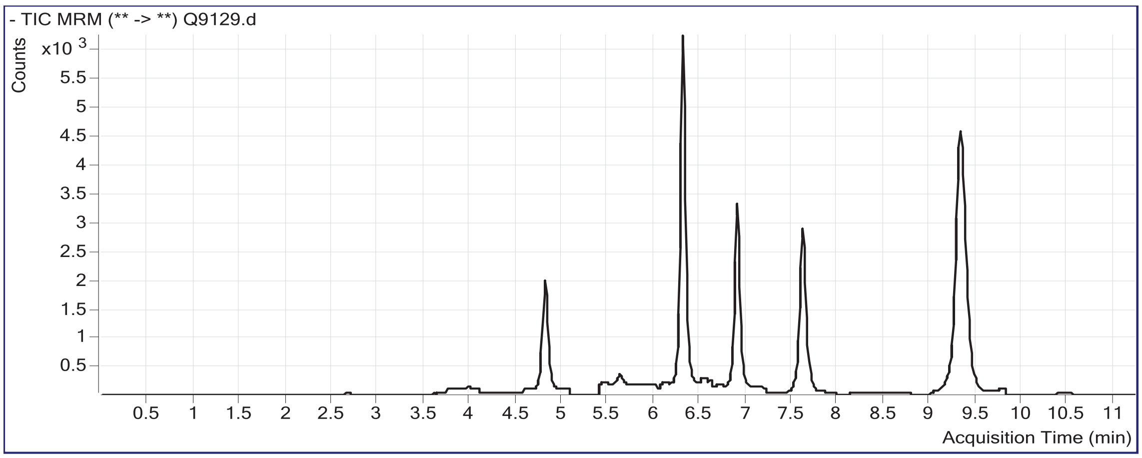
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.1.1

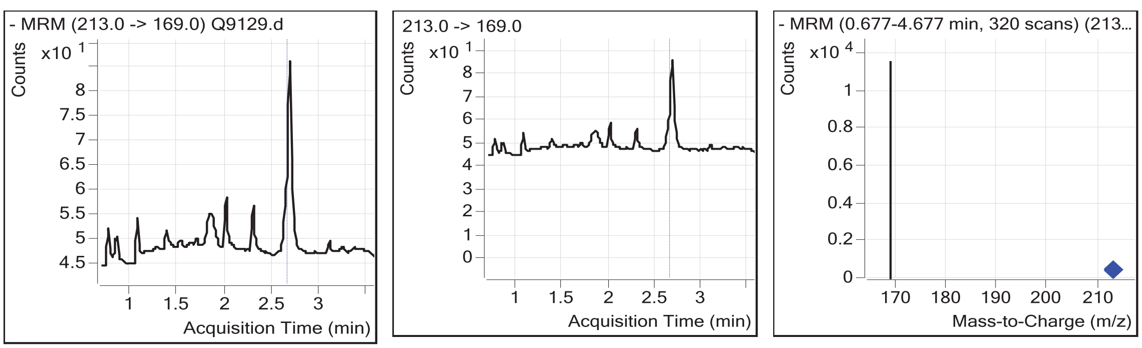
7

Perfluorinated Compounds by LC/MS/MS.

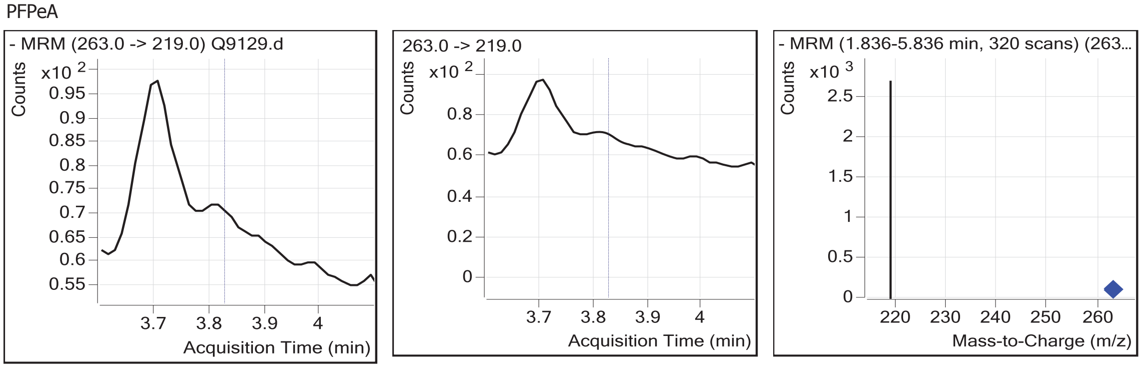
Data File	:	Q9129.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-21 12:14
Sample Name	:	FA20501-1
Vial	:	Vial 4
Sample Info	:	OP54279,SQ291,120,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ291.batch.bin
Last Calib Update	:	2014-12-19 16:57



PFBA

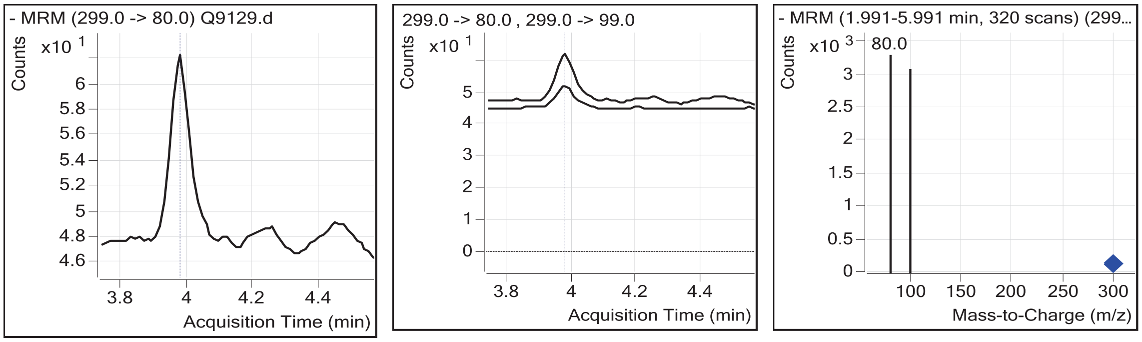


PFPeA

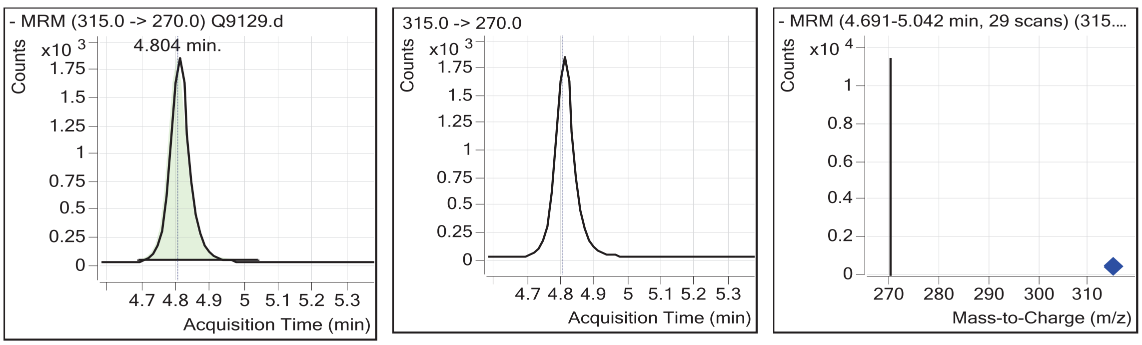


Perfluorinated Compounds by LC/MS/MS.

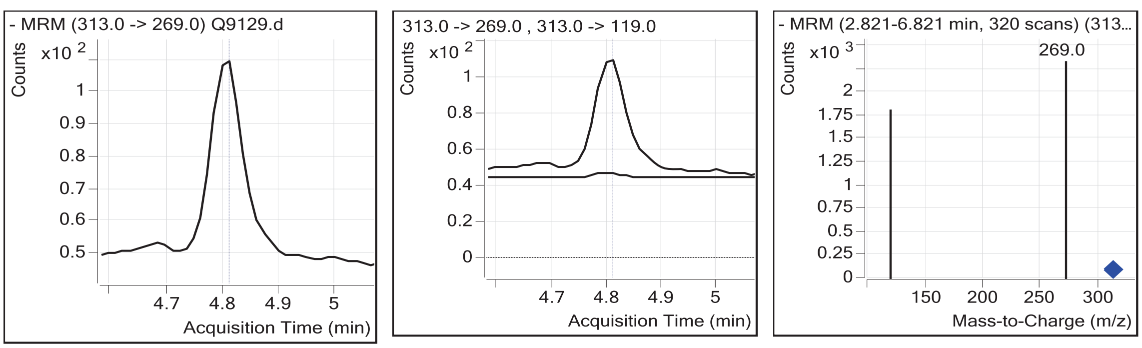
PFBS



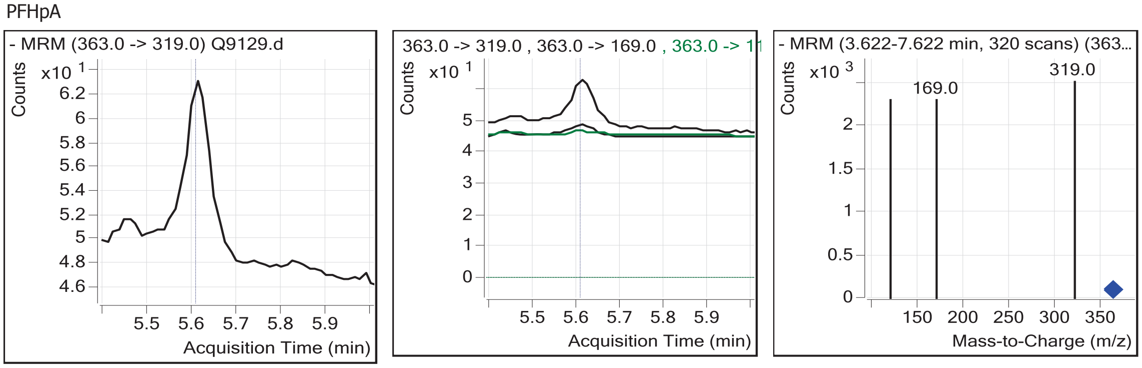
13C2-PFHxA



PFHxA

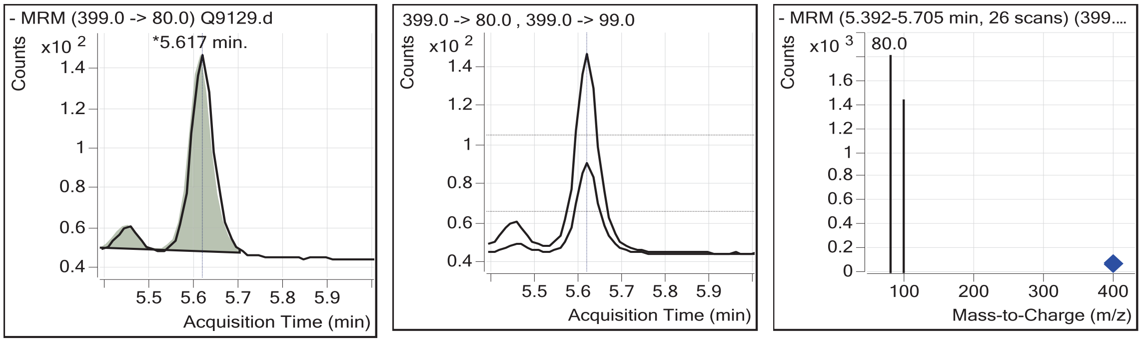


PFHpA

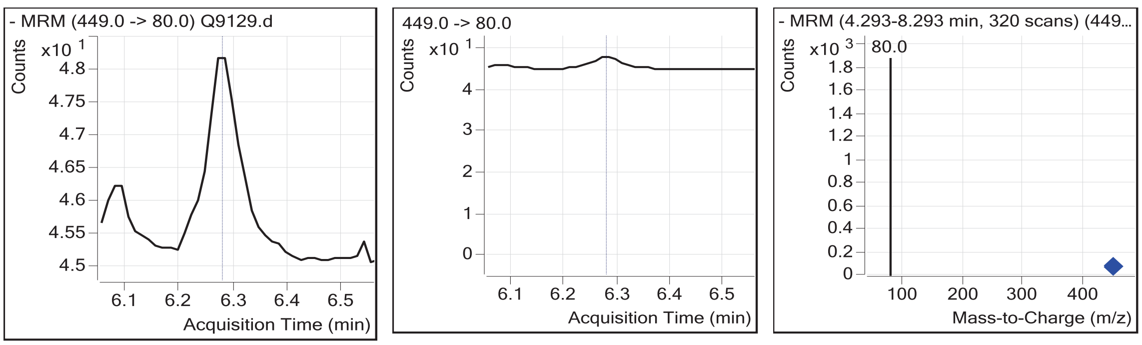


Perfluorinated Compounds by LC/MS/MS.

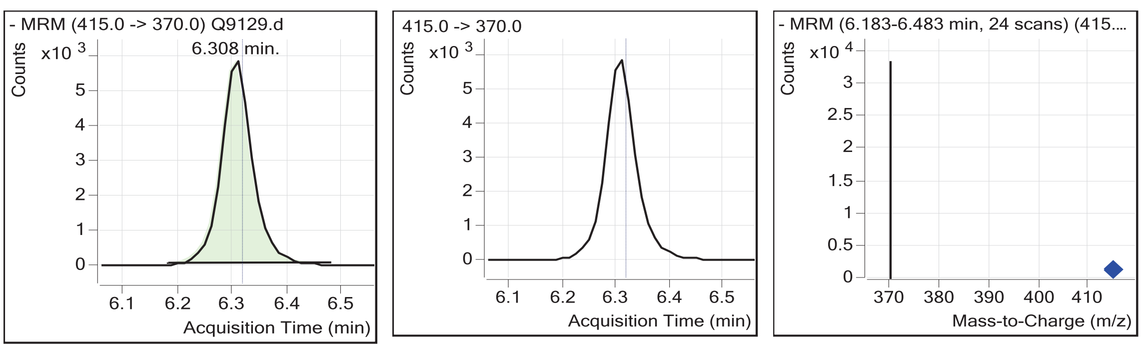
PFHxS



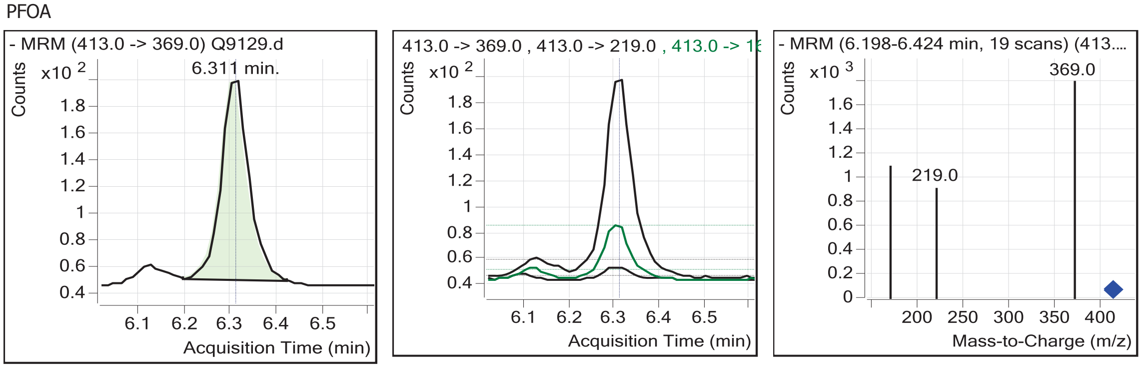
PFHpS



13C2-PFOA



PFOA

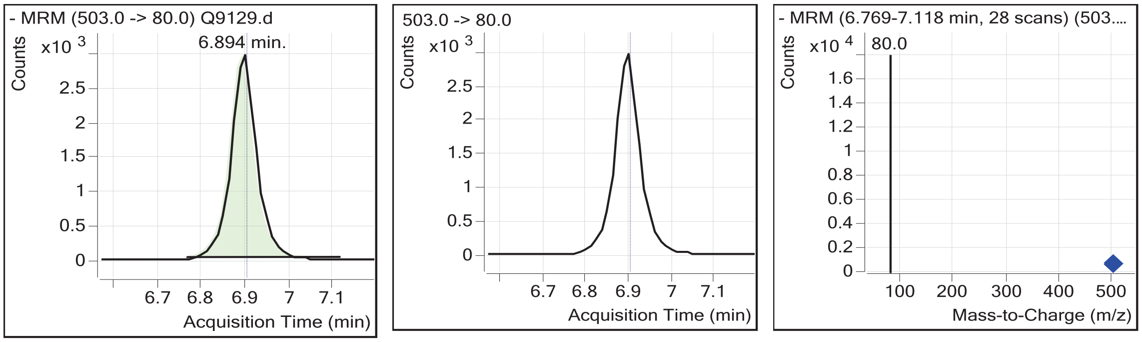


7.1.1

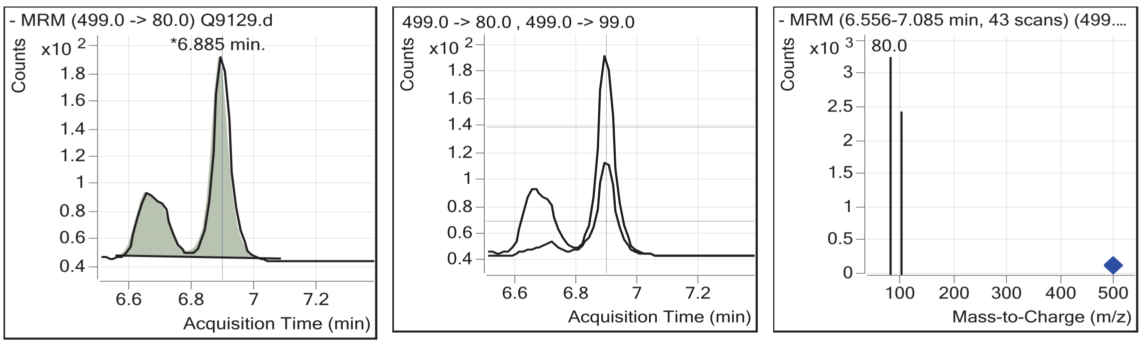
7

Perfluorinated Compounds by LC/MS/MS.

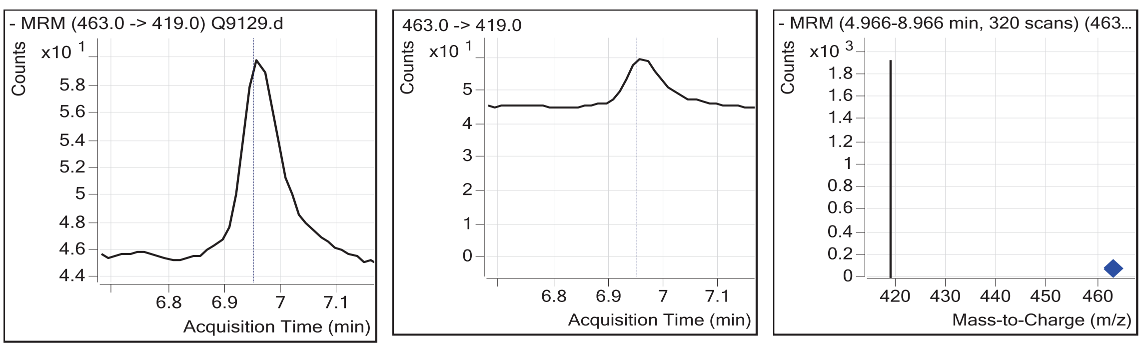
13C4-PFOS



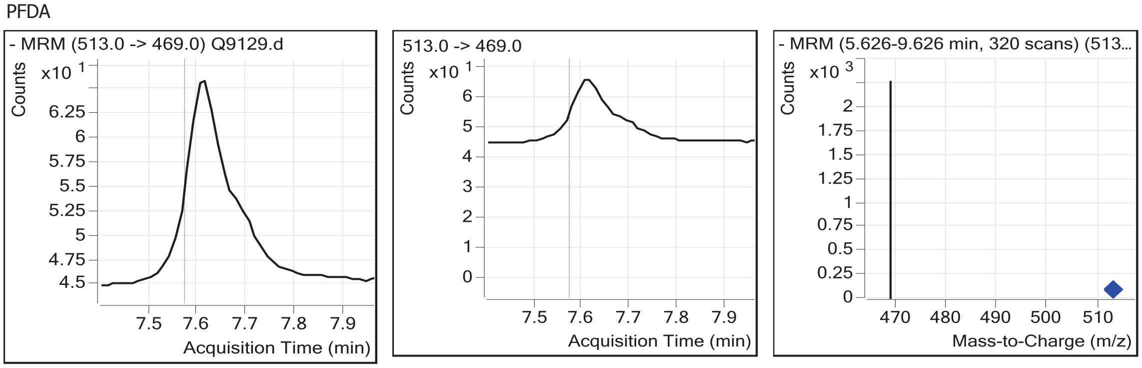
PFOS



PFNA

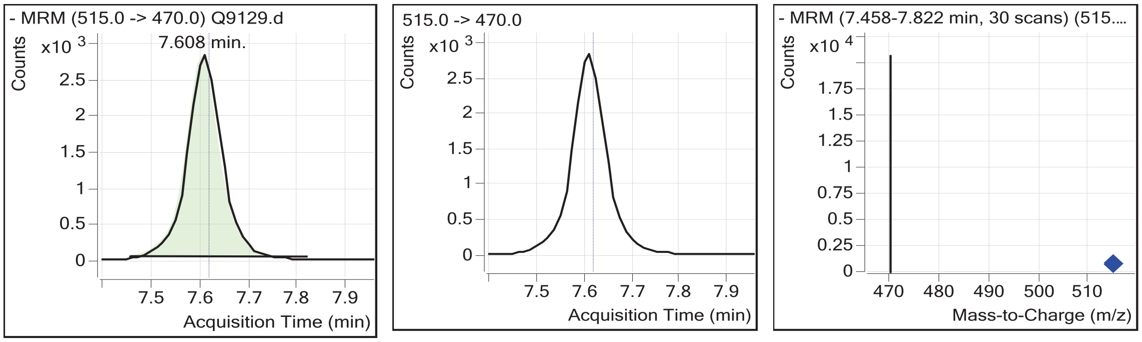


PFDA

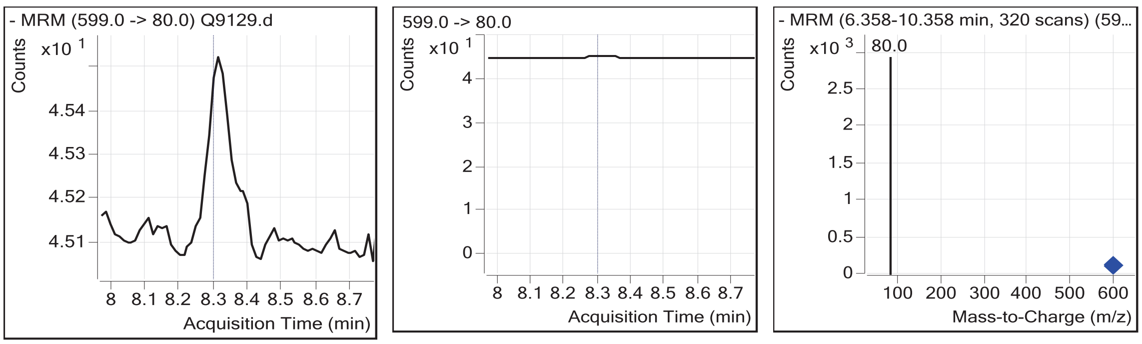


Perfluorinated Compounds by LC/MS/MS.

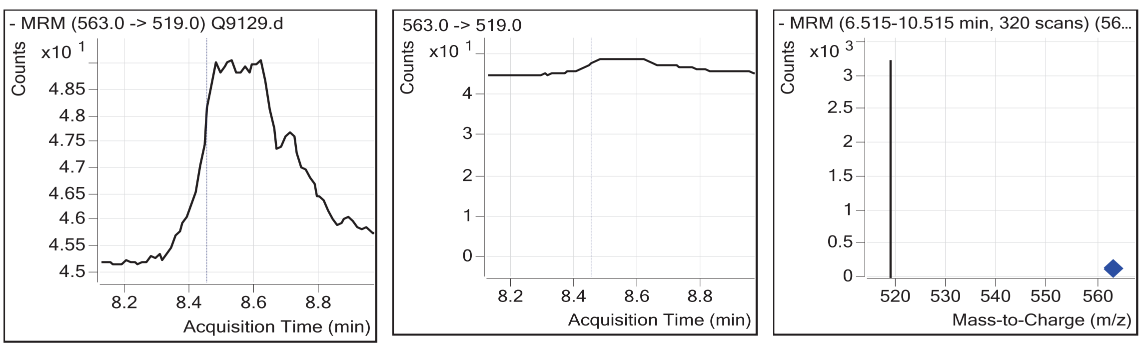
13C2-PFDA



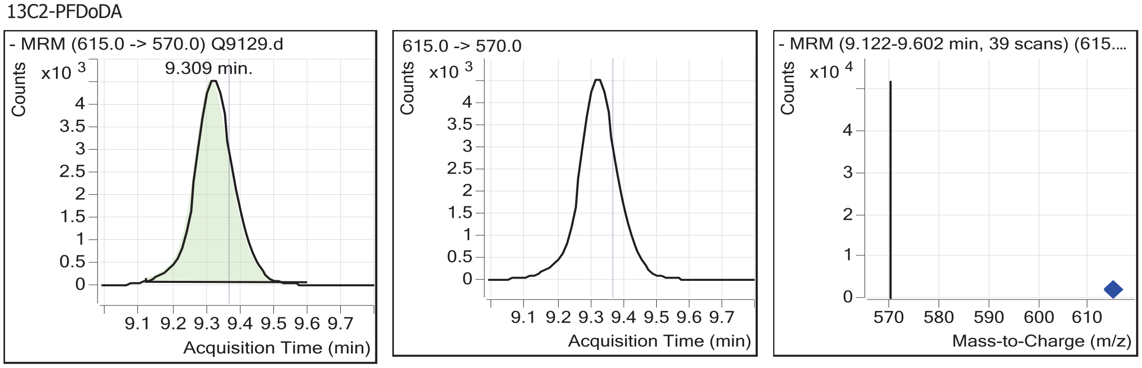
PFDS



PFUnDA

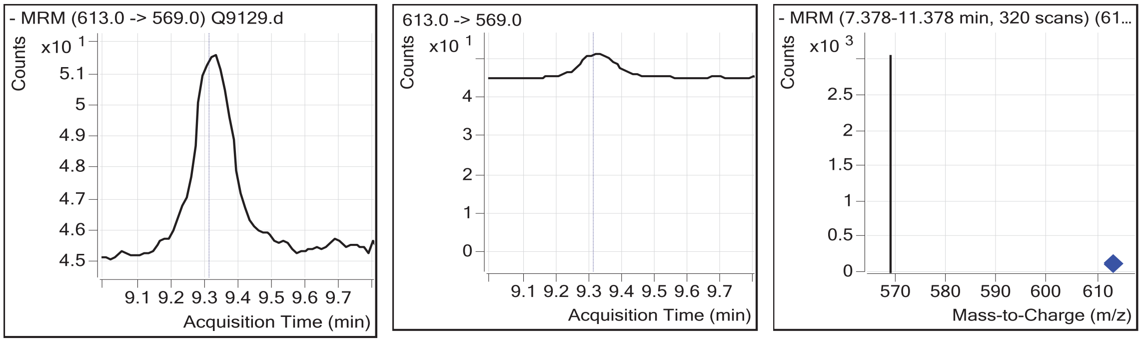


13C2-PFDoDA

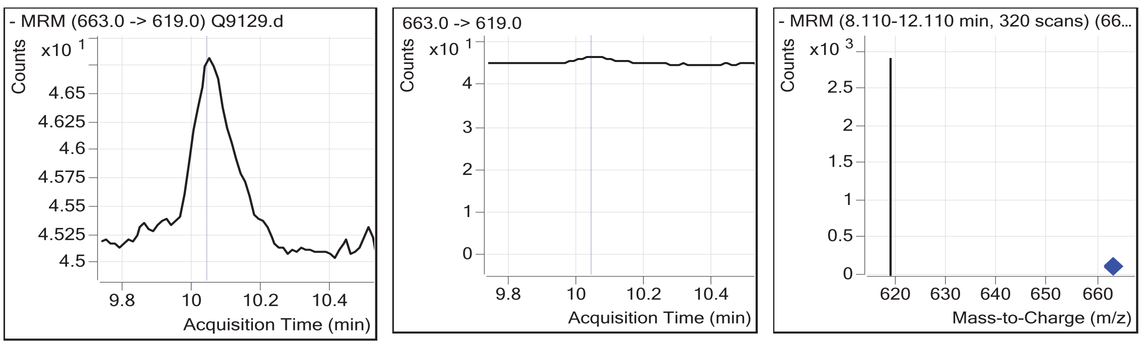


Perfluorinated Compounds by LC/MS/MS.

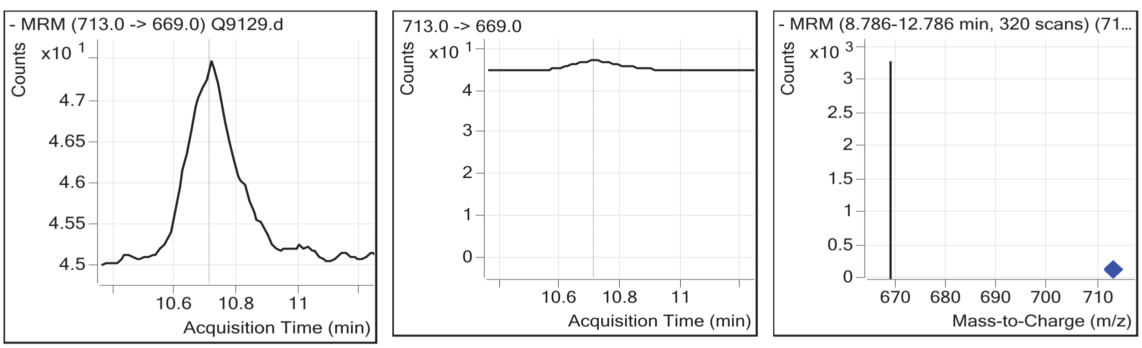
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	FA20501-1	**Method:**	EPA 537 MOD	
Lab FileID:	Q9129.D	**Analyst approved:**	12/22/14 11:16	Mike Eger
Injection Time:	12/21/14 12:14	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.62	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.88	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

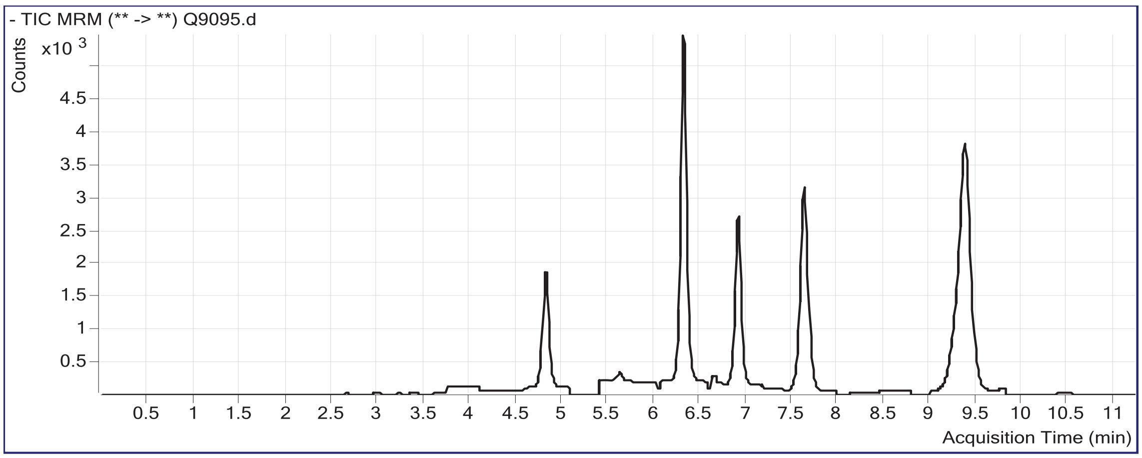
Data File	:	Q9095.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 22:01
Sample Name	:	FA20501-2
Vial	:	Vial 23
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.308	415.0 -> 370.0	23500	20.000	µg/L		-0.013
13C4-PFOS	6.907	503.0 -> 80.0	11892	20.000	µg/L		0.000
13C2-PFDoDA	9.359	615.0 -> 570.0	35929	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	4.816	315.0 -> 270.0	7971	22.12	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 110.62%				
13C2-PFDA	7.620	515.0 -> 470.0	18113	23.33	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 116.65%				
Target Compounds							**Qvalue**
PFOA	6.311	413.0 -> 369.0	670	0.559	µg/L		78
PFOS	6.897	499.0 -> 80.0	614	1.038	µg/L	m	100

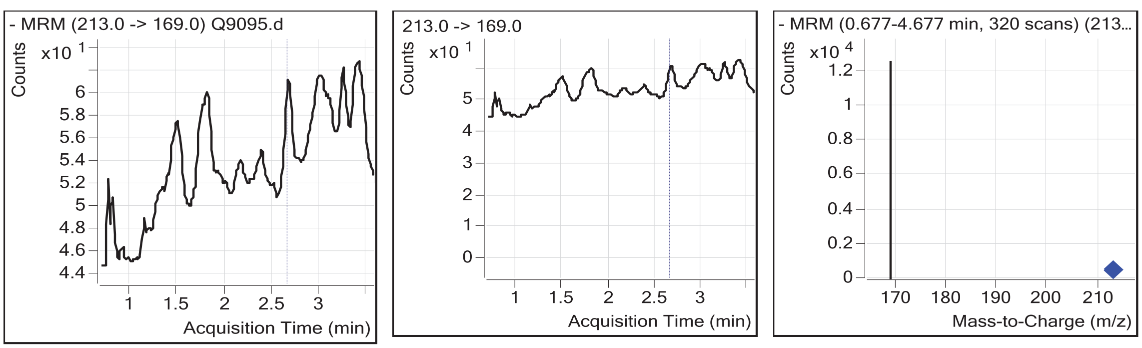
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

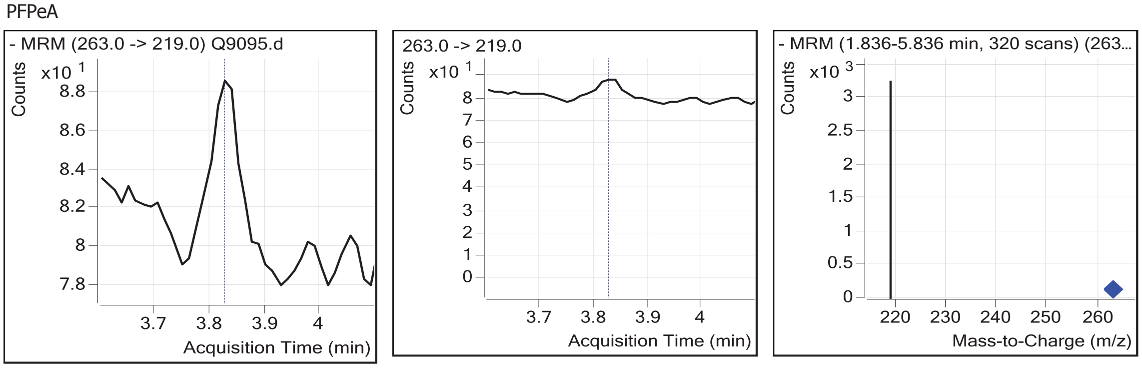
Data File	:	Q9095.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 22:01
Sample Name	:	FA20501-2
Vial	:	Vial 23
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

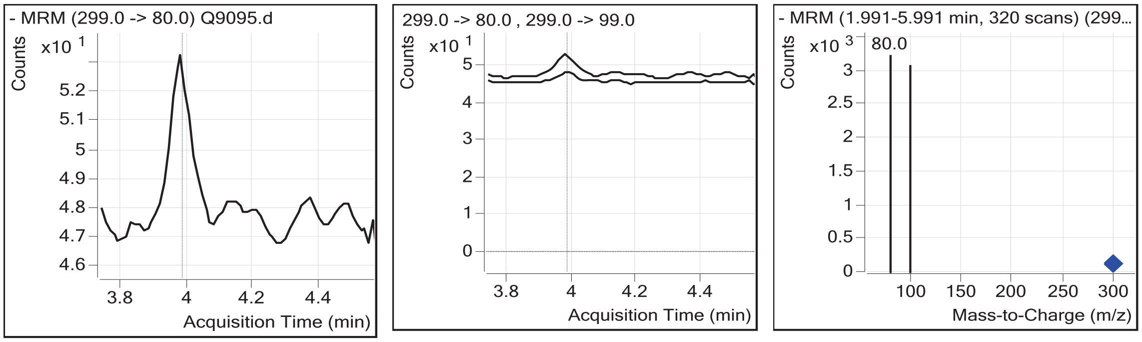


PFPeA

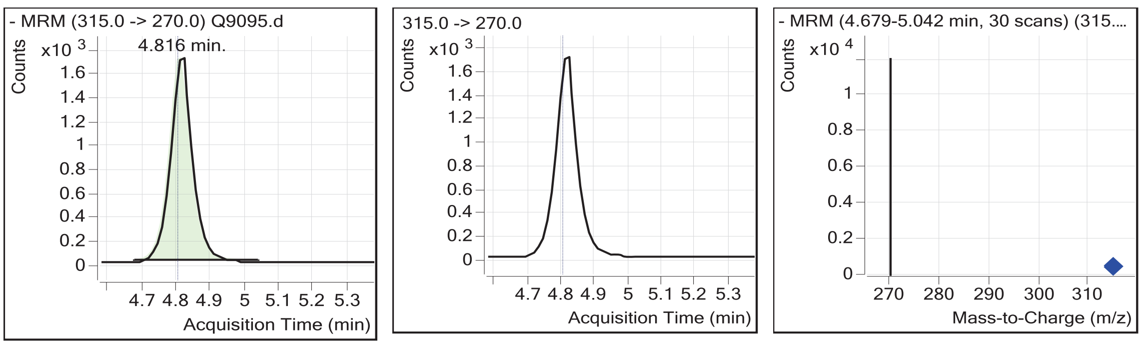


Perfluorinated Compounds by LC/MS/MS.

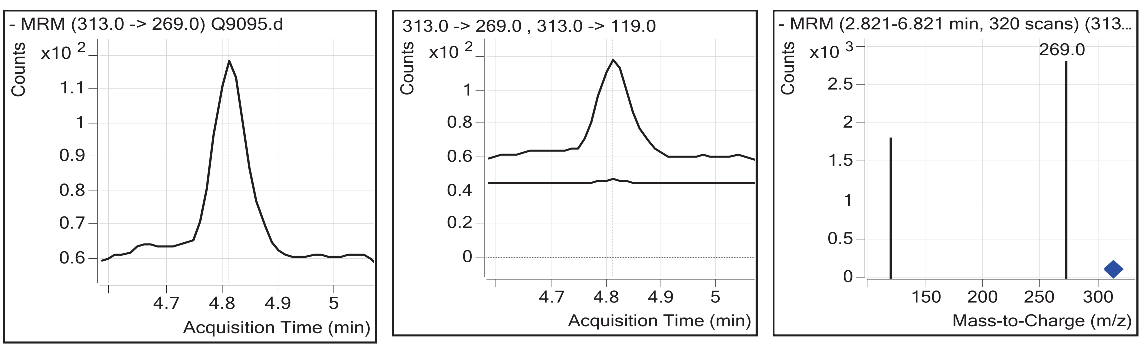
PFBS



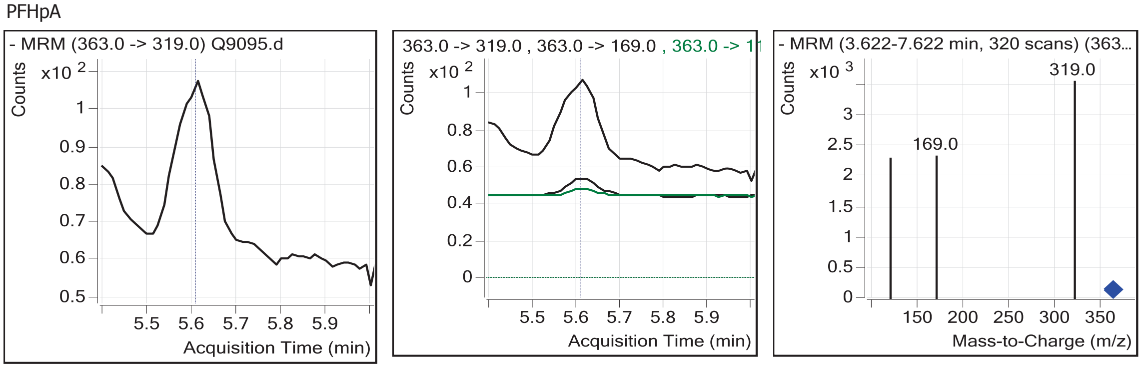
13C2-PFHxA



PFHxA



PFHpA

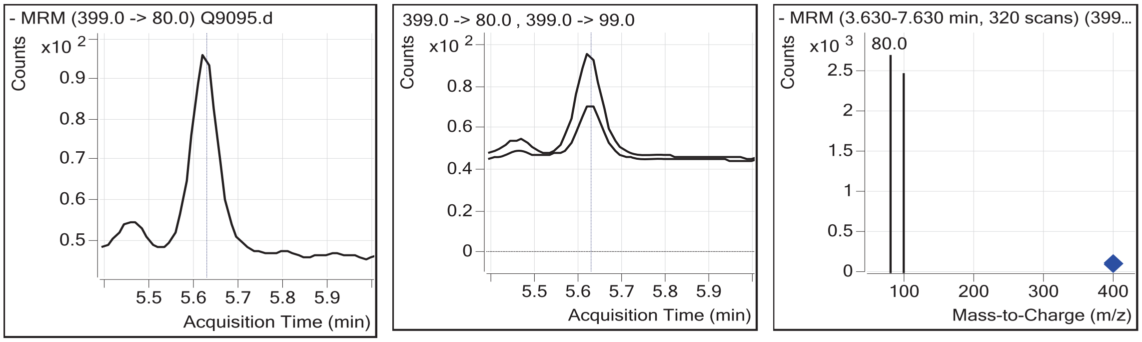


7.1.2

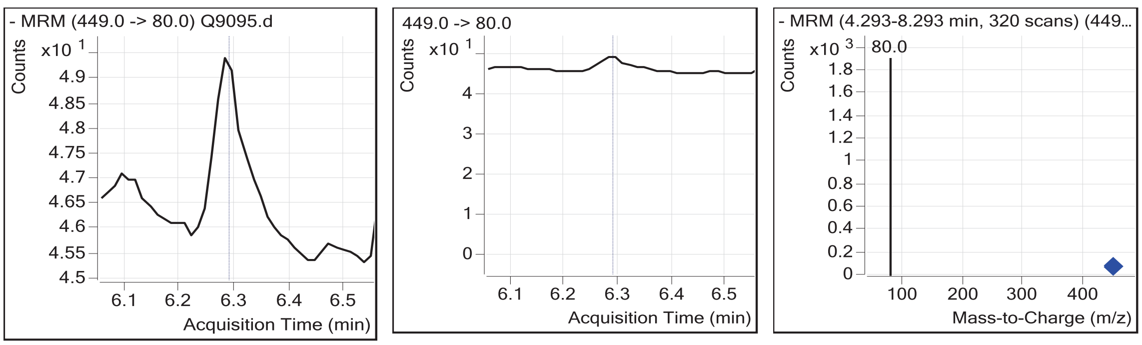
7

Perfluorinated Compounds by LC/MS/MS.

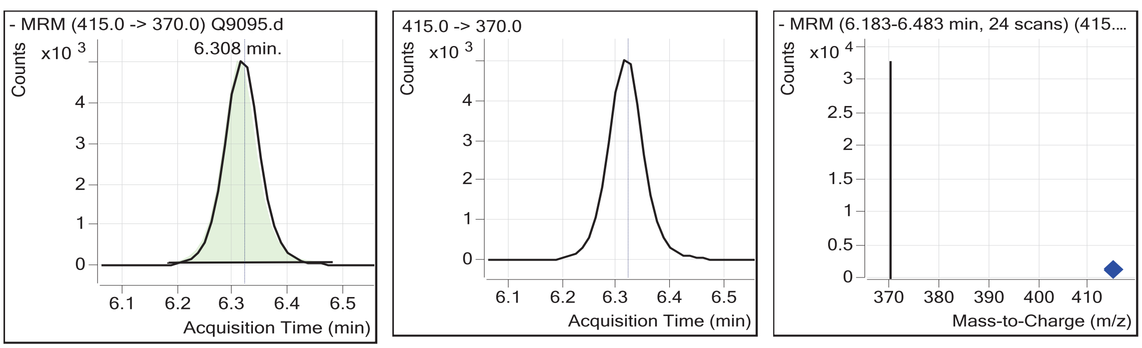
PFHxS



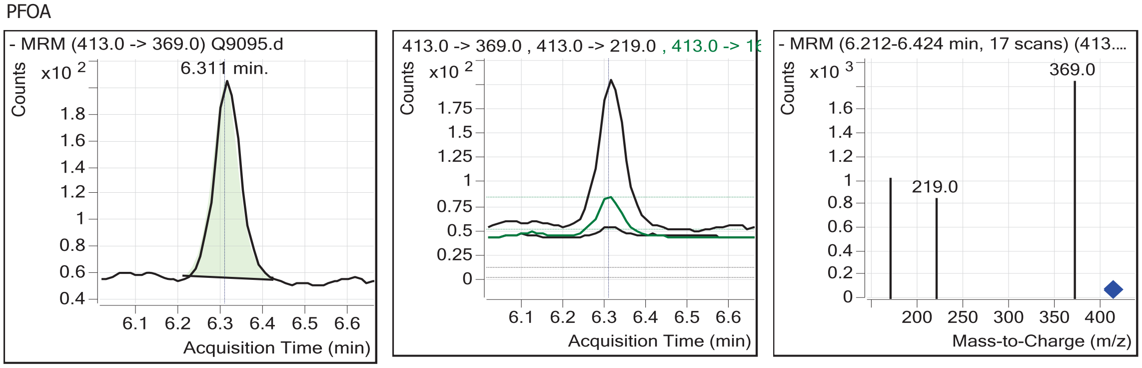
PFHpS



13C2-PFOA



PFOA

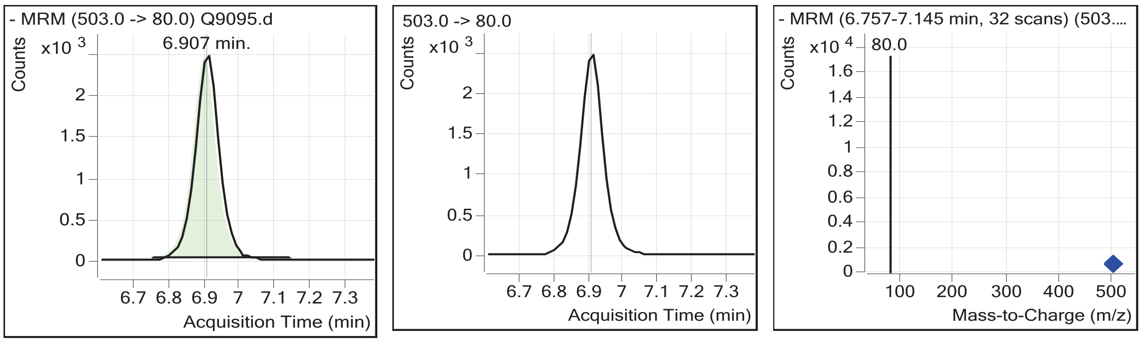


7.1.2

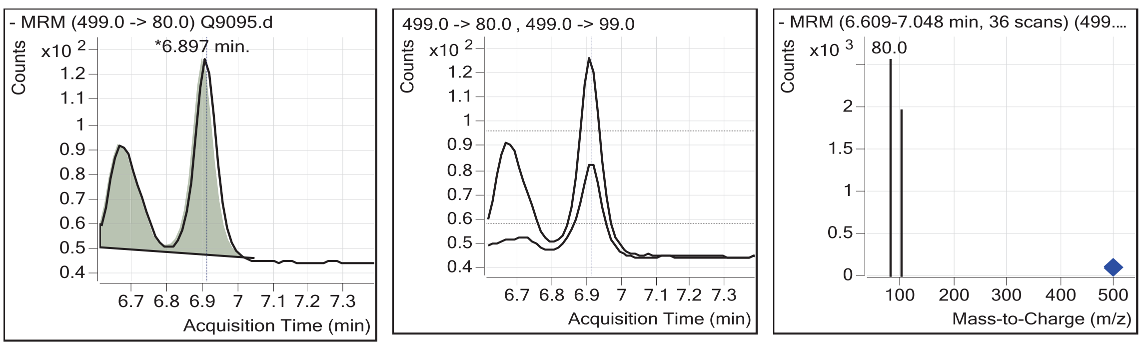
7

Perfluorinated Compounds by LC/MS/MS.

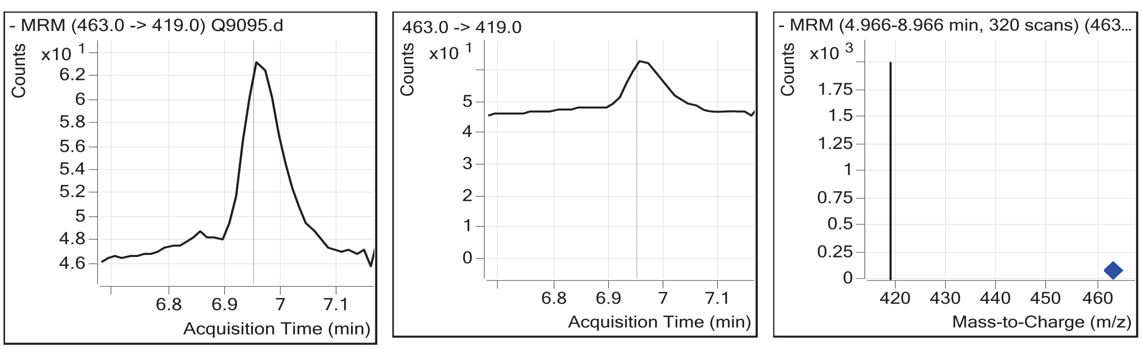
13C4-PFOS



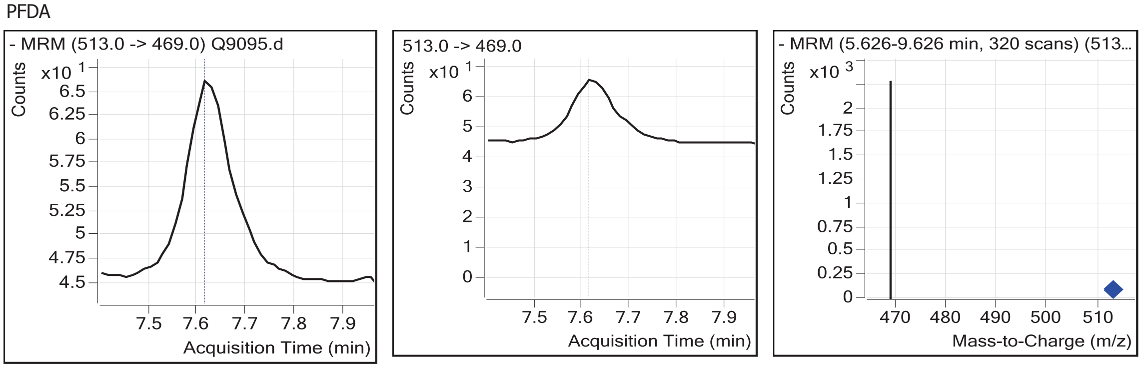
PFOS



PFNA

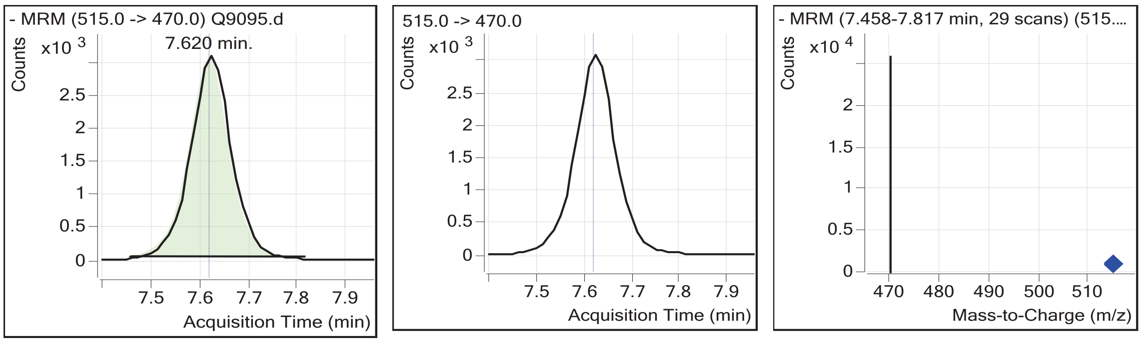


PFDA

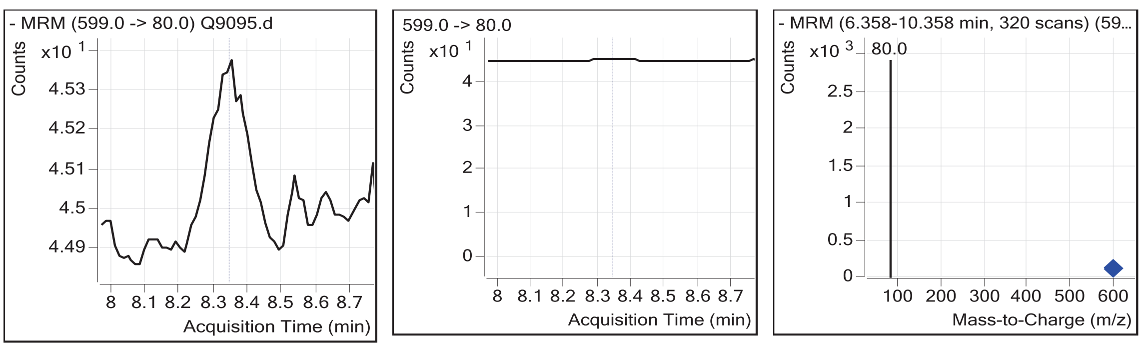


Perfluorinated Compounds by LC/MS/MS.

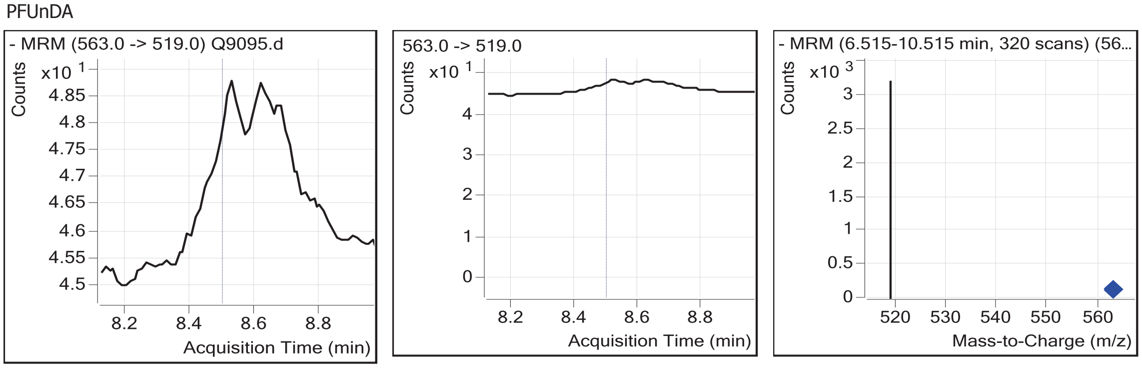
13C2-PFDA



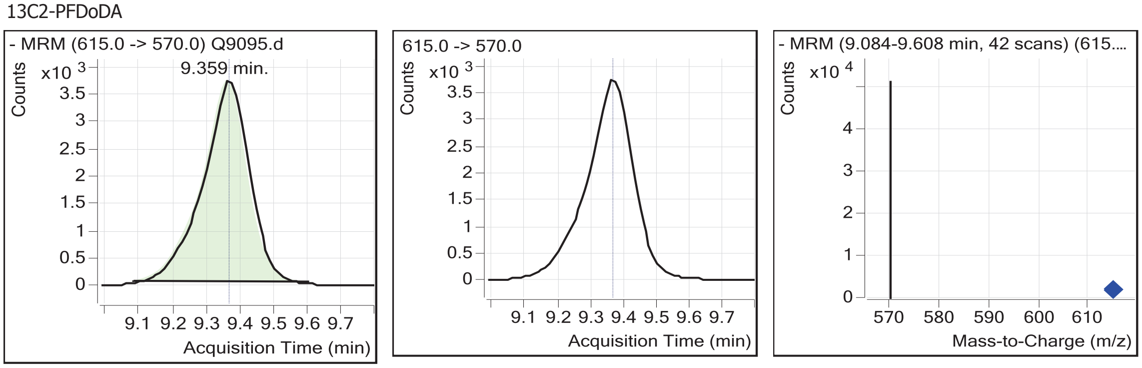
PFDS



PFUnDA

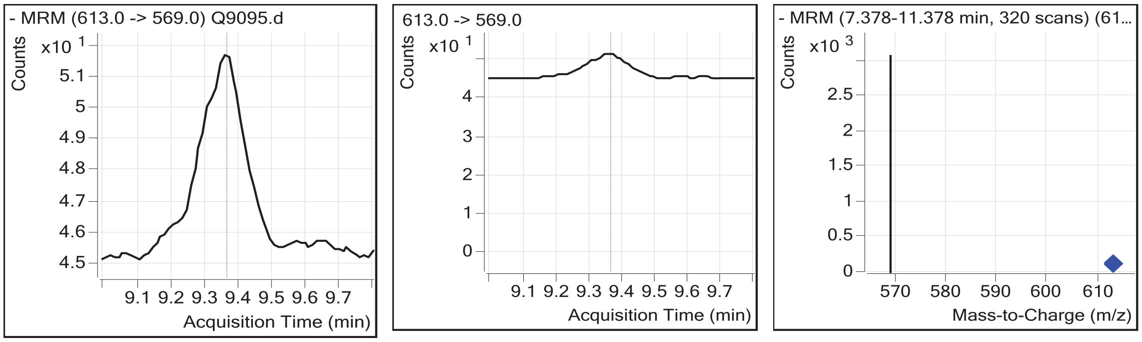


13C2-PFDoDA

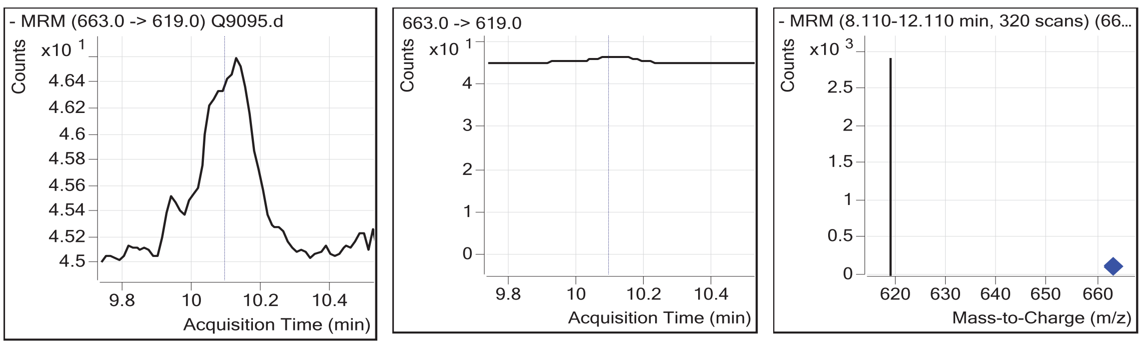


Perfluorinated Compounds by LC/MS/MS.

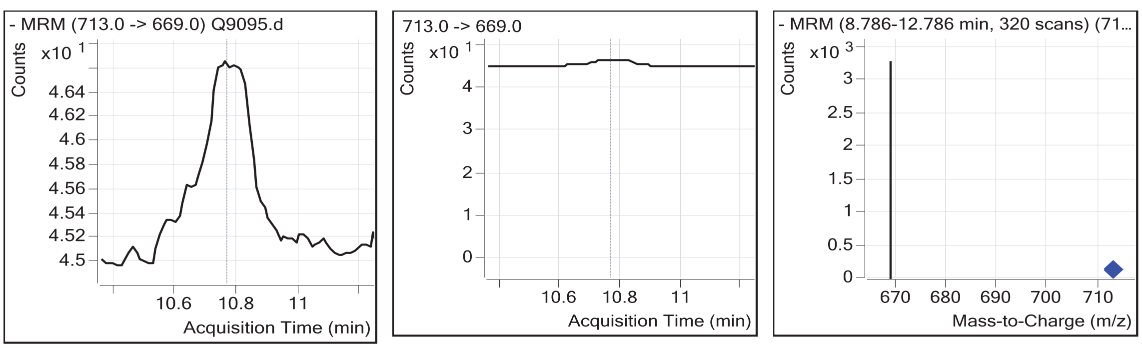
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	FA20501-2	**Method:**	EPA 537 MOD
Lab FileID:	Q9095.D	**Analyst approved:**	12/22/14 10:29 Mike Eger
Injection Time:	12/19/14 22:01	**Supervisor approved:**	12/22/14 13:28 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

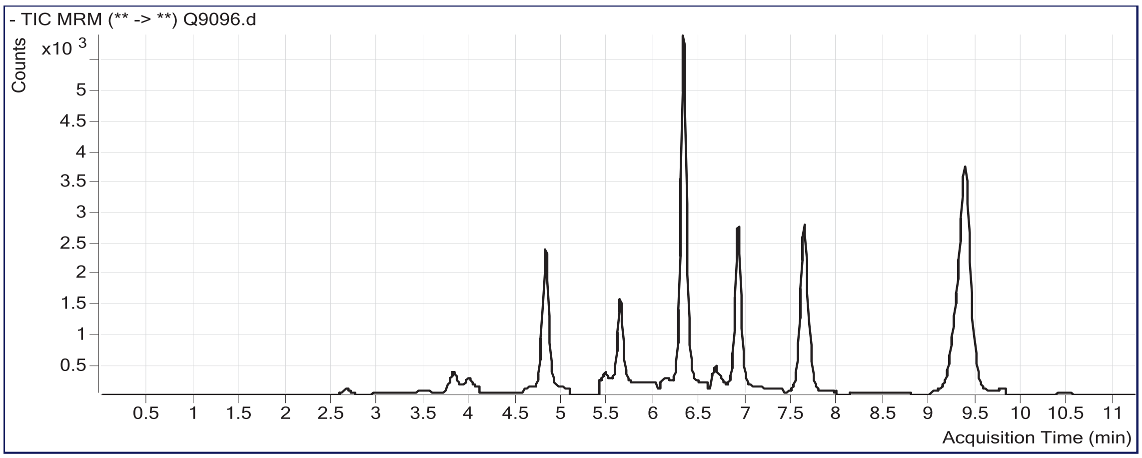
Data File	:	Q9096.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 22:21
Sample Name	:	FA20501-3
Vial	:	Vial 24
Sample Info	:	OP54279,SQ290,120,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	**R.T.**	**QIon**	**Response**	**Conc**	**Units**		**Dev(Min)**
Internal Standards							
13C2-PFOA	6.308	415.0 -> 370.0	21454	20.000	µg/L		-0.013
13C4-PFOS	6.907	503.0 -> 80.0	10627	20.000	µg/L		0.000
13C2-PFDoDA	9.359	615.0 -> 570.0	36445	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	4.804	315.0 -> 270.0	7802	23.72	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 118.59%				
13C2-PFDA	7.620	515.0 -> 470.0	16105	22.72	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 113.61%				
Target Compounds							**Qvalue**
PFBA	2.652	213.0 -> 169.0	463	1.535	µg/L		100
PFPeA	3.824	263.0 -> 219.0	1190	8.756	µg/L		100
PFBS	3.978	299.0 -> 80.0	438	2.423	µg/L		98
PFHxA	4.808	313.0 -> 269.0	2702	7.877	µg/L		98
PFHxS	5.617	399.0 -> 80.0	3177	11.854	µg/L	m	81
PFHpA	5.622	363.0 -> 319.0	1081	3.224	µg/L		98
PFOA	6.311	413.0 -> 369.0	3937	3.598	µg/L	m	84
PFOS	6.897	499.0 -> 80.0	2493	4.712	µg/L	m	86

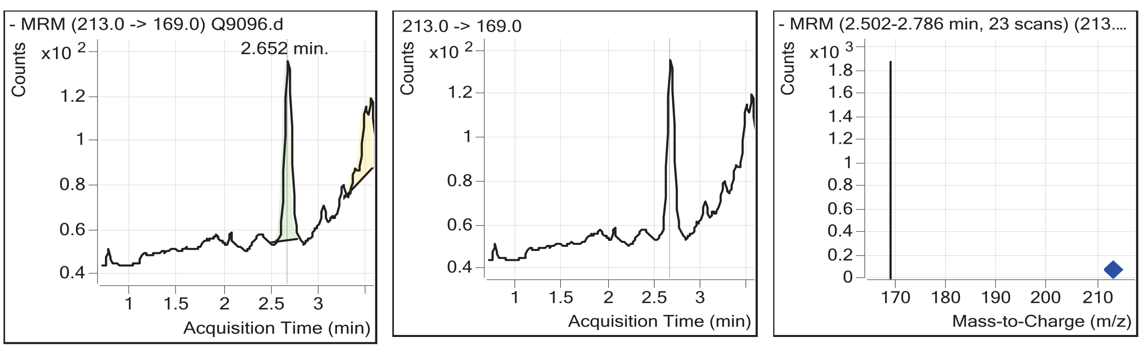
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

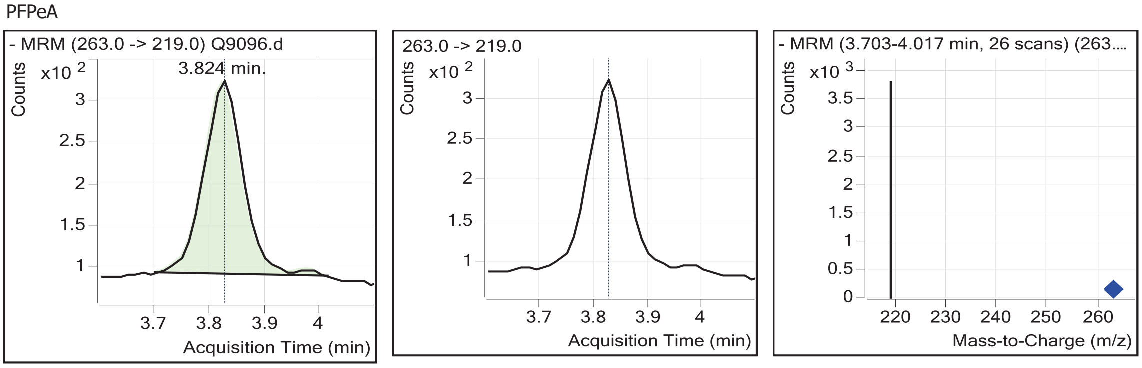
Data File	:	Q9096.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 22:21
Sample Name	:	FA20501-3
Vial	:	Vial 24
Sample Info	:	OP54279,SQ290,120,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

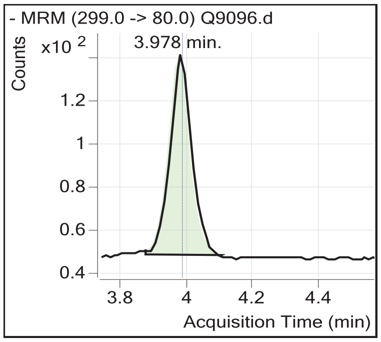


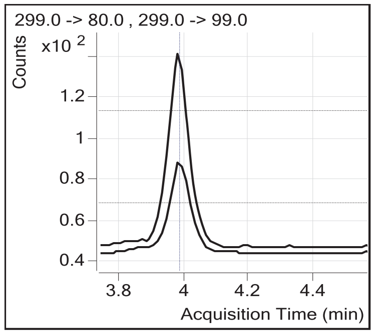
PFPeA

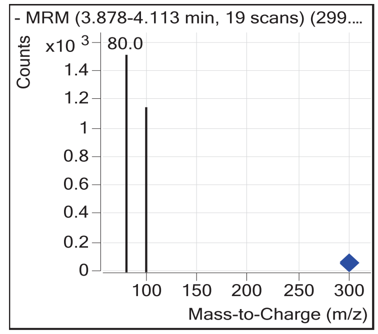


Perfluorinated Compounds by LC/MS/MS.

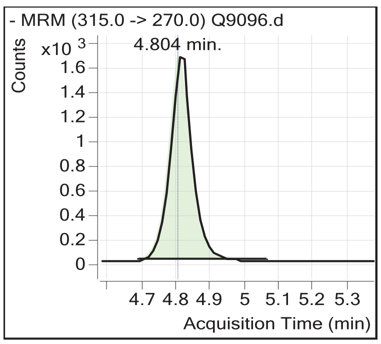
PFBS

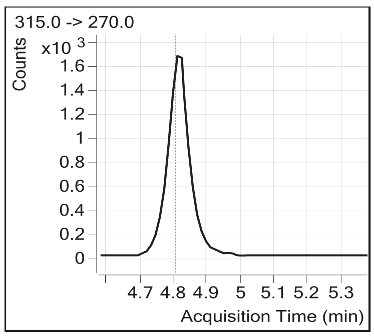


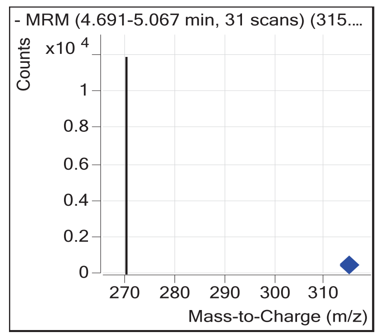




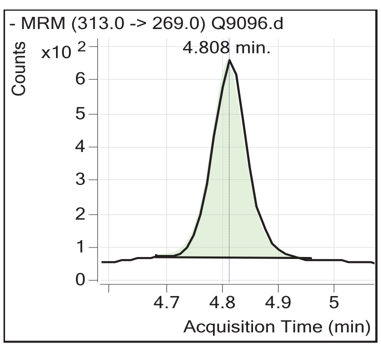
13C2-PFHxA

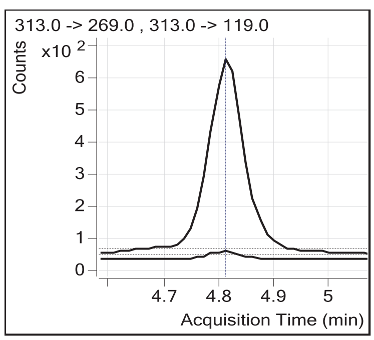


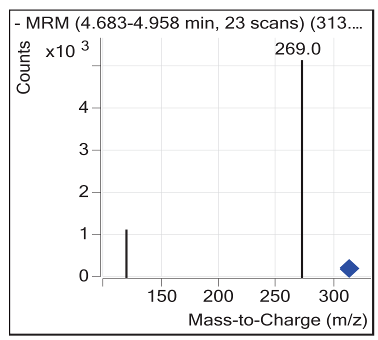




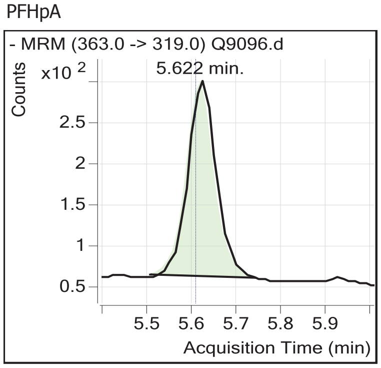
PFHxA

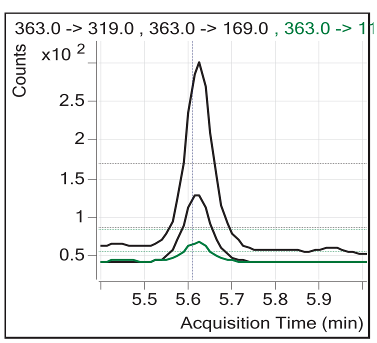


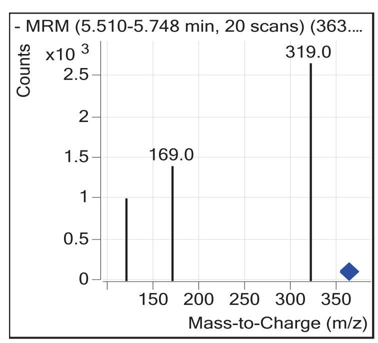




PFHpA



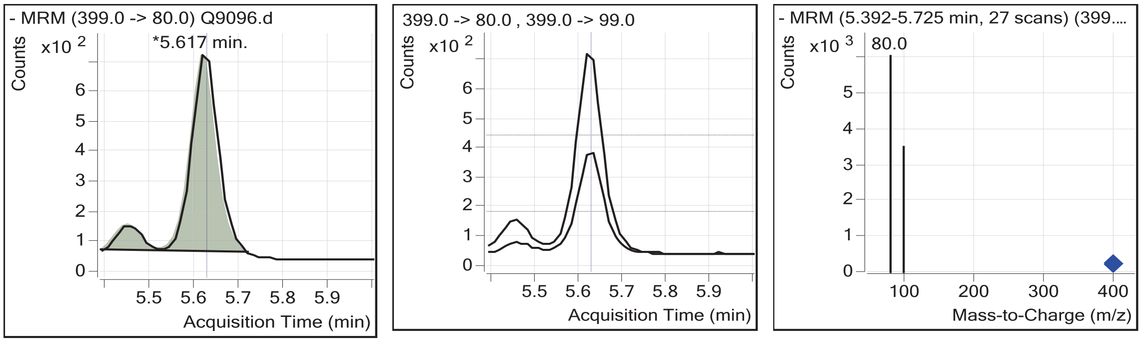




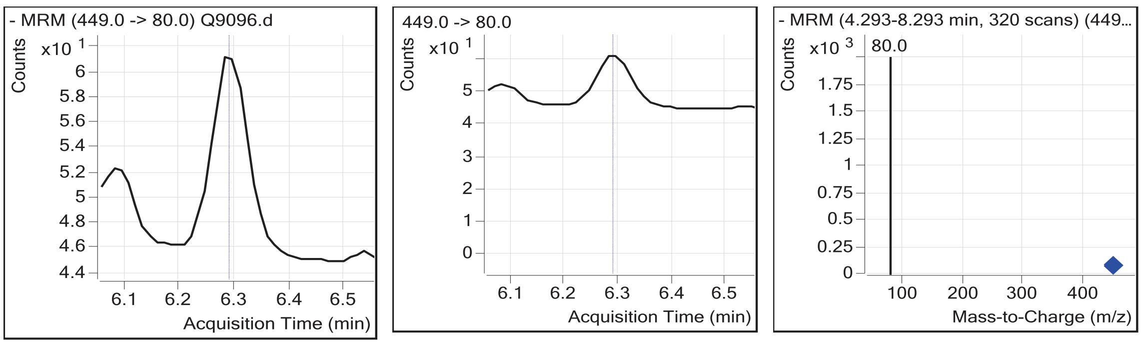
7.1.3
7

Perfluorinated Compounds by LC/MS/MS.

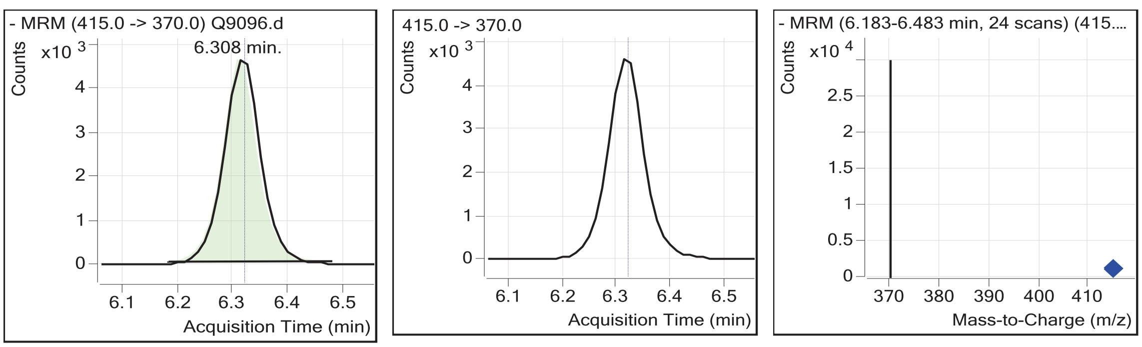
PFHxS



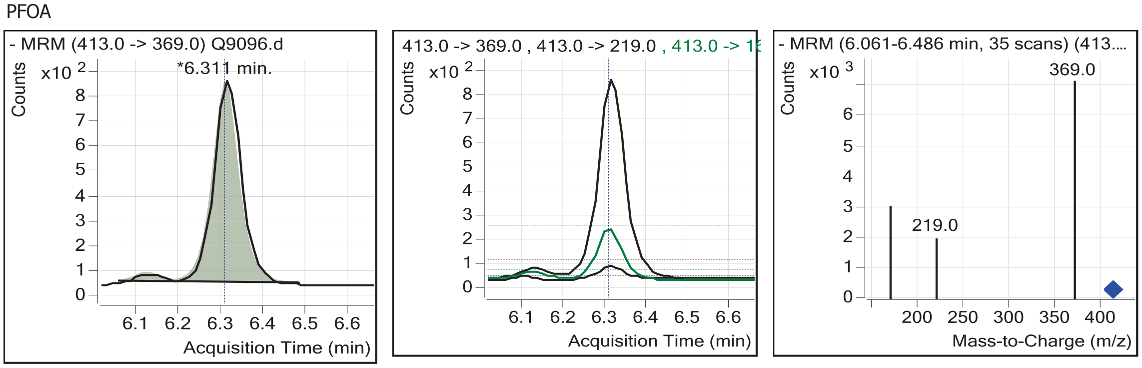
PFHpS



13C2-PFOA

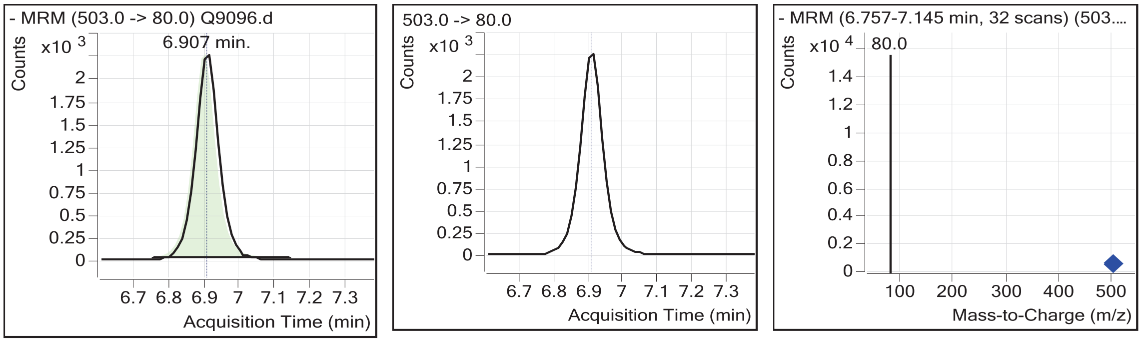


PFOA

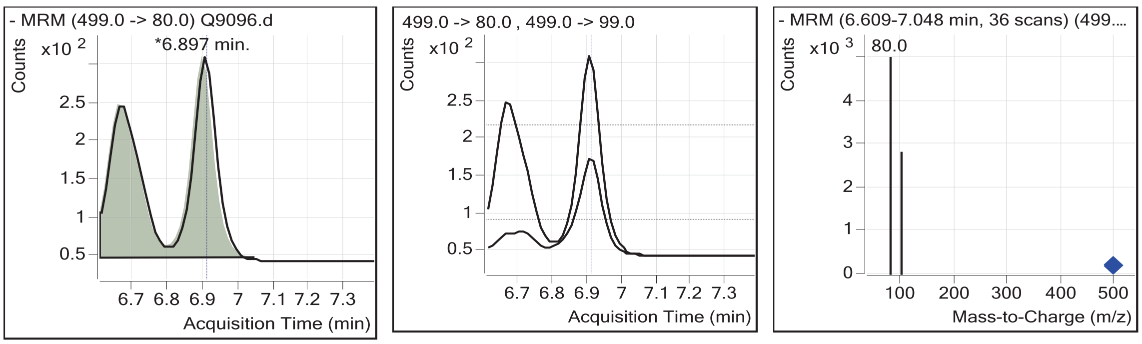


Perfluorinated Compounds by LC/MS/MS.

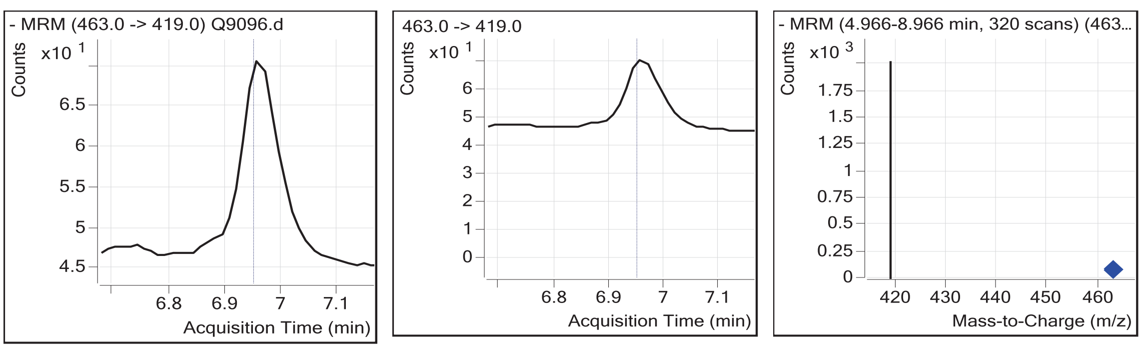
13C4-PFOS



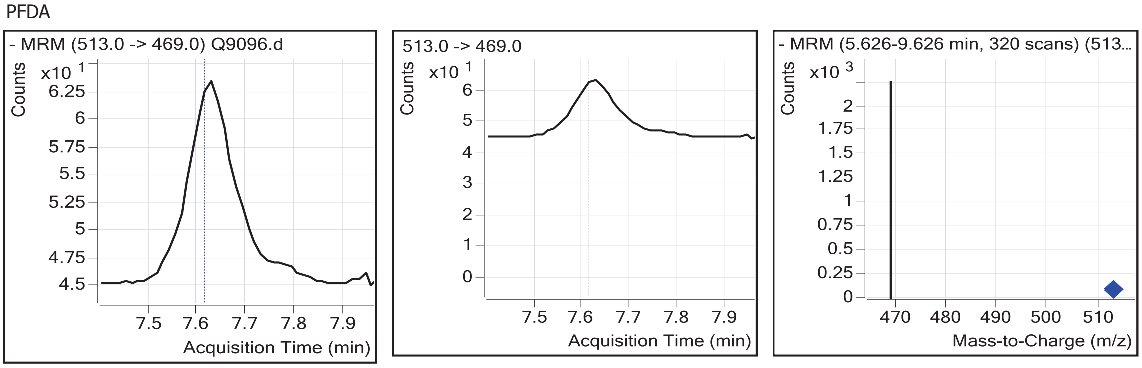
PFOS



PFNA

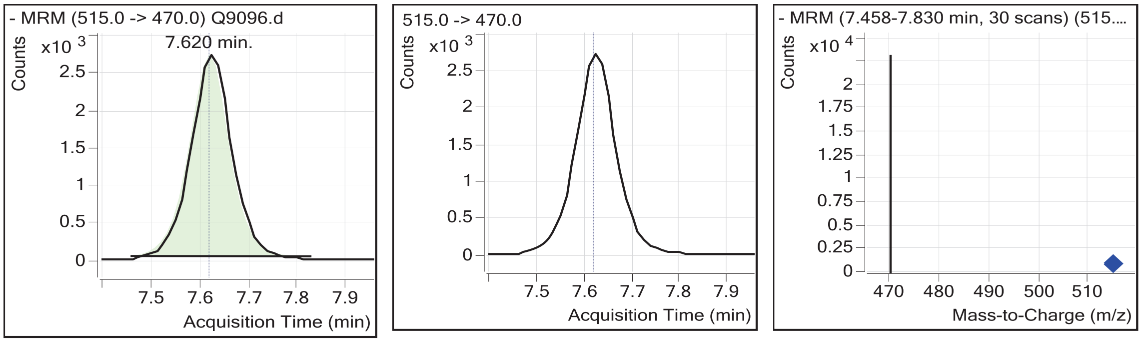


PFDA

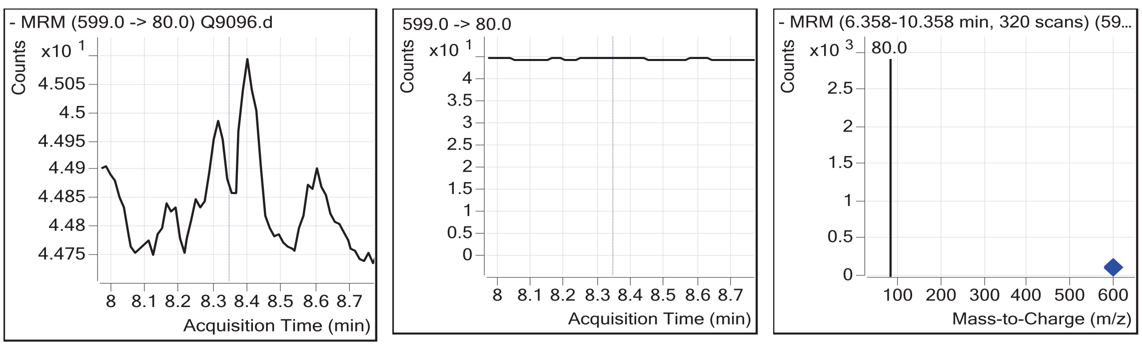


Perfluorinated Compounds by LC/MS/MS.

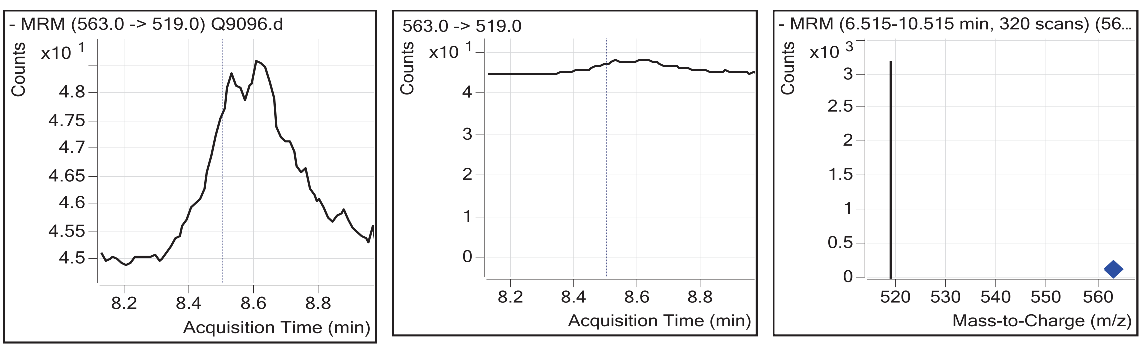
13C2-PFDA



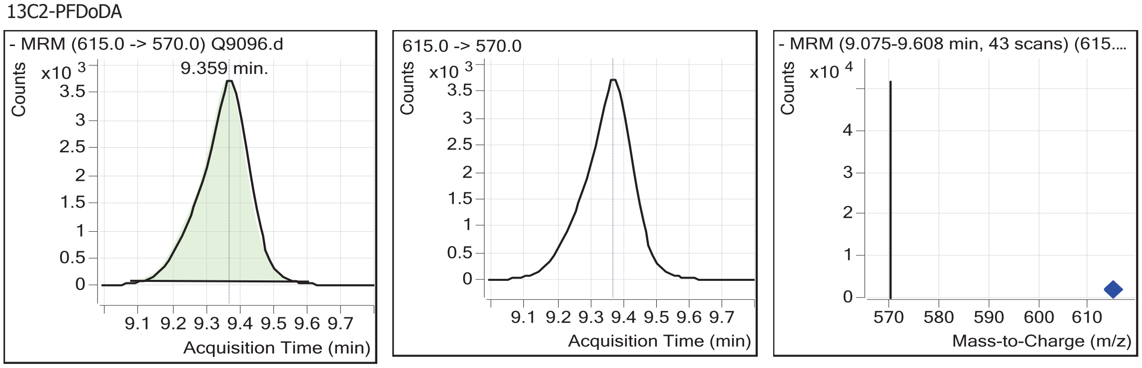
PFDS



PFUnDA

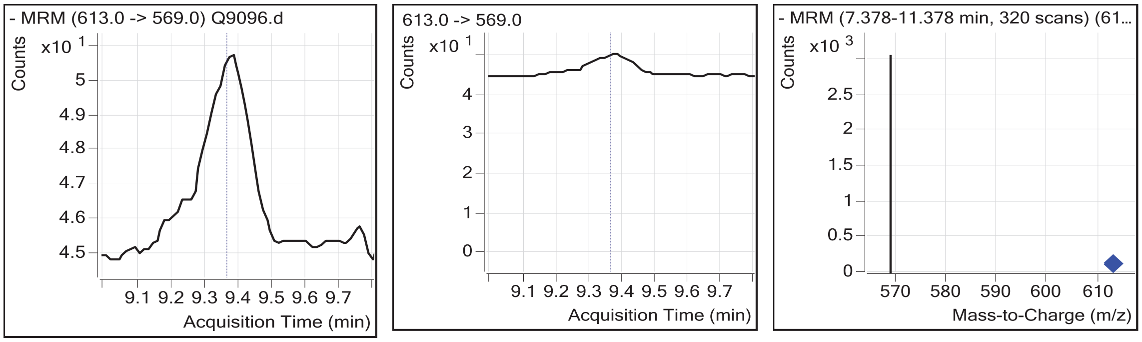


13C2-PFDoDA

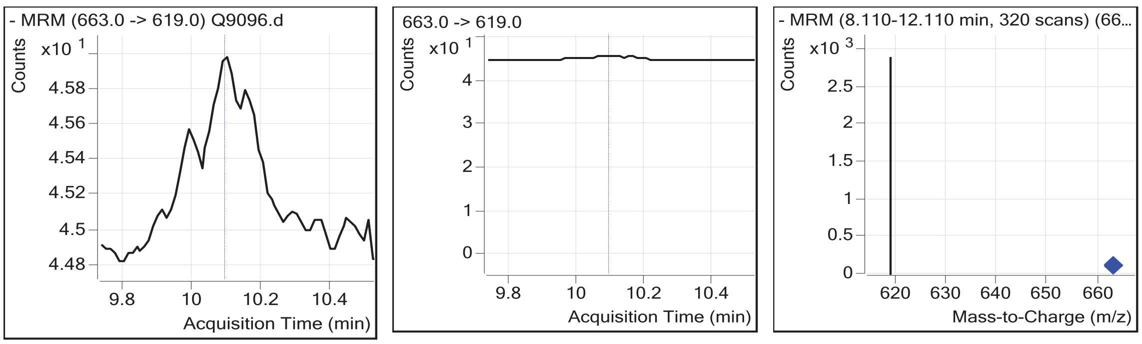


Perfluorinated Compounds by LC/MS/MS.

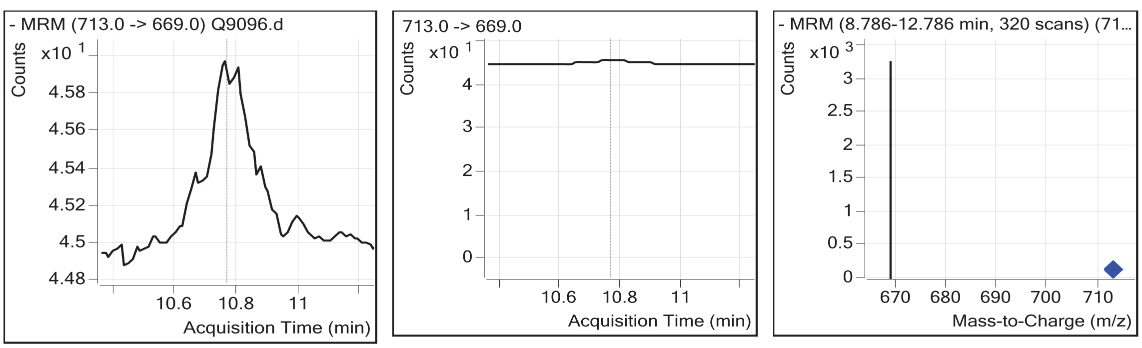
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number: FA20501-3 **Method:** EPA 537 MOD
Lab FileID: Q9096.D **Analyst approved:** 12/22/14 10:29 Mike Eger
Injection Time: 12/19/14 22:21 **Supervisor approved:** 12/22/14 13:28 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.62	Split peak
Perfluorooctanoic acid	335-67-1		6.31	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

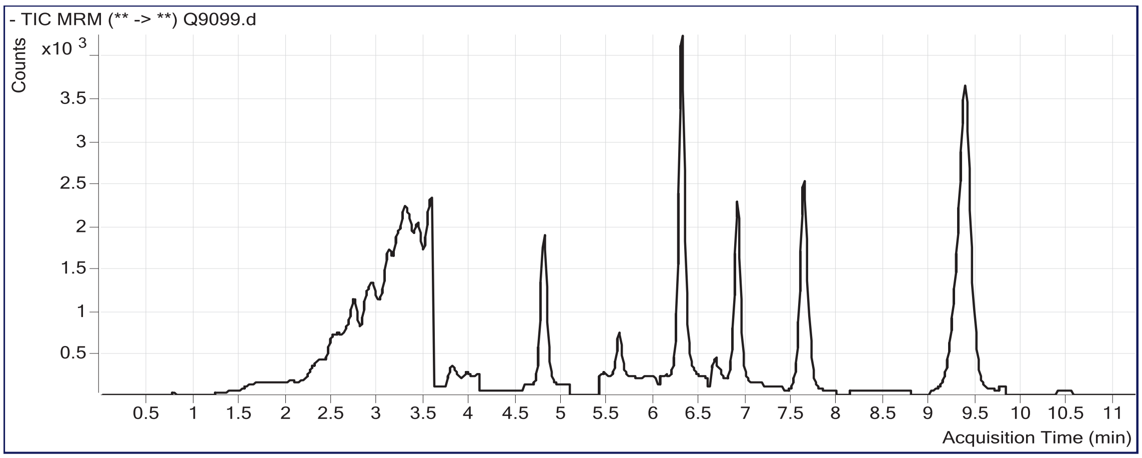
Data File	:	Q9099.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 23:20
Sample Name	:	FA20501-4
Vial	:	Vial 27
Sample Info	:	OP54279,SQ290,120,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.296	415.0 -> 370.0	17595	20.000	µg/L		-0.025
13C4-PFOS	6.894	503.0 -> 80.0	8181	20.000	µg/L		-0.013
13C2-PFDoDA	9.359	615.0 -> 570.0	35938	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	6686	24.78	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 123.91%				
13C2-PFDA	7.620	515.0 -> 470.0	14464	24.88	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 124.41%				
Target Compounds							**Qvalue**
PFBA	2.727	213.0 -> 169.0	2137	8.633	µg/L		100
PFPeA	3.811	263.0 -> 219.0	631	5.658	µg/L		100
PFHxA	4.796	313.0 -> 269.0	1284	4.564	µg/L		100
PFHxS	5.605	399.0 -> 80.0	1019	4.938	µg/L		83
PFHpA	5.610	363.0 -> 319.0	482	1.752	µg/L		94
PFOA	6.286	413.0 -> 369.0	1214	1.353	µg/L	#	49
PFOS	6.897	499.0 -> 80.0	2494	6.124	µg/L	m	99

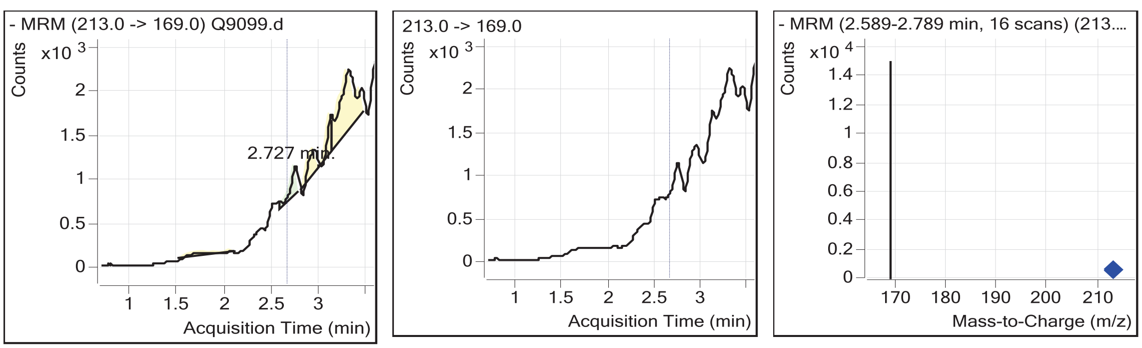
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

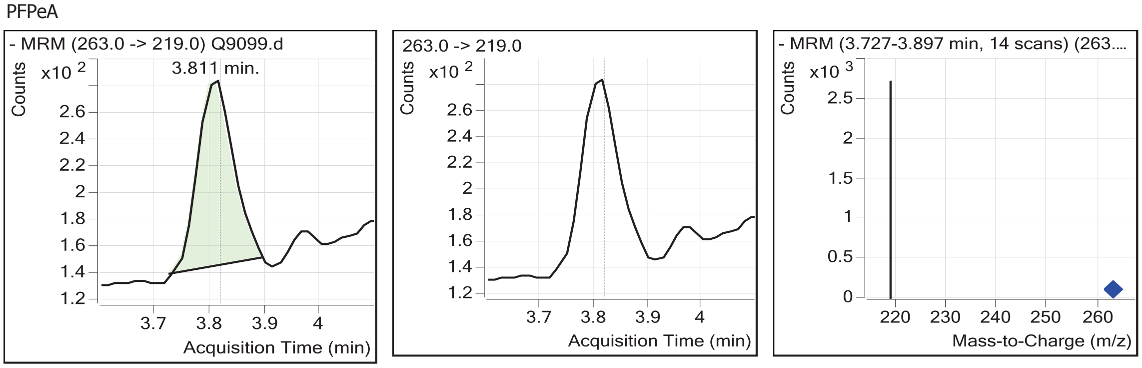
Data File	:	Q9099.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 23:20
Sample Name	:	FA20501-4
Vial	:	Vial 27
Sample Info	:	OP54279,SQ290,120,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

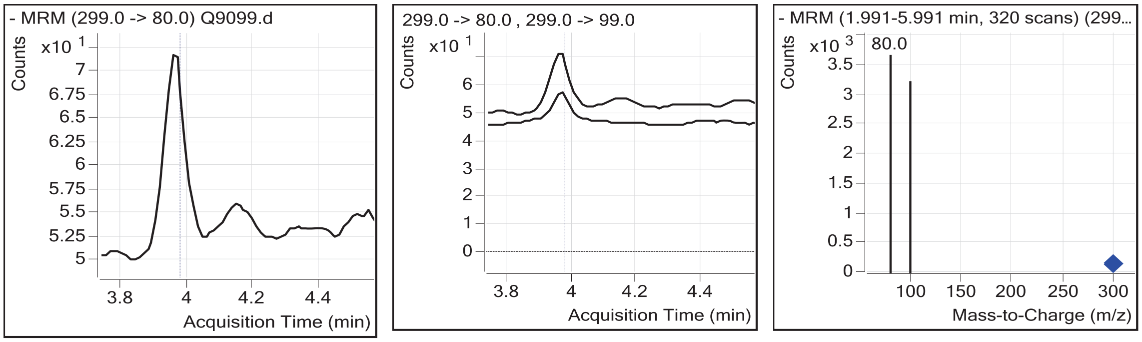


PFPeA

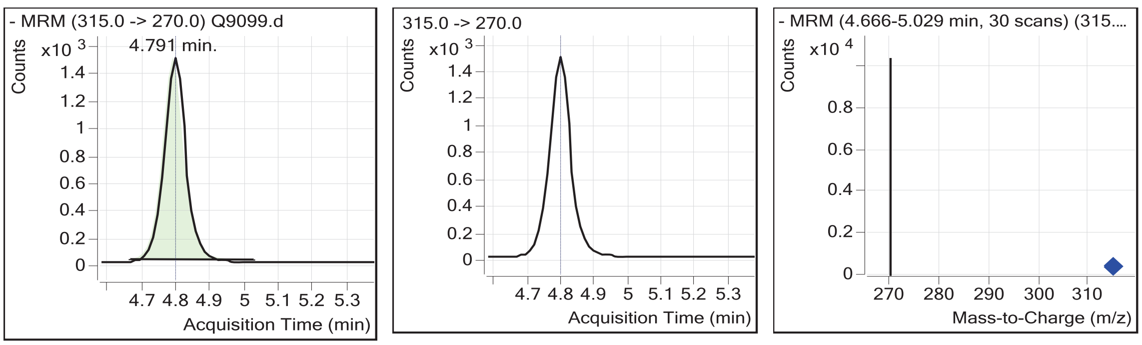


Perfluorinated Compounds by LC/MS/MS.

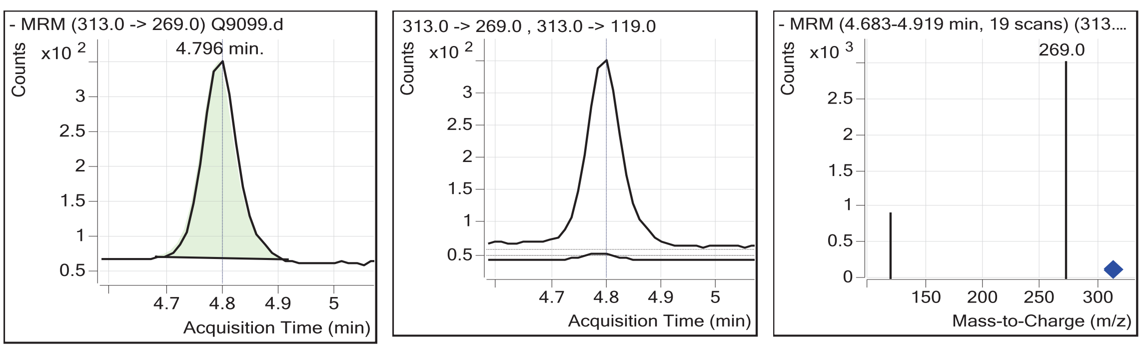
PFBS



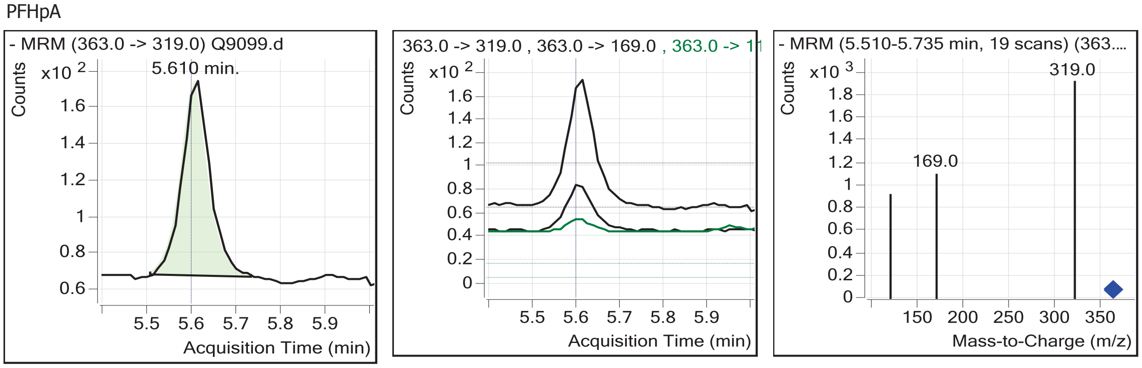
13C2-PFHxA



PFHxA

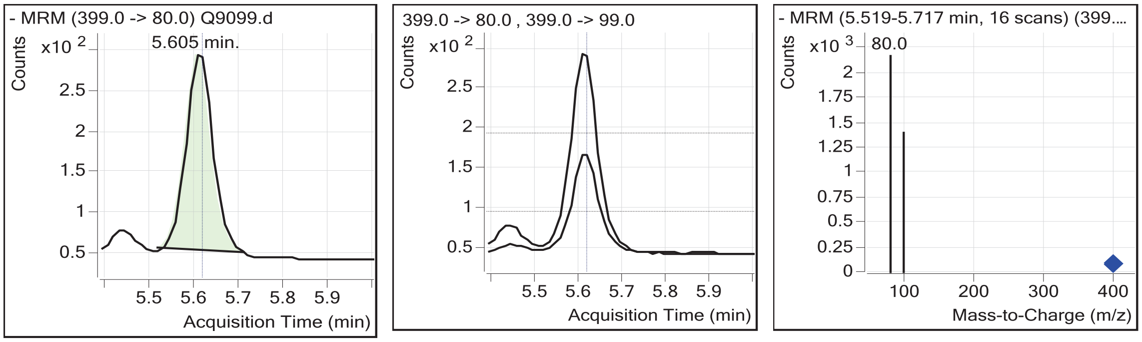


PFHpA

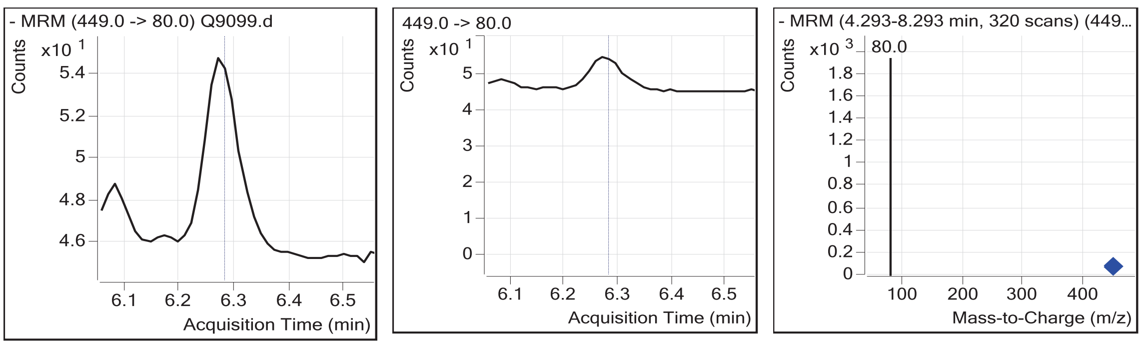


Perfluorinated Compounds by LC/MS/MS.

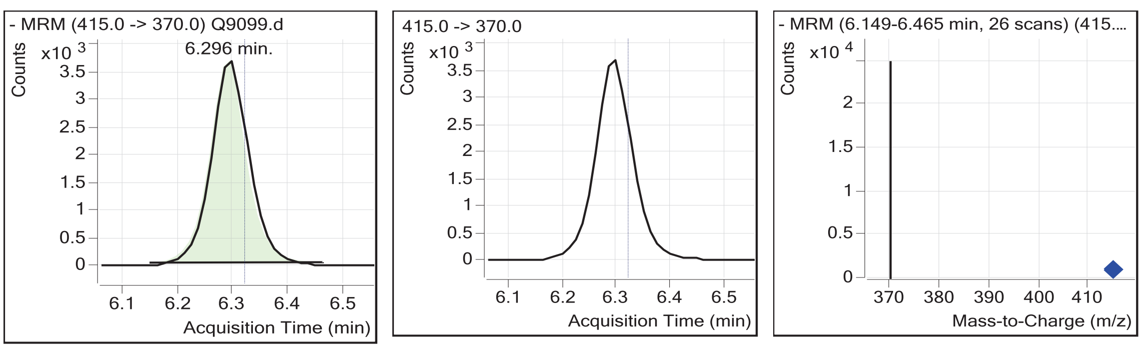
PFHxS



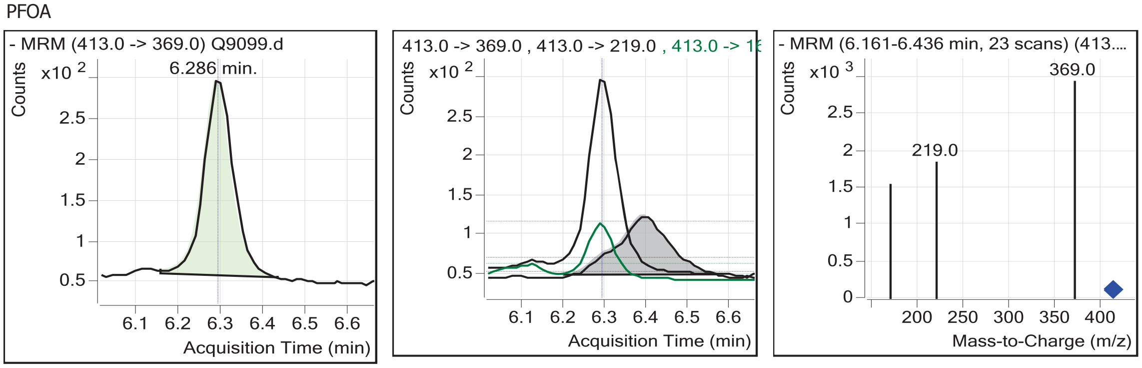
PFHpS



13C2-PFOA

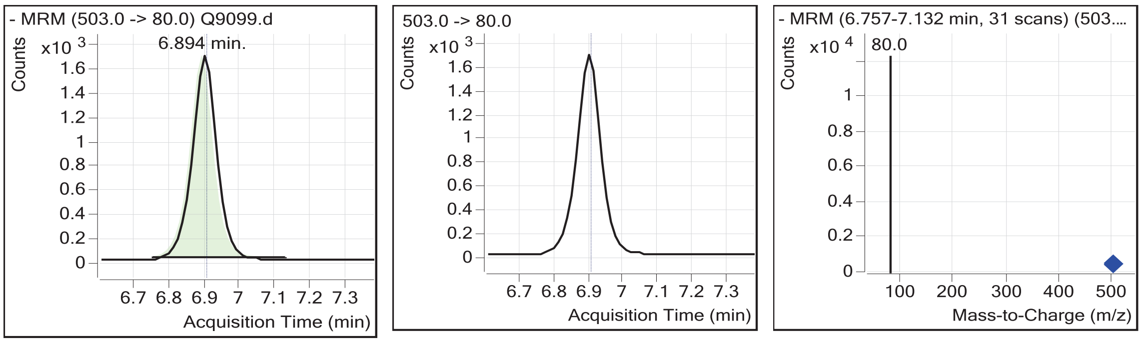


PFOA

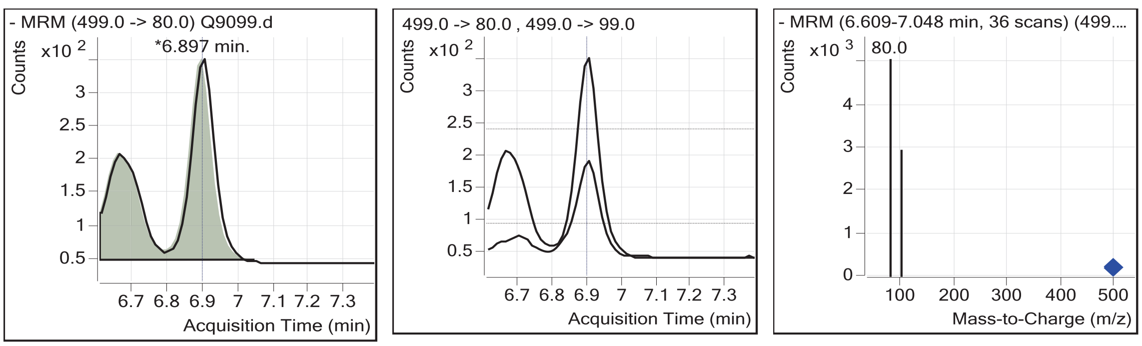


Perfluorinated Compounds by LC/MS/MS.

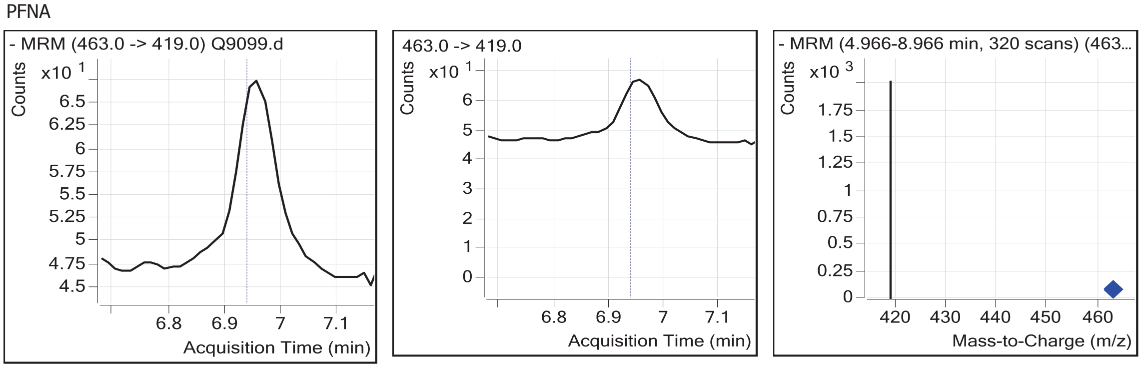
13C4-PFOS



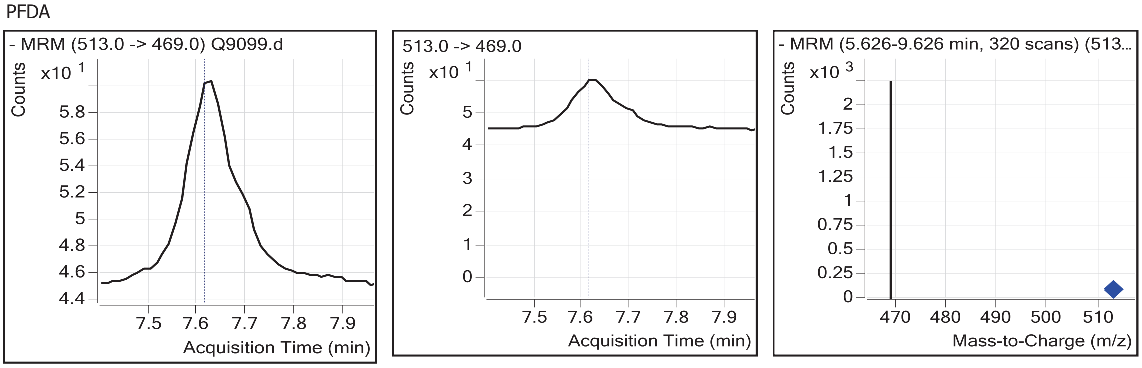
PFOS



PFNA

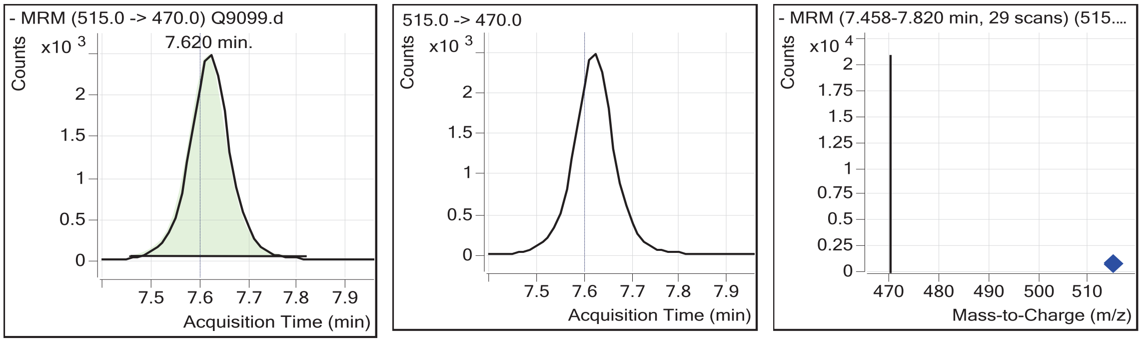


PFDA

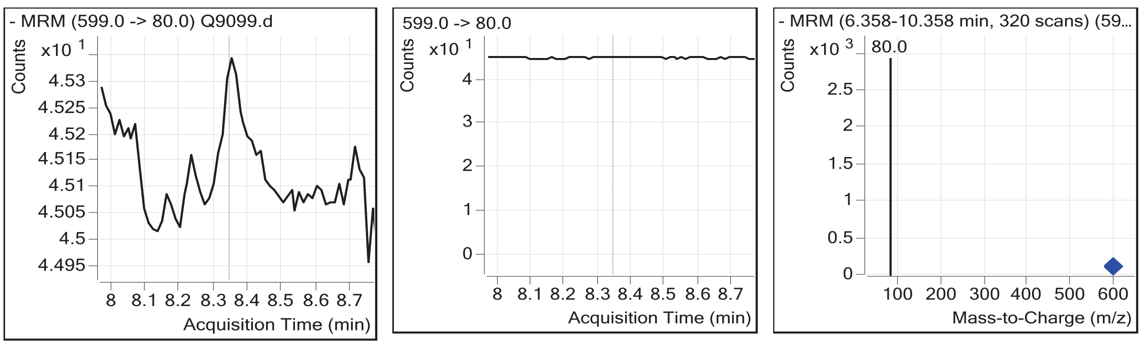


Perfluorinated Compounds by LC/MS/MS.

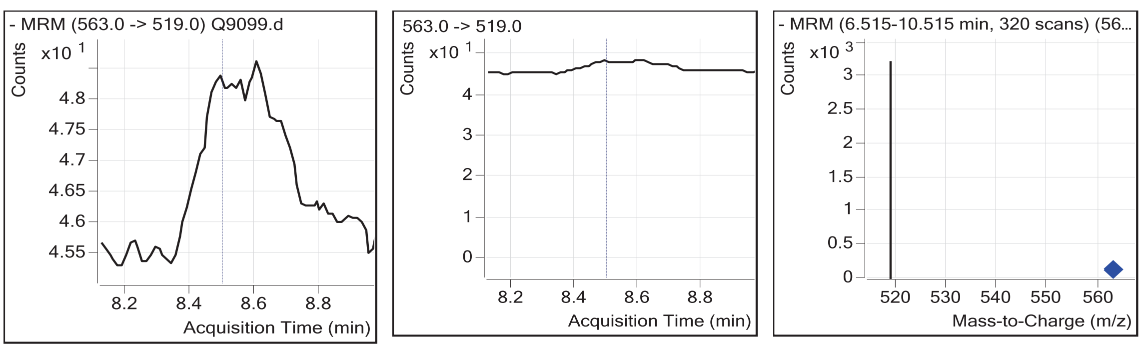
13C2-PFDA



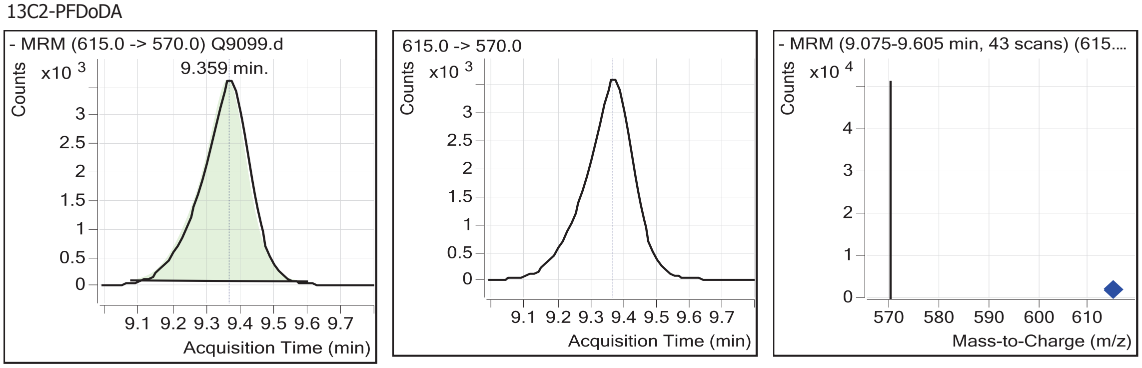
PFDS



PFUnDA

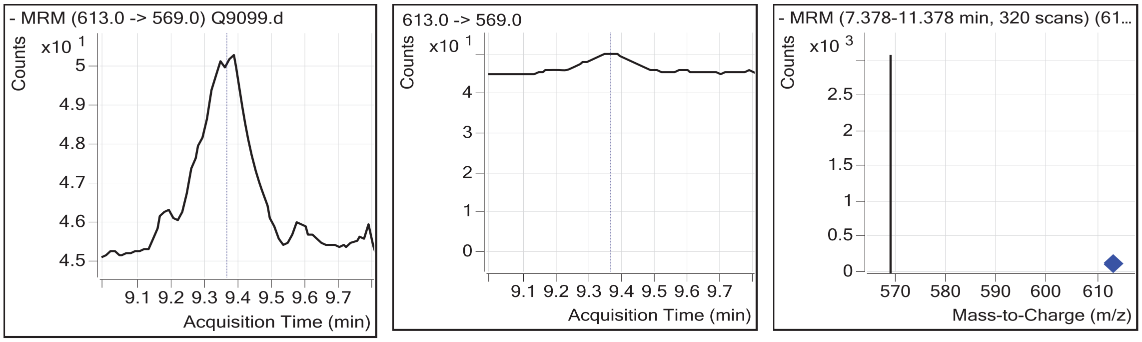


13C2-PFDoDA

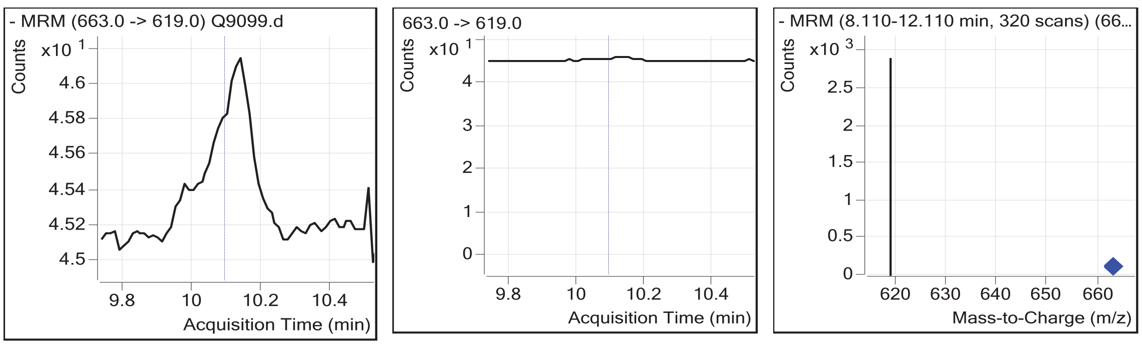


Perfluorinated Compounds by LC/MS/MS.

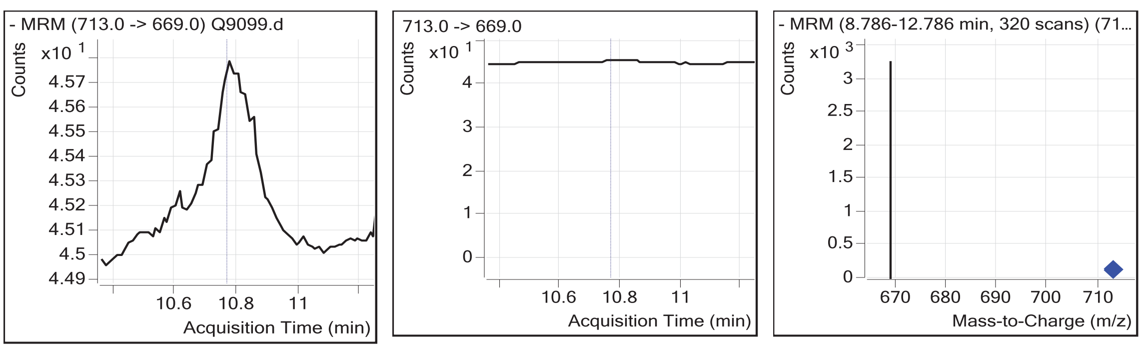
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	FA20501-4	**Method:**	EPA 537 MOD	
Lab FileID:	Q9099.D	**Analyst approved:**	12/22/14 10:29	Mike Eger
Injection Time:	12/19/14 23:20	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Perfluorinated Compounds by LC/MS/MS.

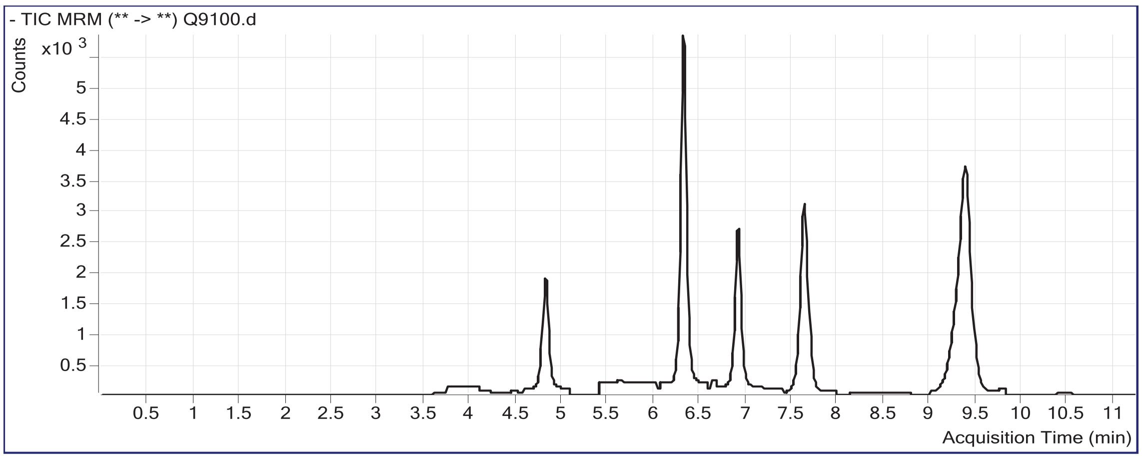
Data File	:	Q9100.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 23:40
Sample Name	:	FA20501-5
Vial	:	Vial 28
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.308	415.0 -> 370.0	24685	20.000	µg/L	-0.013
13C4-PFOS	6.907	503.0 -> 80.0	12418	20.000	µg/L	0.000
13C2-PFDoDA	9.372	615.0 -> 570.0	37551	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	8353	22.07	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 110.35%			
13C2-PFDA	7.620	515.0 -> 470.0	18448	22.62	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 113.10%			
Target Compounds						**Qvalue**
PFOA	6.311	413.0 -> 369.0	1351	1.073	µg/L	81

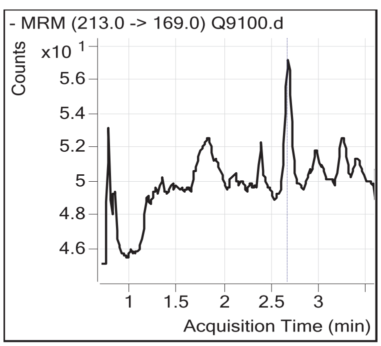
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

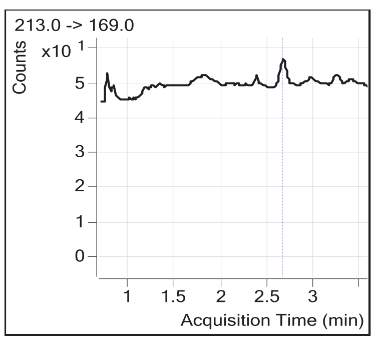
Perfluorinated Compounds by LC/MS/MS.

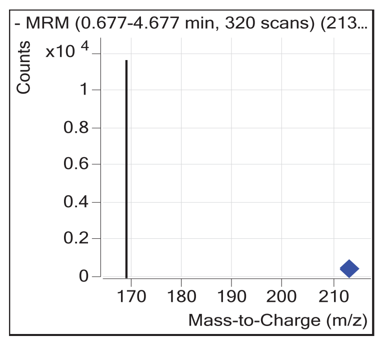
Data File	:	Q9100.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 23:40
Sample Name	:	FA20501-5
Vial	:	Vial 28
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



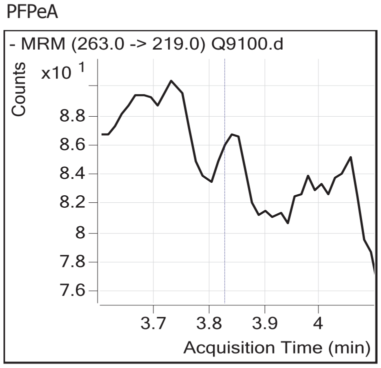
PFBA

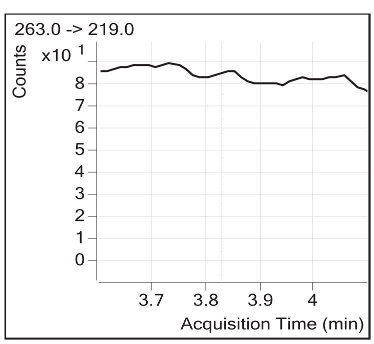


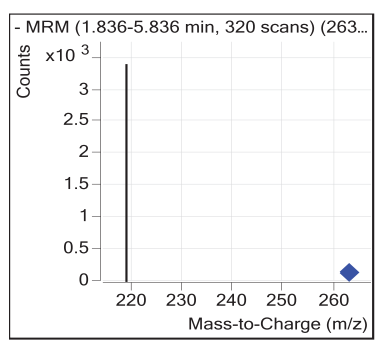




PFPeA

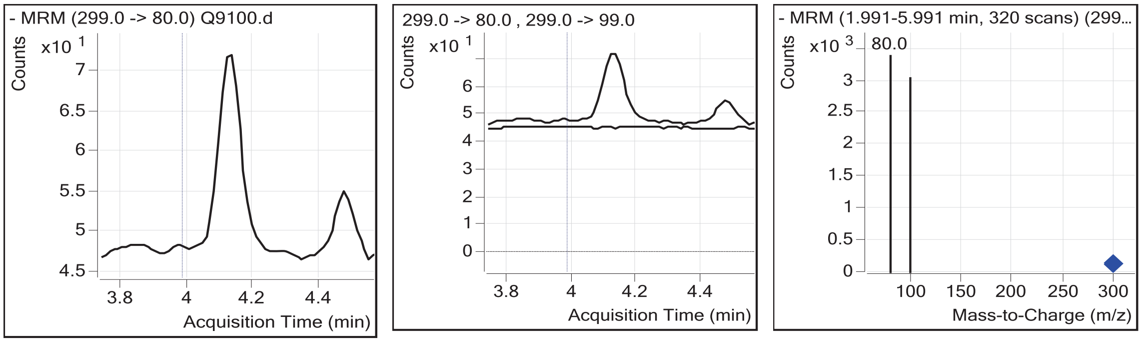




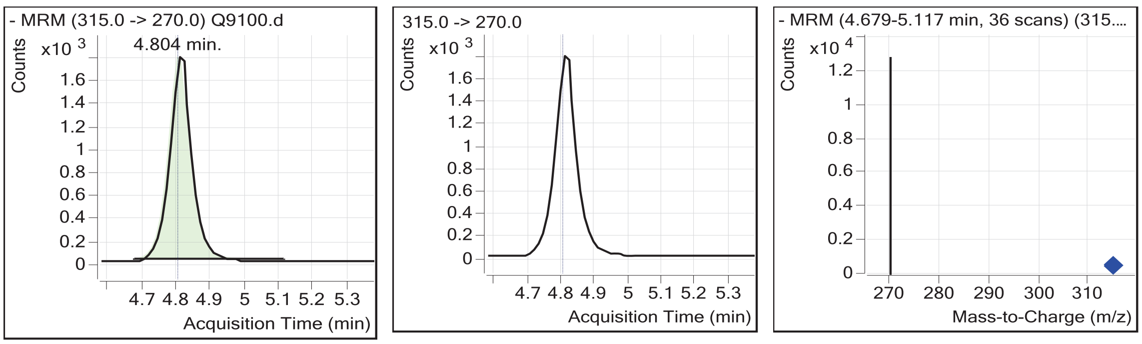


Perfluorinated Compounds by LC/MS/MS.

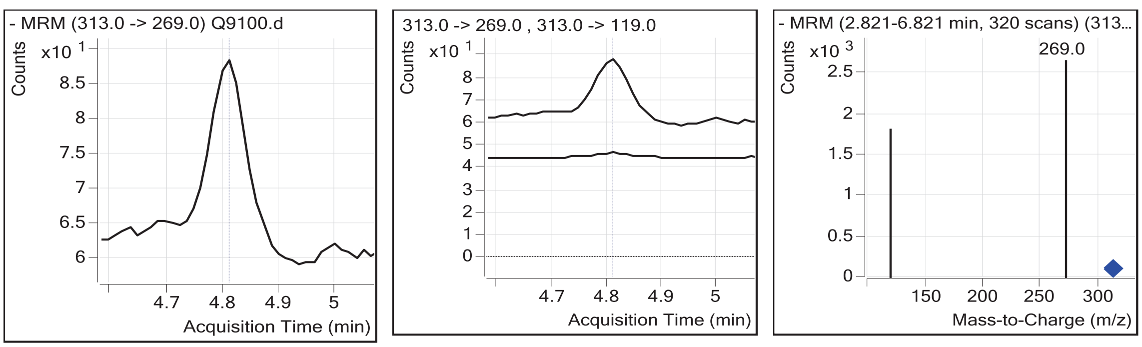
PFBS



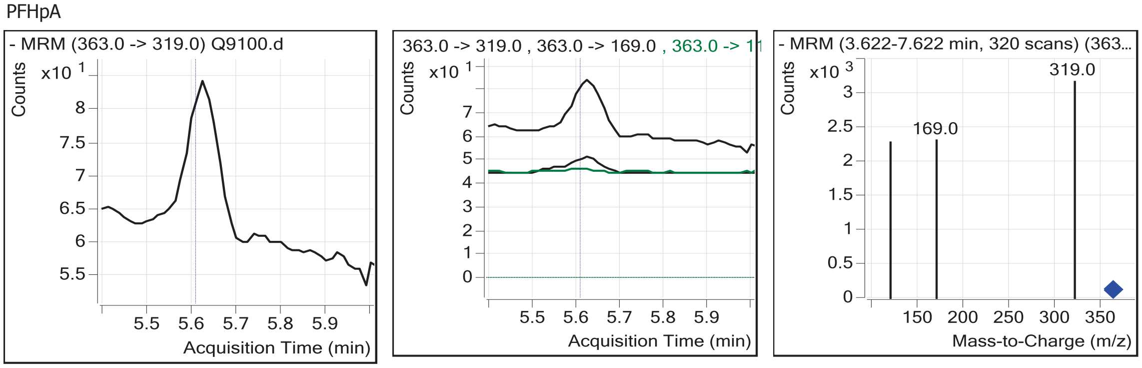
13C2-PFHxA



PFHxA



PFHpA

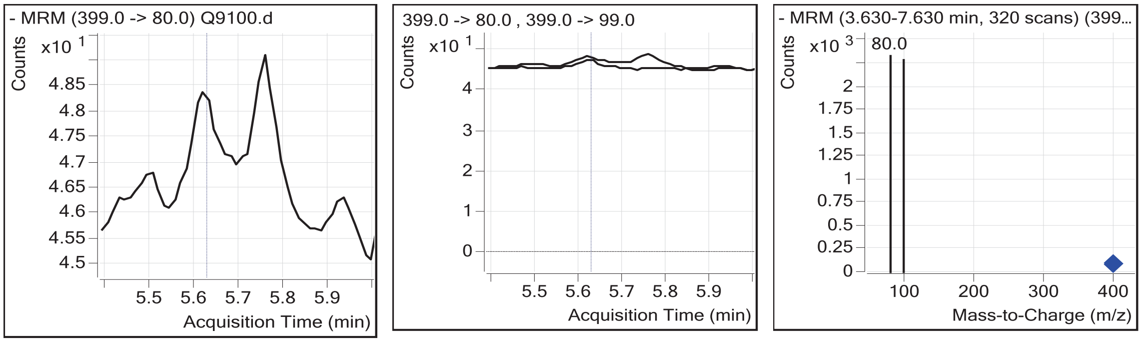


7.1.5

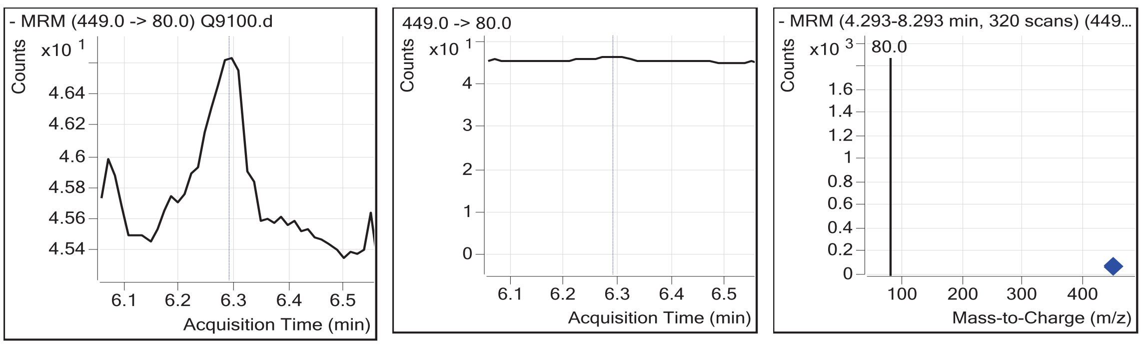
7

Perfluorinated Compounds by LC/MS/MS.

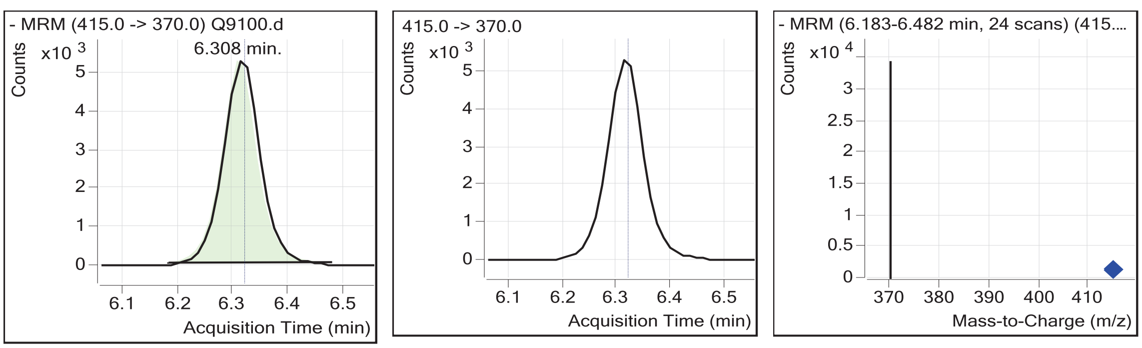
PFHxS



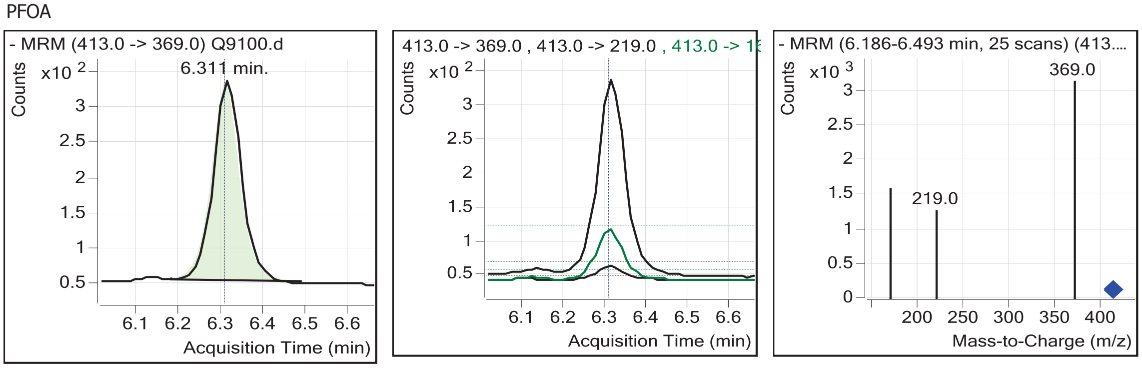
PFHpS



13C2-PFOA

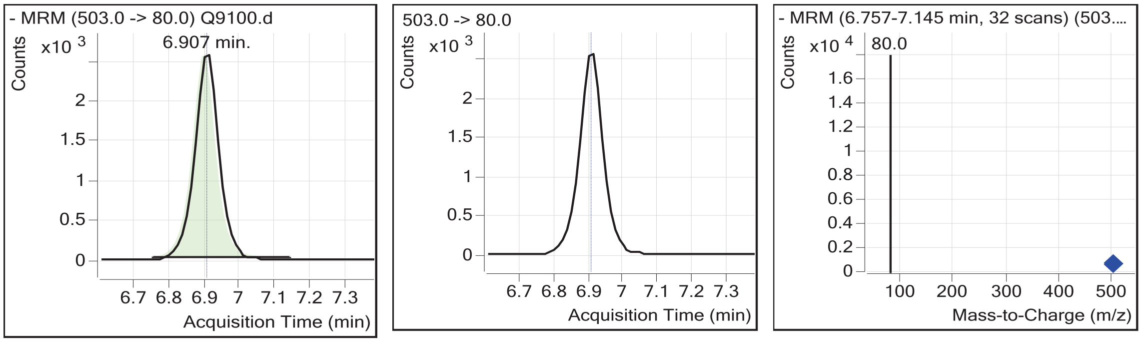


PFOA

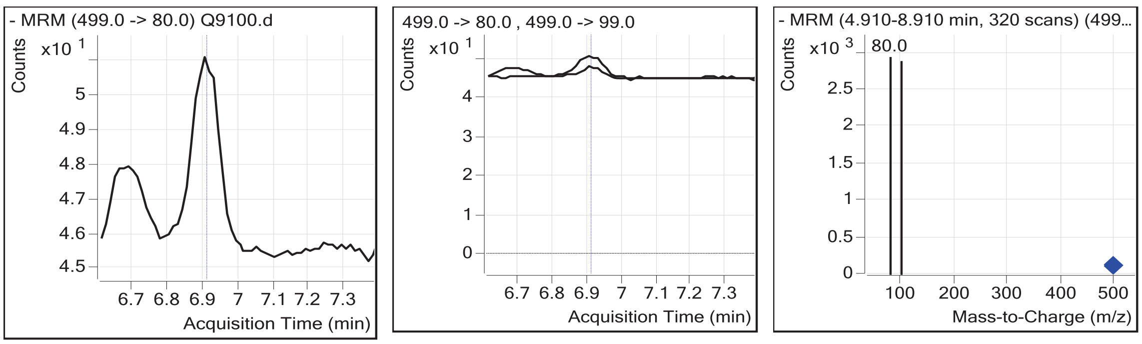


Perfluorinated Compounds by LC/MS/MS.

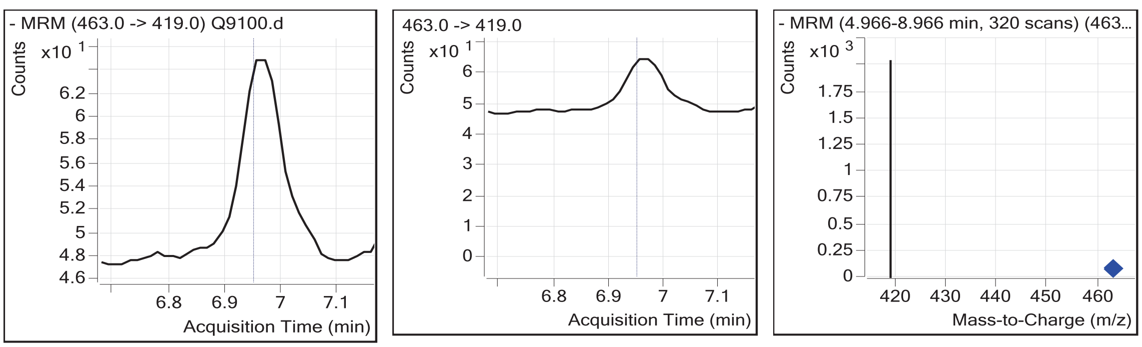
13C4-PFOS



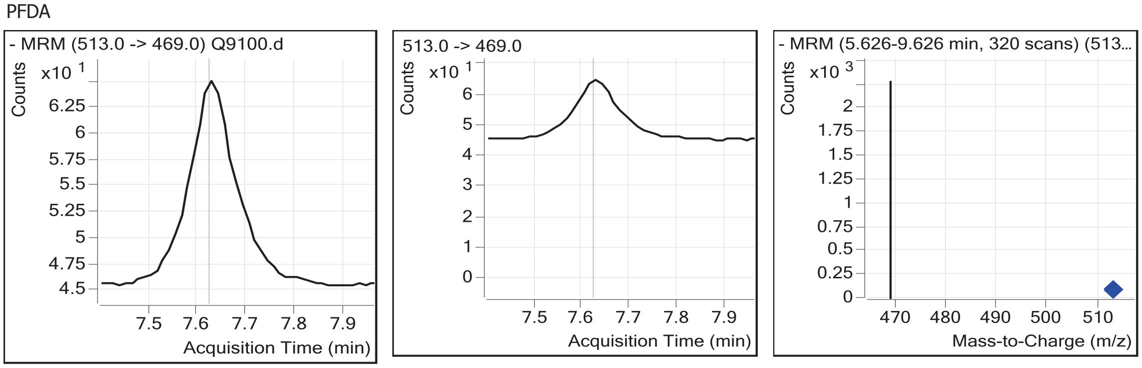
PFOS



PFNA

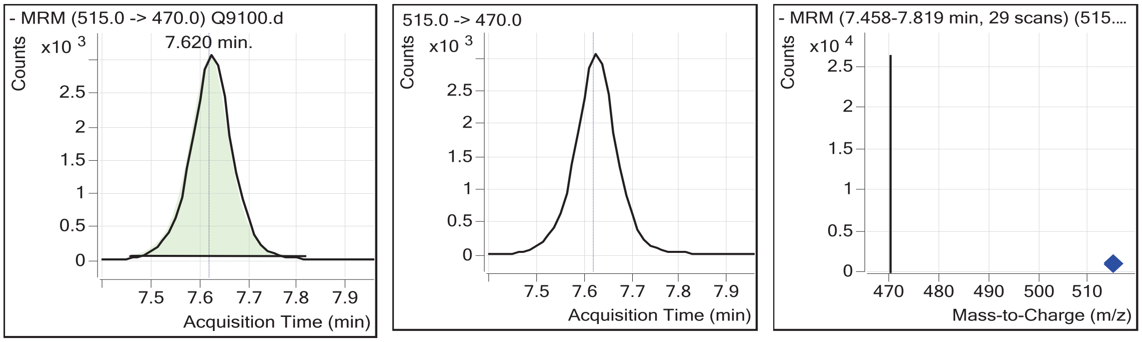


PFDA

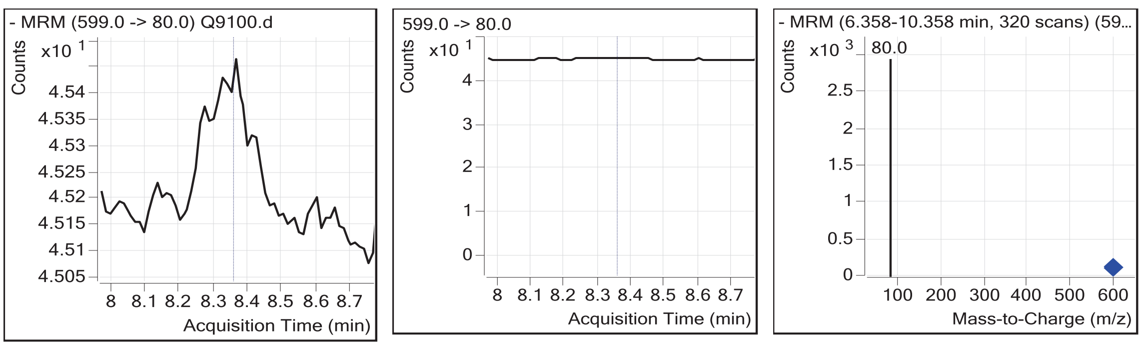


Perfluorinated Compounds by LC/MS/MS.

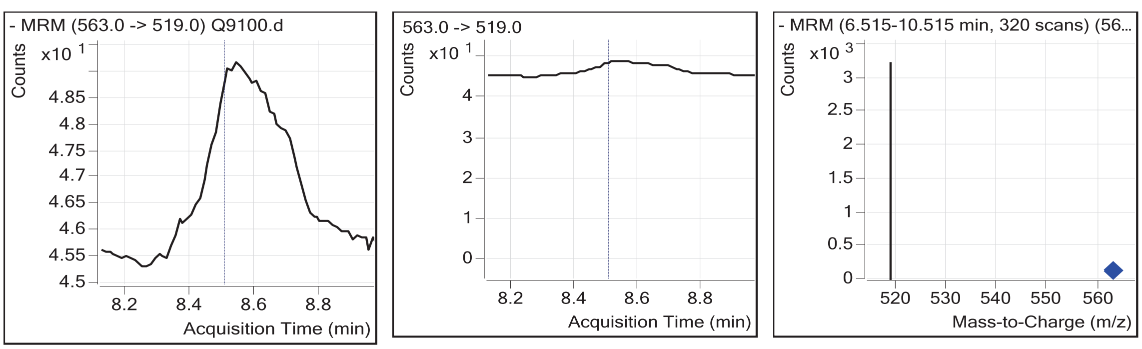
13C2-PFDA



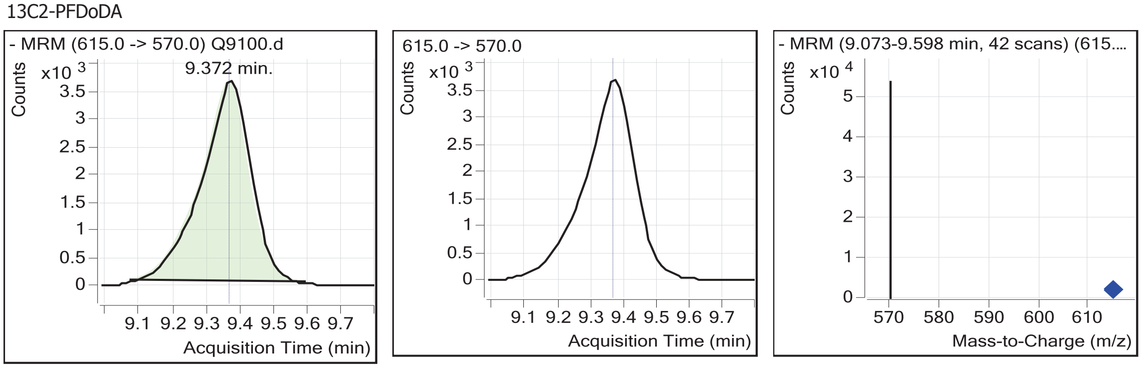
PFDS



PFUnDA



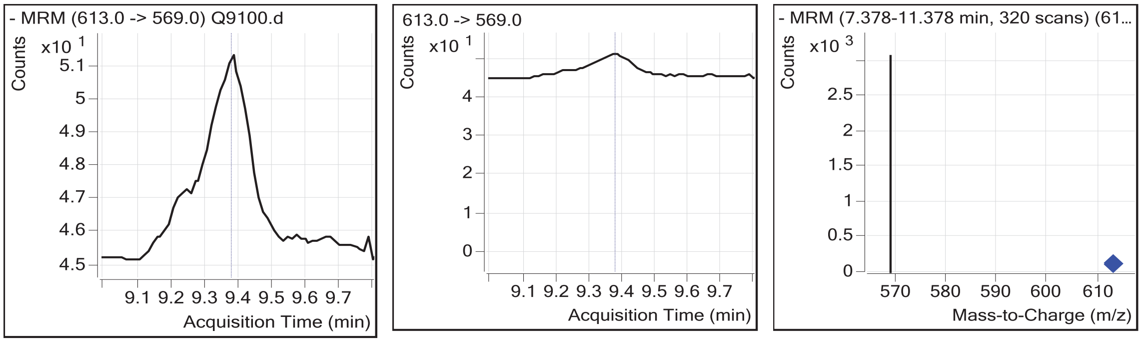
13C2-PFDoDA



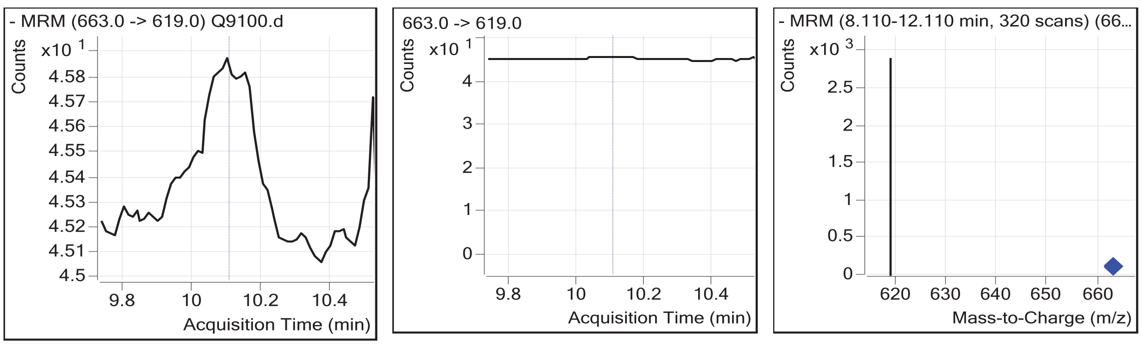
7.1.5
7

Perfluorinated Compounds by LC/MS/MS.

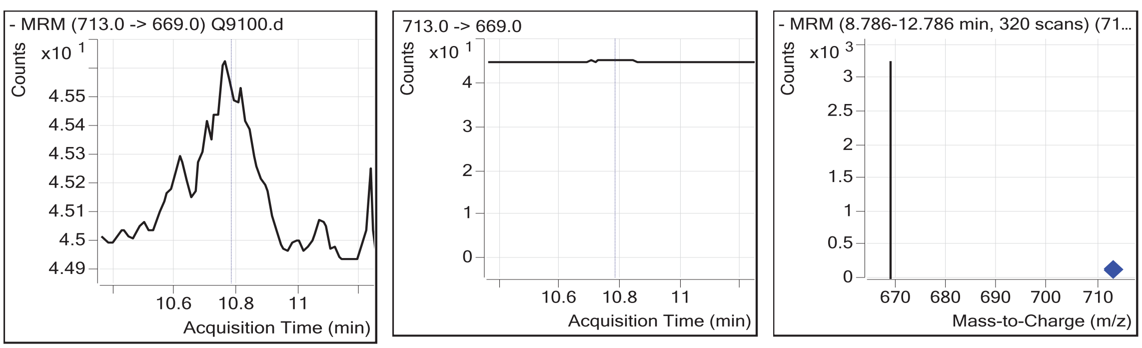
PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

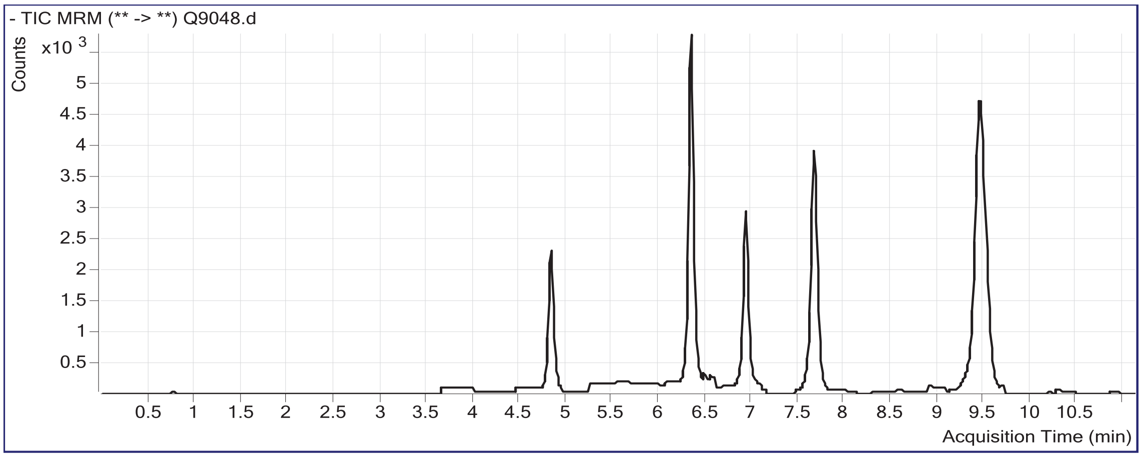
Data File	:	Q9048.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 21:48
Sample Name	:	FA20501-6
Vial	:	Vial 11
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.334	415.0 -> 370.0	22744	20.000	µg/L	0.000
13C4-PFOS	6.920	503.0 -> 80.0	11801	20.000	µg/L	0.000
13C2-PFDoDA	9.447	615.0 -> 570.0	38510	20.000	µg/L	0.100
System Monitoring Compounds						
13C2-PFHxA	4.829	315.0 -> 270.0	9023	24.13	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 120.64%			
13C2-PFDA	7.658	515.0 -> 470.0	20114	20.73	µg/L	0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 103.65%			
Target Compounds						**Qvalue**

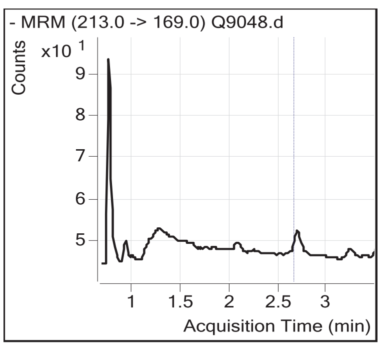
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

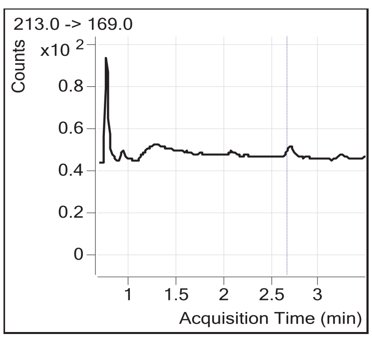
Perfluorinated Compounds by LC/MS/MS.

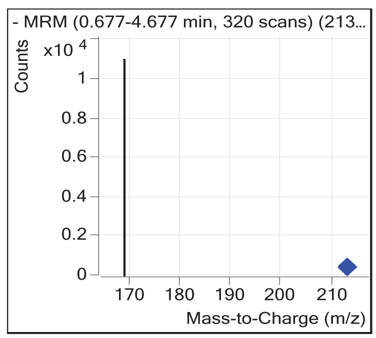
Data File	:	Q9048.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 21:48
Sample Name	:	FA20501-6
Vial	:	Vial 11
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



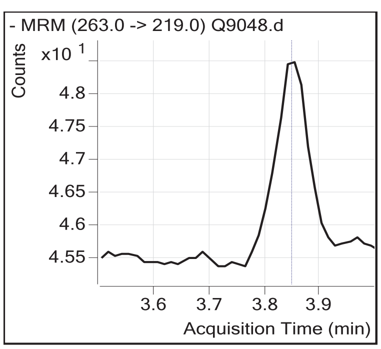
PFBA

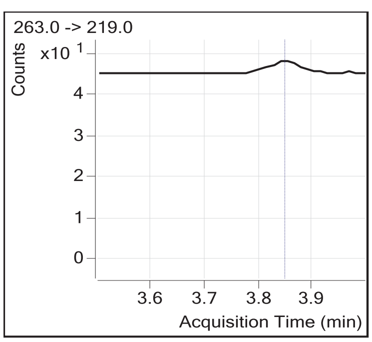


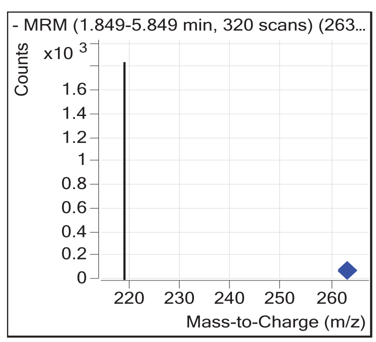




PFPeA







7.1.6

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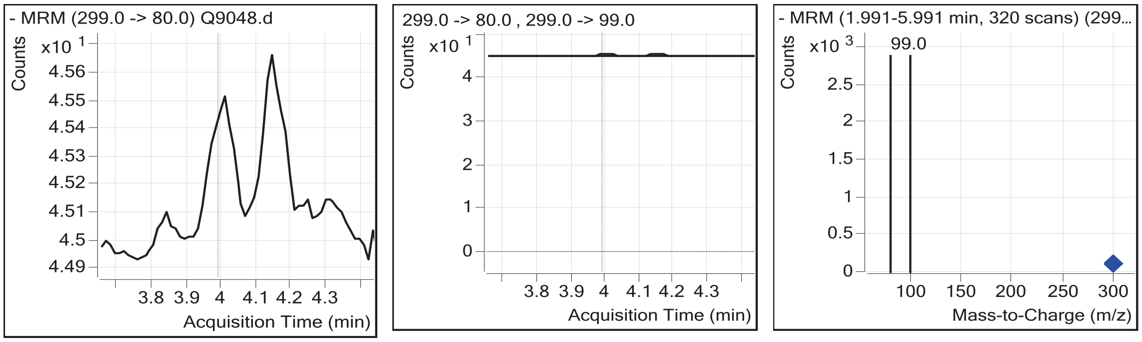
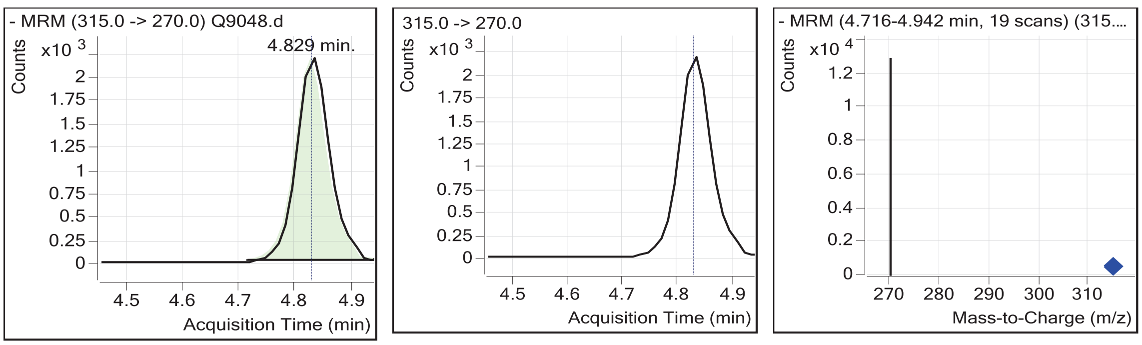
Perfluorinated Compounds by LC/MS/MS.

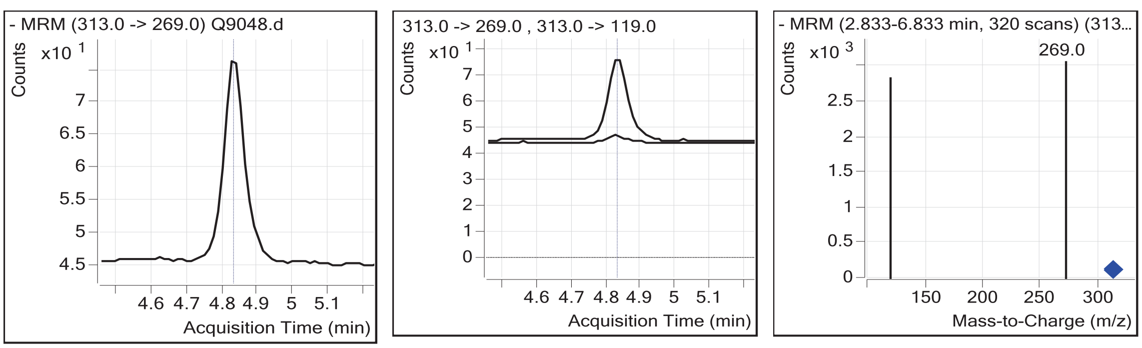
PFBS



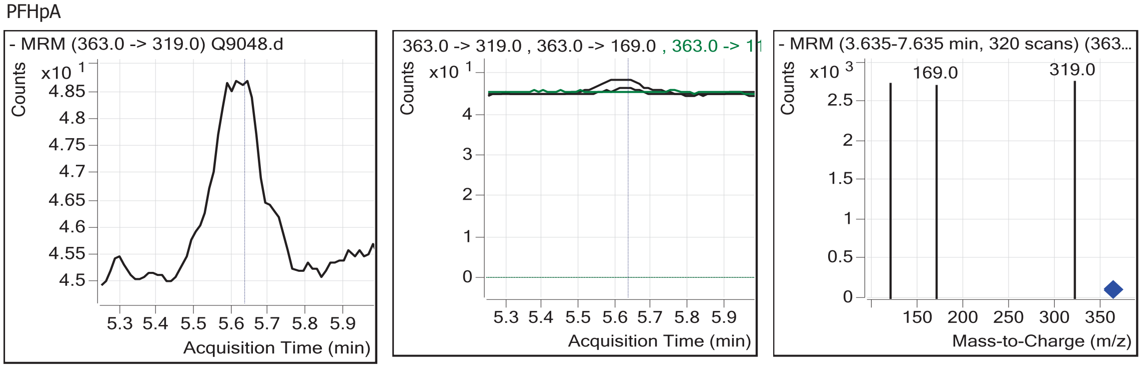
13C2-PFHxA



PFHxA

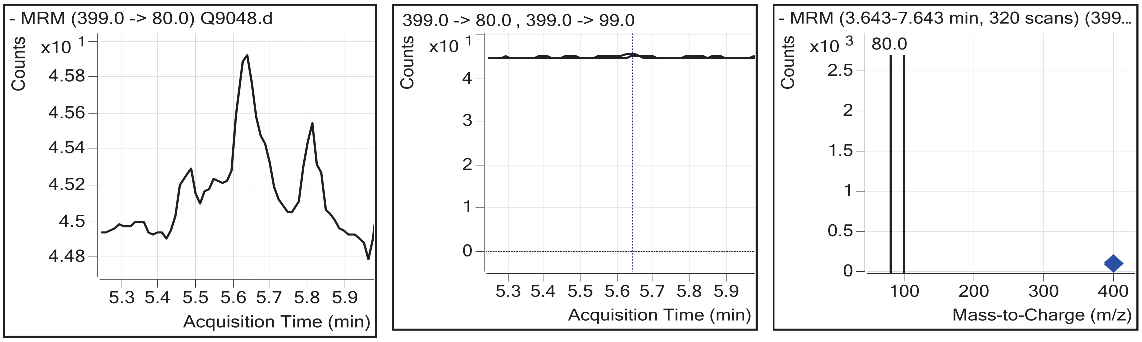


PFHpA

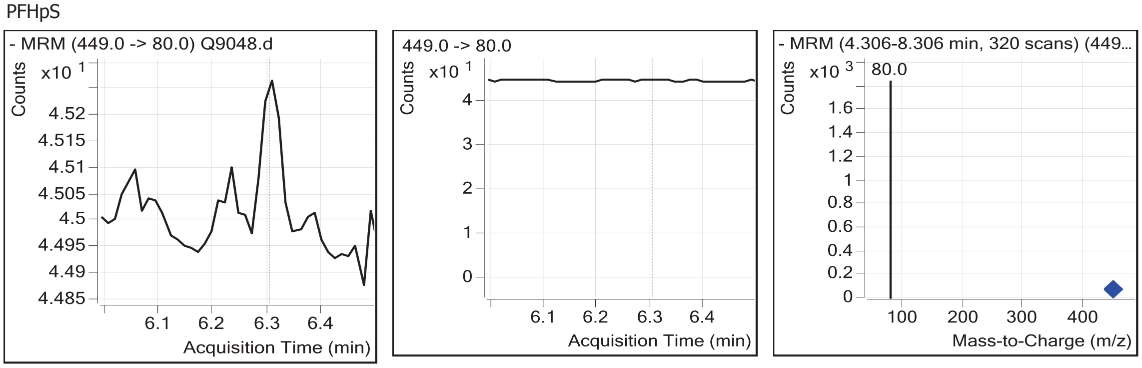


Perfluorinated Compounds by LC/MS/MS.

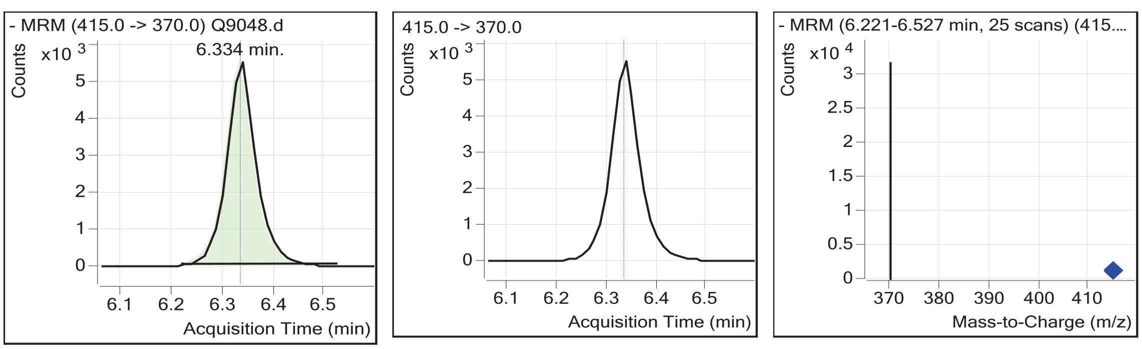
PFHxS



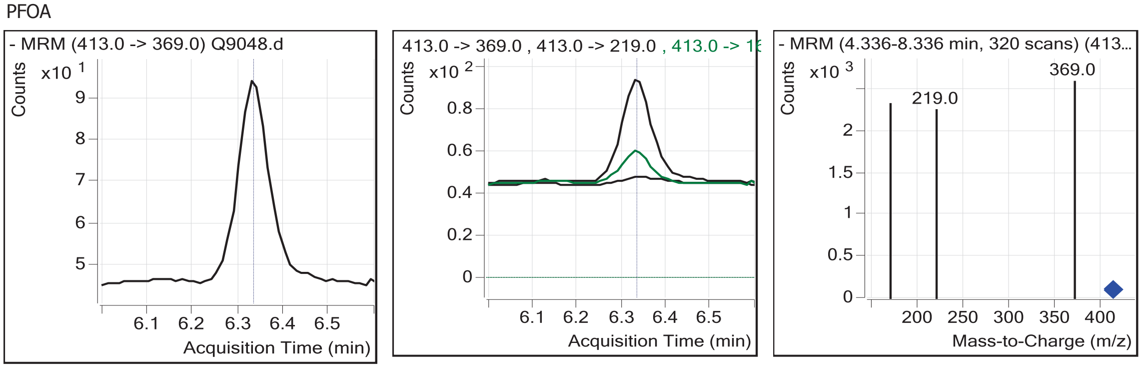
PFHpS



13C2-PFOA

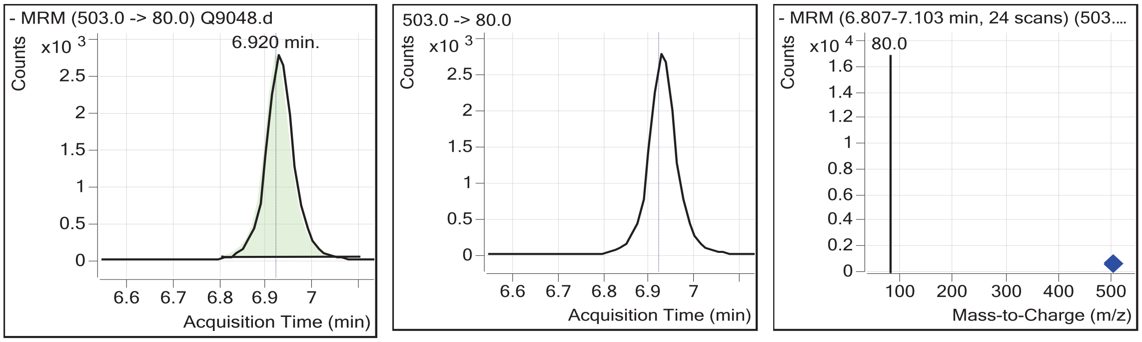


PFOA

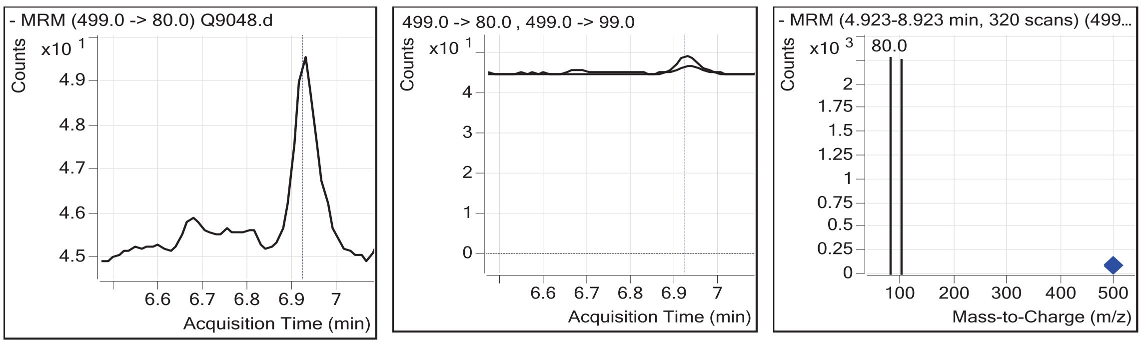


Perfluorinated Compounds by LC/MS/MS.

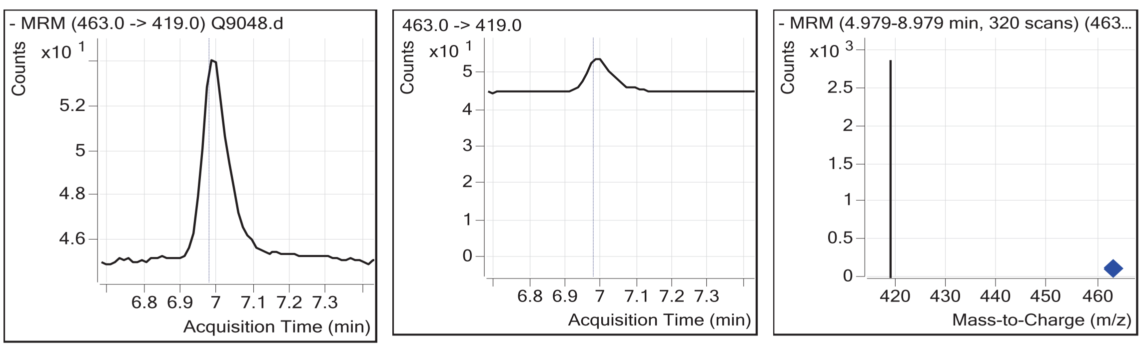
13C4-PFOS



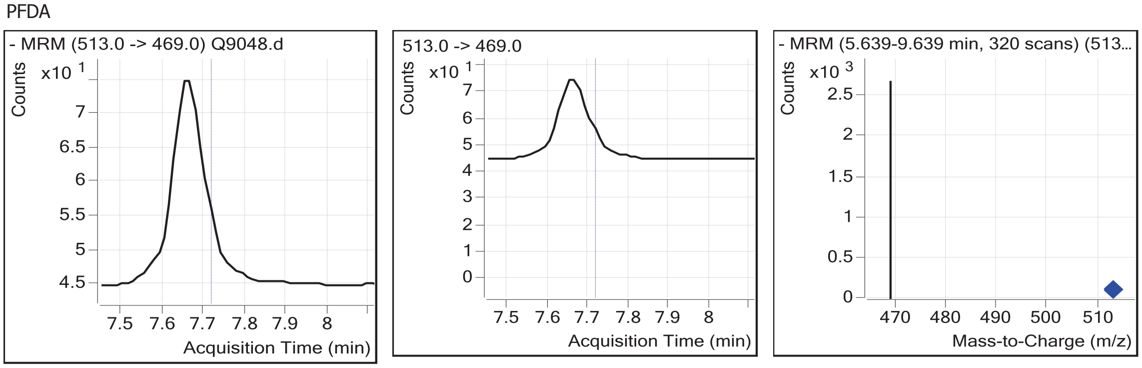
PFOS



PFNA

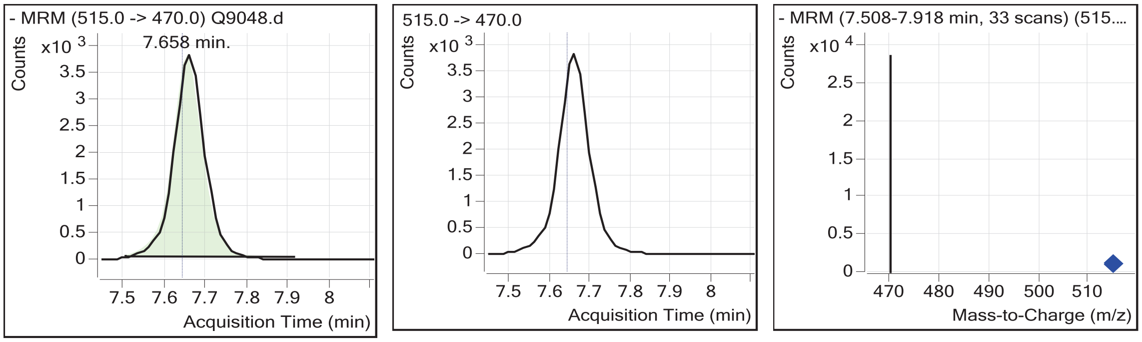


PFDA

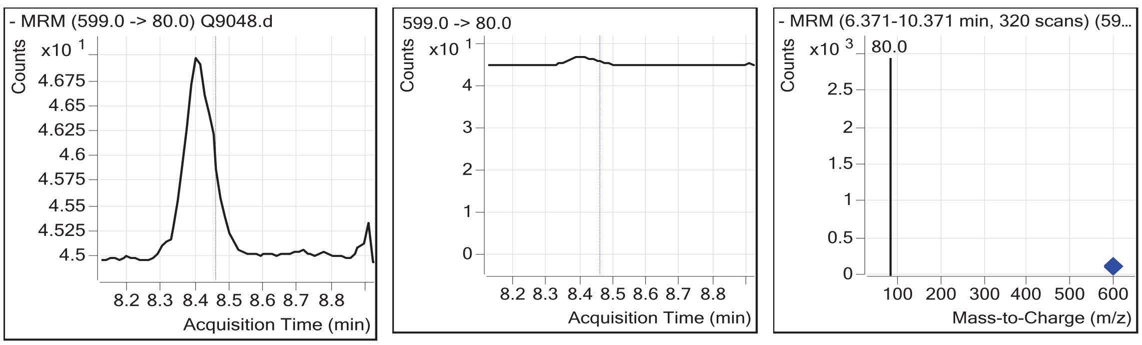


Perfluorinated Compounds by LC/MS/MS.

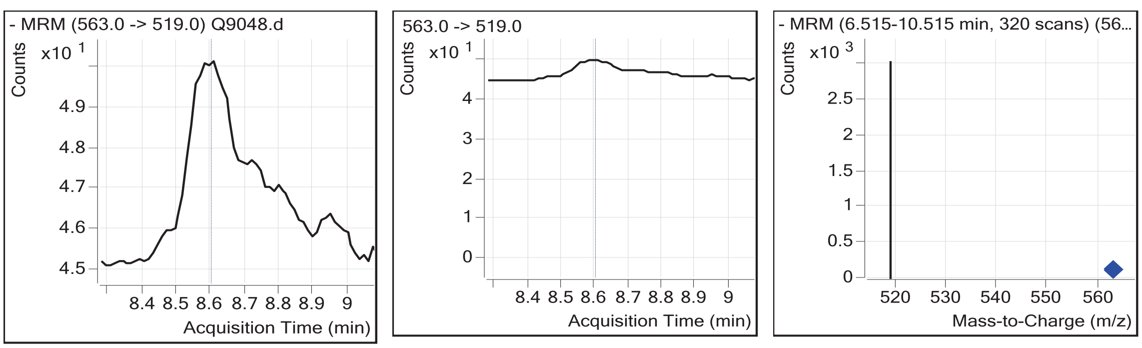
13C2-PFDA



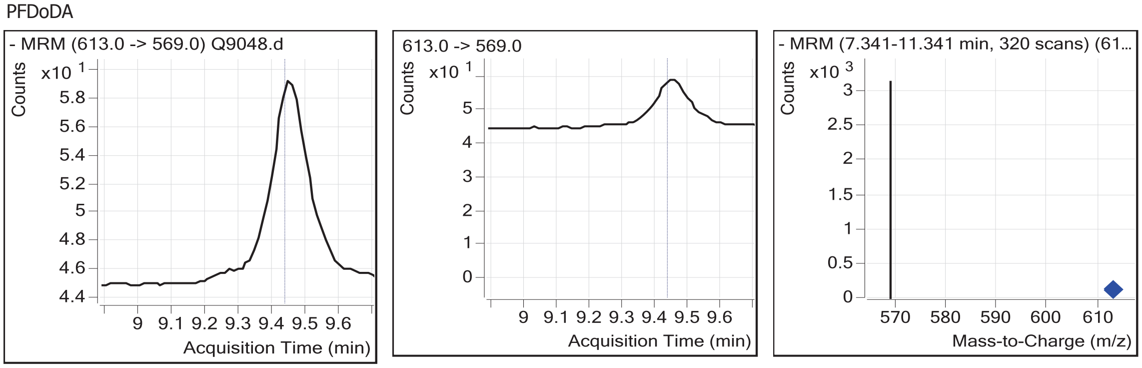
PFDS



PFUnDA

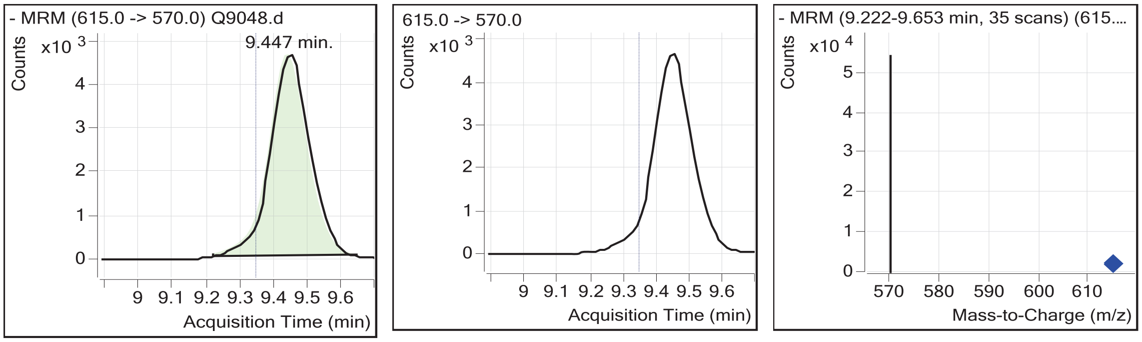


PFDoDA

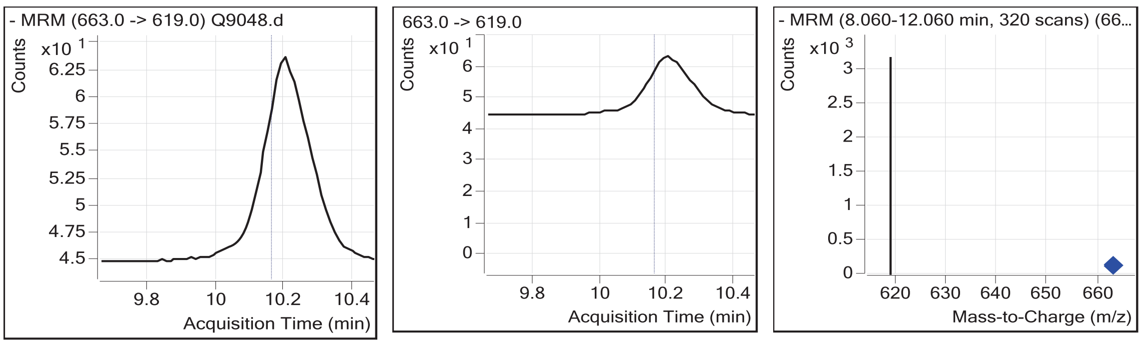


Perfluorinated Compounds by LC/MS/MS.

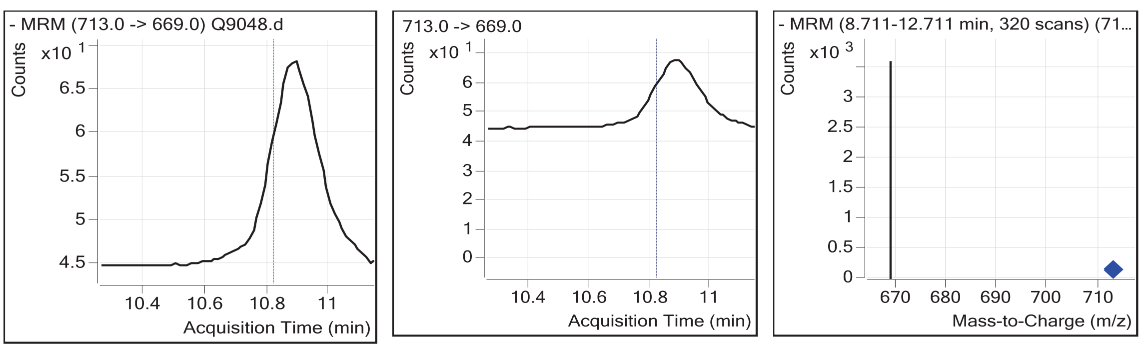
13C2-PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

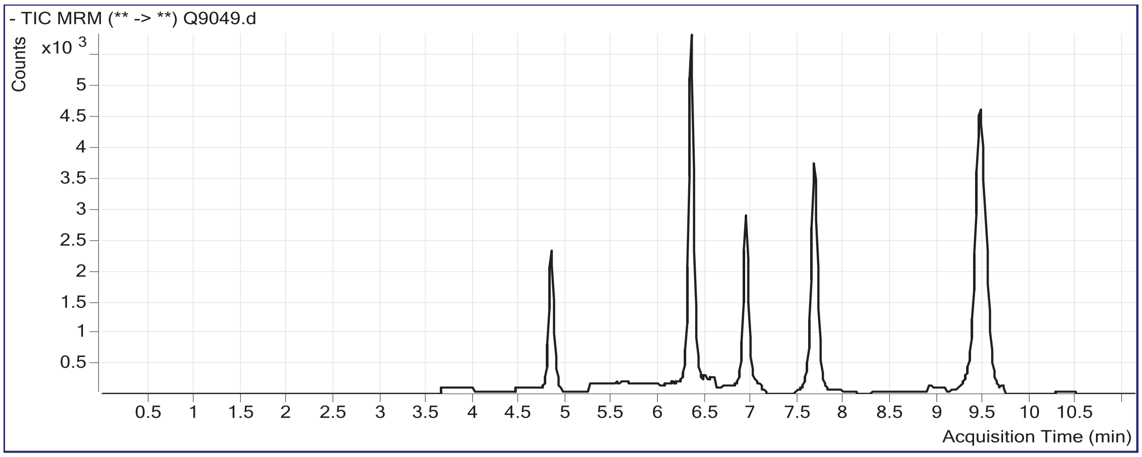
Data File	:	Q9049.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 22:08
Sample Name	:	FA20501-7
Vial	:	Vial 12
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.334	415.0 -> 370.0	23059	20.000	µg/L	0.000
13C4-PFOS	6.920	503.0 -> 80.0	11701	20.000	µg/L	0.000
13C2-PFDoDA	9.447	615.0 -> 570.0	36902	20.000	µg/L	0.100
System Monitoring Compounds						
13C2-PFHxA	4.829	315.0 -> 270.0	8996	23.73	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 118.63%			
13C2-PFDA	7.658	515.0 -> 470.0	19307	19.63	µg/L	0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 98.14%			
Target Compounds						**Qvalue**

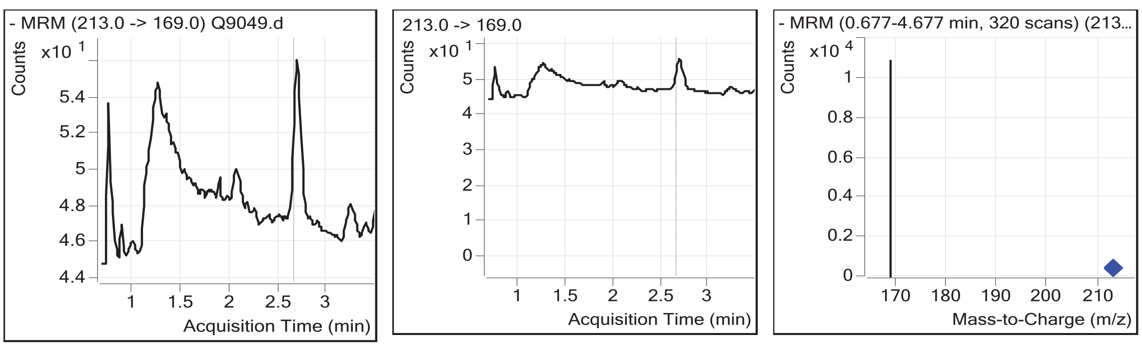
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

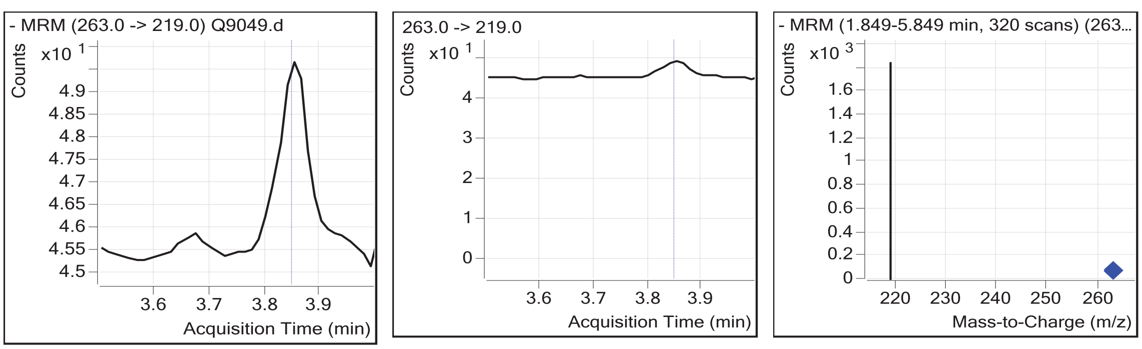
Data File	:	Q9049.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 22:08
Sample Name	:	FA20501-7
Vial	:	Vial 12
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



PFBA

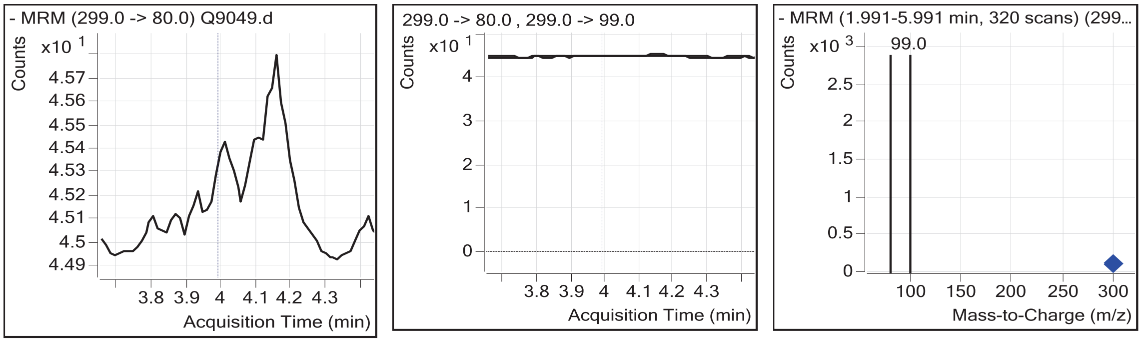


PFPeA

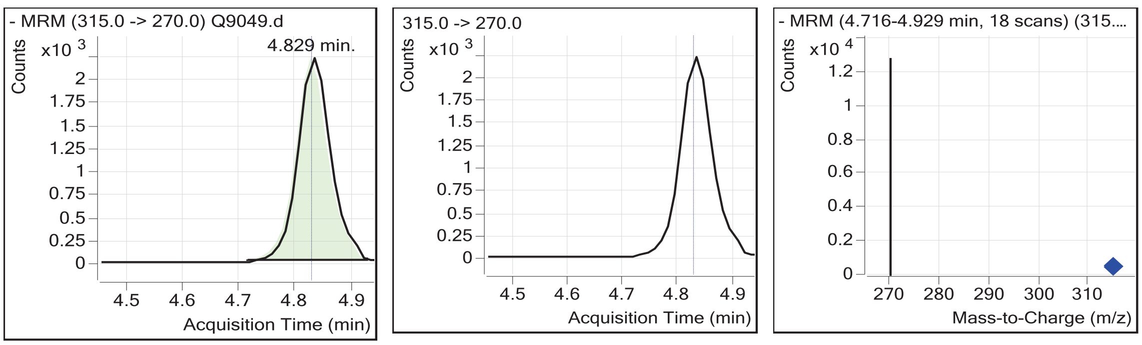


Perfluorinated Compounds by LC/MS/MS.

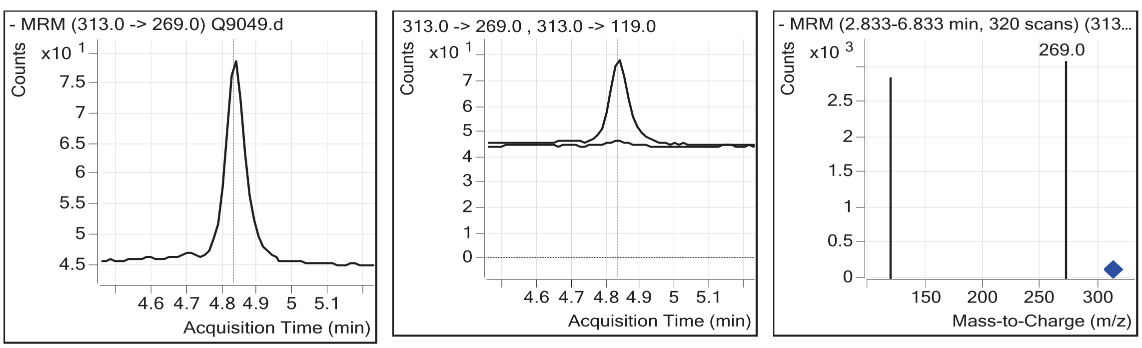
PFBS



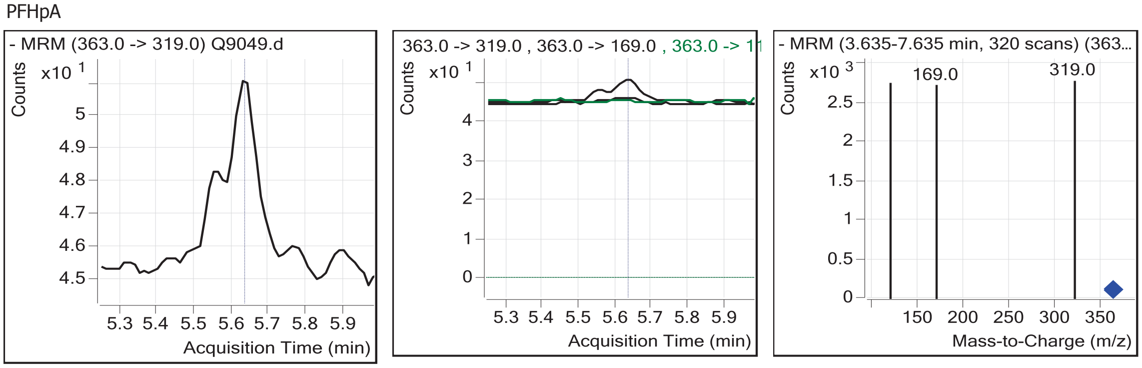
13C2-PFHxA



PFHxA

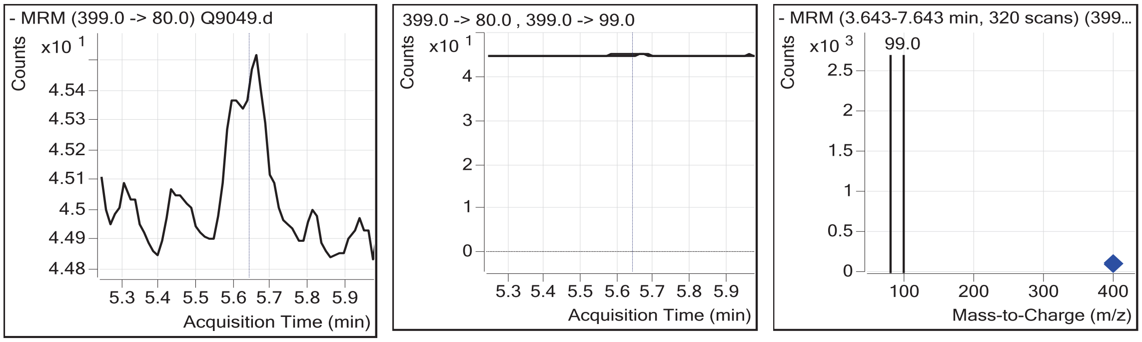


PFHpA

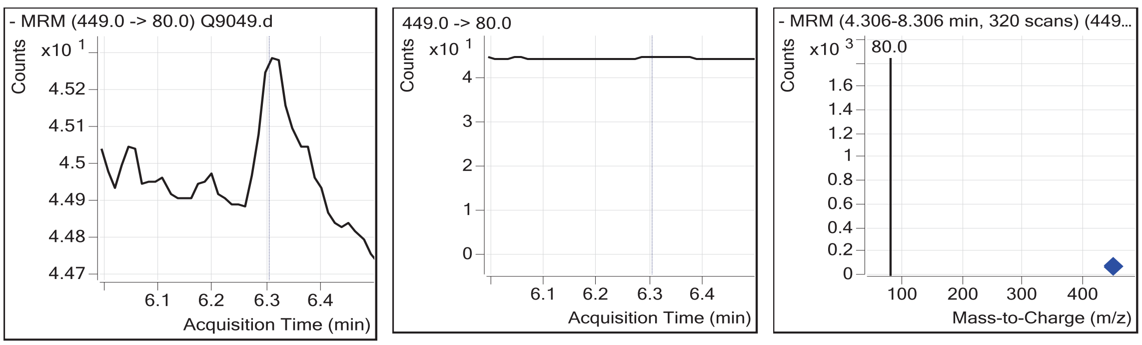


Perfluorinated Compounds by LC/MS/MS.

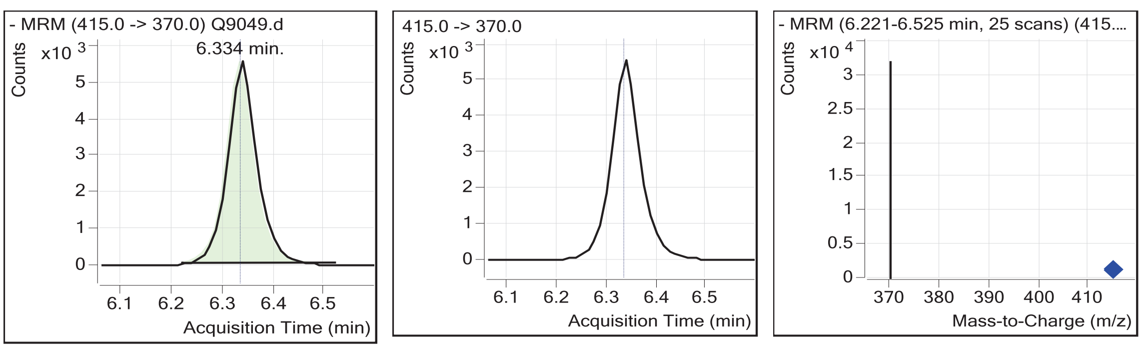
PFHxS



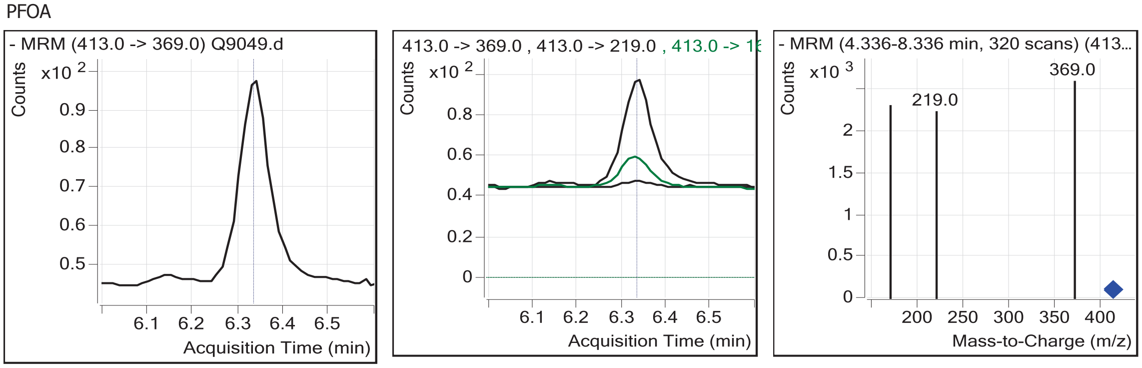
PFHpS



13C2-PFOA

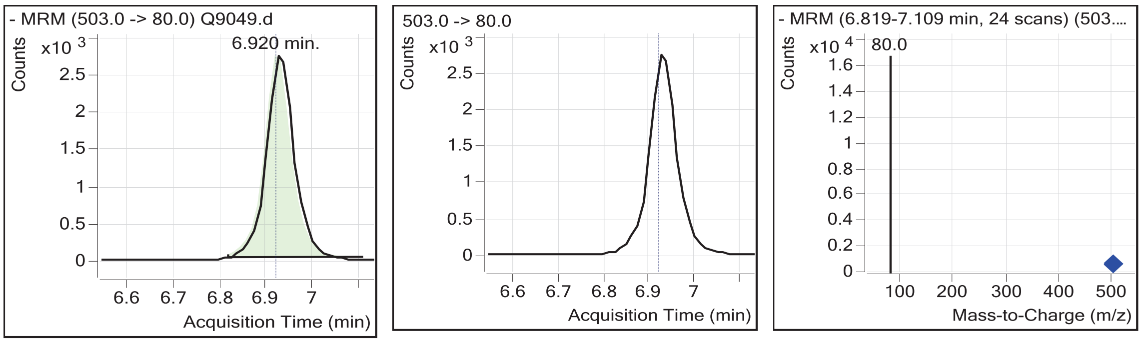


PFOA

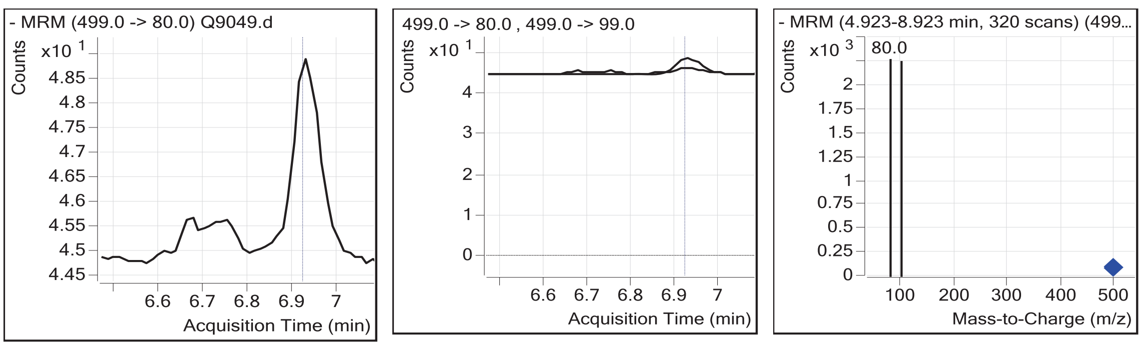


Perfluorinated Compounds by LC/MS/MS.

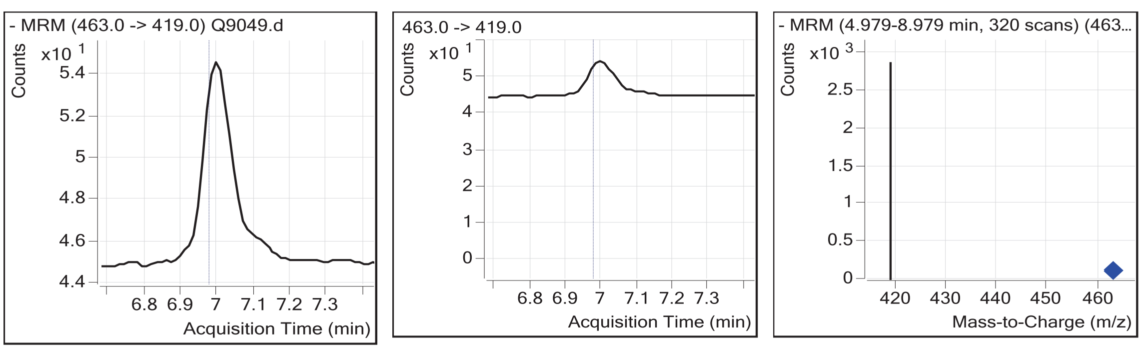
13C4-PFOS



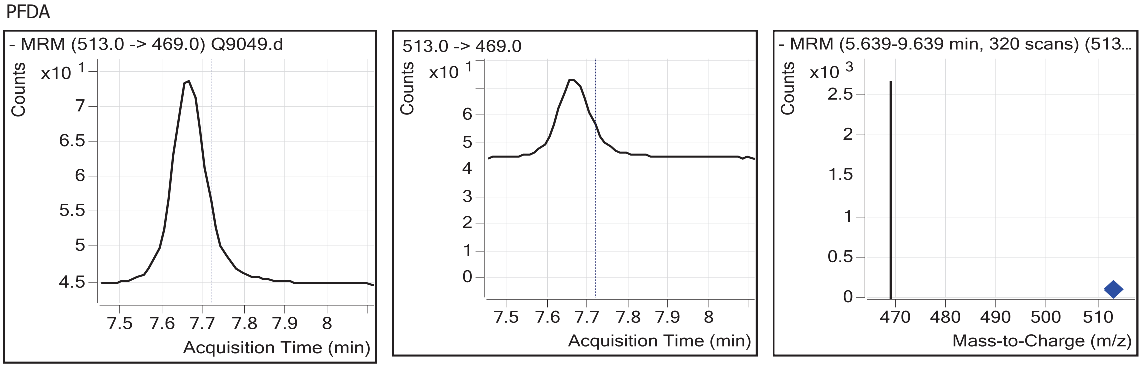
PFOS



PFNA

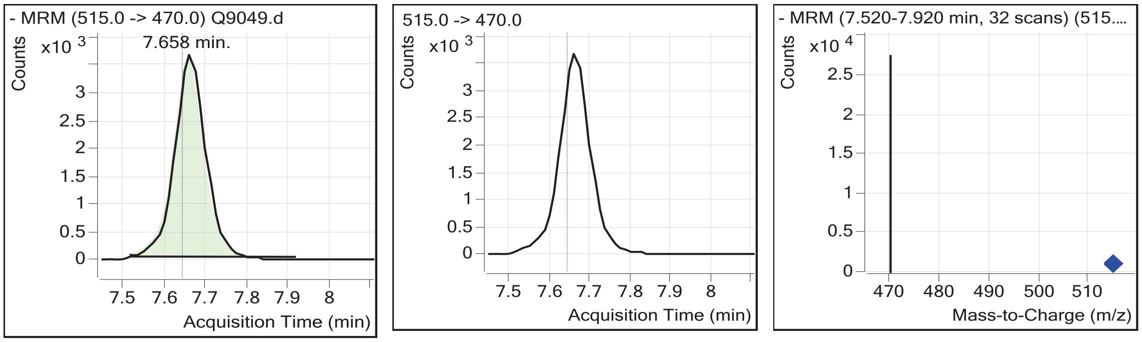


PFDA

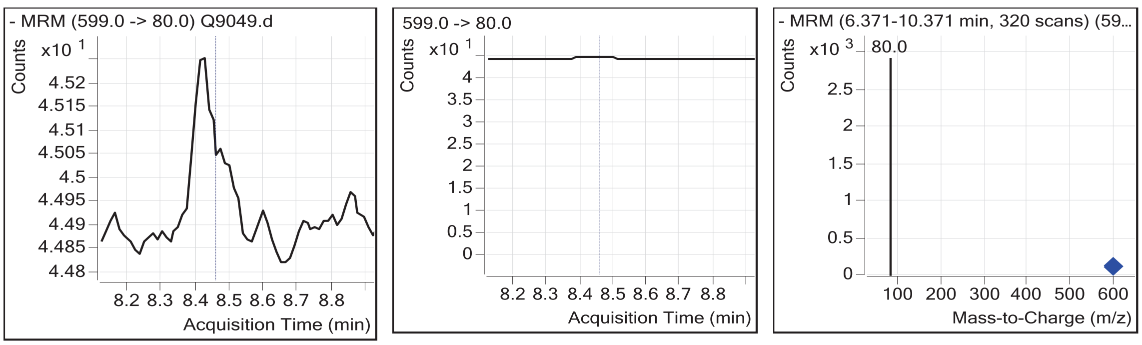


Perfluorinated Compounds by LC/MS/MS.

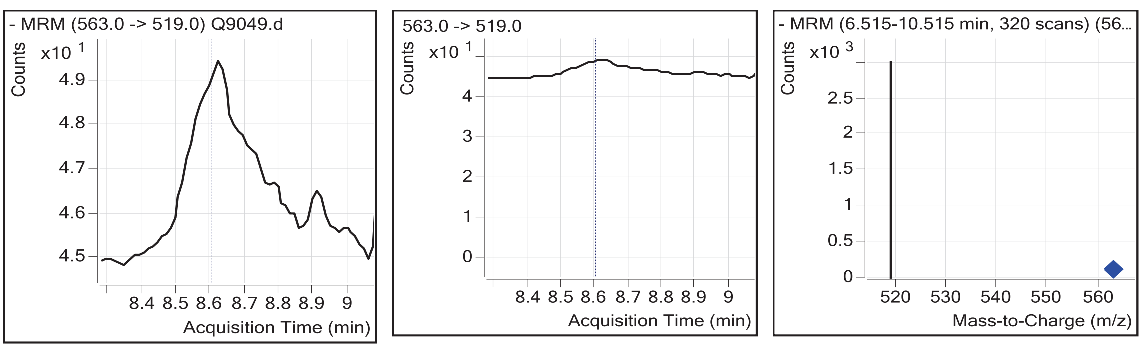
13C2-PFDA



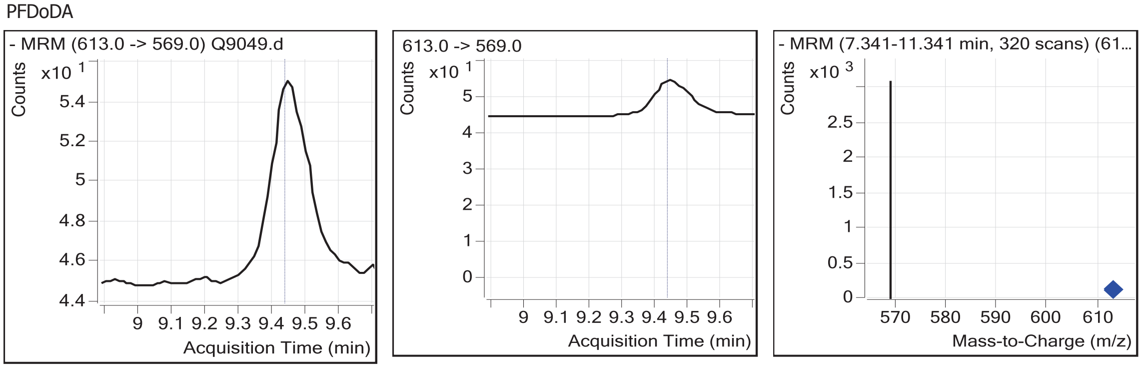
PFDS



PFUnDA

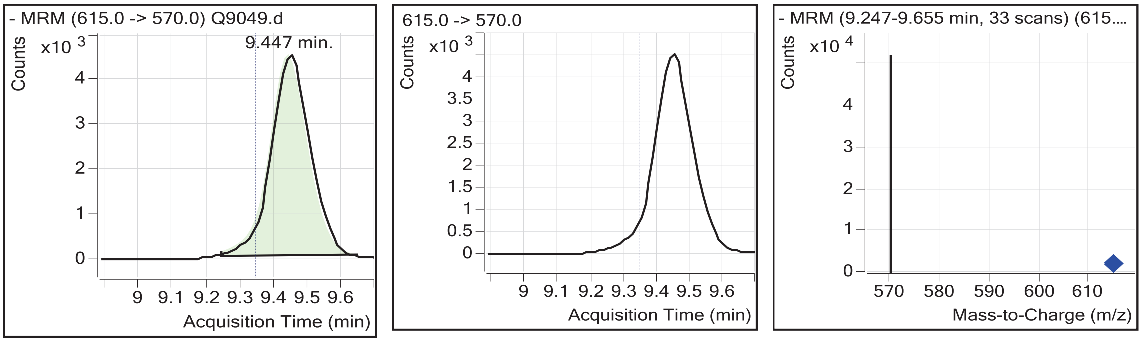


PFDoDA

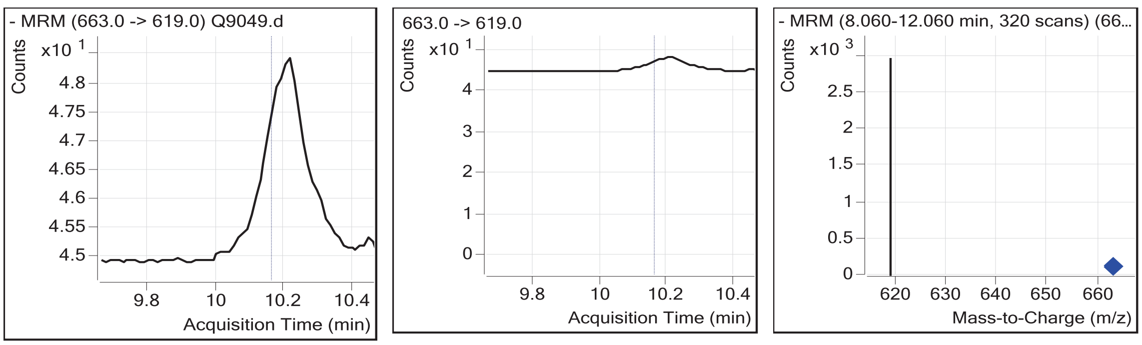


Perfluorinated Compounds by LC/MS/MS.

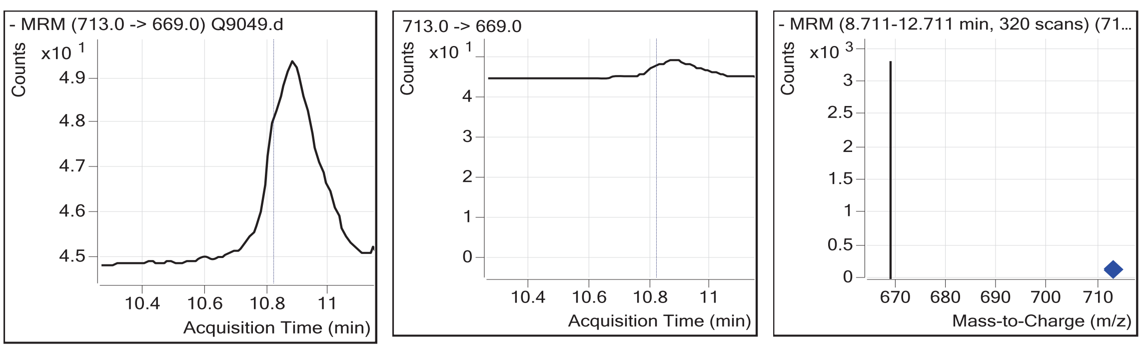
13C2-PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q9101.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-20 00:00
Sample Name	:	FA20501-8
Vial	:	Vial 29
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.321	415.0 -> 370.0	23922	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	12378	20.000	µg/L	0.000
13C2-PFDoDA	9.372	615.0 -> 570.0	35460	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.816	315.0 -> 270.0	8107	22.10	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 110.51%			
13C2-PFDA	7.620	515.0 -> 470.0	15888	20.10	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 100.52%			
Target Compounds						**Qvalue**

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.1.8

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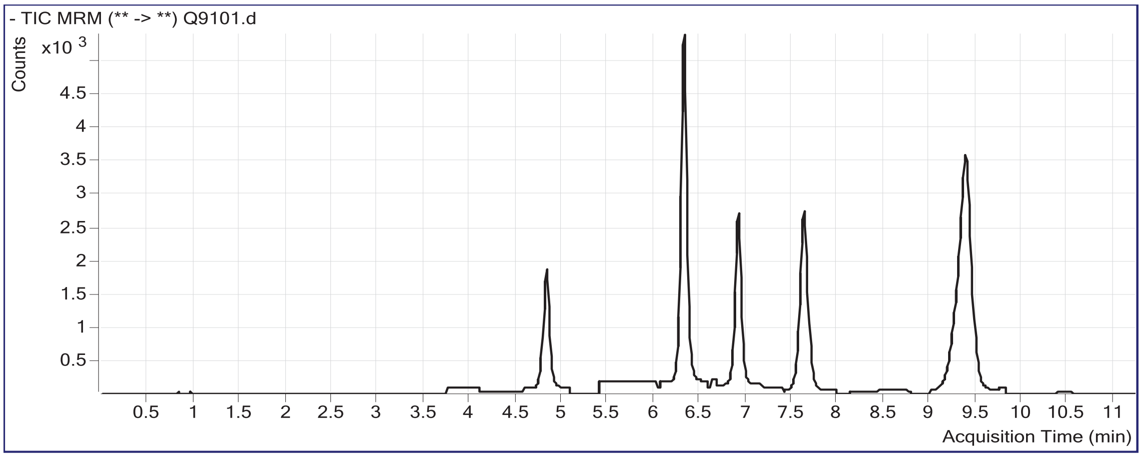
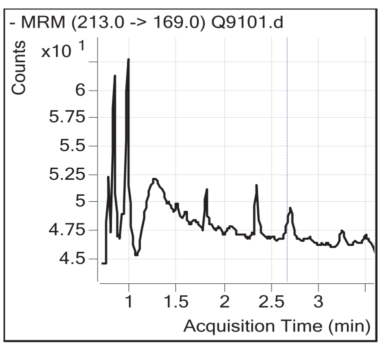
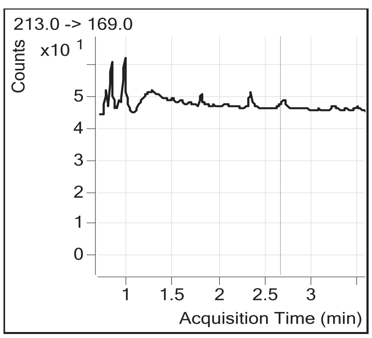
Perfluorinated Compounds by LC/MS/MS.

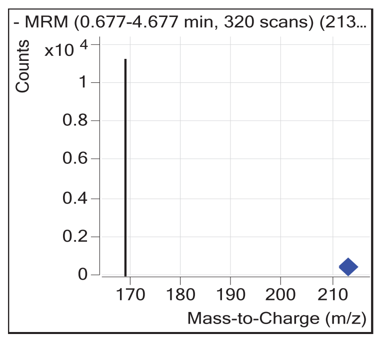
Data File	:	Q9101.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-20 00:00
Sample Name	:	FA20501-8
Vial	:	Vial 29
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



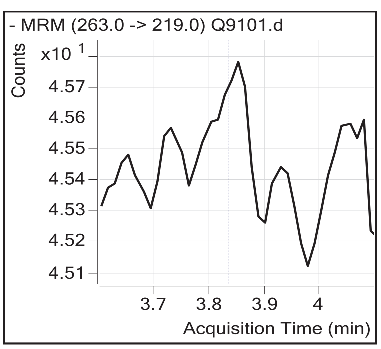
PFBA

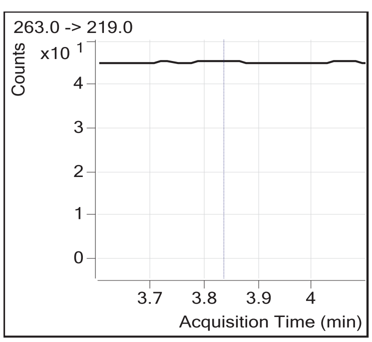


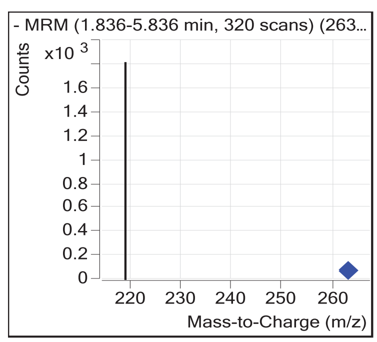




PFPeA

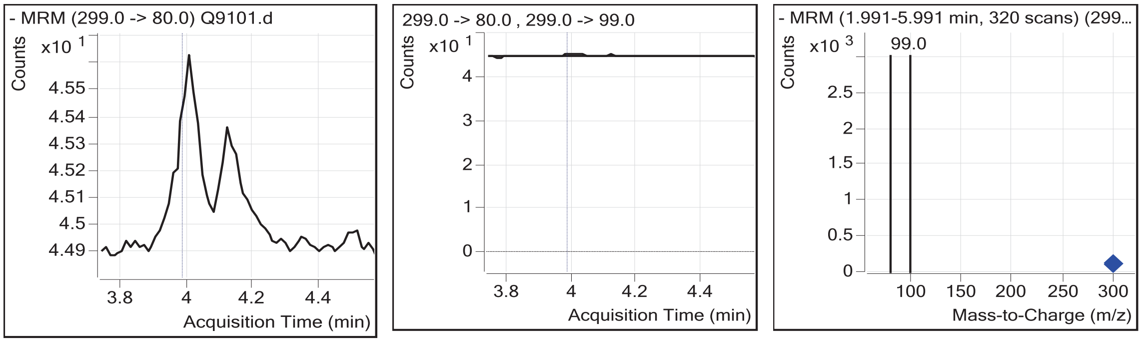




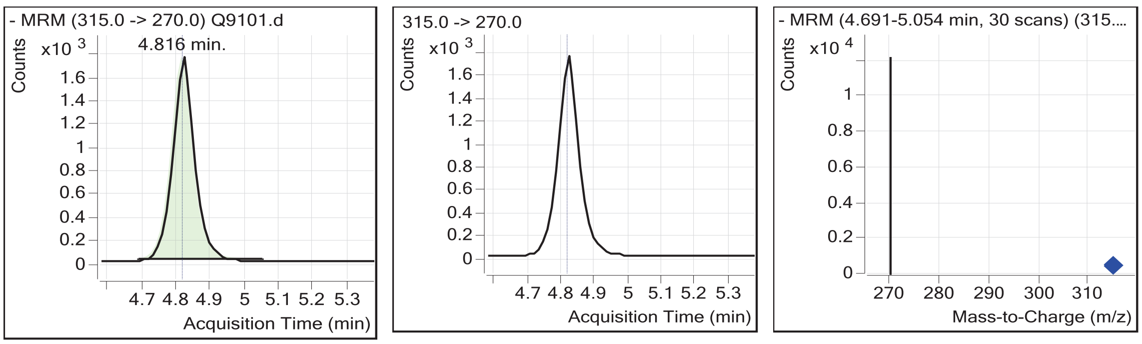


Perfluorinated Compounds by LC/MS/MS.

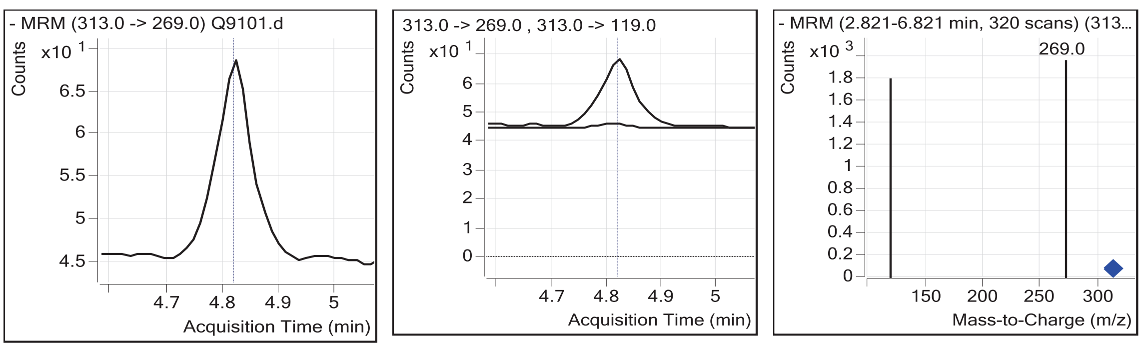
PFBS



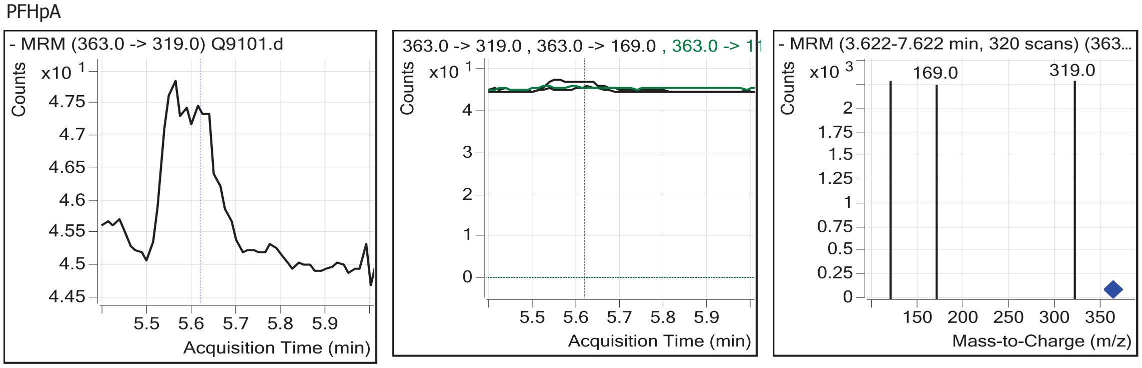
13C2-PFHxA



PFHxA

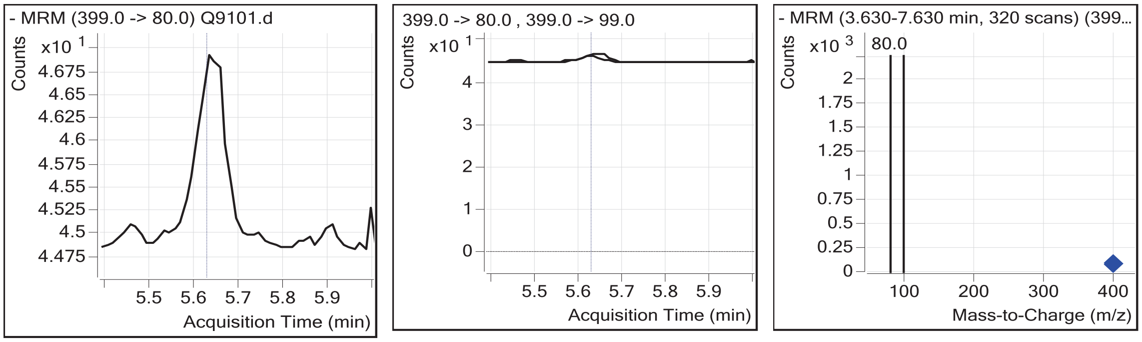


PFHpA

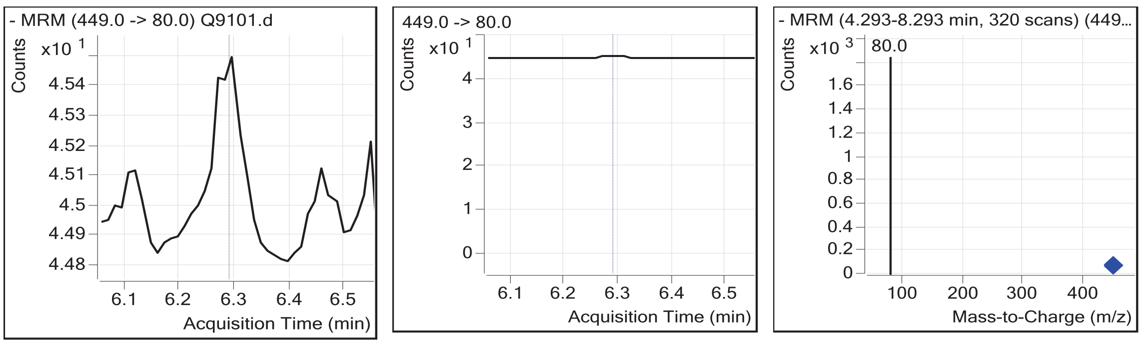


Perfluorinated Compounds by LC/MS/MS.

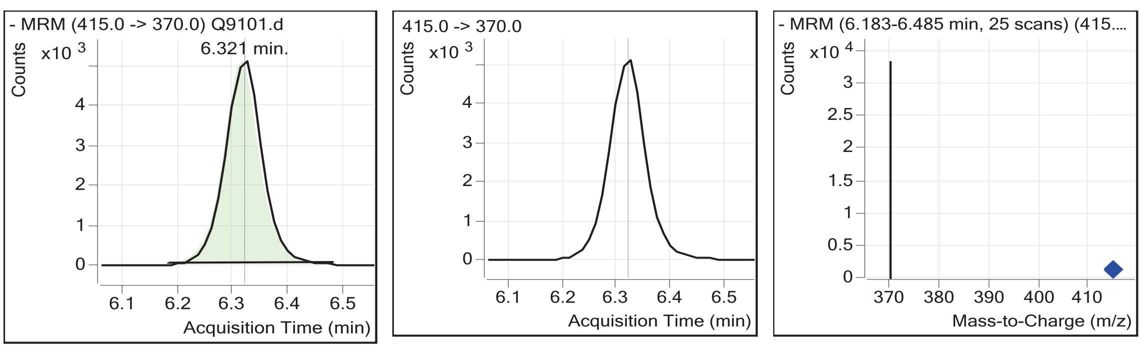
PFHxS



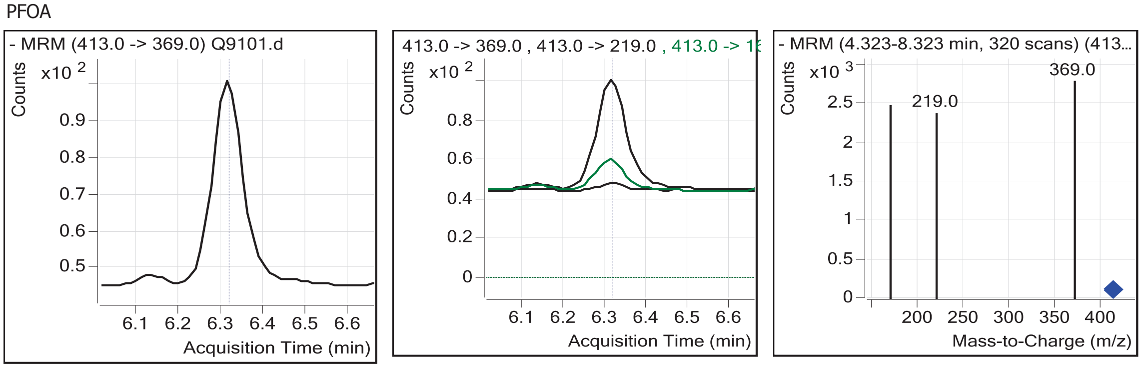
PFHpS



13C2-PFOA



PFOA



7.1.8

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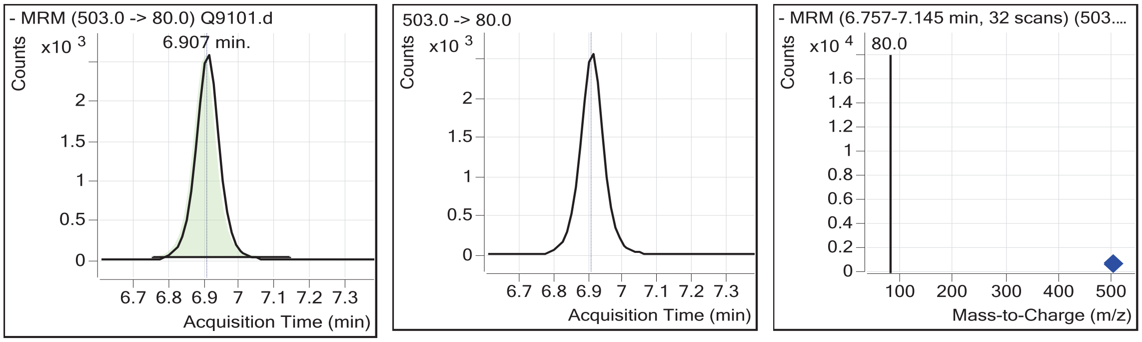
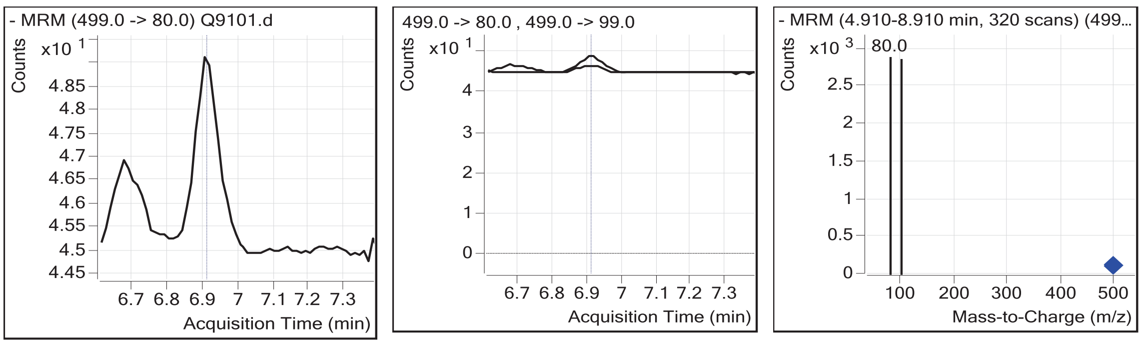
Perfluorinated Compounds by LC/MS/MS.

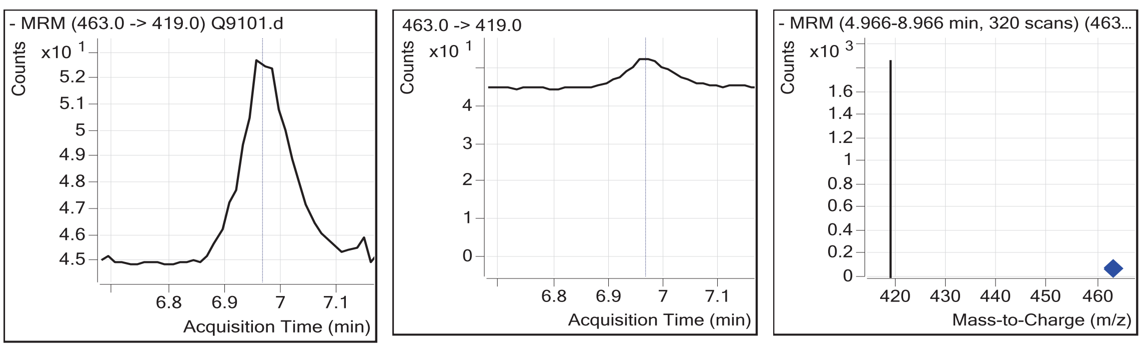
13C4-PFOS



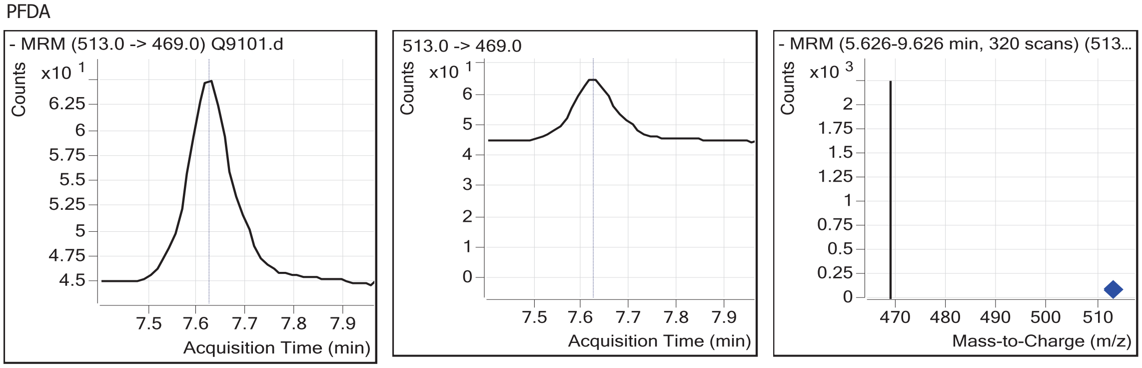
PFOS



PFNA



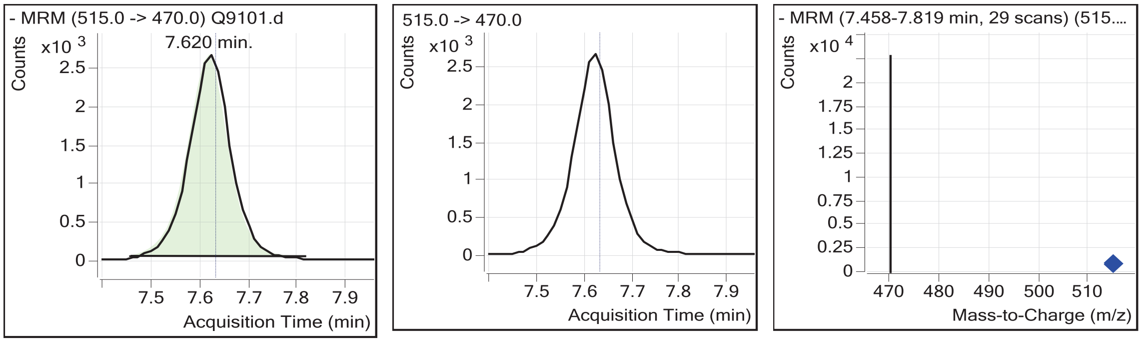
PFDA



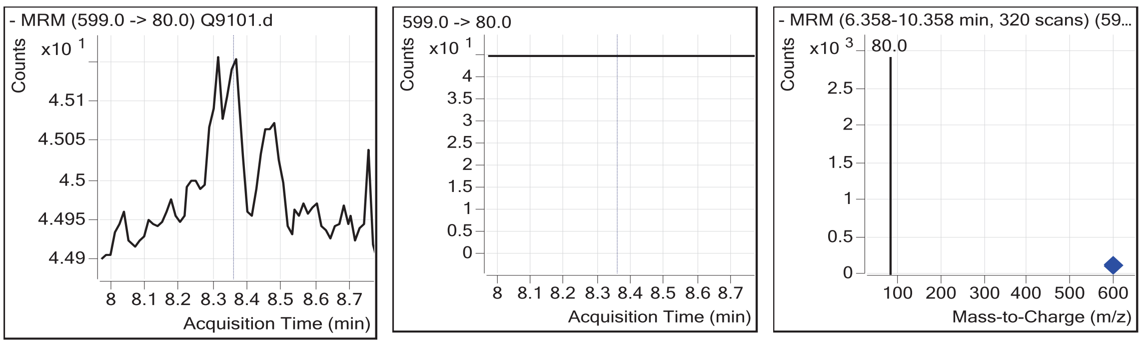
7.1.8
7

Perfluorinated Compounds by LC/MS/MS.

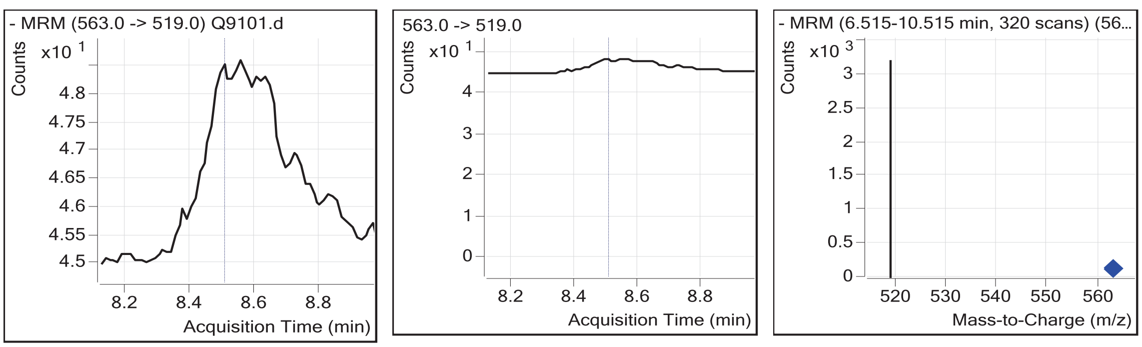
13C2-PFDA



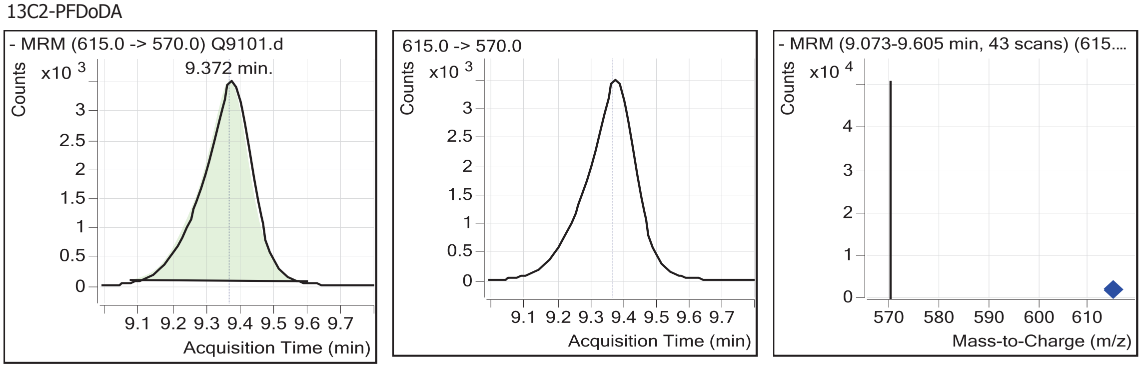
PFDS



PFUnDA

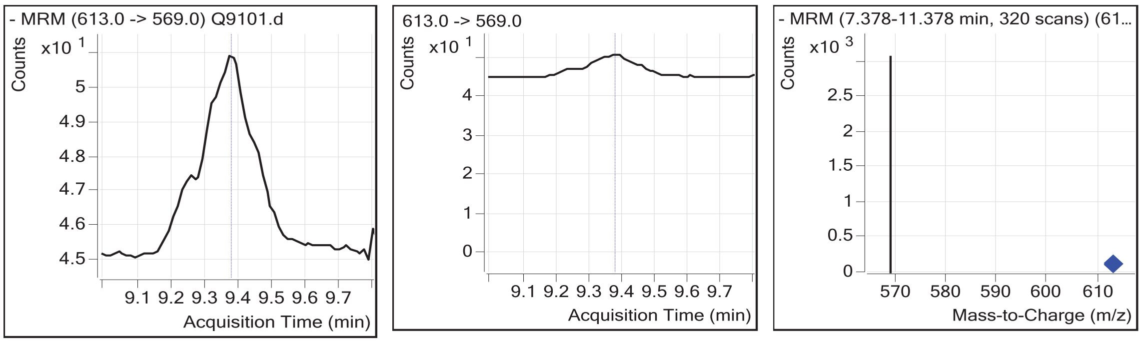


13C2-PFDoDA

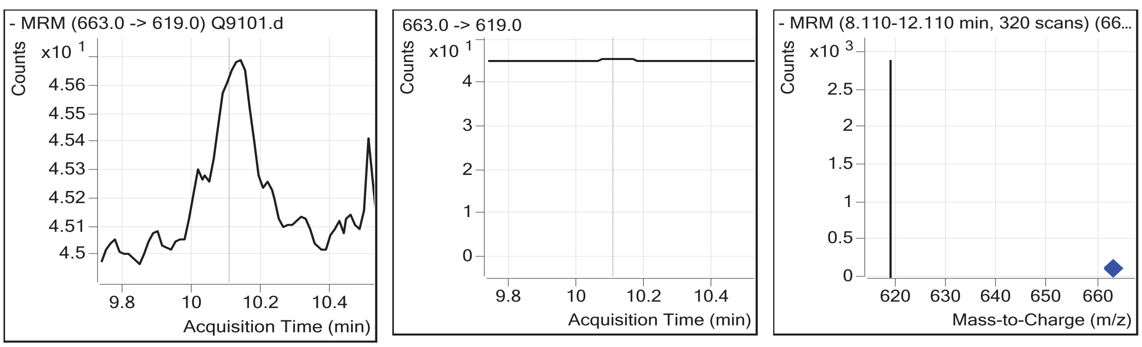


Perfluorinated Compounds by LC/MS/MS.

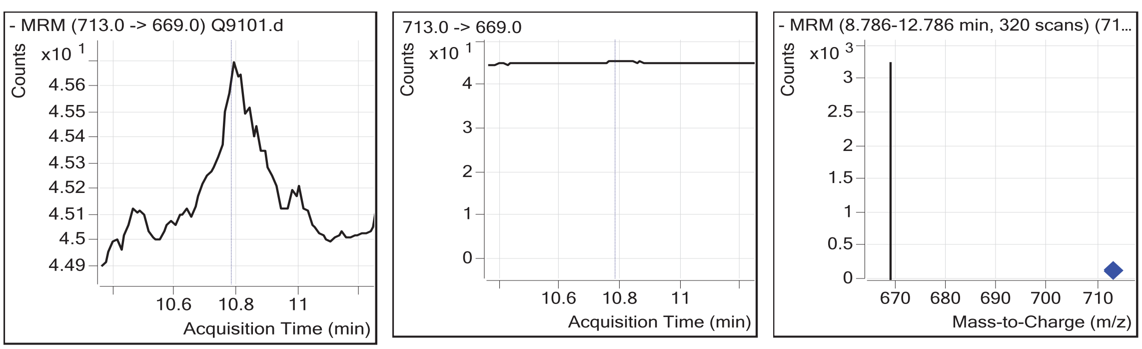
PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

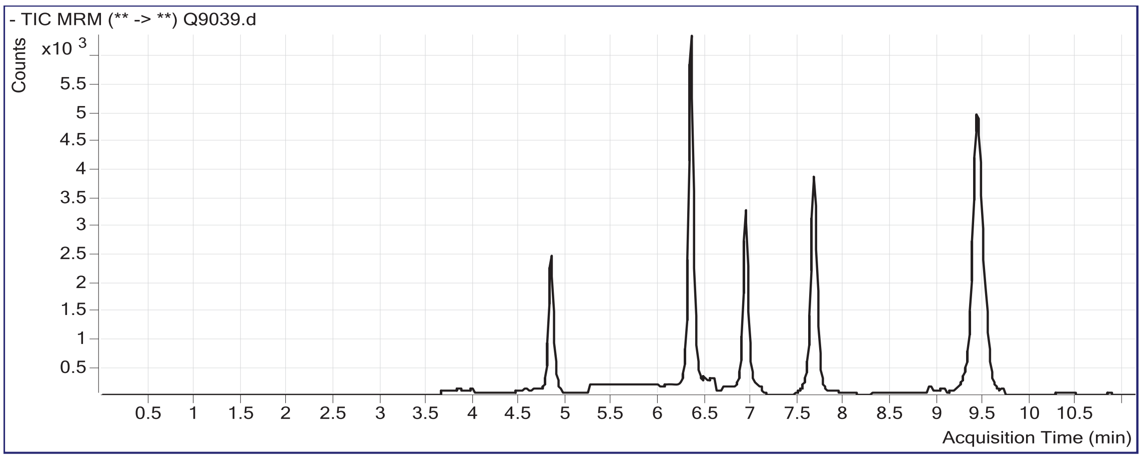
Data File	:	Q9039.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 18:51
Sample Name	:	OP54254-MB
Vial	:	Vial 4
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	**R.T.**	**QIon**	**Response**	**Conc**	**Units**		**Dev(Min)**
Internal Standards							
13C2-PFOA	6.334	415.0 -> 370.0	25010	20.000	µg/L		0.000
13C4-PFOS	6.920	503.0 -> 80.0	13068	20.000	µg/L		0.000
13C2-PFDoDA	9.410	615.0 -> 570.0	40890	20.000	µg/L		0.063
System Monitoring Compounds							
13C2-PFHxA	4.829	315.0 -> 270.0	9562	23.25	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 116.27%				
13C2-PFDA	7.658	515.0 -> 470.0	19985	18.73	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 93.66%				
Target Compounds							**Qvalue**
PFBA	1.276	213.0 -> 169.0	0	0.000	µg/L	m	1

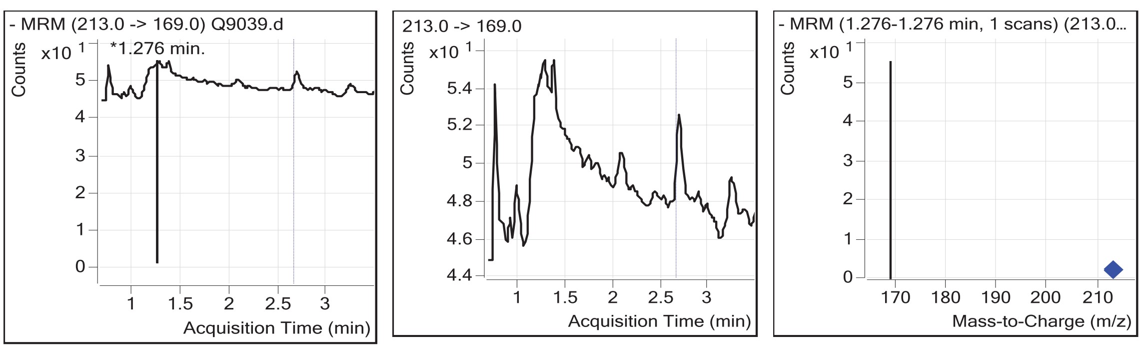
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

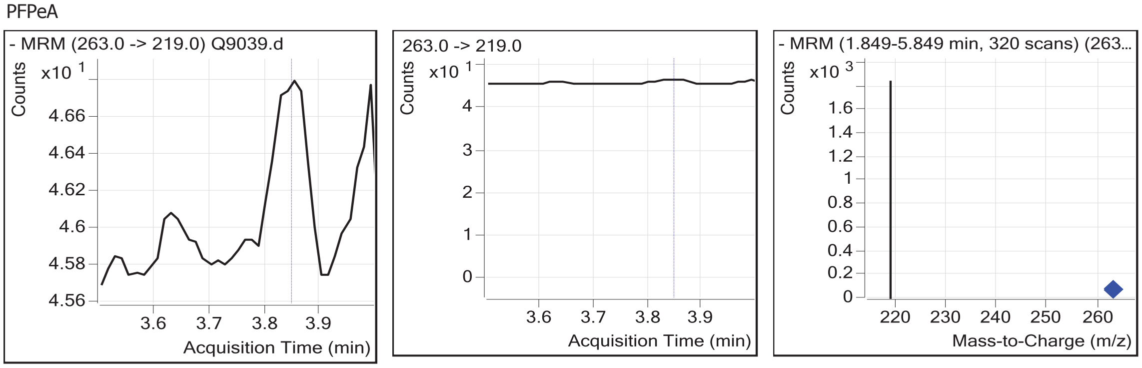
Data File	:	Q9039.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 18:51
Sample Name	:	OP54254-MB
Vial	:	Vial 4
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



PFBA

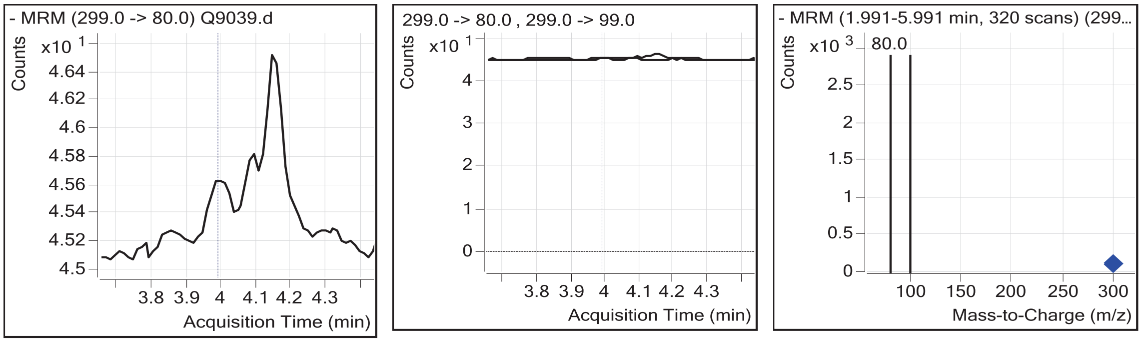


PFPeA

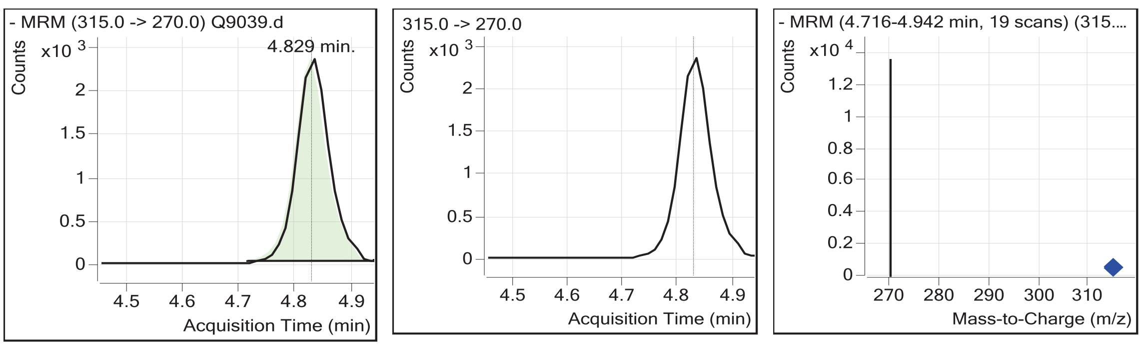


Perfluorinated Compounds by LC/MS/MS.

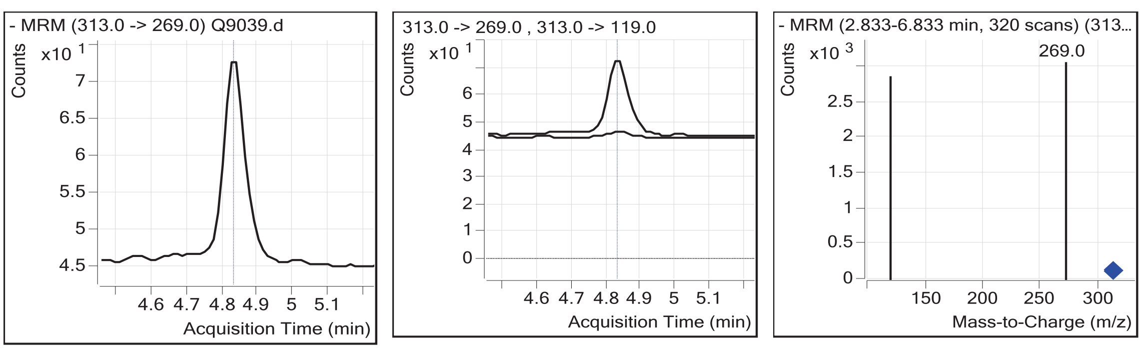
PFBS



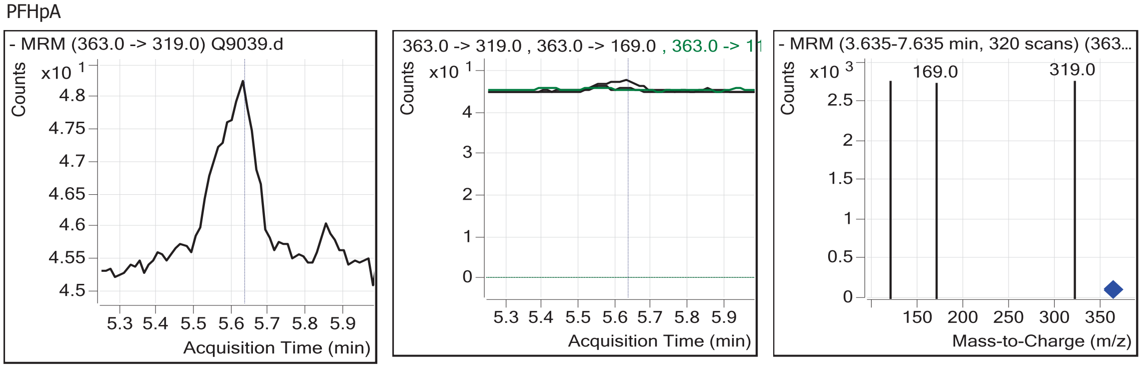
13C2-PFHxA



PFHxA

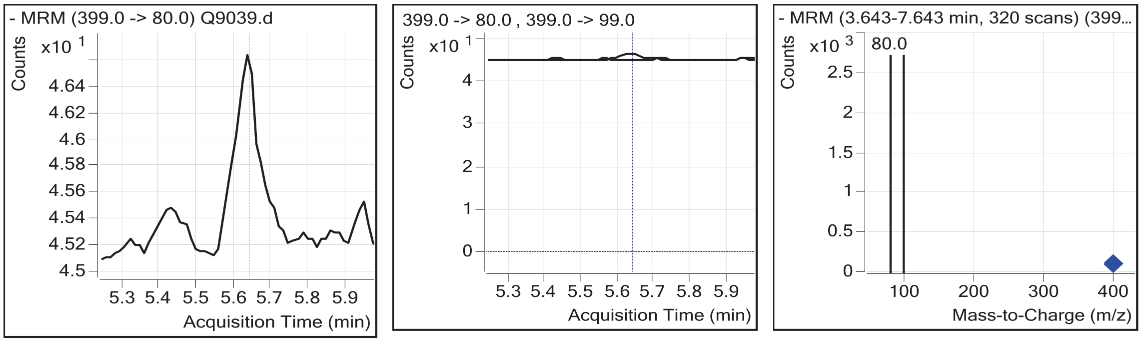


PFHpA

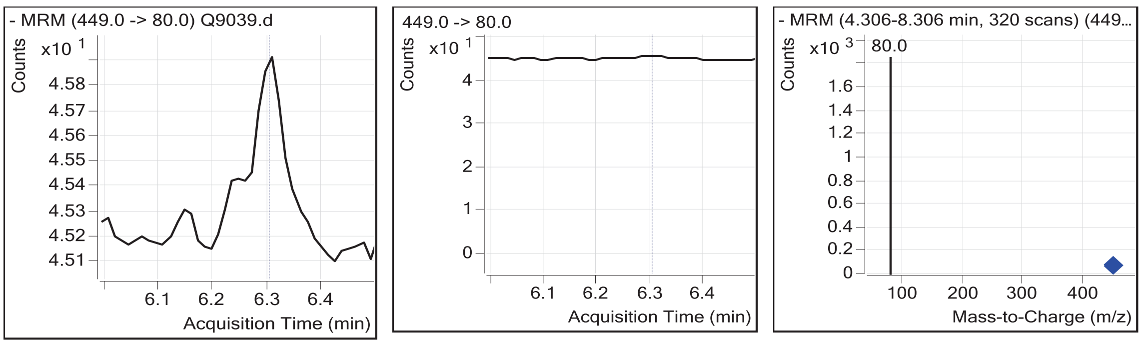


Perfluorinated Compounds by LC/MS/MS.

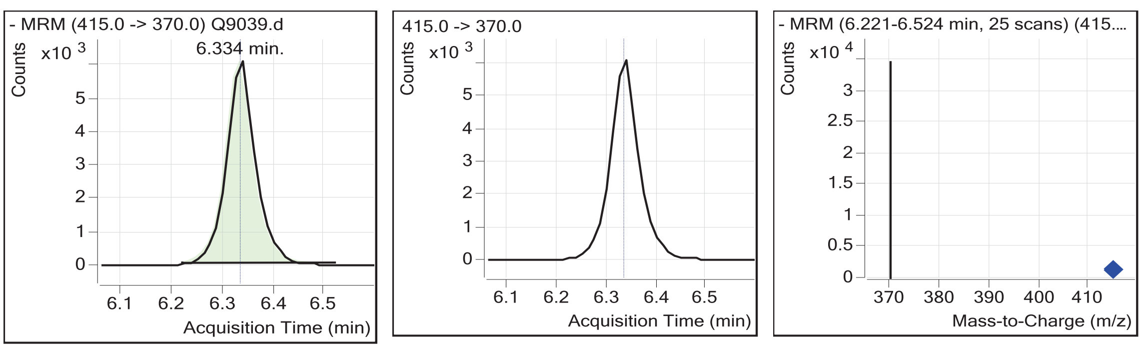
PFHxS



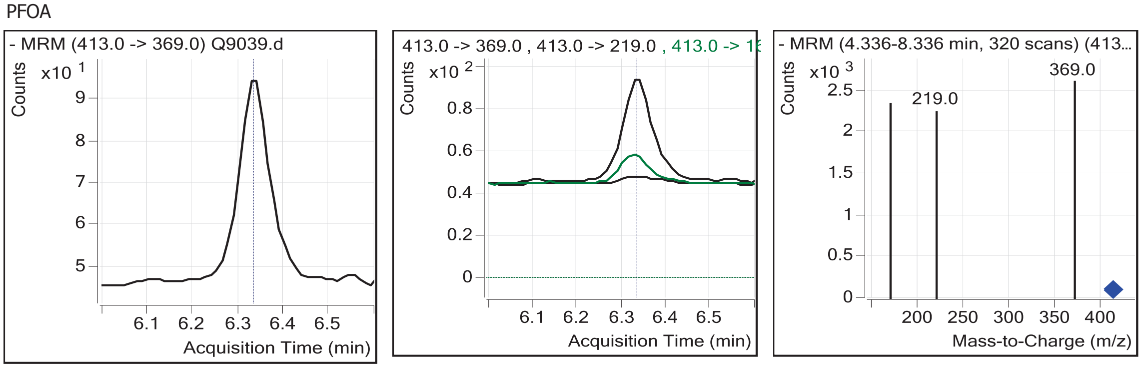
PFHpS



13C2-PFOA



PFOA



7.2.1

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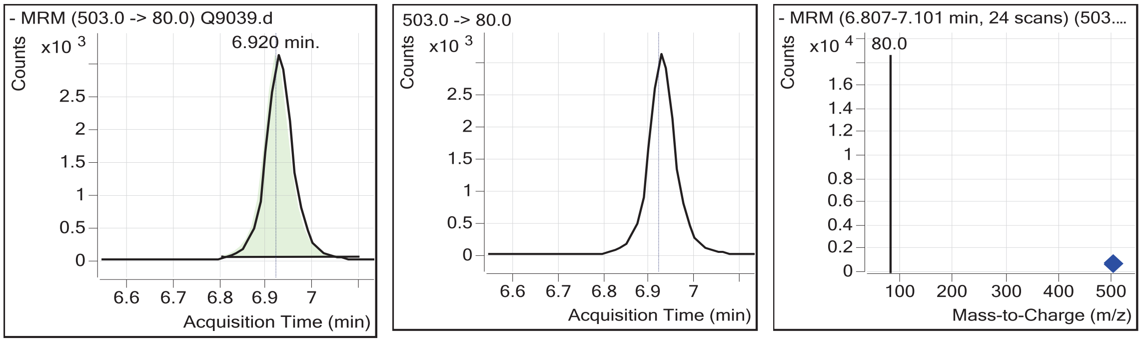
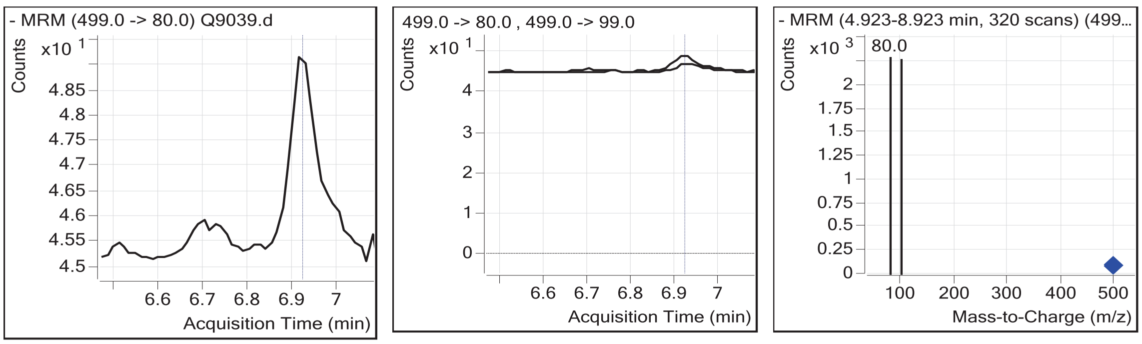
Perfluorinated Compounds by LC/MS/MS.

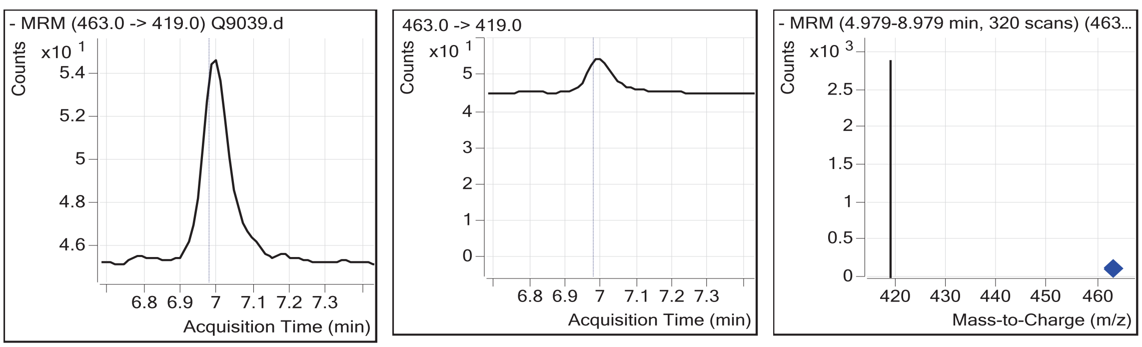
13C4-PFOS



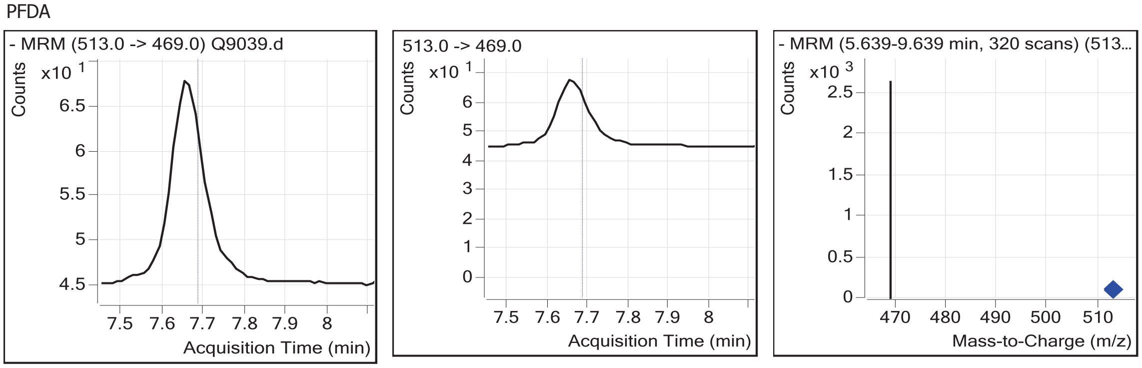
PFOS



PFNA

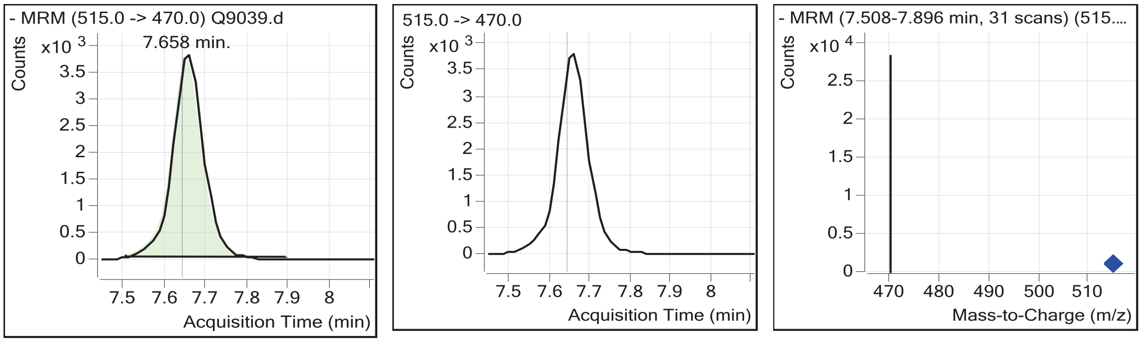


PFDA

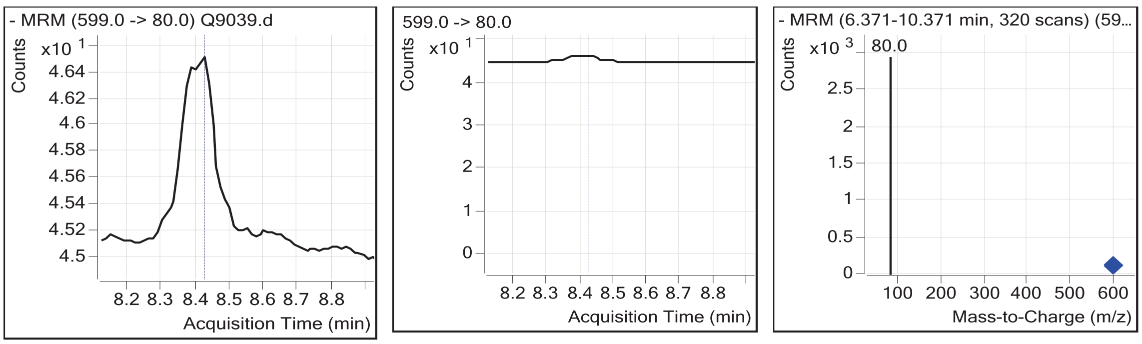


Perfluorinated Compounds by LC/MS/MS.

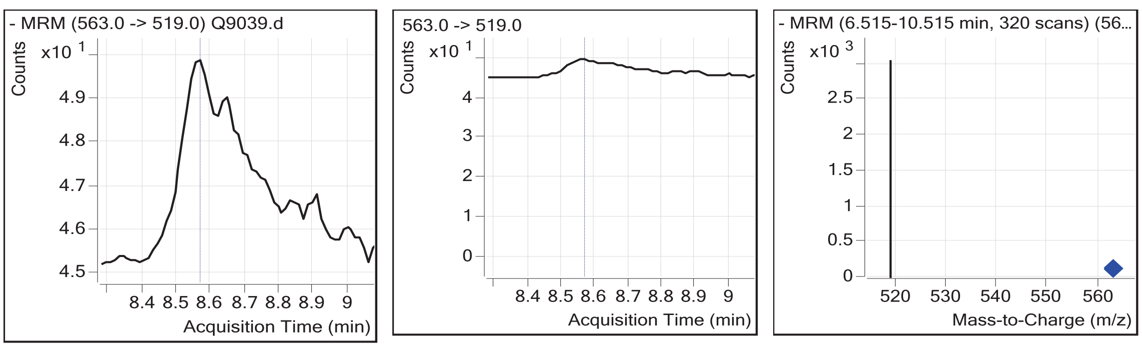
13C2-PFDA



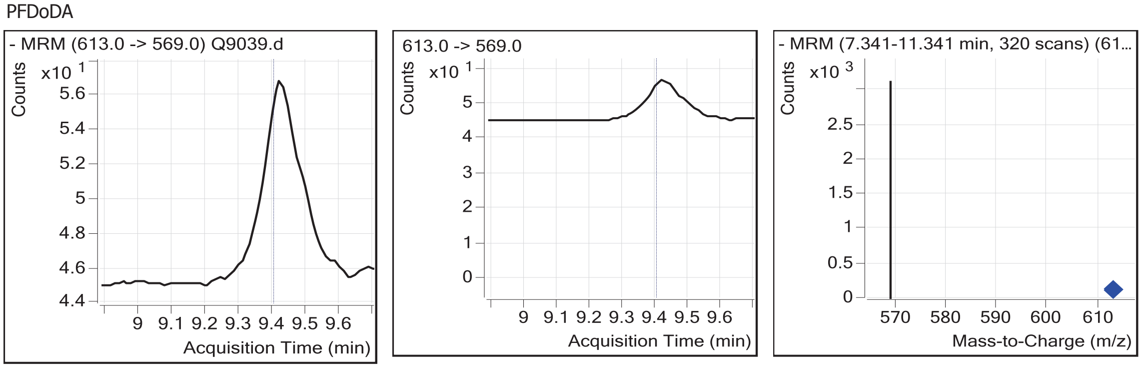
PFDS



PFUnDA

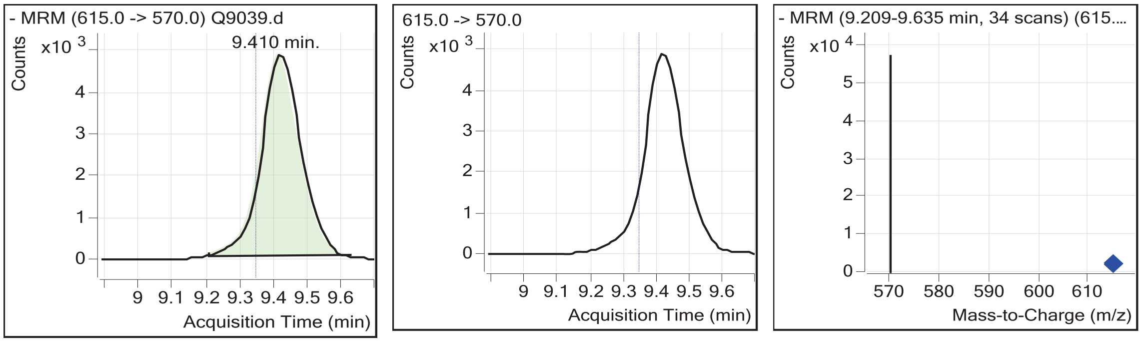


PFDoDA

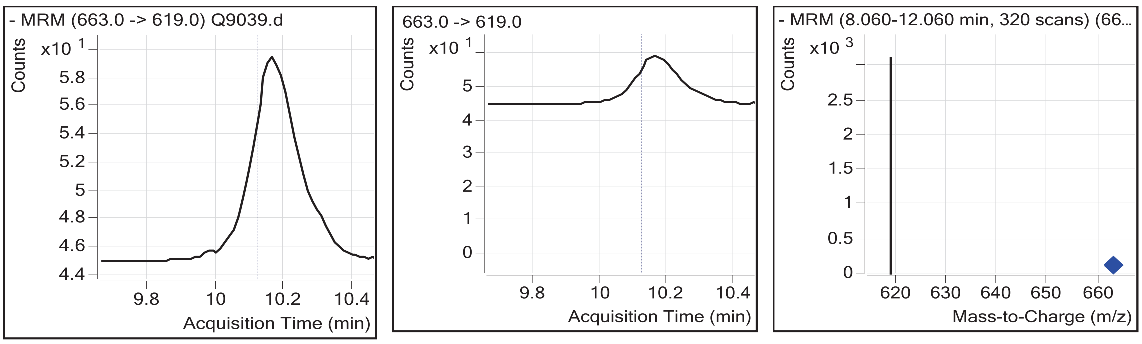


Perfluorinated Compounds by LC/MS/MS.

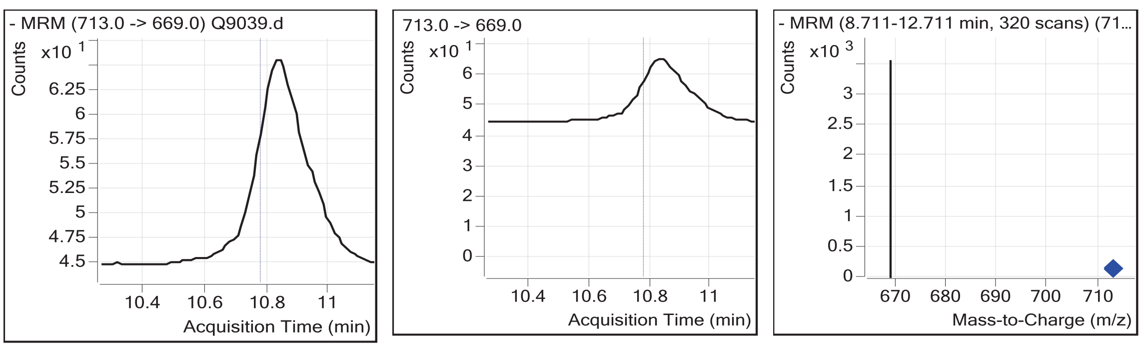
13C2-PFDoDA



PFTrDA



PFTeDA



7.2.1

7

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q9084.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 18:25
Sample Name	:	OP54279-MB
Vial	:	Vial 14
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.308	415.0 -> 370.0	25044	20.000	µg/L	-0.013
13C4-PFOS	6.894	503.0 -> 80.0	12747	20.000	µg/L	-0.013
13C2-PFDoDA	9.334	615.0 -> 570.0	37994	20.000	µg/L	-0.038
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	8784	22.87	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 114.37%			
13C2-PFDA	7.608	515.0 -> 470.0	17857	21.58	µg/L	-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 107.92%			
Target Compounds						**Qvalue**

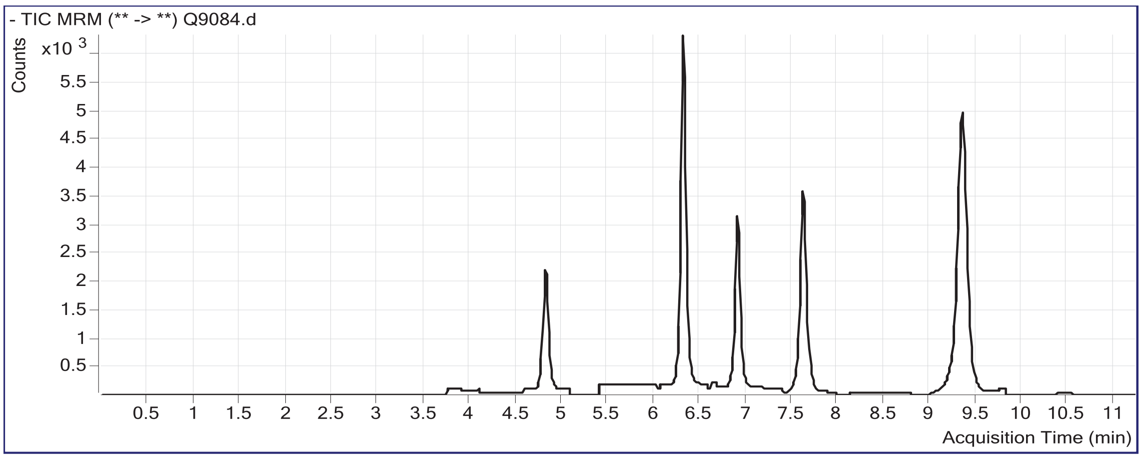
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.2.2

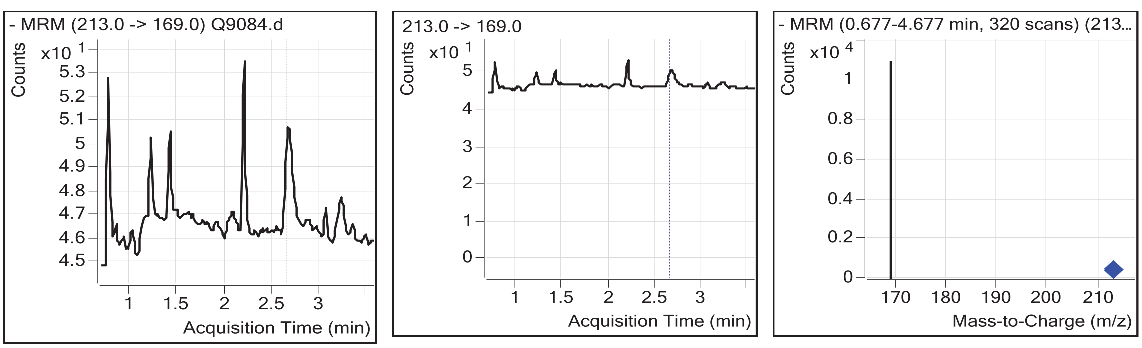
7

Perfluorinated Compounds by LC/MS/MS.

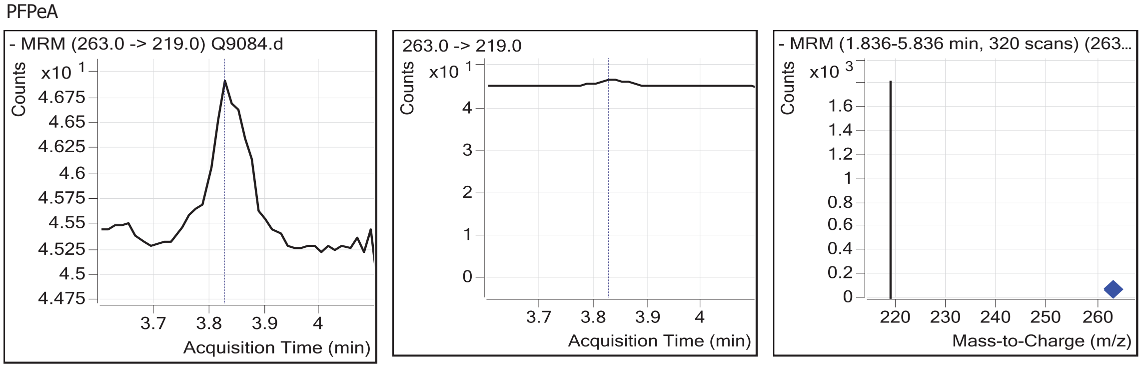
Data File	:	Q9084.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 18:25
Sample Name	:	OP54279-MB
Vial	:	Vial 14
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

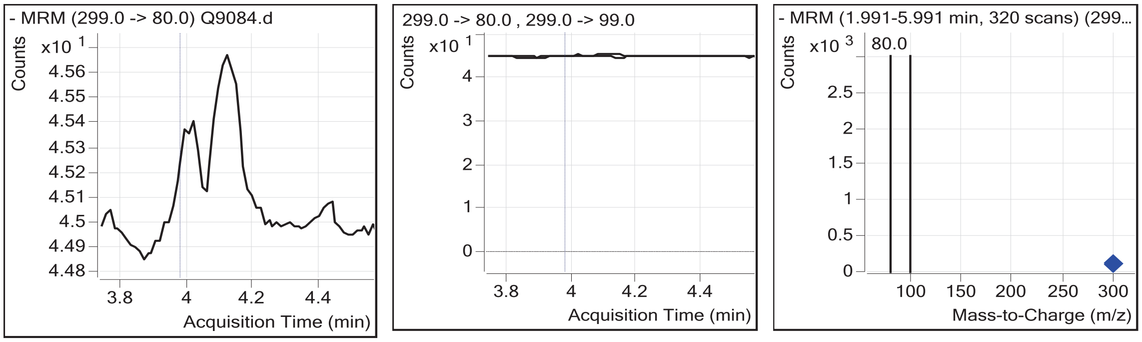


PFPeA

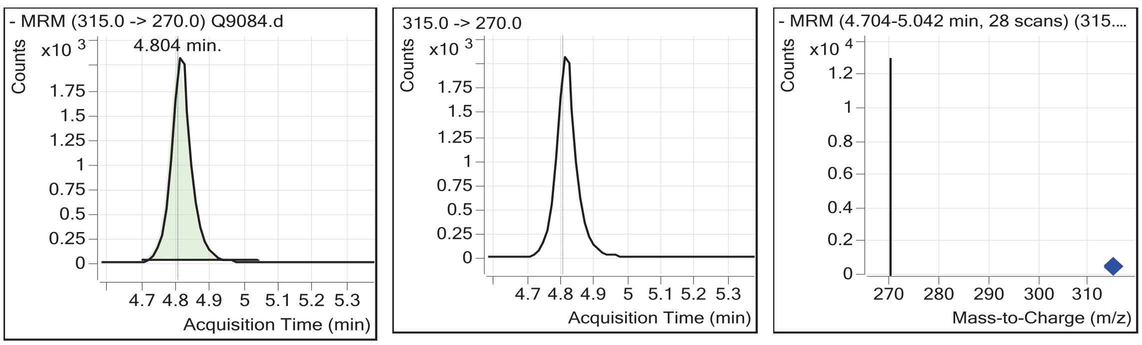


Perfluorinated Compounds by LC/MS/MS.

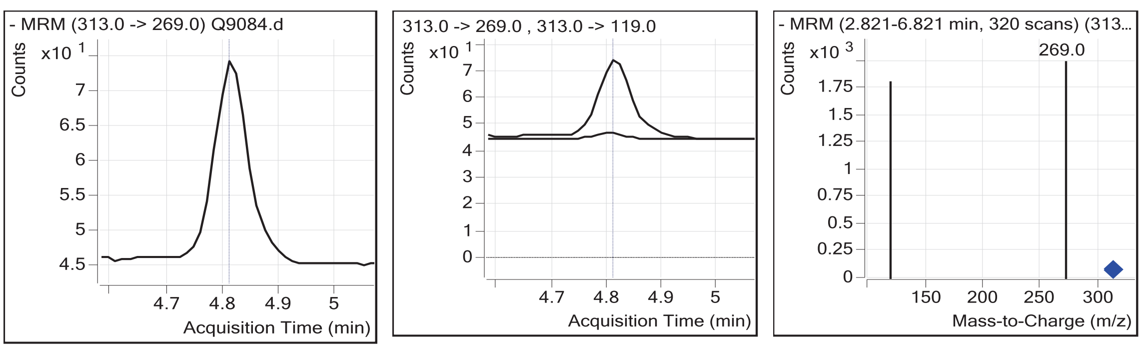
PFBS



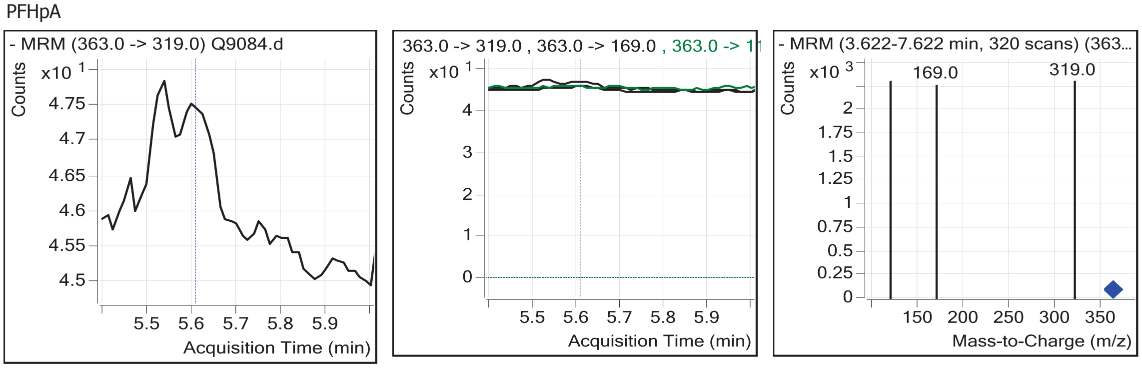
13C2-PFHxA



PFHxA



PFHpA

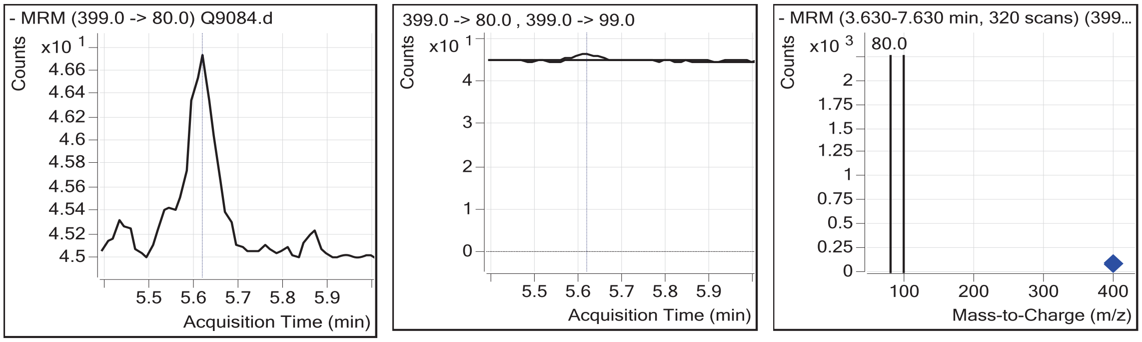


7.2.2

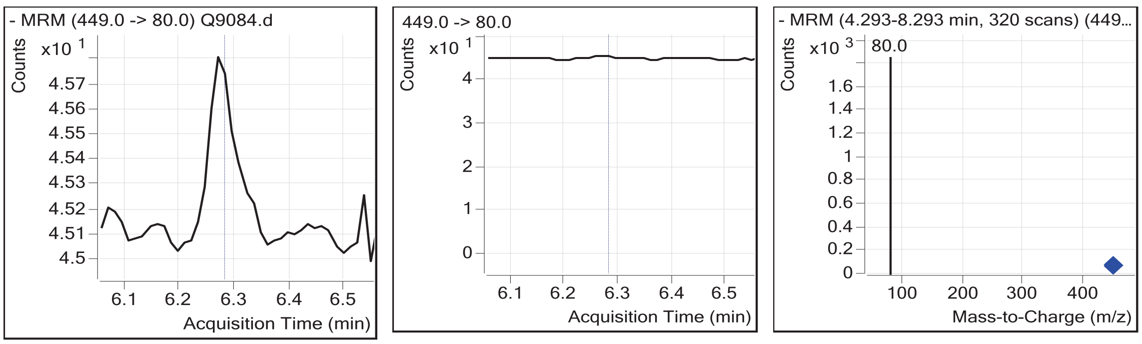
7

Perfluorinated Compounds by LC/MS/MS.

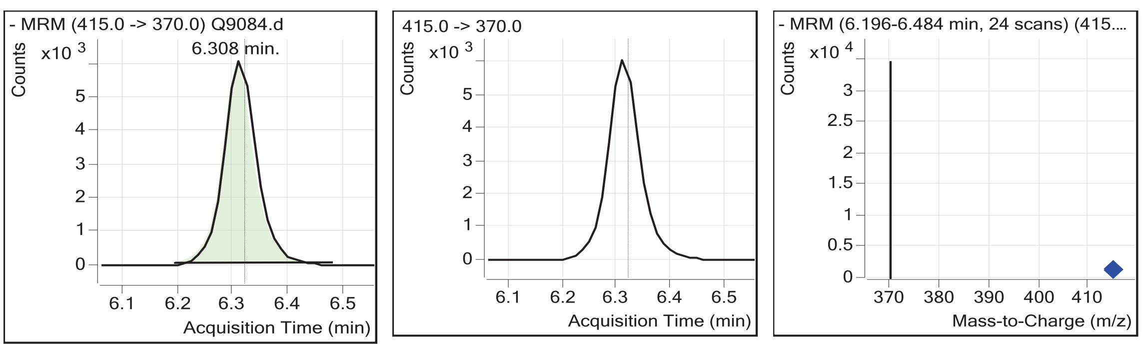
PFHxS



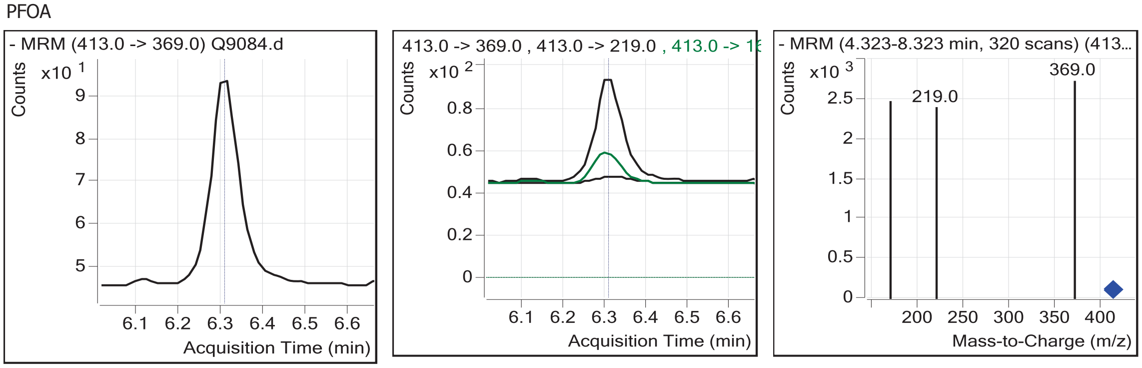
PFHpS



13C2-PFOA

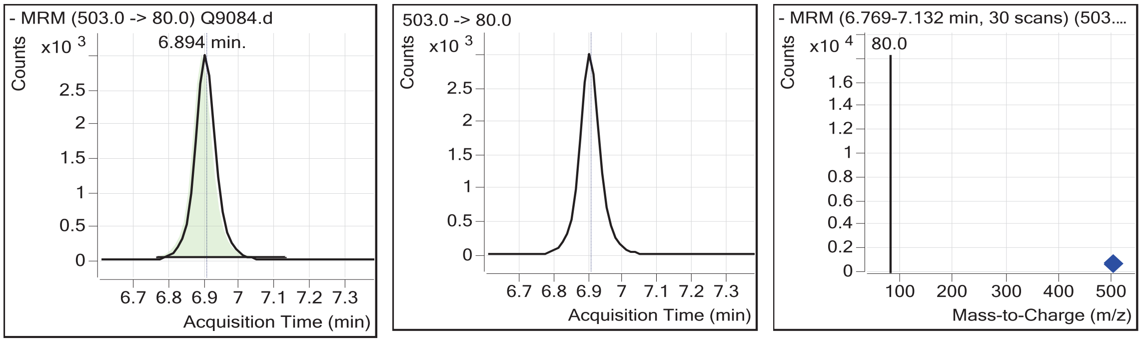


PFOA

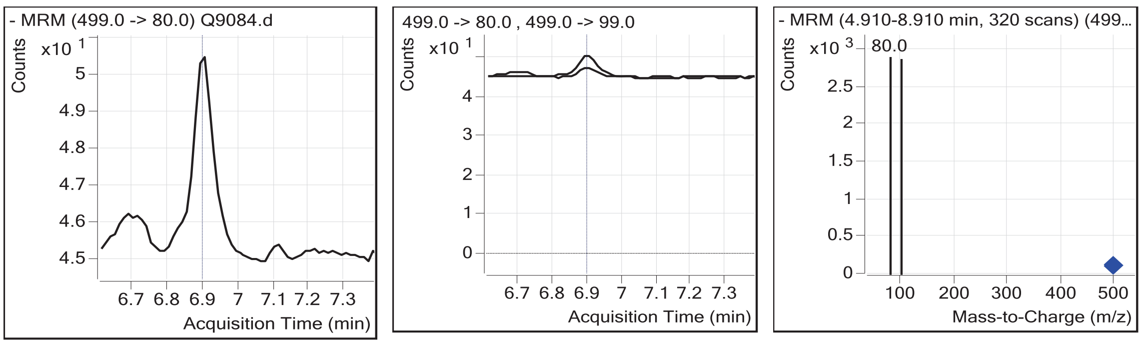


Perfluorinated Compounds by LC/MS/MS.

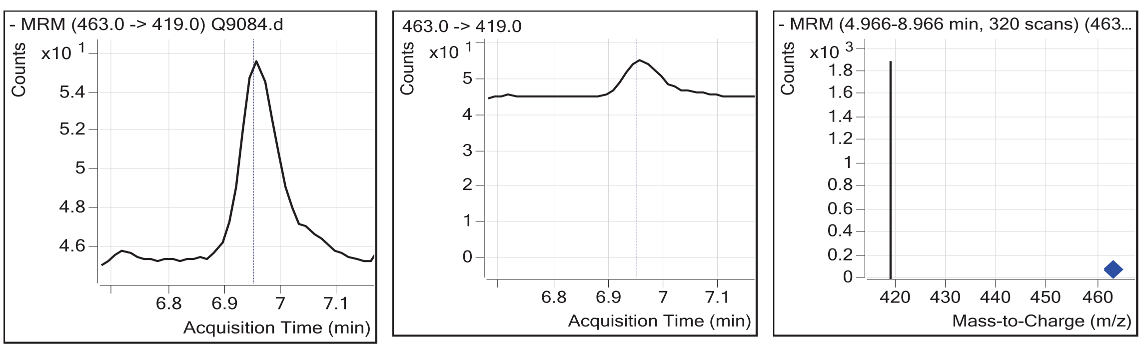
13C4-PFOS



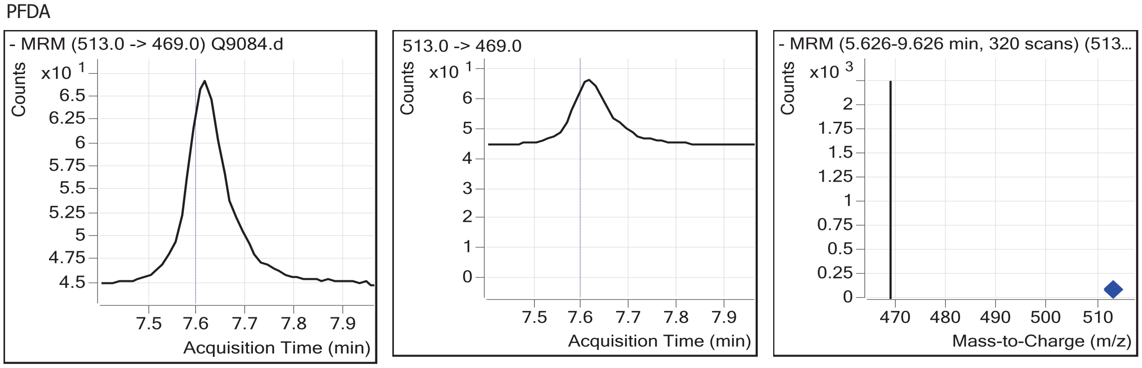
PFOS



PFNA



PFDA

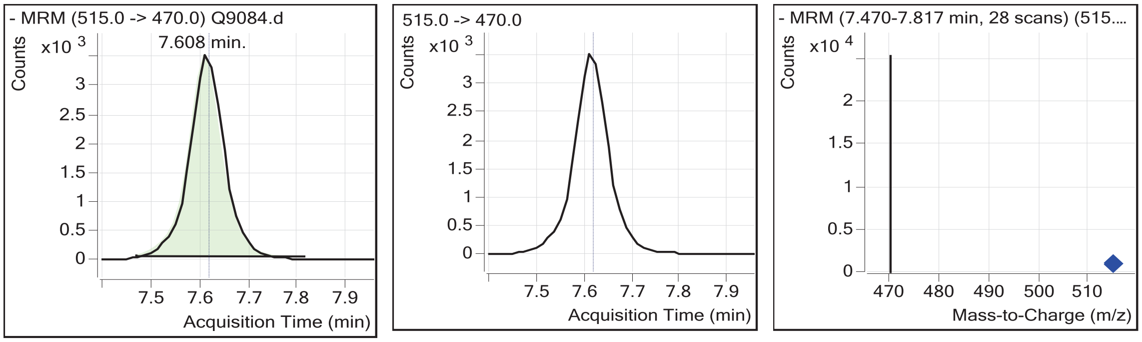


7.2.2

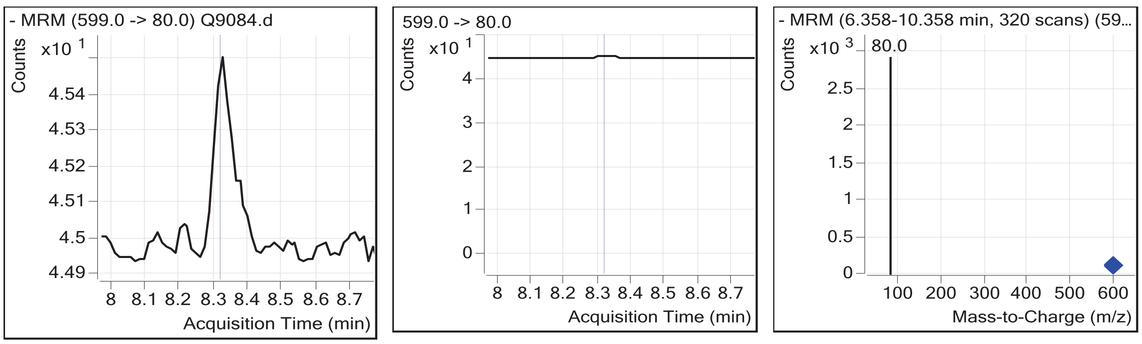
7

Perfluorinated Compounds by LC/MS/MS.

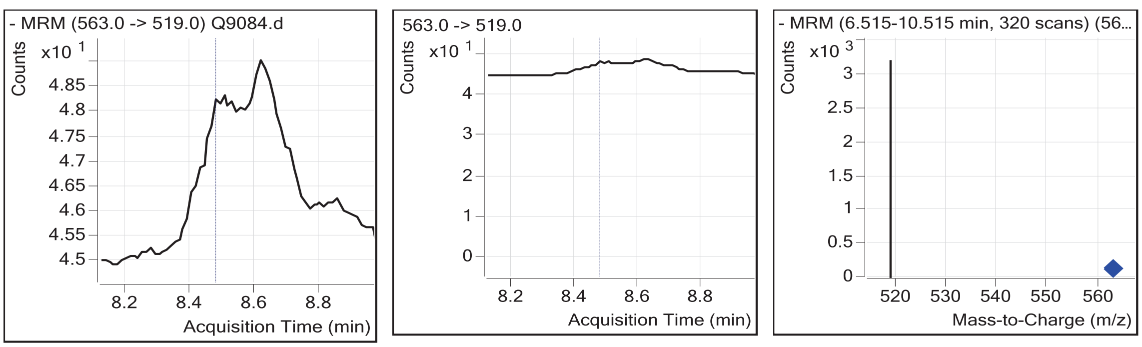
13C2-PFDA



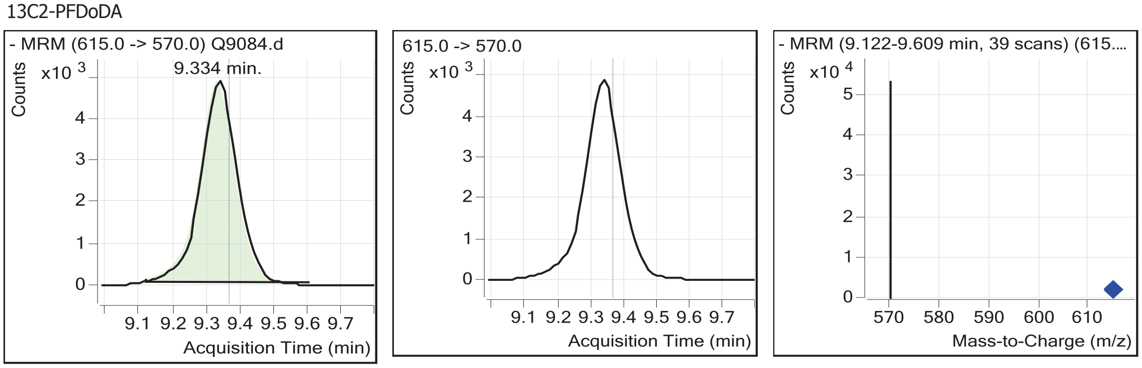
PFDS



PFUnDA

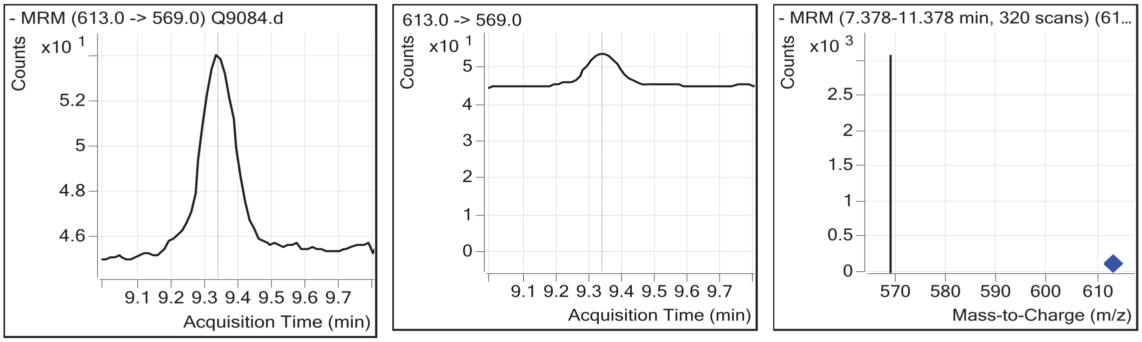


13C2-PFDoDA

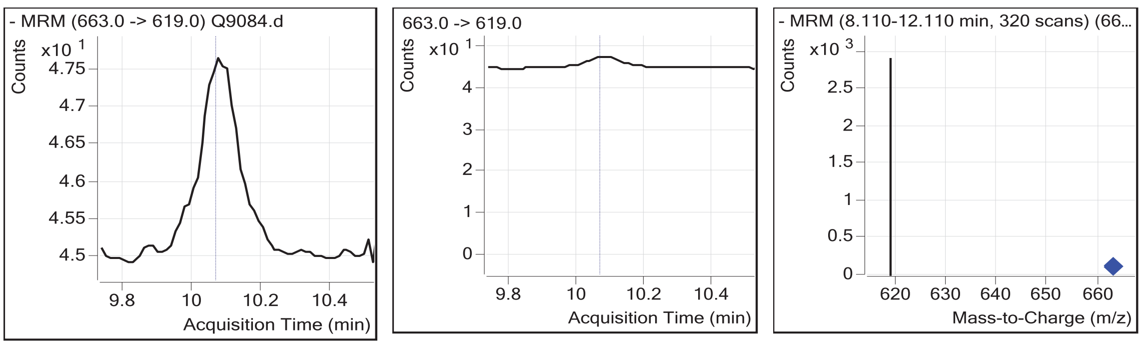


Perfluorinated Compounds by LC/MS/MS.

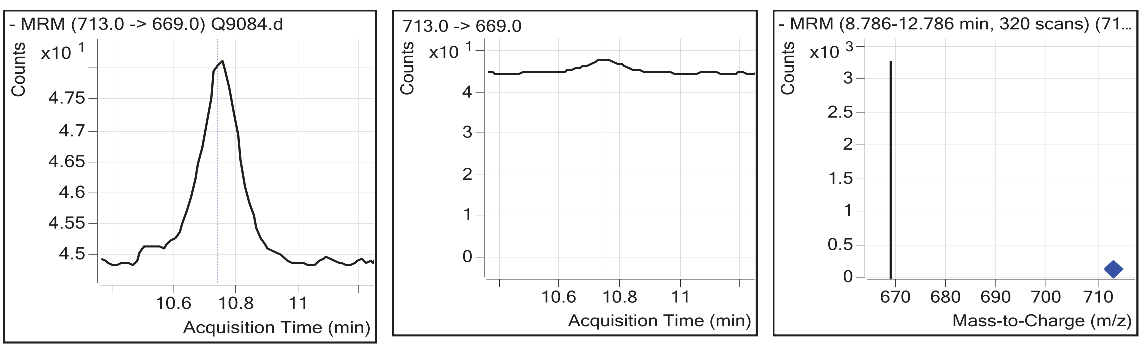
PFDoDA



PFTrDA



PFTeDA



Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/19/14 11:30

Perfluorinated Compounds by LC/MS/MS.

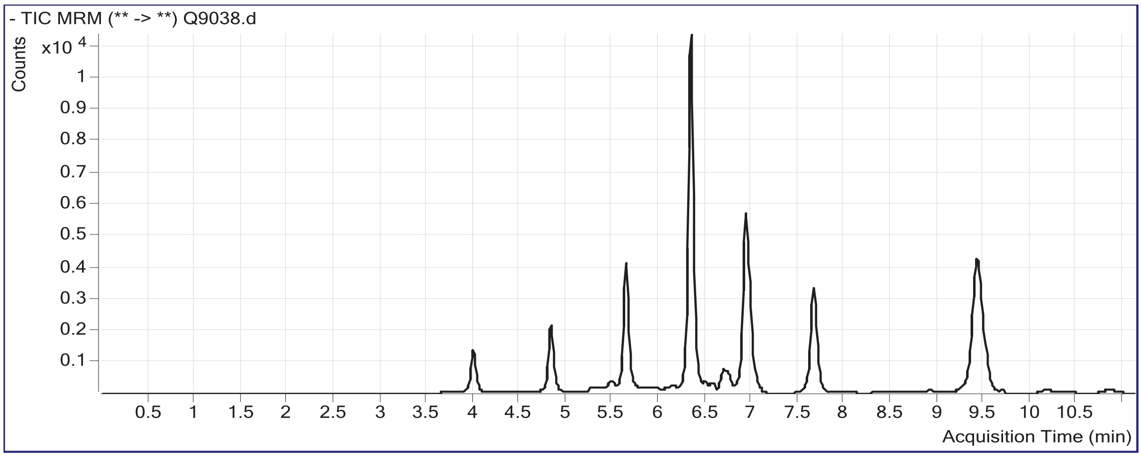
Data File	:	Q9038.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 18:31
Sample Name	:	OP54254-BS
Vial	:	Vial 3
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.334	415.0 -> 370.0	20516	20.000	µg/L		0.000
13C4-PFOS	6.920	503.0 -> 80.0	10870	20.000	µg/L		0.000
13C2-PFDoDA	9.410	615.0 -> 570.0	35491	20.000	µg/L		0.063
System Monitoring Compounds							
13C2-PFHxA	4.829	315.0 -> 270.0	8474	25.12	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 125.60%				
13C2-PFDA	7.645	515.0 -> 470.0	17320	19.79	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 98.95%				
Target Compounds							**Qvalue**
PFBA	1.151	213.0 -> 169.0	0	0.000	µg/L	m	1
PFBS	3.991	299.0 -> 80.0	3548	22.093	µg/L		99
PFHpA	5.635	363.0 -> 319.0	6055	17.621	µg/L		97
PFHxS	5.643	399.0 -> 80.0	5901	22.880	µg/L	m	97
PFOA	6.336	413.0 -> 369.0	20186	19.422	µg/L		81
PFOS	6.923	499.0 -> 80.0	10822	19.905	µg/L	m	100
PFNA	6.979	463.0 -> 419.0	9600	15.535	µg/L		100
PFDoDA	9.416	613.0 -> 569.0	0	0.000	µg/L	m	1
PFTrDA	10.148	663.0 -> 619.0	0	0.000	µg/L	m	1
PFTeDA	10.823	713.0 -> 669.0	0	0.000	µg/L	m	1

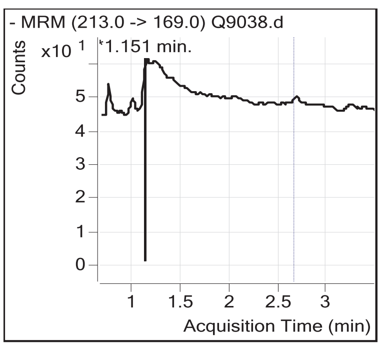
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

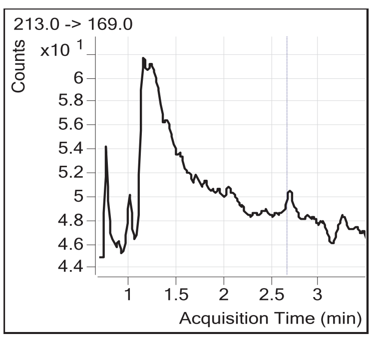
Perfluorinated Compounds by LC/MS/MS.

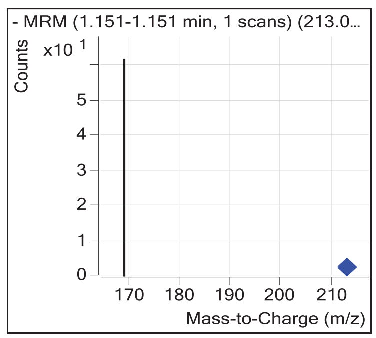
Data File	:	Q9038.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 18:31
Sample Name	:	OP54254-BS
Vial	:	Vial 3
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



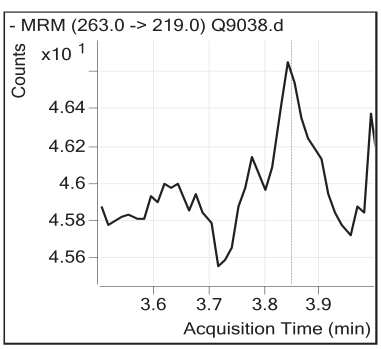
PFBA

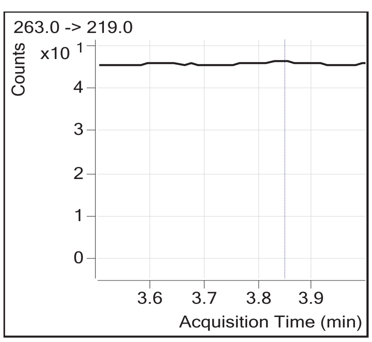


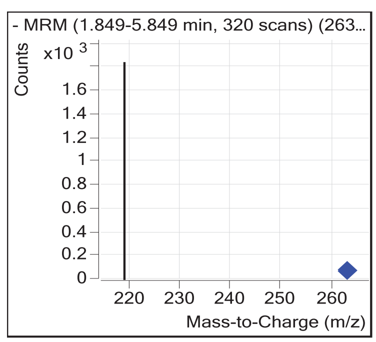




PFPeA

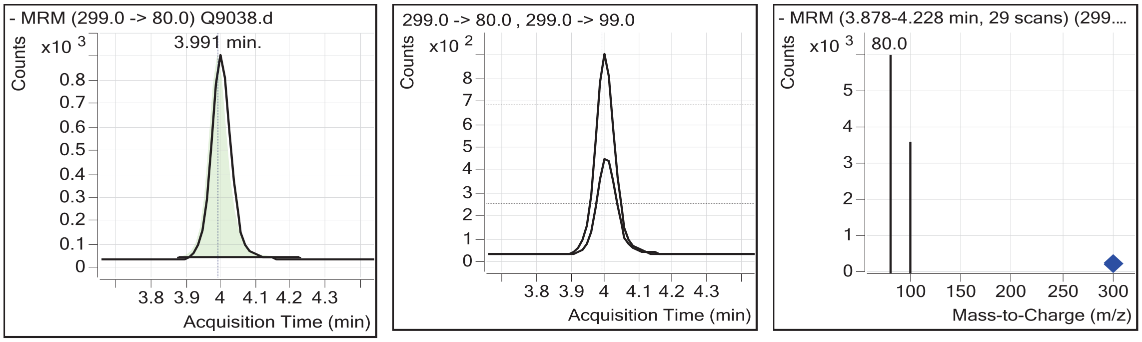




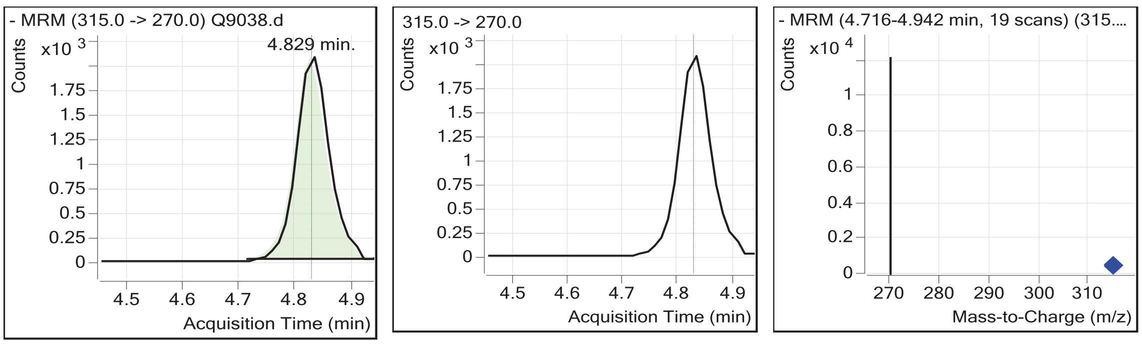


Perfluorinated Compounds by LC/MS/MS.

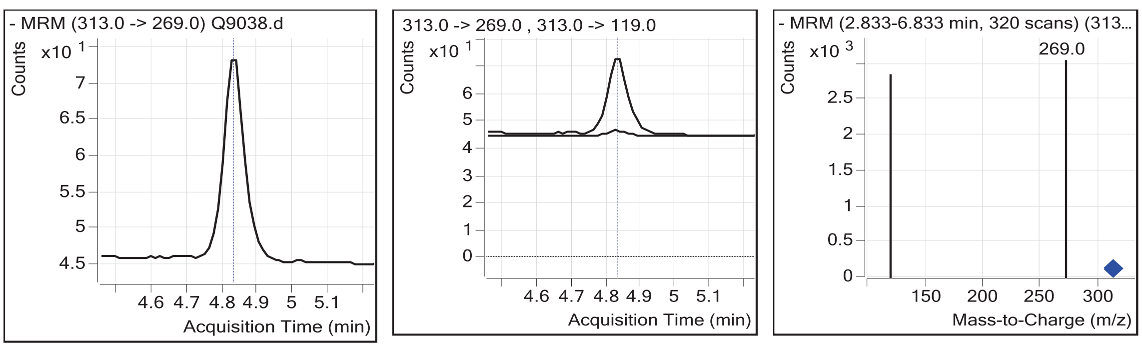
PFBS



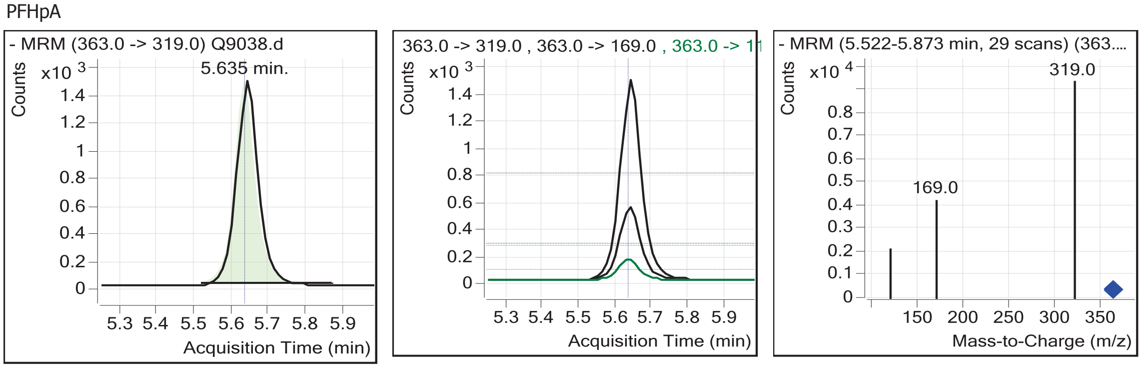
13C2-PFHxA



PFHxA

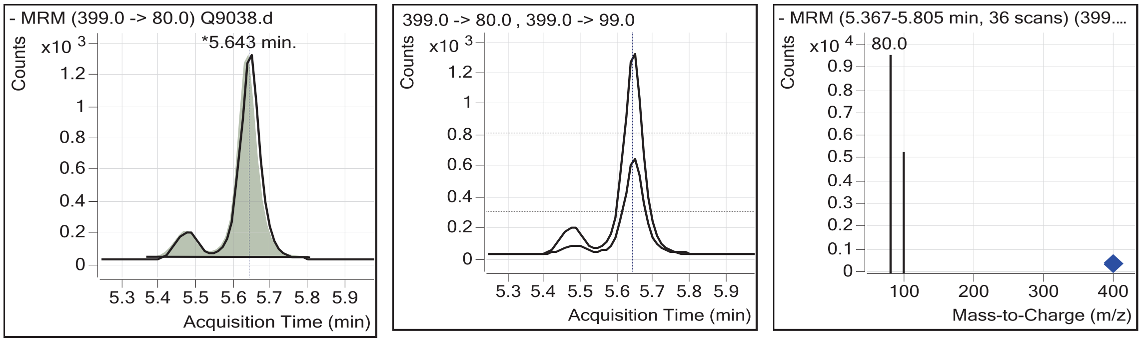


PFHpA

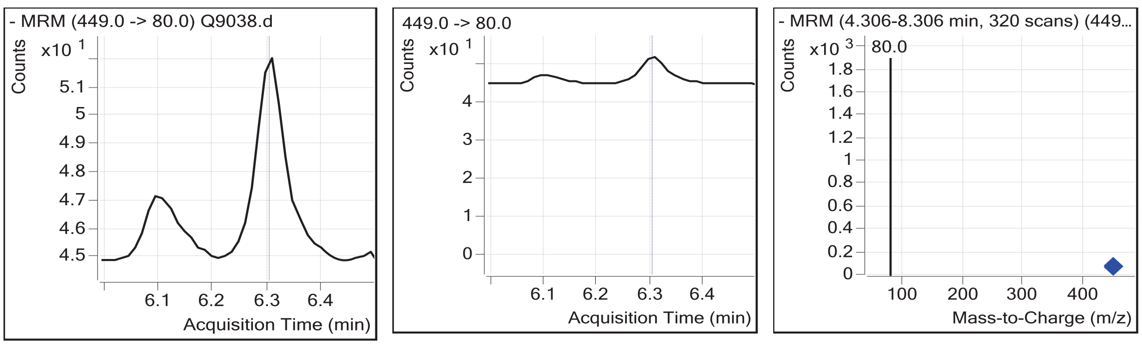


Perfluorinated Compounds by LC/MS/MS.

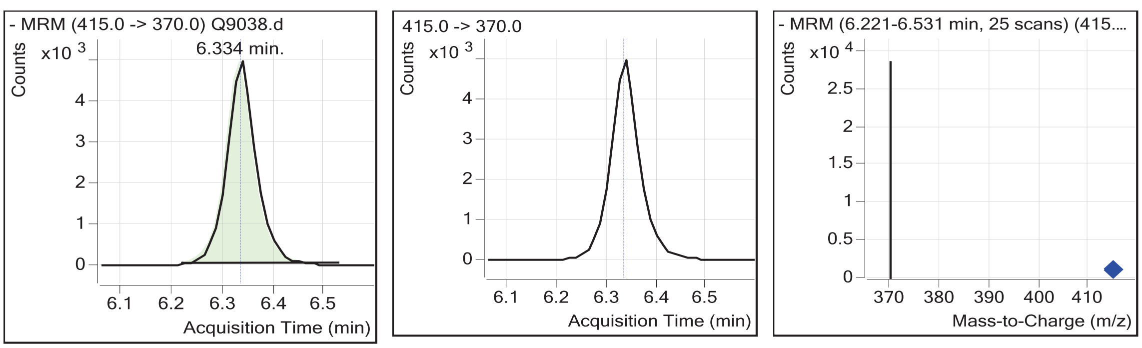
PFHxS



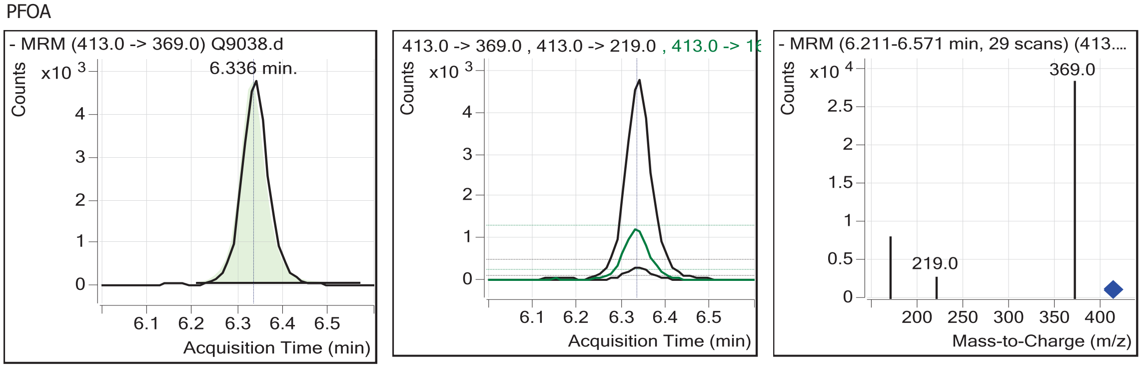
PFHpS



13C2-PFOA

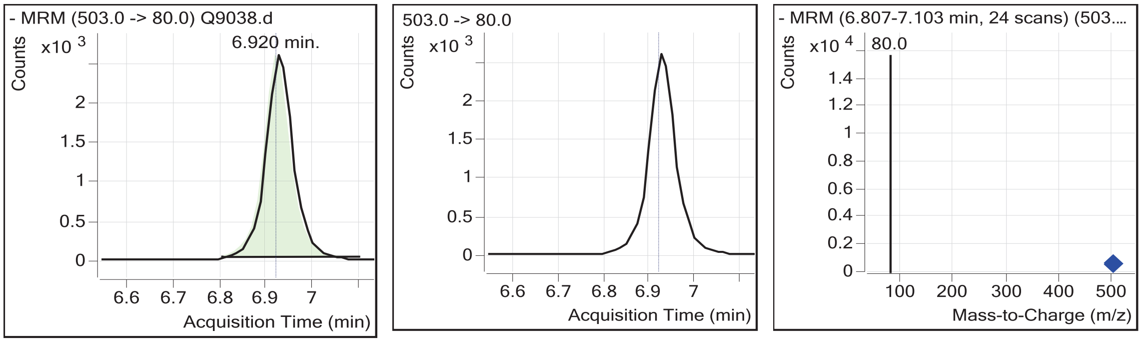


PFOA

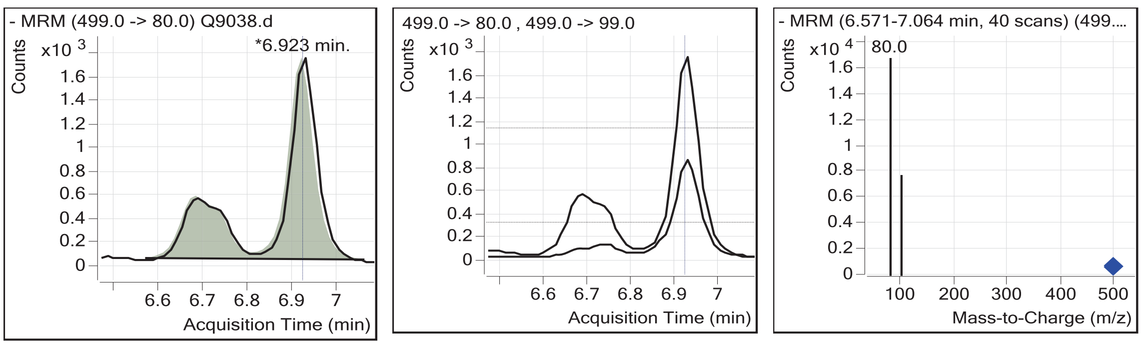


Perfluorinated Compounds by LC/MS/MS.

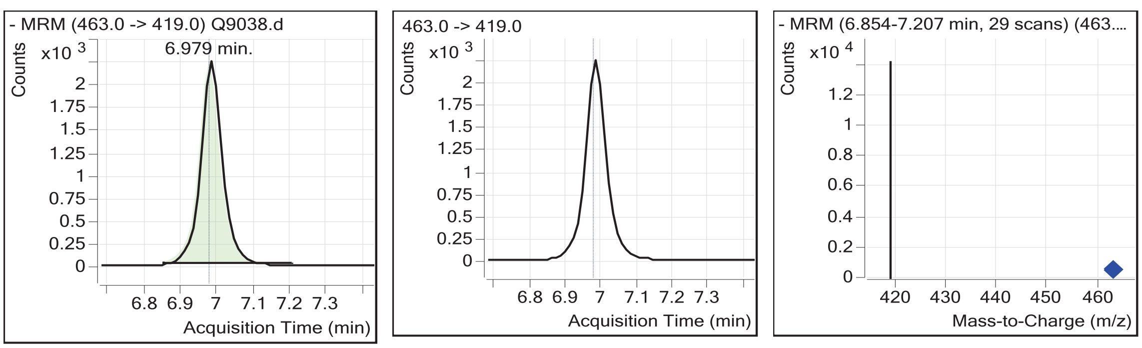
13C4-PFOS



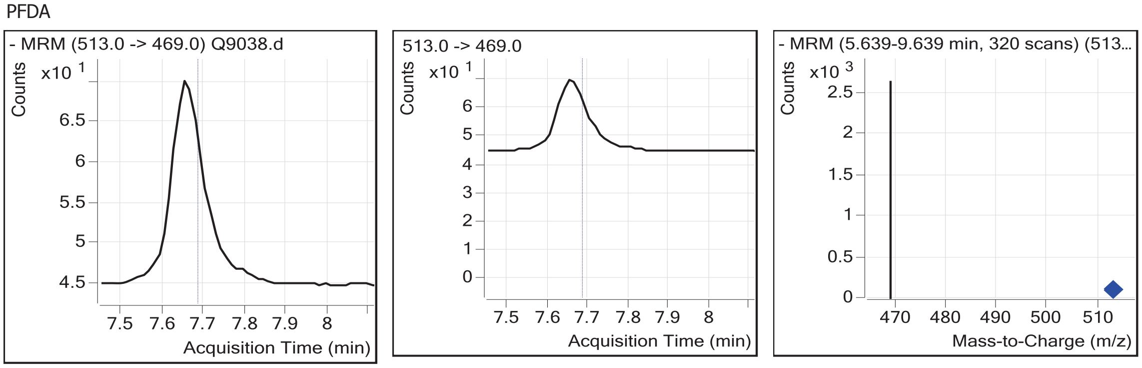
PFOS



PFNA

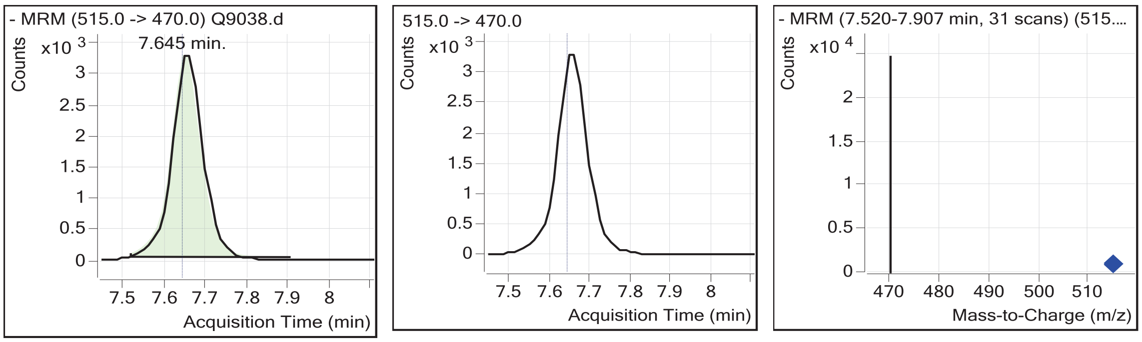


PFDA

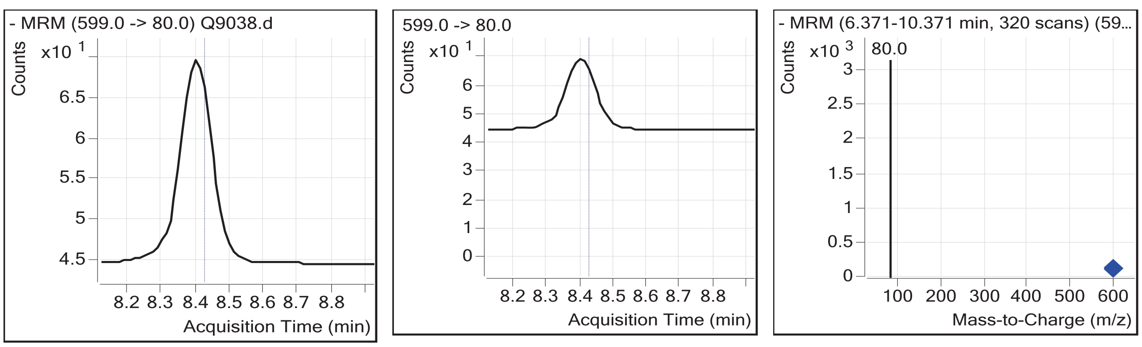


Perfluorinated Compounds by LC/MS/MS.

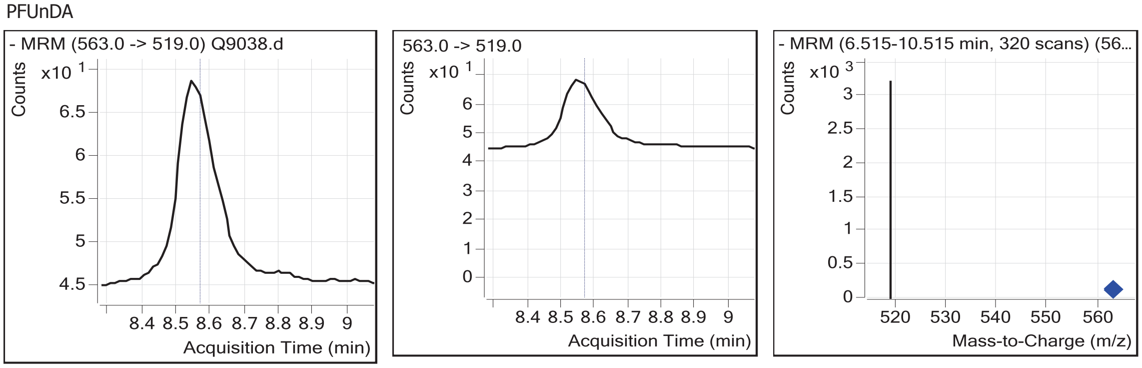
13C2-PFDA



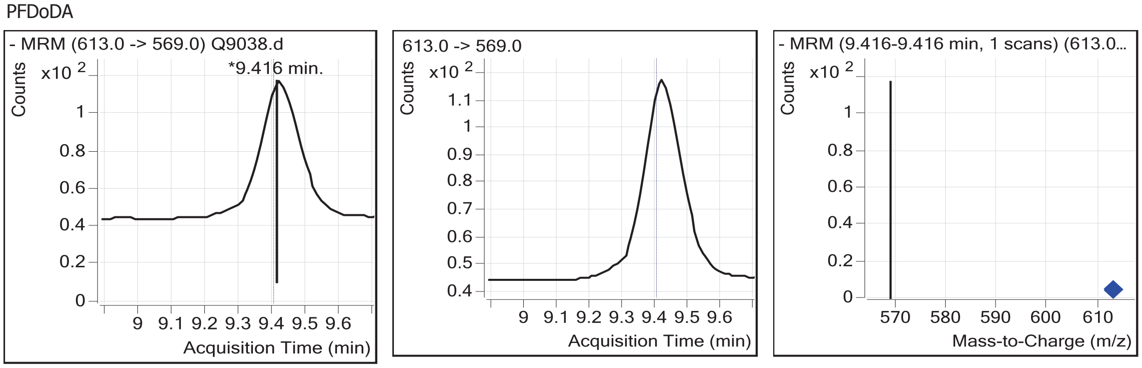
PFDS



PFUnDA

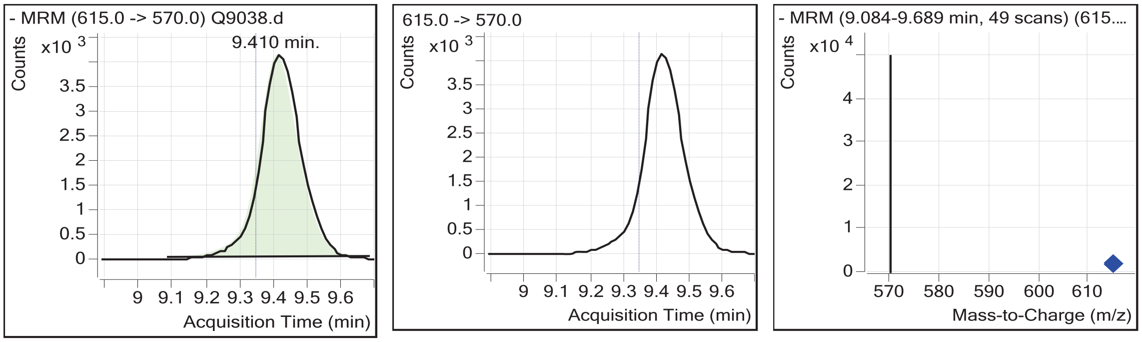


PFDoDA

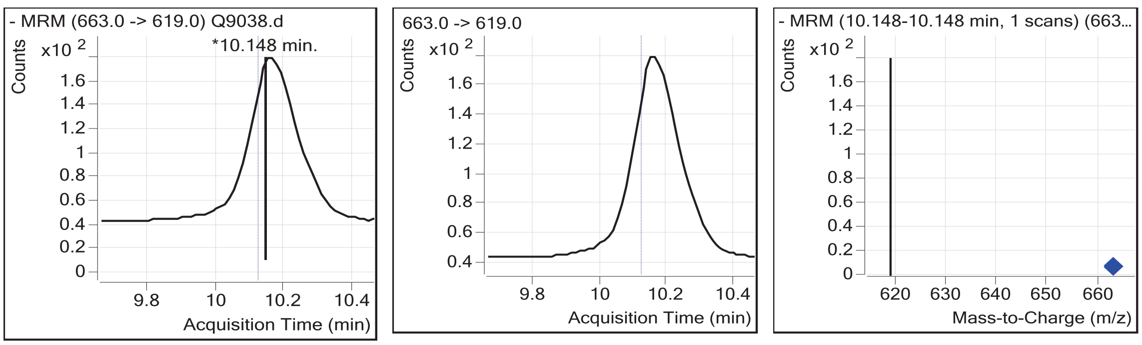


Perfluorinated Compounds by LC/MS/MS.

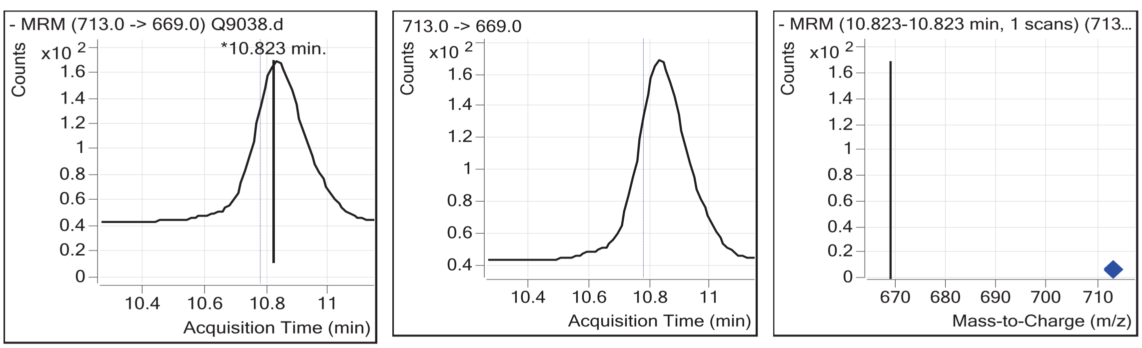
13C2-PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	OP54254-BS	**Method:**	EPA 537 MOD
Lab FileID:	Q9038.D	**Analyst approved:**	12/19/14 09:34 Mike Eger
Injection Time:	12/18/14 18:31	**Supervisor approved:**	12/19/14 11:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.64	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.92	Split peak
13C2-PFDoDA			9.41	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q9083.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 18:05
Sample Name	:	OP54279-BS
Vial	:	Vial 13
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.308	415.0 -> 370.0	24942	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	12815	20.000	µg/L		-0.013
13C2-PFDoDA	9.334	615.0 -> 570.0	39548	20.000	µg/L		-0.038
System Monitoring Compounds							
13C2-PFHxA	4.804	315.0 -> 270.0	9232	24.14	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 120.70%				
13C2-PFDA	7.608	515.0 -> 470.0	18448	22.39	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 111.94%				
Target Compounds							**Qvalue**
PFBS	3.978	299.0 -> 80.0	4900	22.489	µg/L		97
PFHxS	5.617	399.0 -> 80.0	6371	19.713	µg/L	m	86
PFHpA	5.622	363.0 -> 319.0	7269	18.642	µg/L		97
PFOA	6.311	413.0 -> 369.0	24735	19.445	µg/L		81
PFOS	6.897	499.0 -> 80.0	12028	18.853	µg/L	m	94
PFNA	6.954	463.0 -> 419.0	11749	20.508	µg/L		100

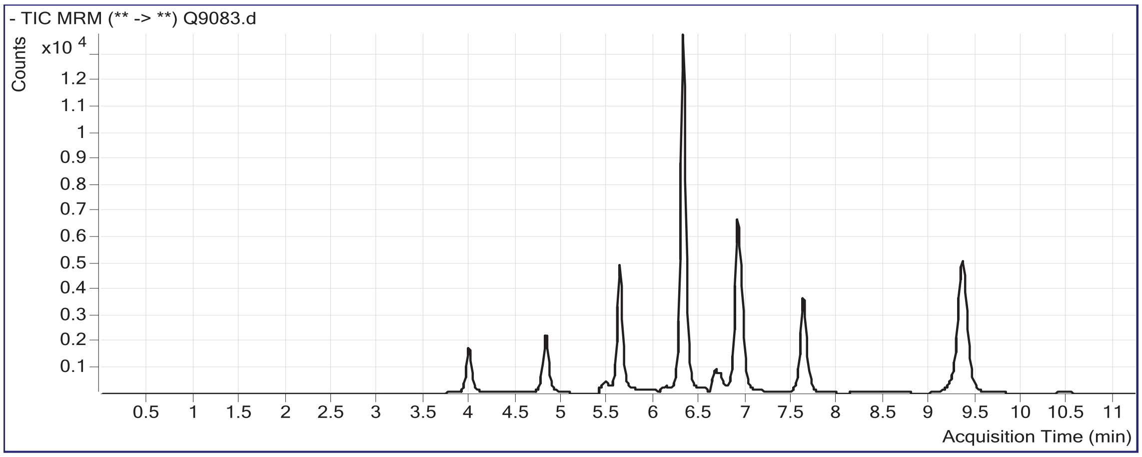
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.3.2

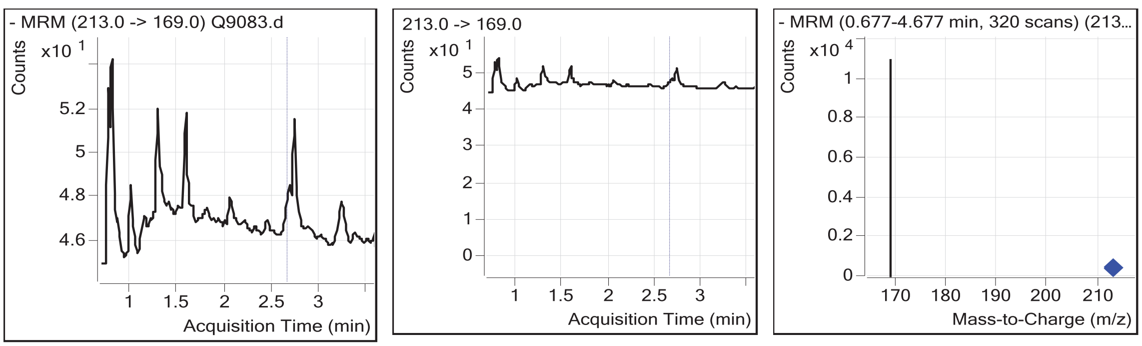
7

Perfluorinated Compounds by LC/MS/MS.

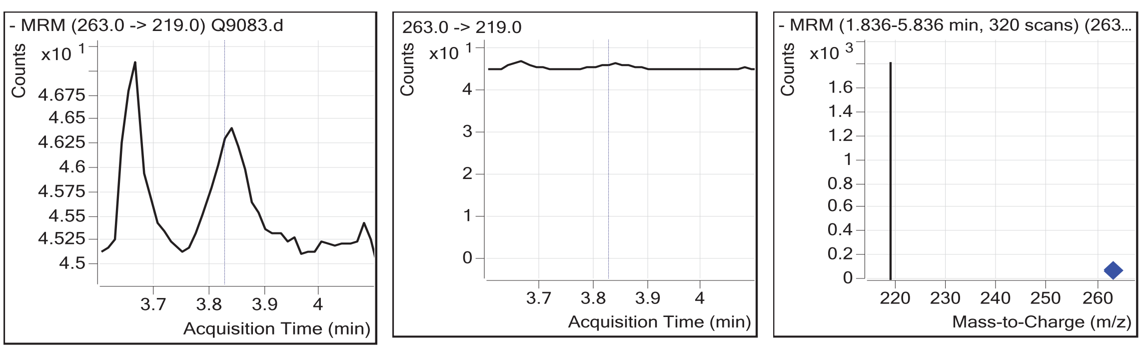
Data File	:	Q9083.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 18:05
Sample Name	:	OP54279-BS
Vial	:	Vial 13
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

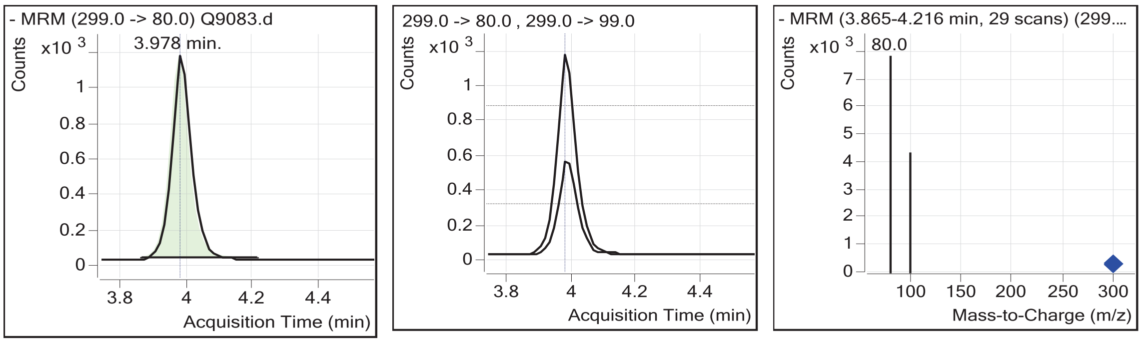


PFPeA

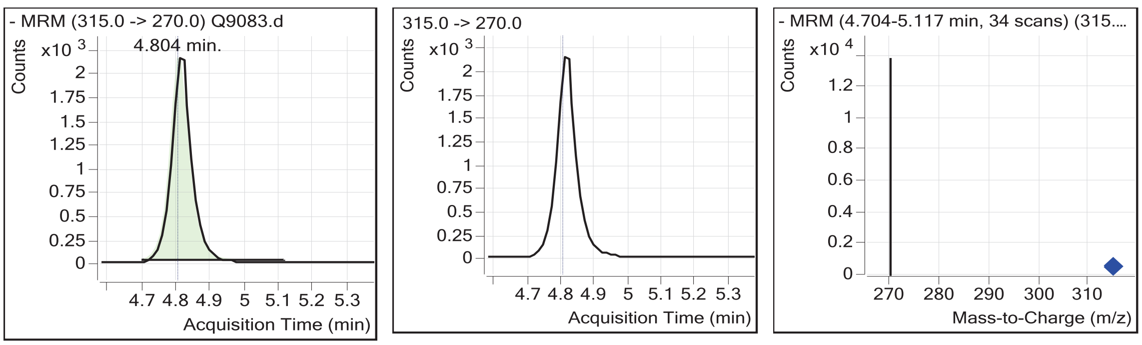


Perfluorinated Compounds by LC/MS/MS.

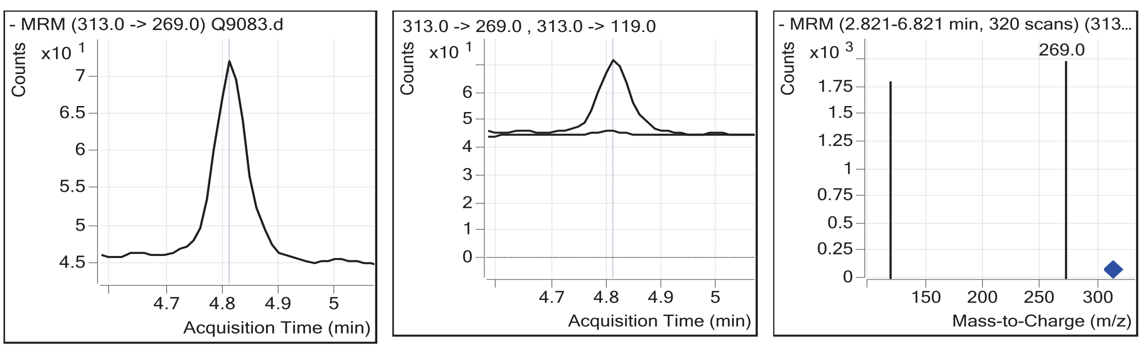
PFBS



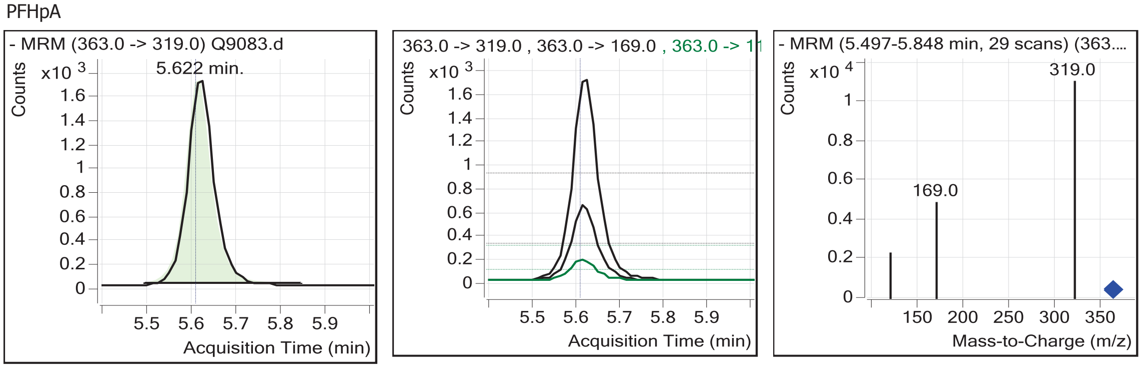
13C2-PFHxA



PFHxA

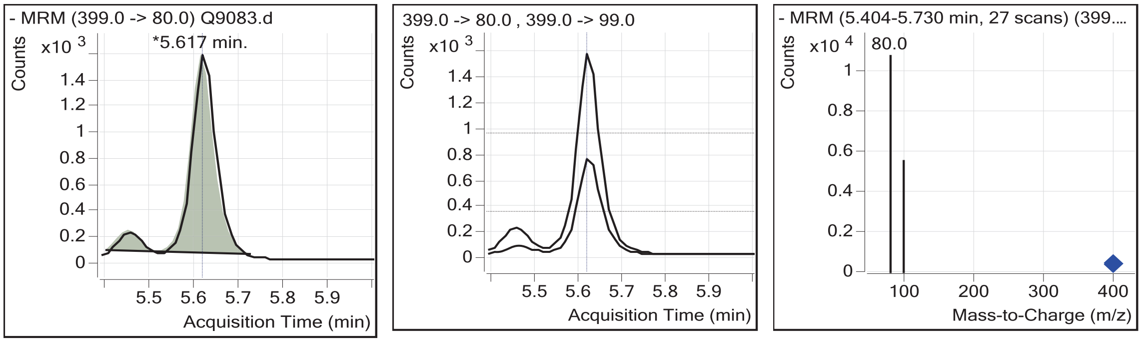


PFHpA

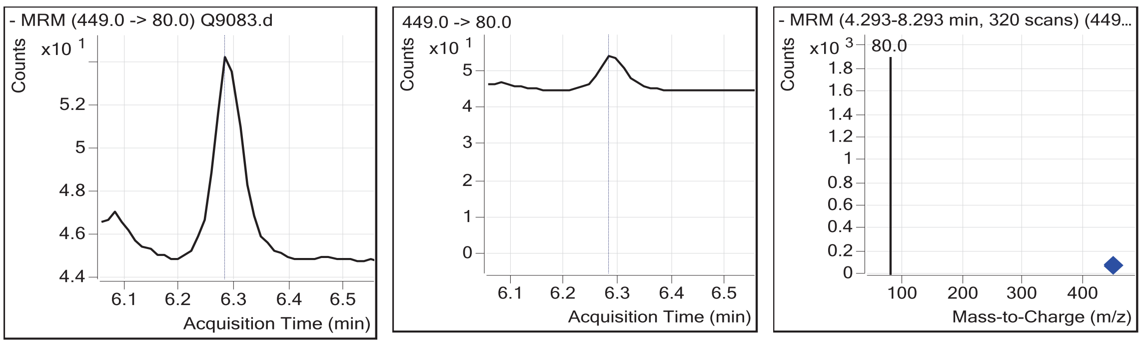


Perfluorinated Compounds by LC/MS/MS.

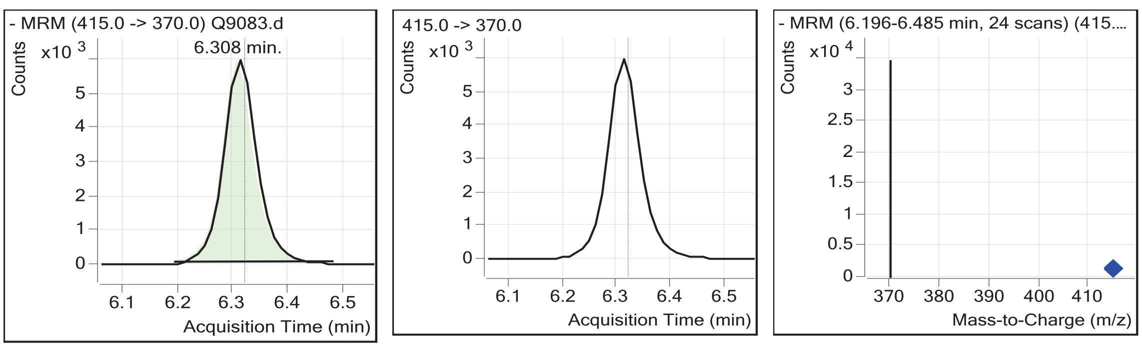
PFHxS



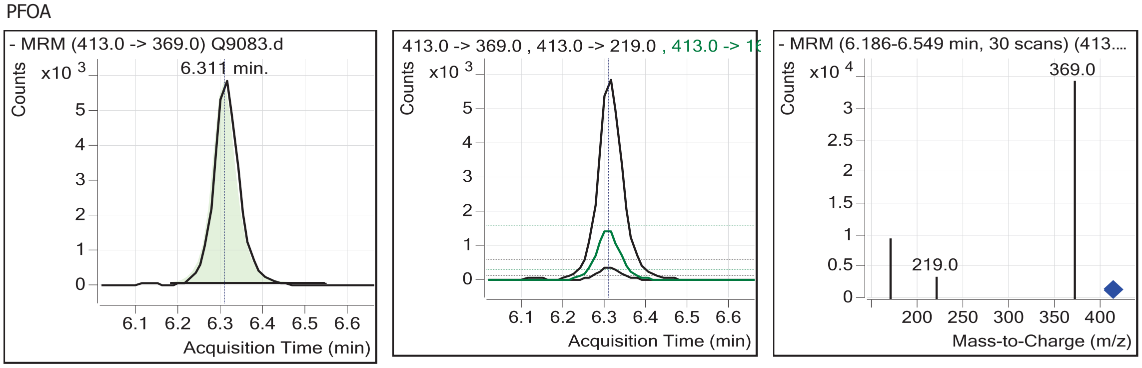
PFHpS



13C2-PFOA



PFOA

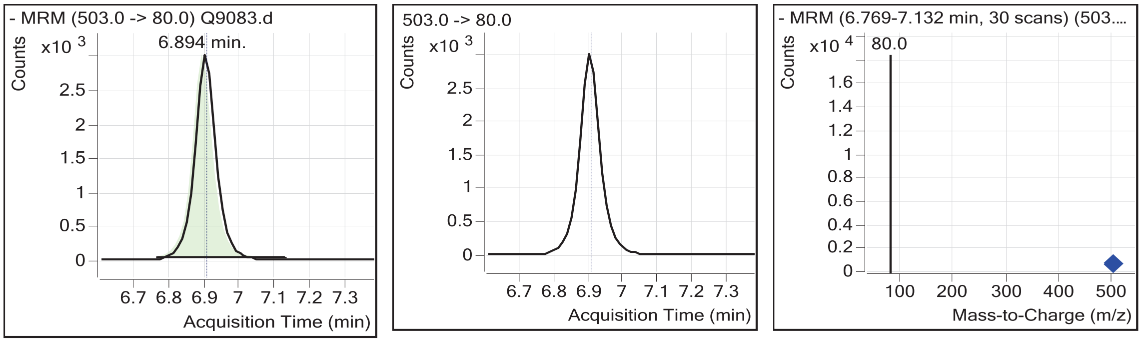


7.3.2

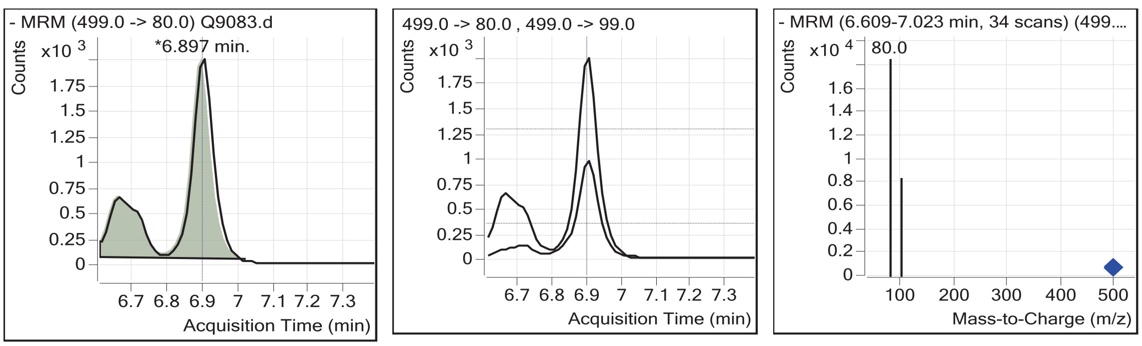
7

Perfluorinated Compounds by LC/MS/MS.

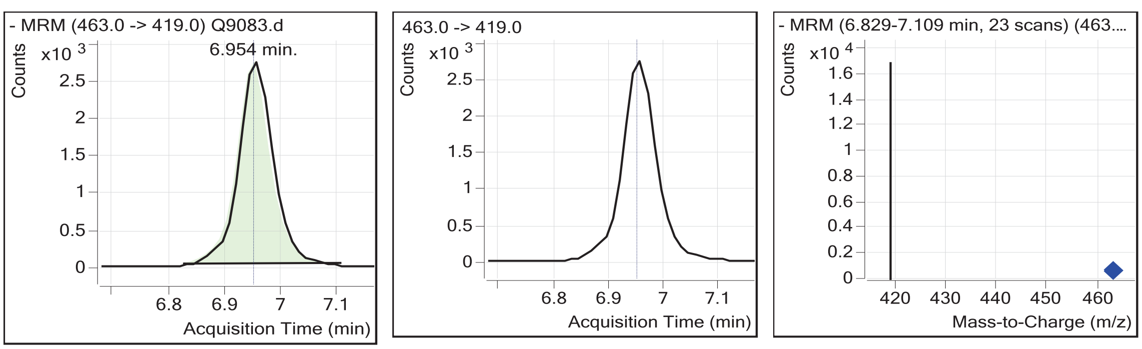
13C4-PFOS



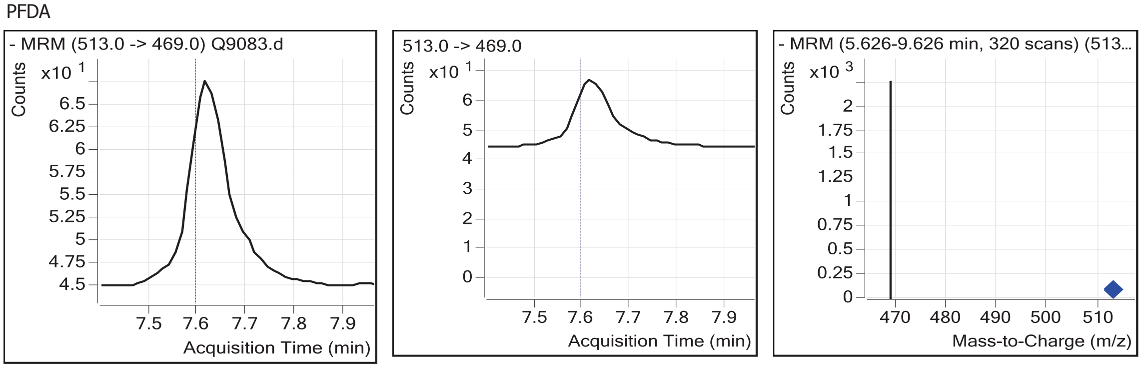
PFOS



PFNA

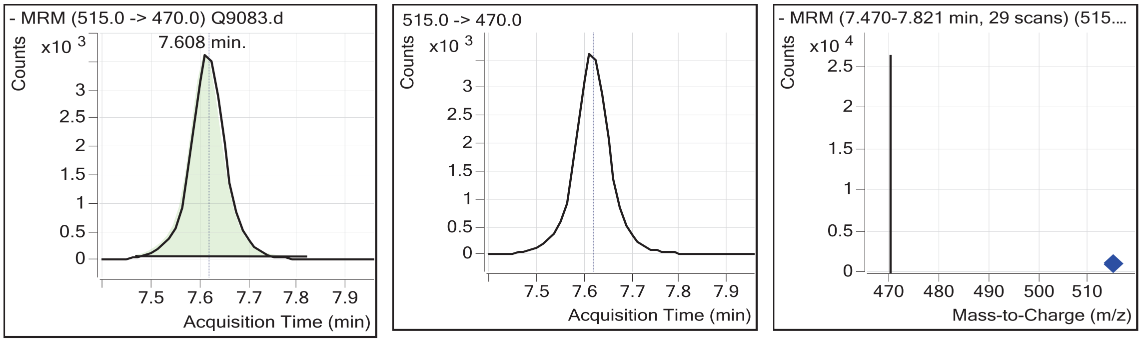


PFDA

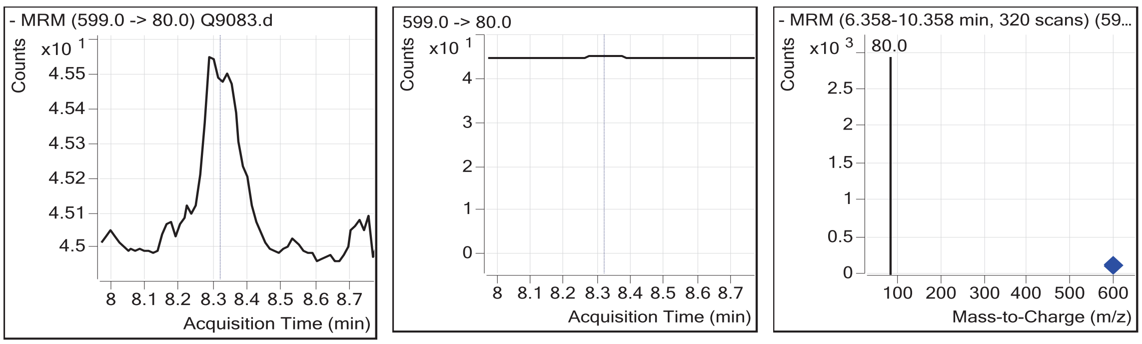


Perfluorinated Compounds by LC/MS/MS.

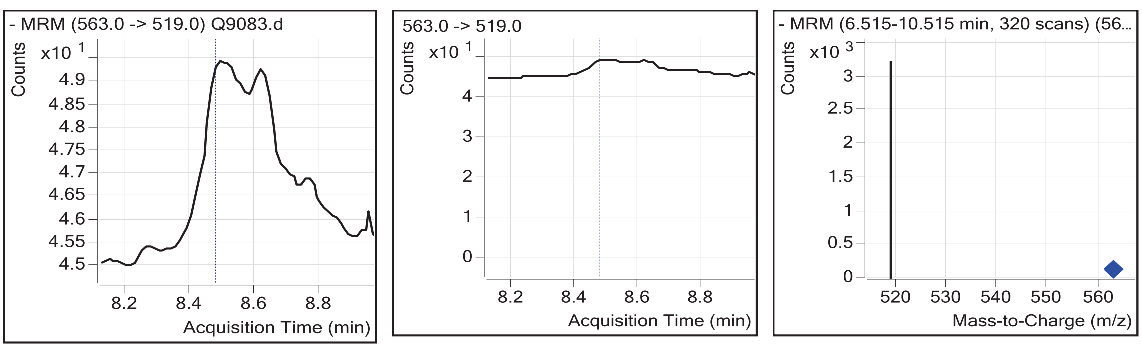
13C2-PFDA



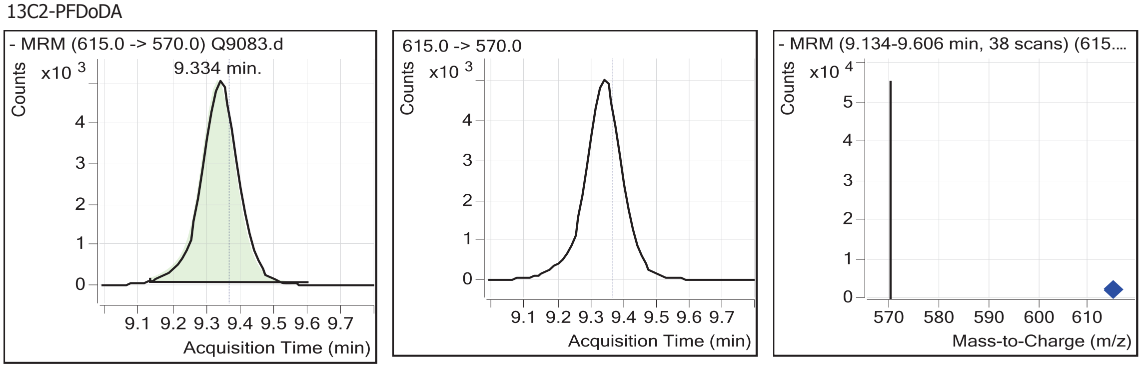
PFDS



PFUnDA



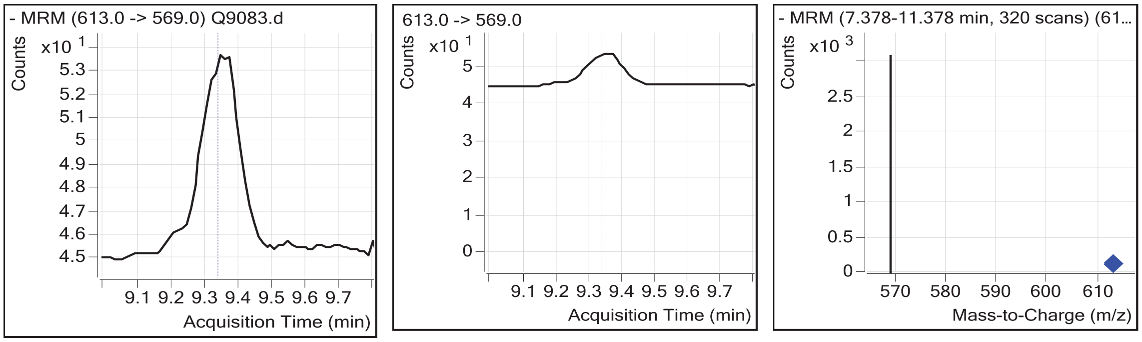
13C2-PFDoDA



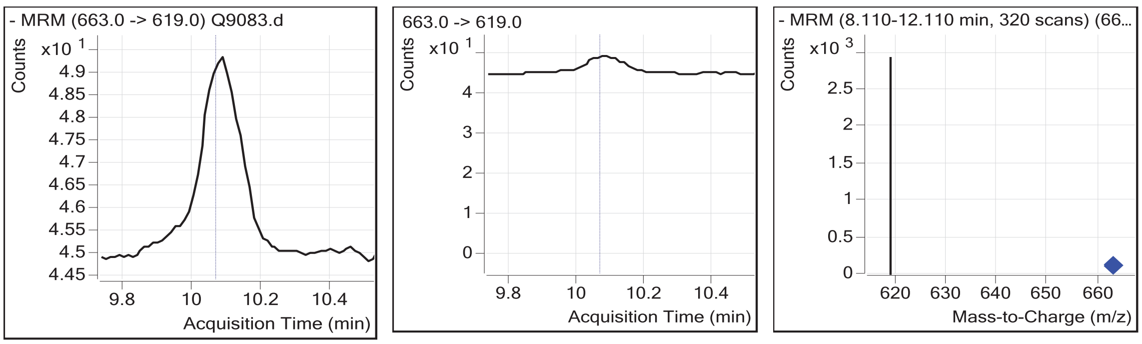
7.3.2
7

Perfluorinated Compounds by LC/MS/MS.

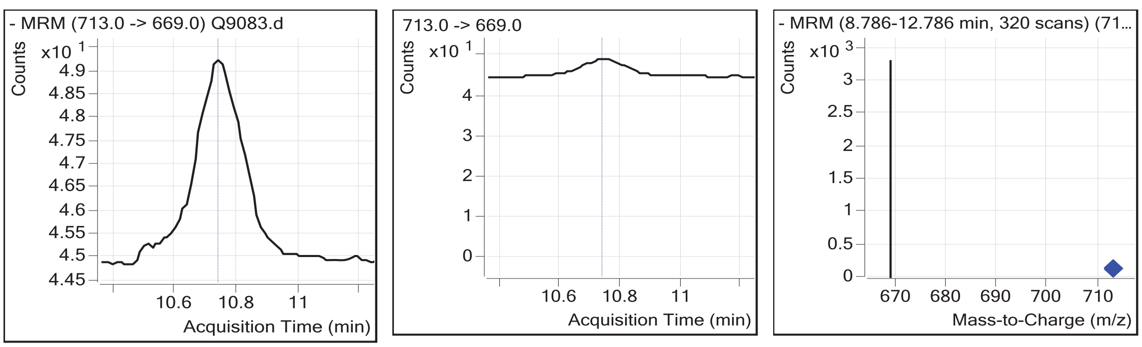
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	OP54279-BS	**Method:**	EPA 537 MOD
Lab FileID:	Q9083.D	**Analyst approved:**	12/22/14 10:29 Mike Eger
Injection Time:	12/19/14 18:05	**Supervisor approved:**	12/22/14 13:28 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.62	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/22/14 10:28

Perfluorinated Compounds by LC/MS/MS.

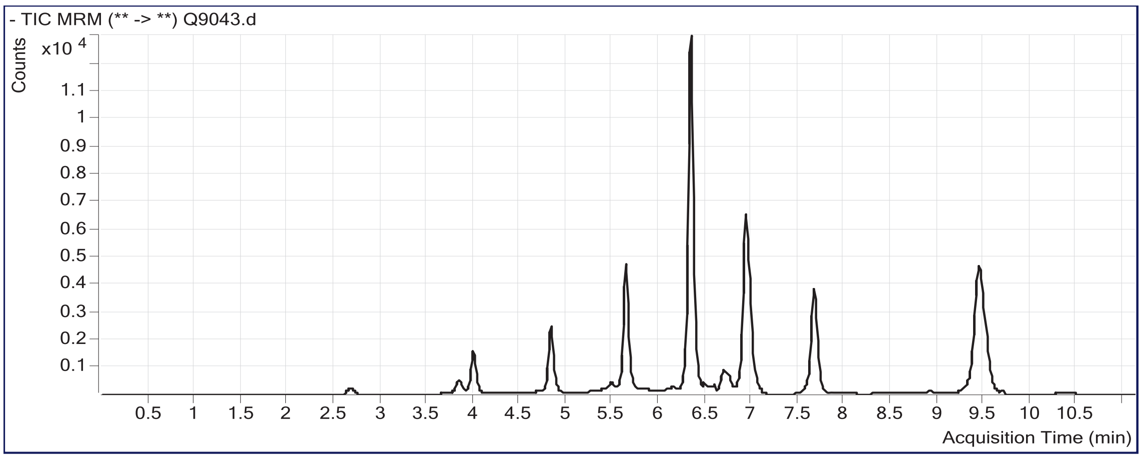
Data File	:	Q9043.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 20:10
Sample Name	:	OP54254-MS
Vial	:	Vial 8
Sample Info	:	OP54254,SQ289,120,,,1,,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.334	415.0 -> 370.0	23248	20.000	µg/L		0.000
13C4-PFOS	6.920	503.0 -> 80.0	12265	20.000	µg/L		0.000
13C2-PFDoDA	9.435	615.0 -> 570.0	38642	20.000	µg/L		0.088
System Monitoring Compounds							
13C2-PFHxA	4.829	315.0 -> 270.0	9134	23.90	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 119.48%				
13C2-PFDA	7.658	515.0 -> 470.0	19825	19.99	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.95%				
Target Compounds							**Qvalue**
PFBA	2.664	213.0 -> 169.0	1382	4.953	µg/L		100
PFPeA	3.836	263.0 -> 219.0	2087	14.970	µg/L		100
PFBS	3.991	299.0 -> 80.0	4186	23.101	µg/L		100
PFHxA	4.833	313.0 -> 269.0	880	2.193	µg/L	m	91
PFHpA	5.635	363.0 -> 319.0	6928	17.792	µg/L		96
PFHxS	5.643	399.0 -> 80.0	6680	22.952	µg/L	m	97
PFOA	6.336	413.0 -> 369.0	23620	20.056	µg/L		81
PFOS	6.923	499.0 -> 80.0	12479	20.342	µg/L	m	92
PFNA	6.979	463.0 -> 419.0	11506	16.431	µg/L		100

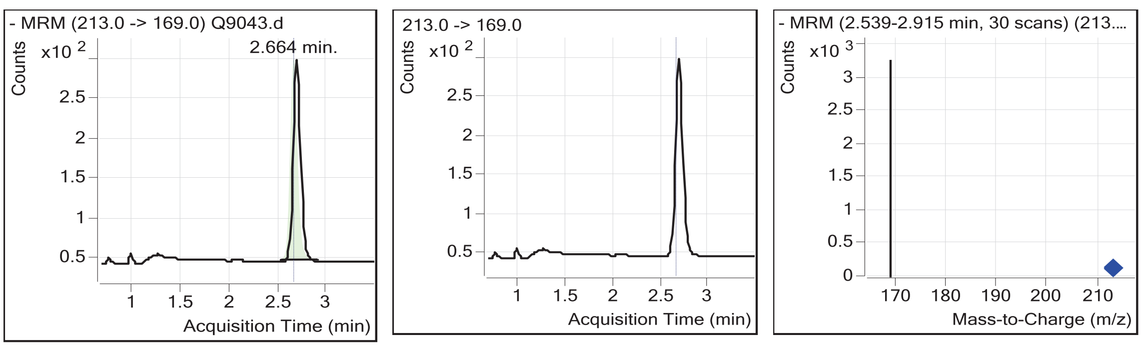
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

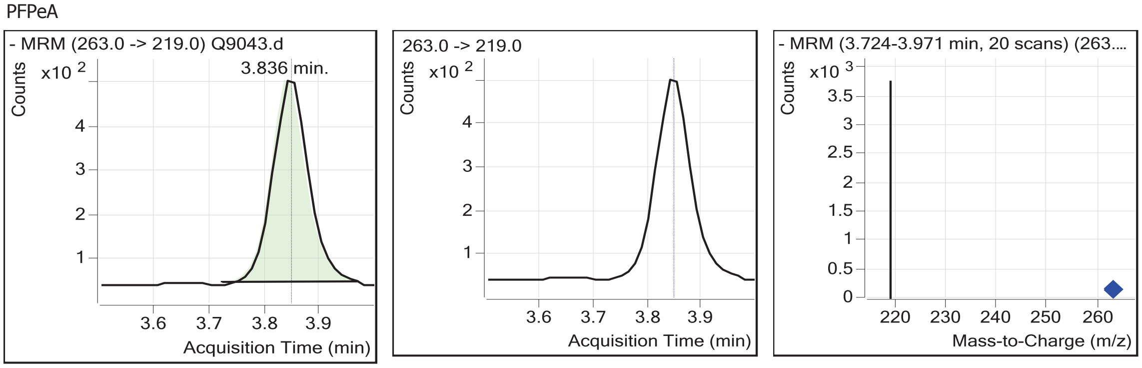
Data File	:	Q9043.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 20:10
Sample Name	:	OP54254-MS
Vial	:	Vial 8
Sample Info	:	OP54254,SQ289,120,,,1,,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



PFBA

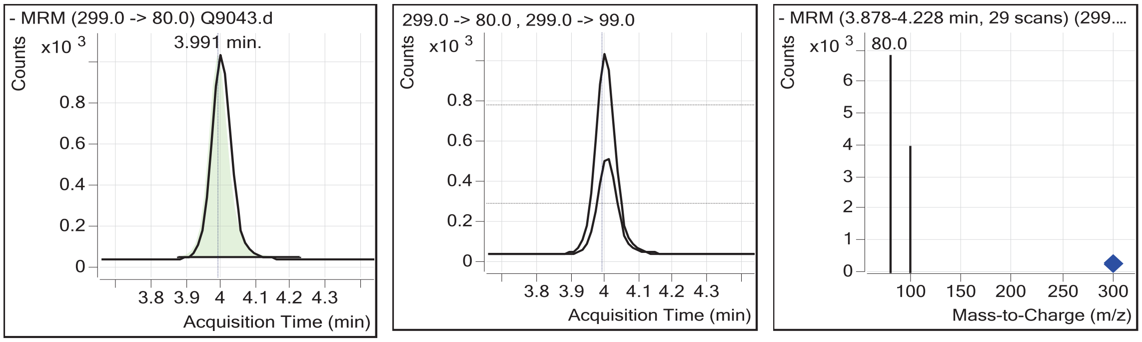


PFPeA

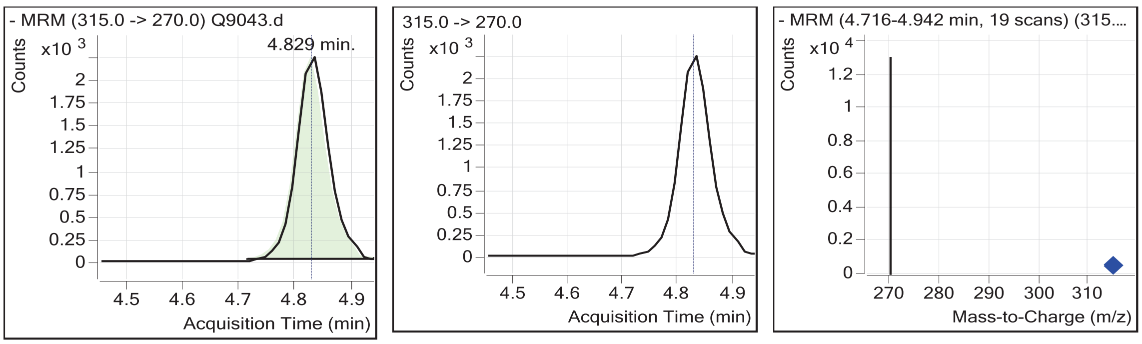


Perfluorinated Compounds by LC/MS/MS.

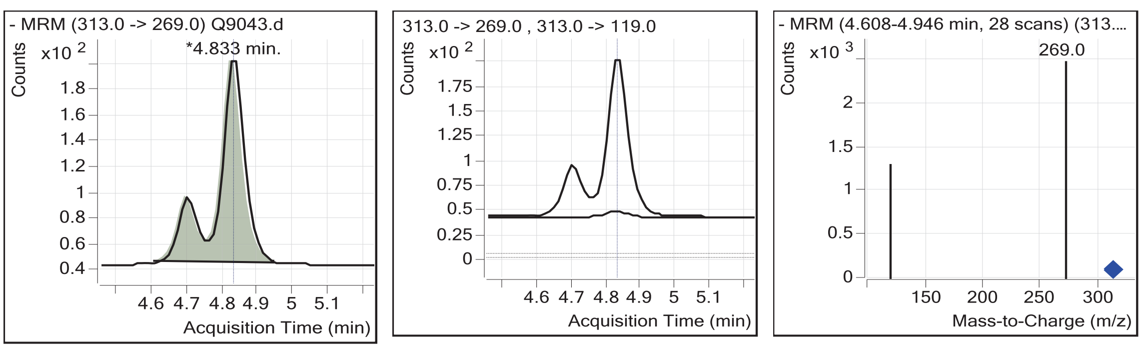
PFBS



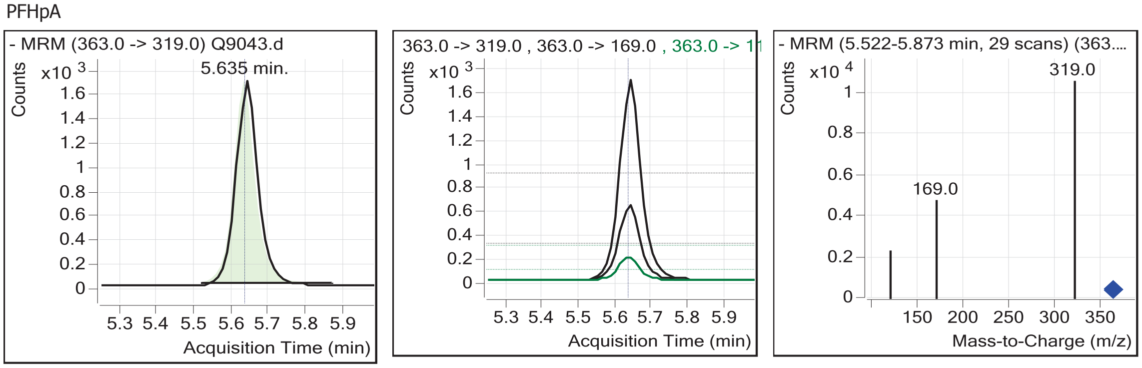
13C2-PFHxA



PFHxA

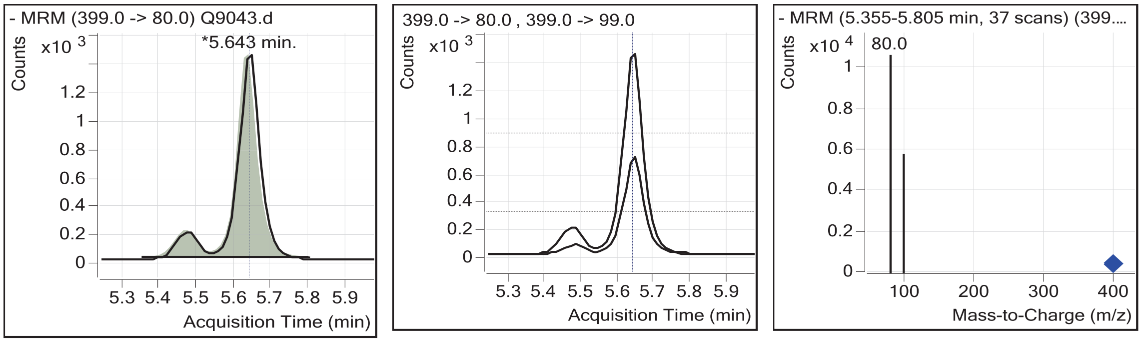


PFHpA

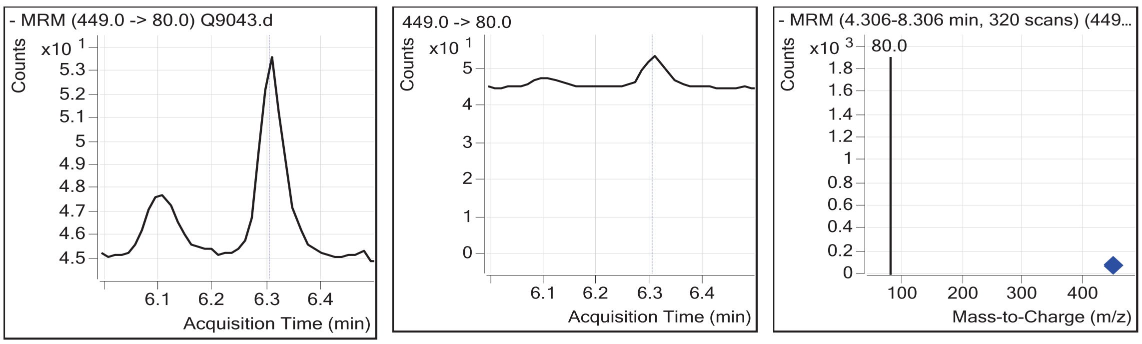


Perfluorinated Compounds by LC/MS/MS.

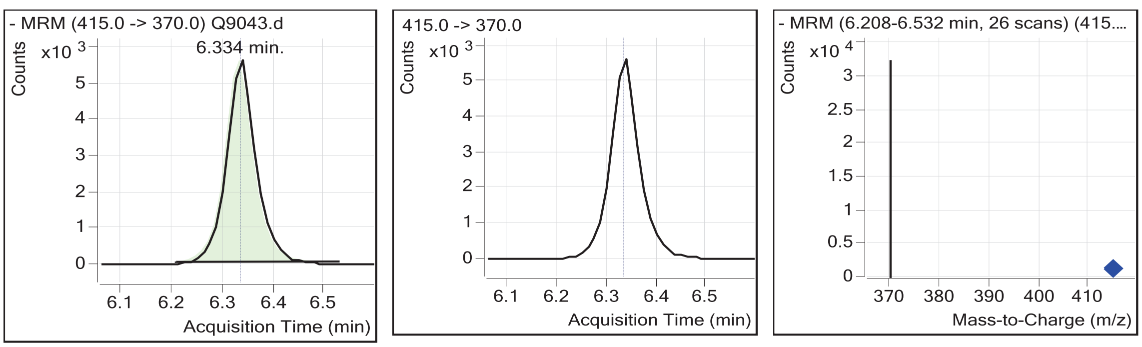
PFHxS



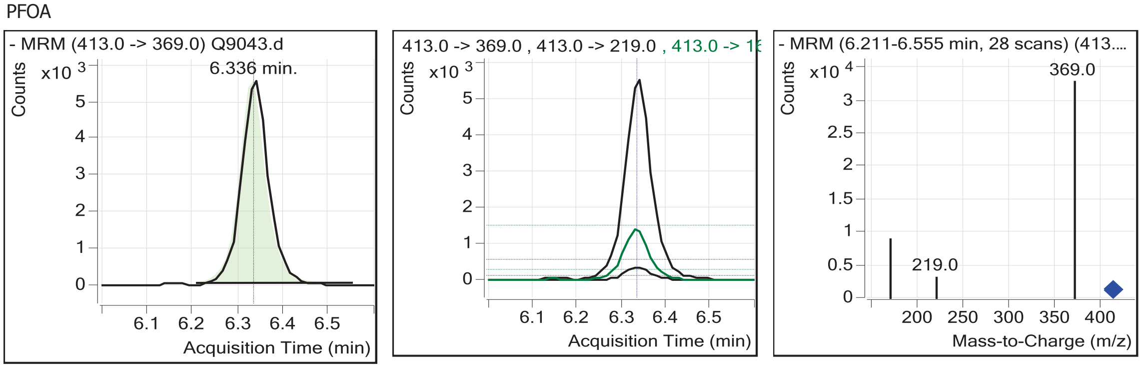
PFHpS



13C2-PFOA

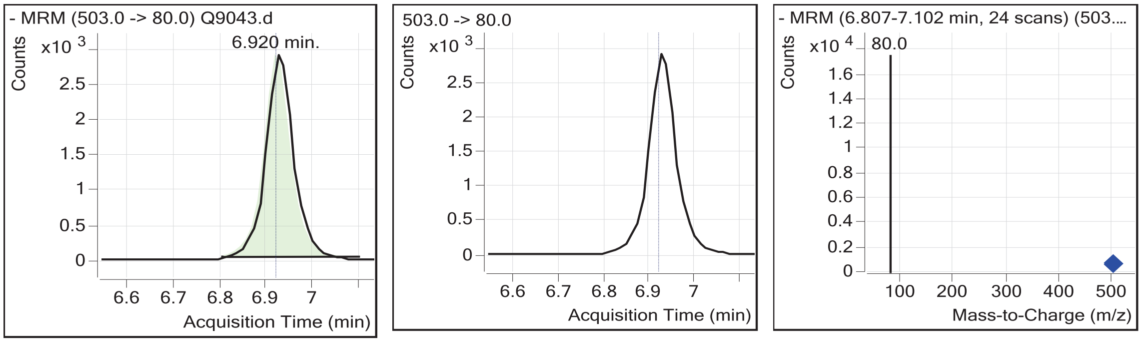


PFOA

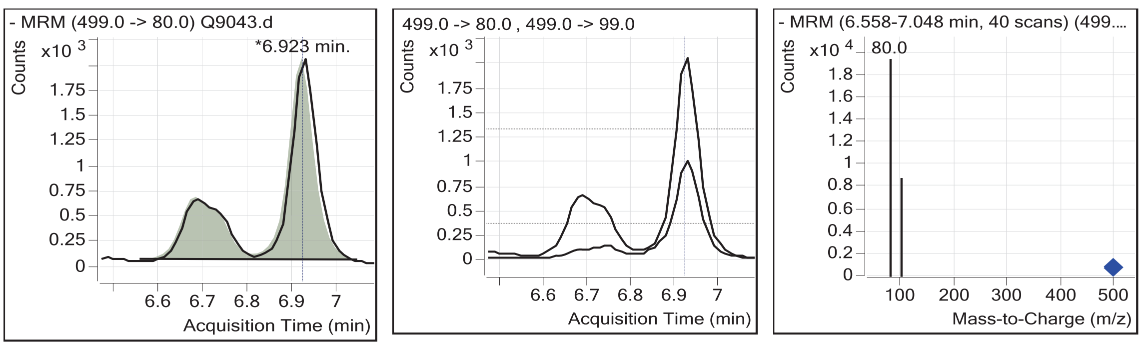


Perfluorinated Compounds by LC/MS/MS.

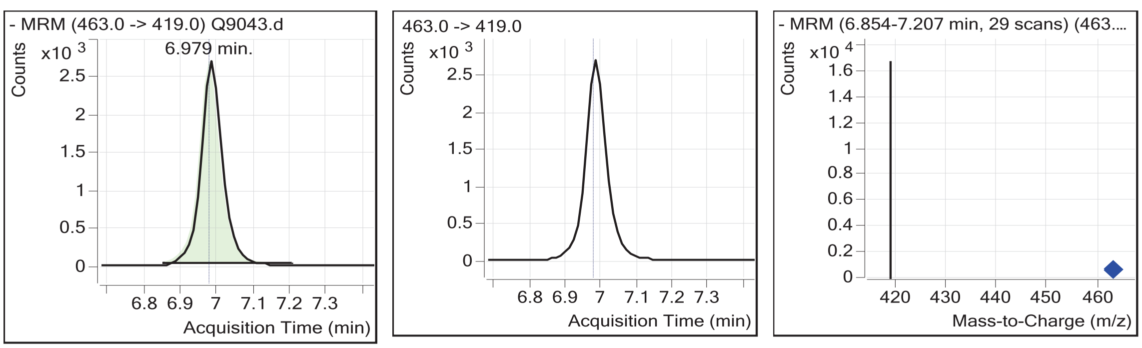
13C4-PFOS



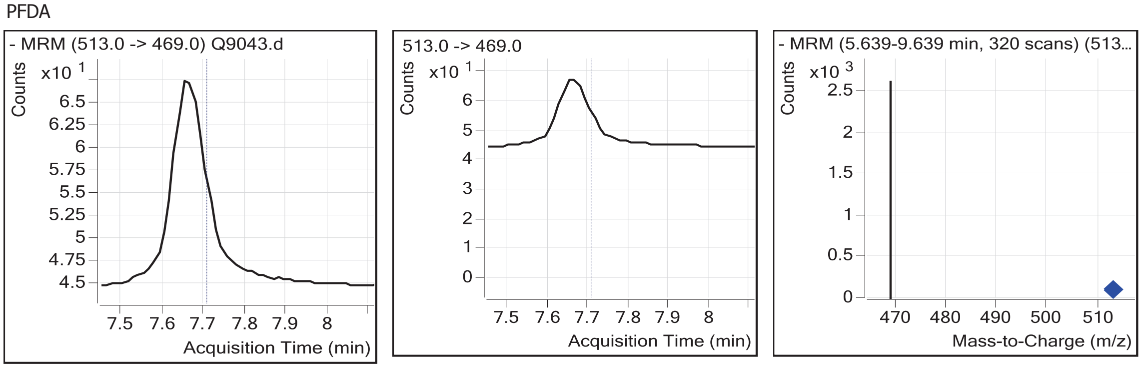
PFOS



PFNA

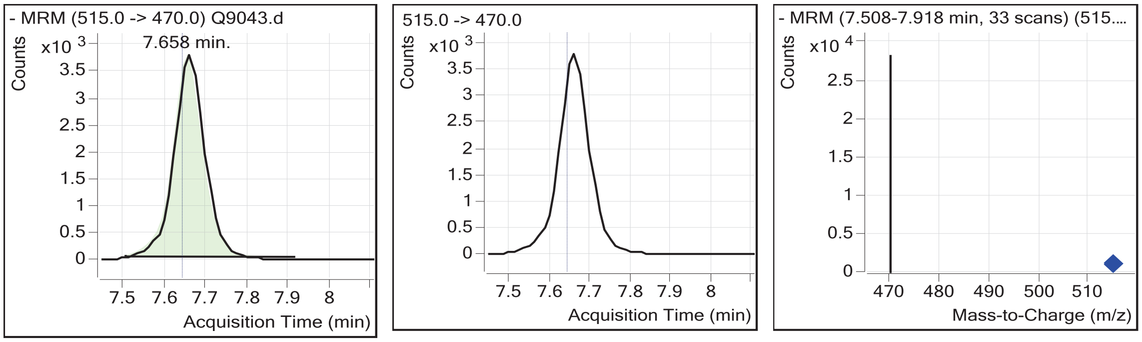


PFDA

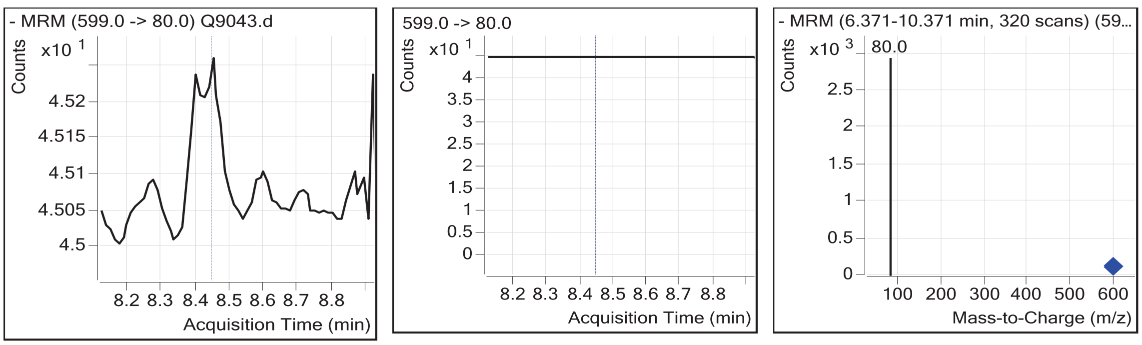


Perfluorinated Compounds by LC/MS/MS.

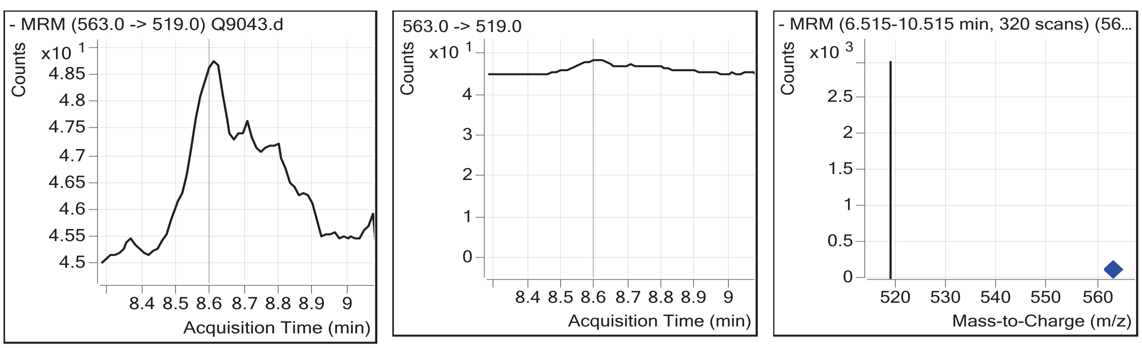
13C2-PFDA



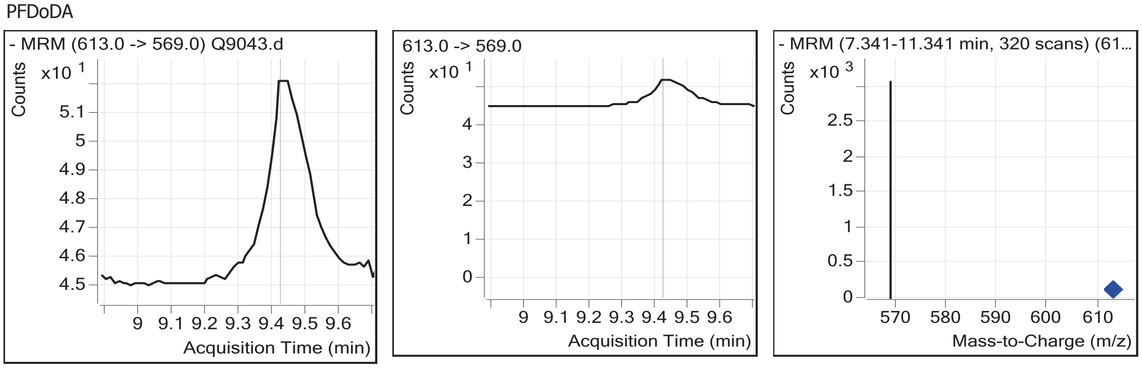
PFDS



PFUnDA

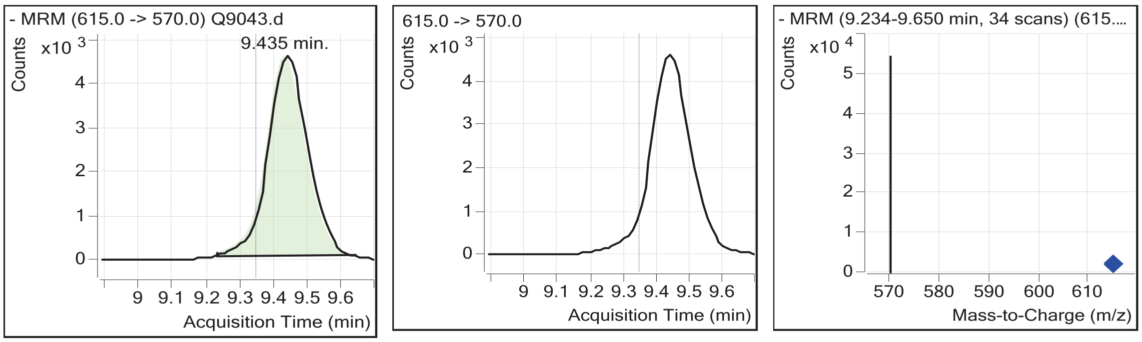


PFDoDA

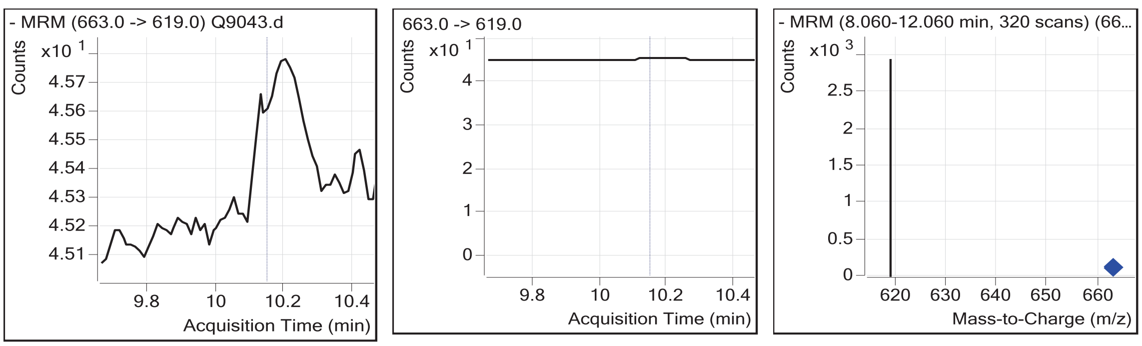


Perfluorinated Compounds by LC/MS/MS.

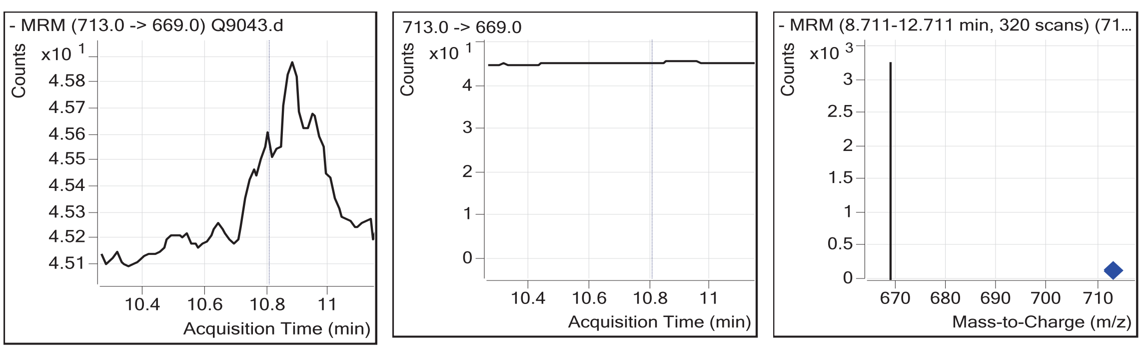
13C2-PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number: OP54254-MS
Lab FileID: Q9043.D
Injection Time: 12/18/14 20:10
Method: EPA 537 MOD
Analyst approved: 12/19/14 09:38 Mike Eger
Supervisor approved: 12/22/14 10:28 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanoic acid	307-24-4		4.83	Split peak
Perfluorohexanesulfonic acid	355-46-4		5.64	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.92	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/22/14 10:28

Perfluorinated Compounds by LC/MS/MS.

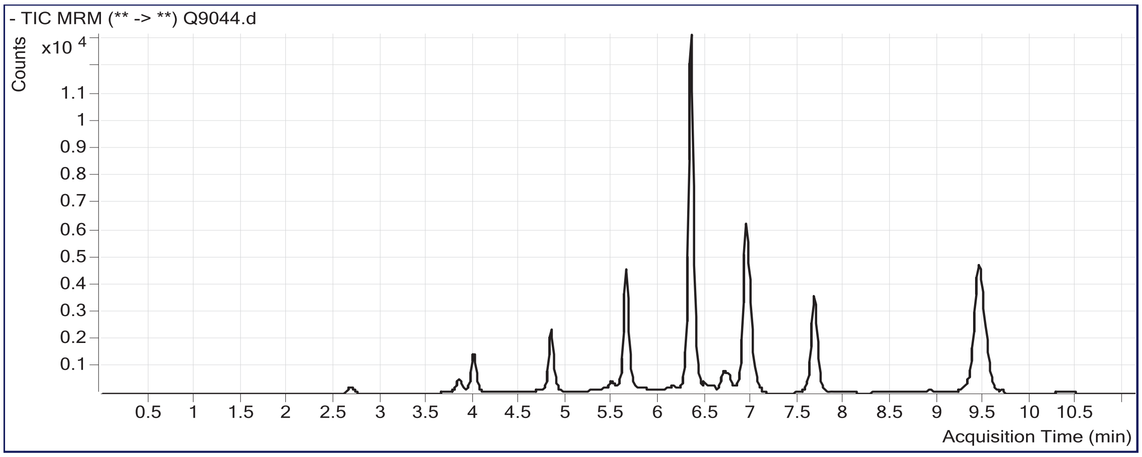
Data File	:	Q9044.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 20:29
Sample Name	:	OP54254-MSD
Vial	:	Vial 9
Sample Info	:	OP54254,SQ289,125,,,1,,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.334	415.0 -> 370.0	23857	20.000	µg/L		0.000
13C4-PFOS	6.920	503.0 -> 80.0	12371	20.000	µg/L		0.000
13C2-PFDoDA	9.435	615.0 -> 570.0	38937	20.000	µg/L		0.088
System Monitoring Compounds							
13C2-PFHxA	4.829	315.0 -> 270.0	8562	21.83	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 109.14%				
13C2-PFDA	7.658	515.0 -> 470.0	18250	17.93	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 89.66%				
Target Compounds							**Qvalue**
PFBA	2.677	213.0 -> 169.0	1384	4.835	µg/L		100
PFPeA	3.849	263.0 -> 219.0	1960	13.700	µg/L		100
PFBS	3.991	299.0 -> 80.0	4027	22.031	µg/L		100
PFHxA	4.833	313.0 -> 269.0	853	2.071	µg/L	m	100
PFHpA	5.635	363.0 -> 319.0	6859	17.166	µg/L		96
PFHxS	5.643	399.0 -> 80.0	6658	22.682	µg/L	m	98
PFOA	6.336	413.0 -> 369.0	23321	19.297	µg/L		81
PFOS	6.923	499.0 -> 80.0	11864	19.173	µg/L	m	91
PFNA	6.979	463.0 -> 419.0	11014	15.328	µg/L		100

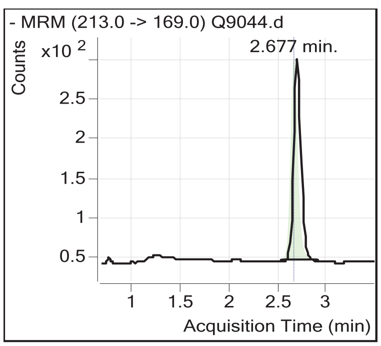
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

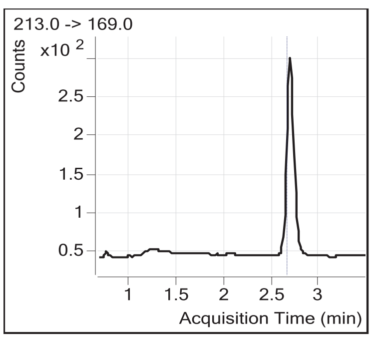
Perfluorinated Compounds by LC/MS/MS.

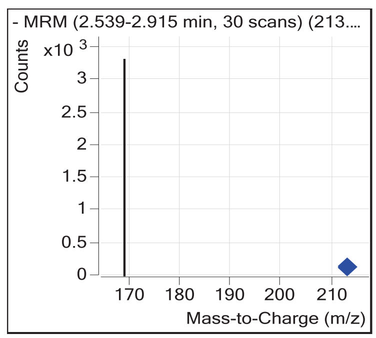
Data File	:	Q9044.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 20:29
Sample Name	:	OP54254-MSD
Vial	:	Vial 9
Sample Info	:	OP54254,SQ289,125,,,1,,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



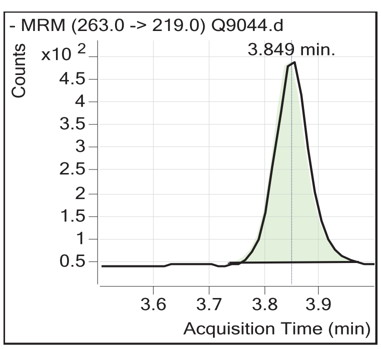
PFBA

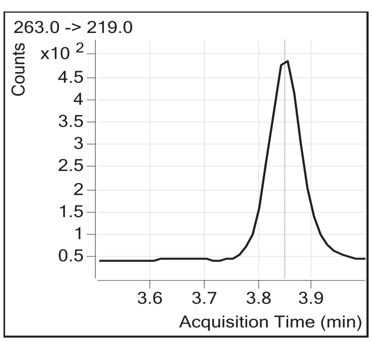


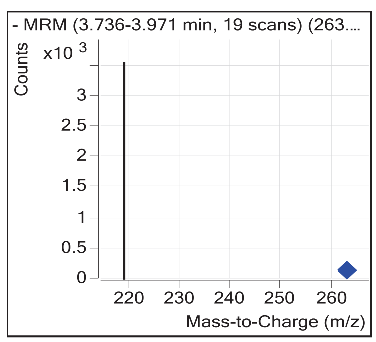




PFPeA

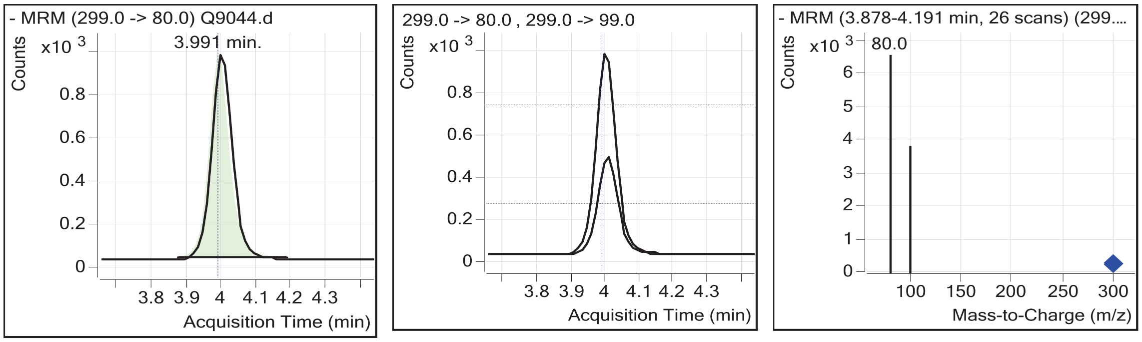




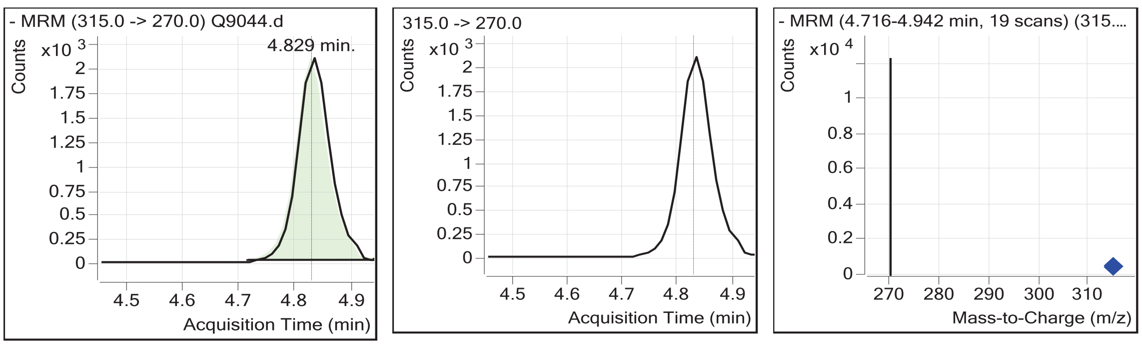


Perfluorinated Compounds by LC/MS/MS.

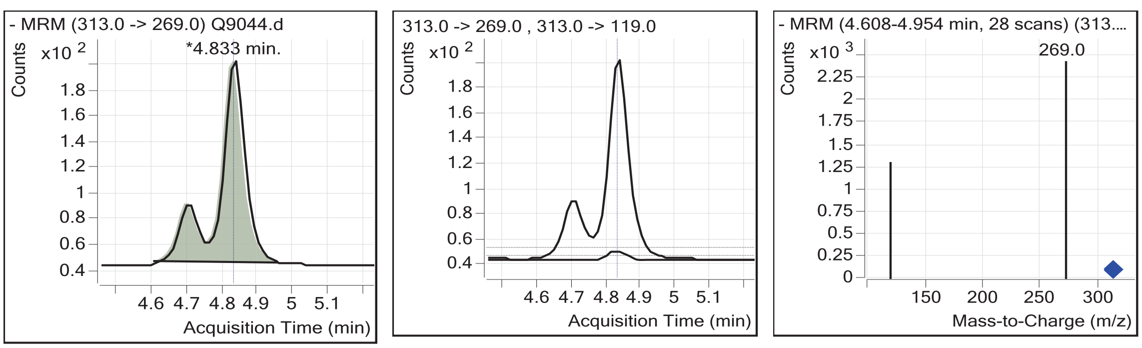
PFBS



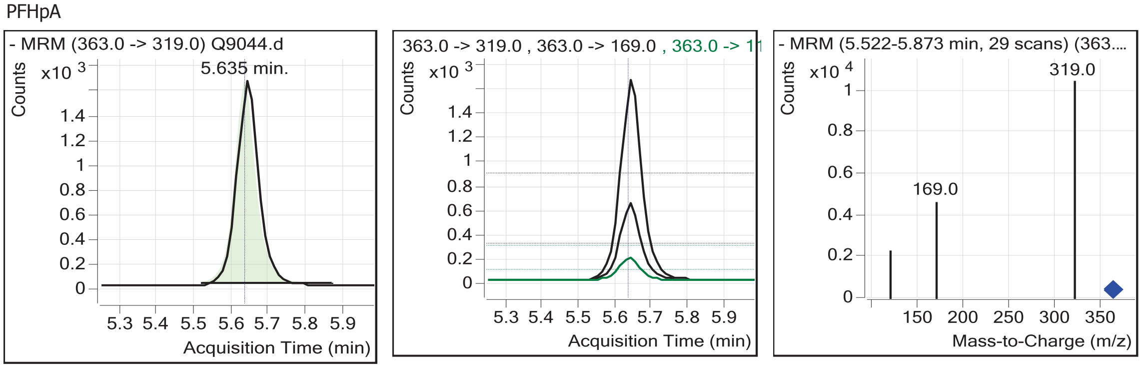
13C2-PFHxA



PFHxA

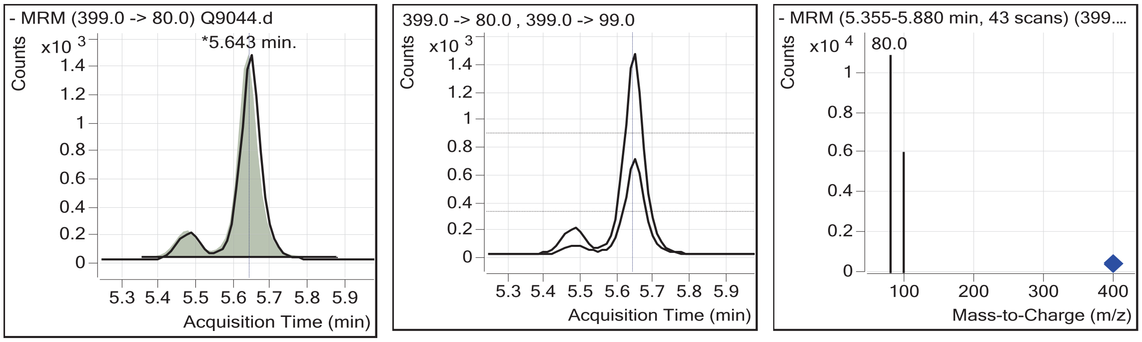


PFHpA

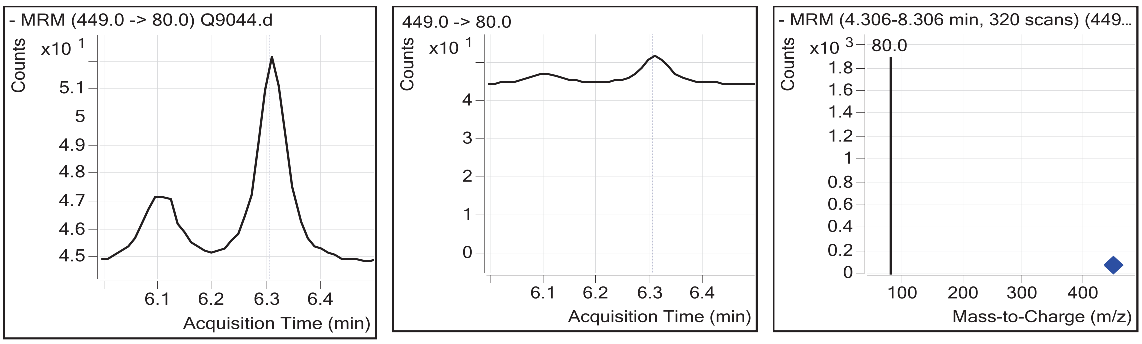


Perfluorinated Compounds by LC/MS/MS.

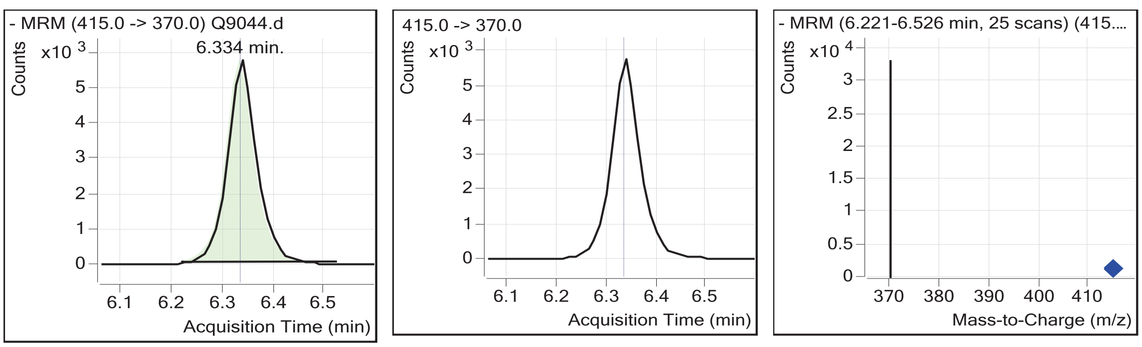
PFHxS



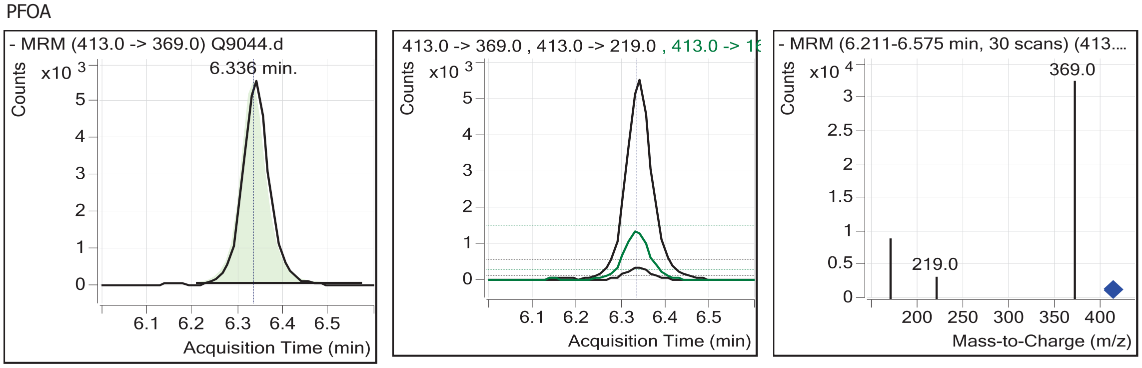
PFHpS



13C2-PFOA

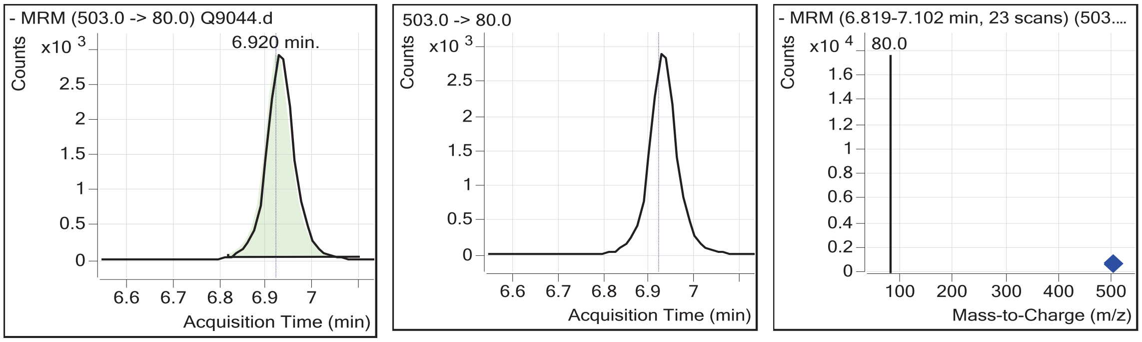


PFOA

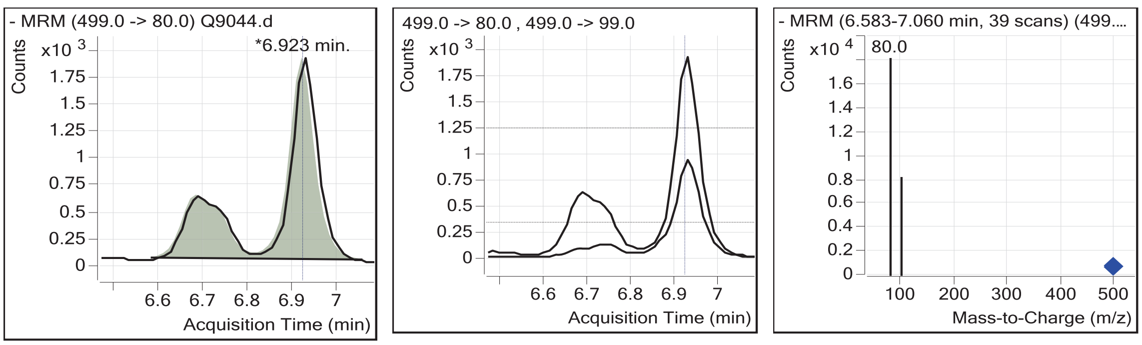


Perfluorinated Compounds by LC/MS/MS.

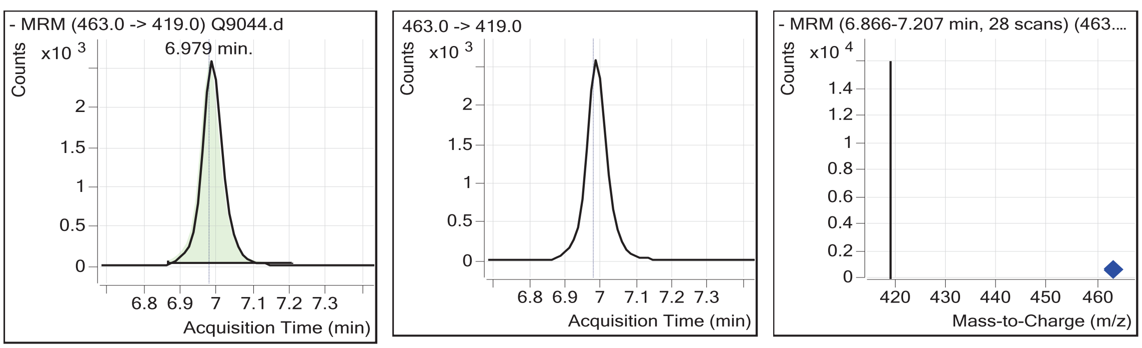
13C4-PFOS



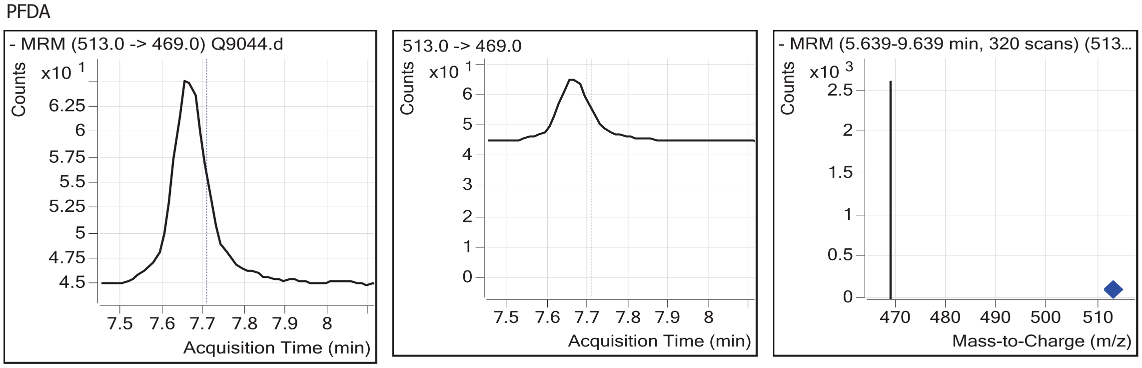
PFOS



PFNA

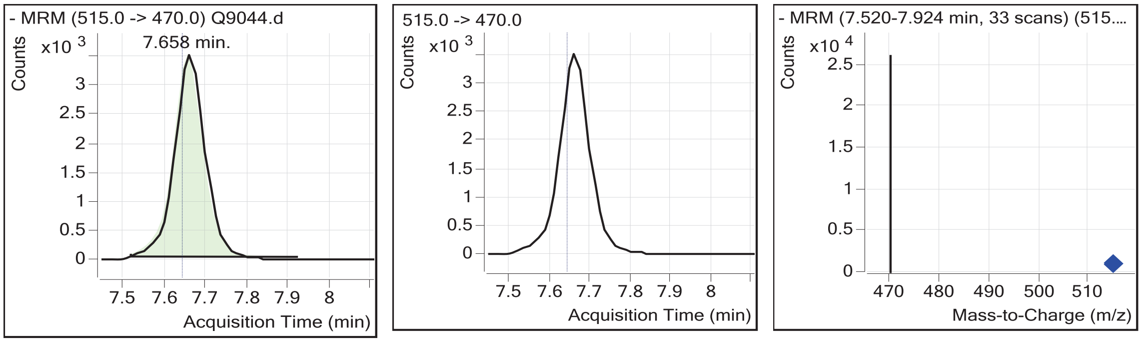


PFDA

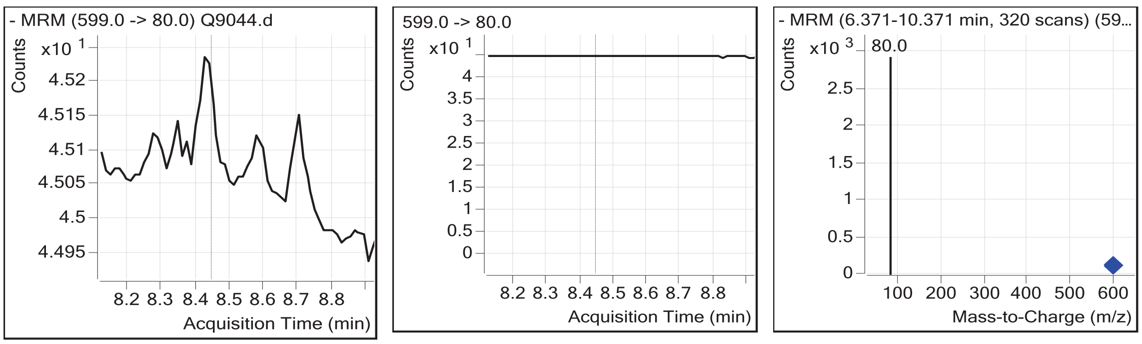


Perfluorinated Compounds by LC/MS/MS.

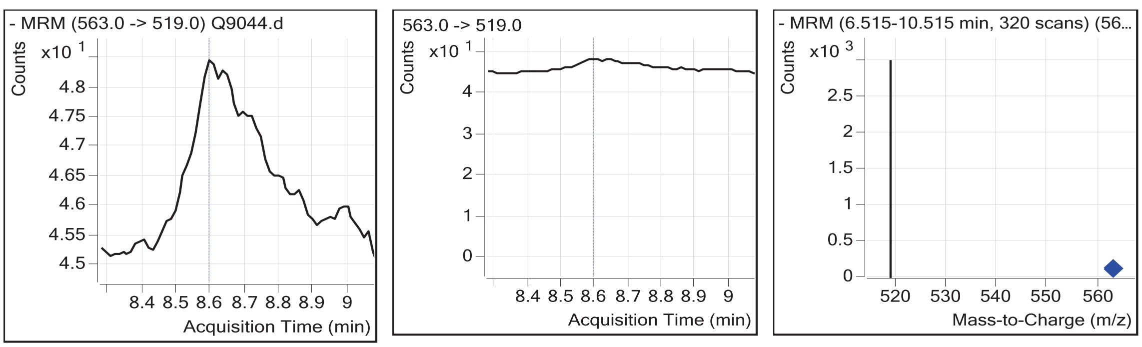
13C2-PFDA



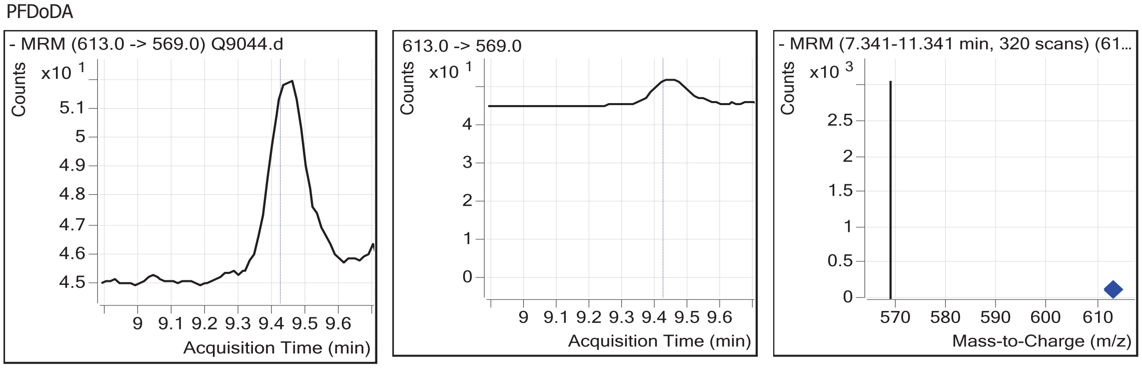
PFDS



PFUnDA



PFDoDA

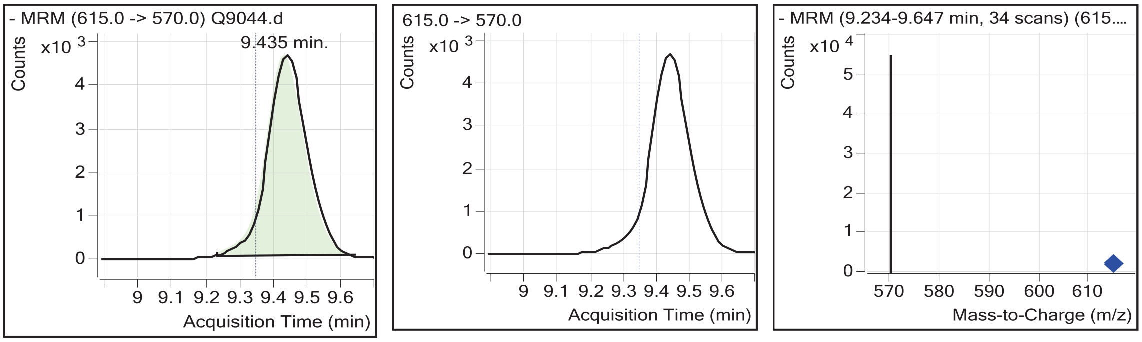


7.4.2

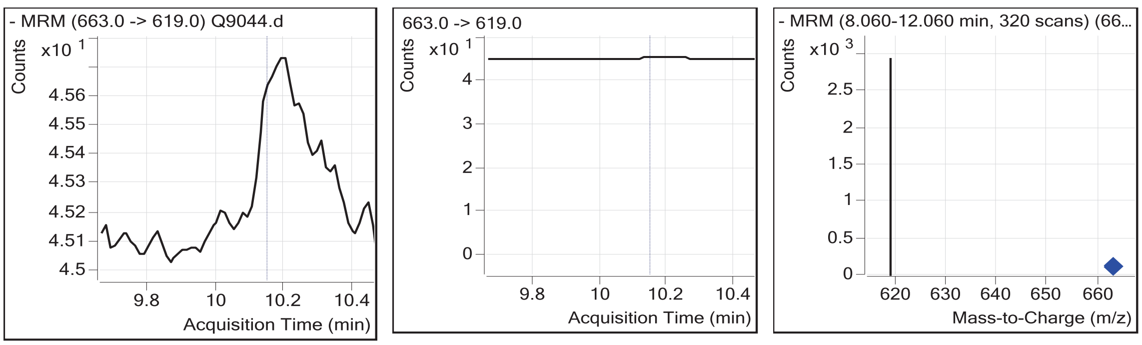
7

Perfluorinated Compounds by LC/MS/MS.

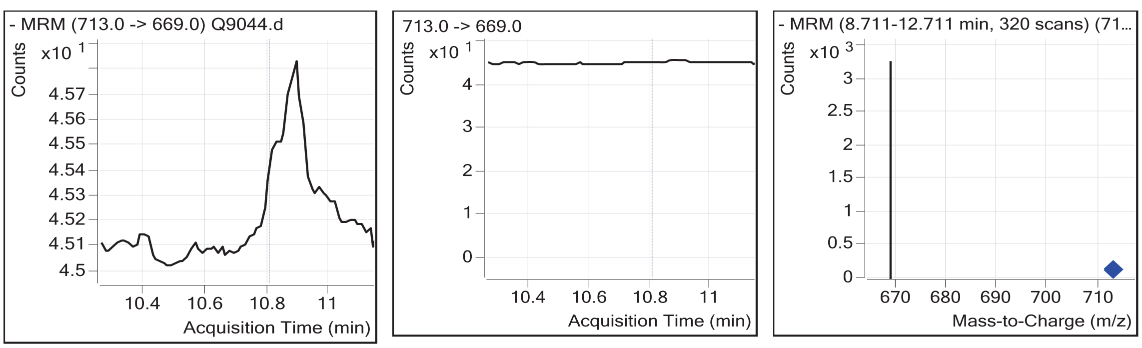
13C2-PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number: OP54254-MSD **Method:** EPA 537 MOD
Lab FileID: Q9044.D **Analyst approved:** 12/19/14 09:38 Mike Eger
Injection Time: 12/18/14 20:29 **Supervisor approved:** 12/22/14 10:28 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanoic acid	307-24-4		4.83	Split peak
Perfluorohexanesulfonic acid	355-46-4		5.64	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.92	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

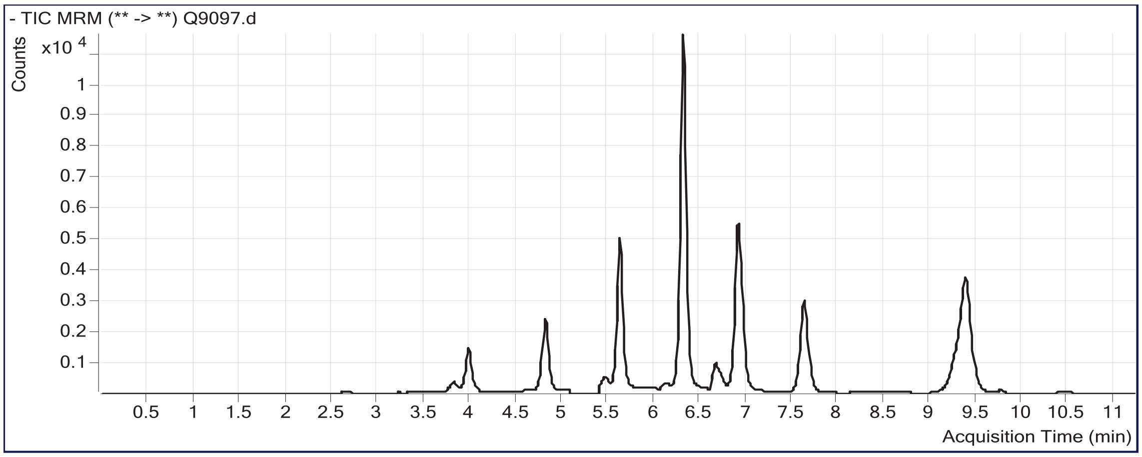
Data File	:	Q9097.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 22:41
Sample Name	:	OP54279-MS
Vial	:	Vial 25
Sample Info	:	OP54279,SQ290,60,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.308	415.0 -> 370.0	21352	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	10540	20.000	µg/L		-0.013
13C2-PFDoDA	9.372	615.0 -> 570.0	36770	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.804	315.0 -> 270.0	8069	24.65	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 123.23%				
13C2-PFDA	7.620	515.0 -> 470.0	17712	25.11	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 125.54%				
Target Compounds							**Qvalue**
PFBA	2.652	213.0 -> 169.0	414	1.380	µg/L		100
PFPeA	3.824	263.0 -> 219.0	1168	8.631	µg/L		100
PFBS	3.978	299.0 -> 80.0	4238	23.647	µg/L		98
PFHxA	4.808	313.0 -> 269.0	2593	7.595	µg/L		99
PFHxS	5.617	399.0 -> 80.0	8427	31.701	µg/L	m	86
PFHpA	5.622	363.0 -> 319.0	6955	20.837	µg/L		98
PFOA	6.311	413.0 -> 369.0	24028	22.065	µg/L		81
PFOS	6.897	499.0 -> 80.0	12000	22.868	µg/L	m	98
PFNA	6.954	463.0 -> 419.0	9647	19.670	µg/L		100

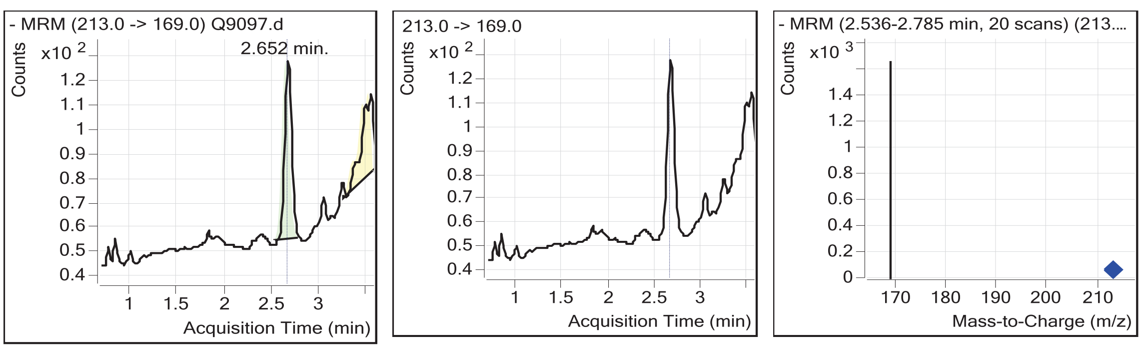
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

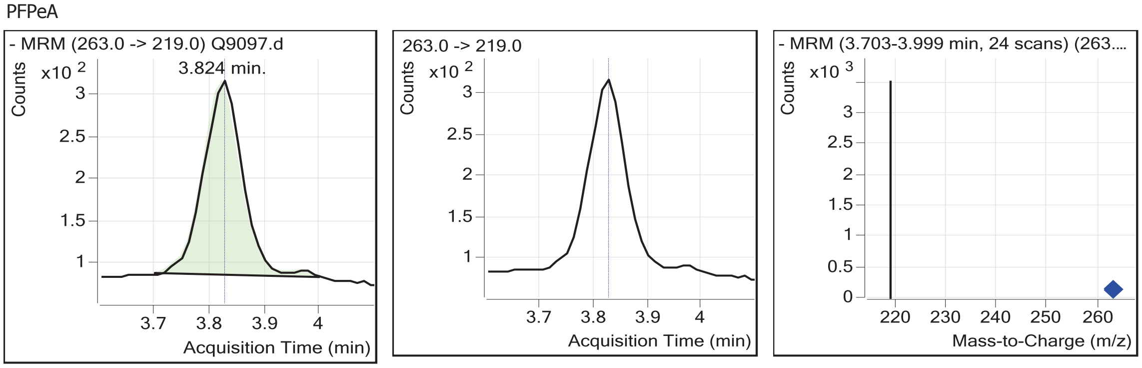
Data File	:	Q9097.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 22:41
Sample Name	:	OP54279-MS
Vial	:	Vial 25
Sample Info	:	OP54279,SQ290,60,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

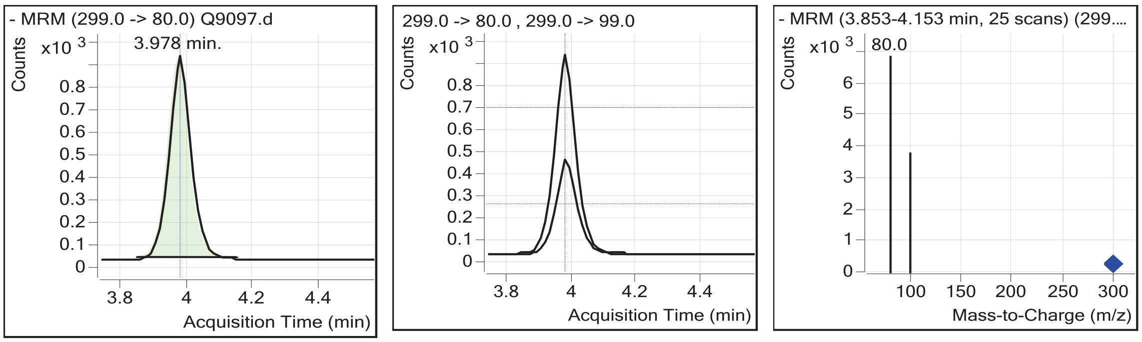


PFPeA

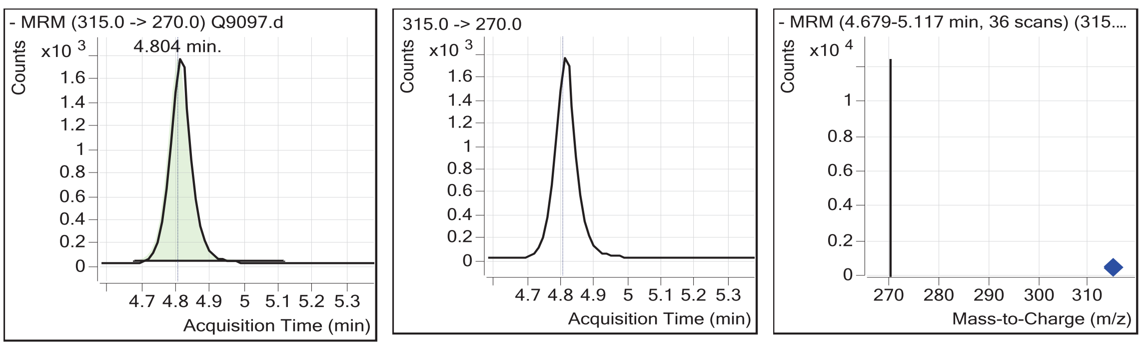


Perfluorinated Compounds by LC/MS/MS.

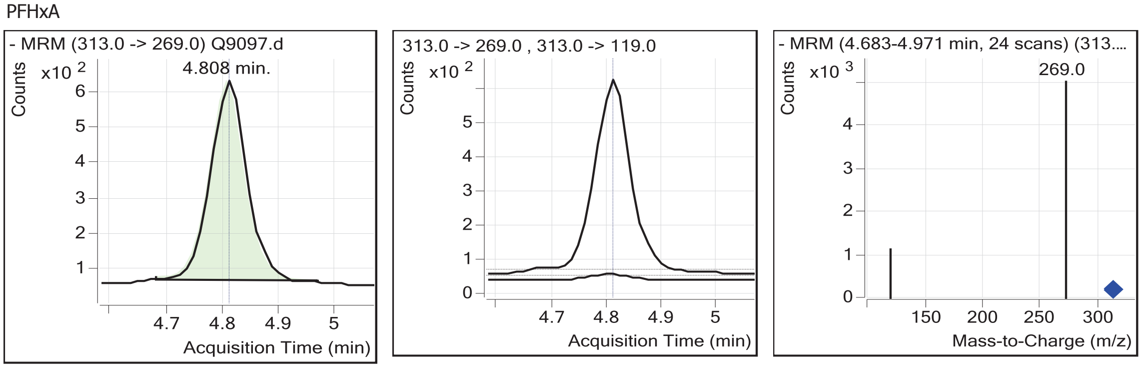
PFBS



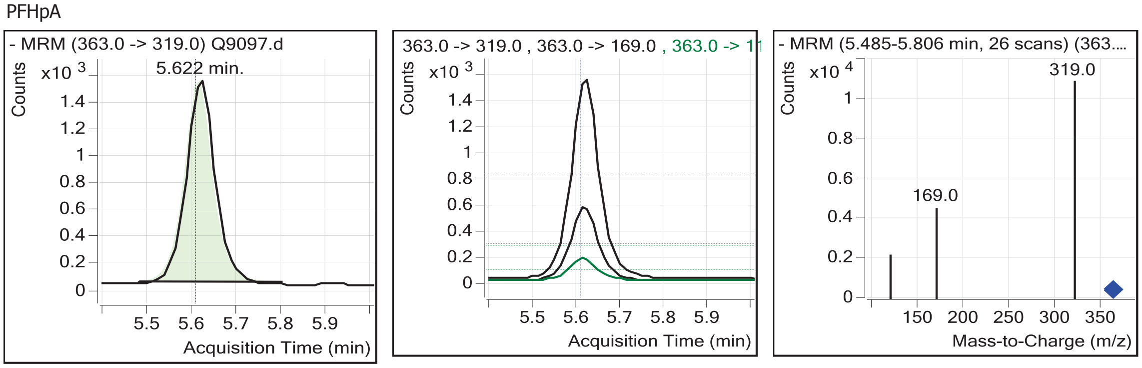
13C2-PFHxA



PFHxA



PFHpA

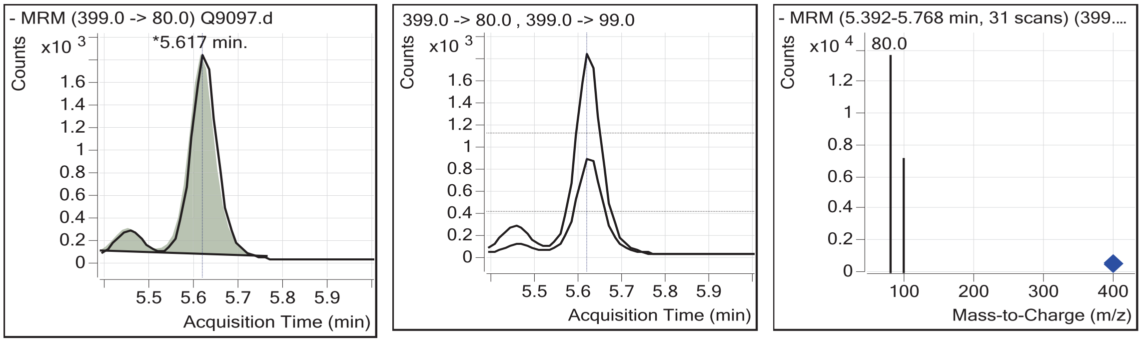


7.4.3

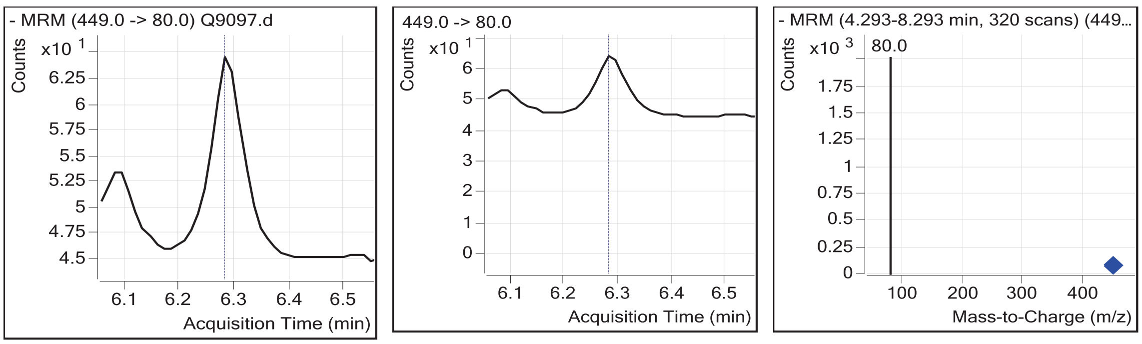
7

Perfluorinated Compounds by LC/MS/MS.

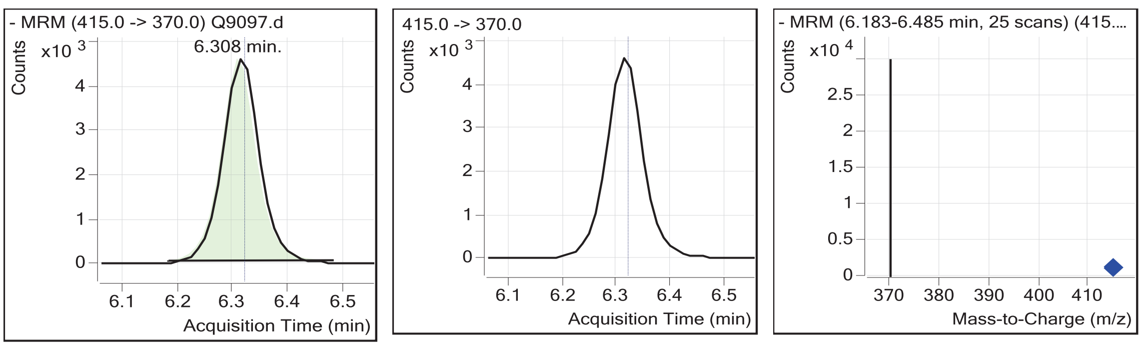
PFHxS



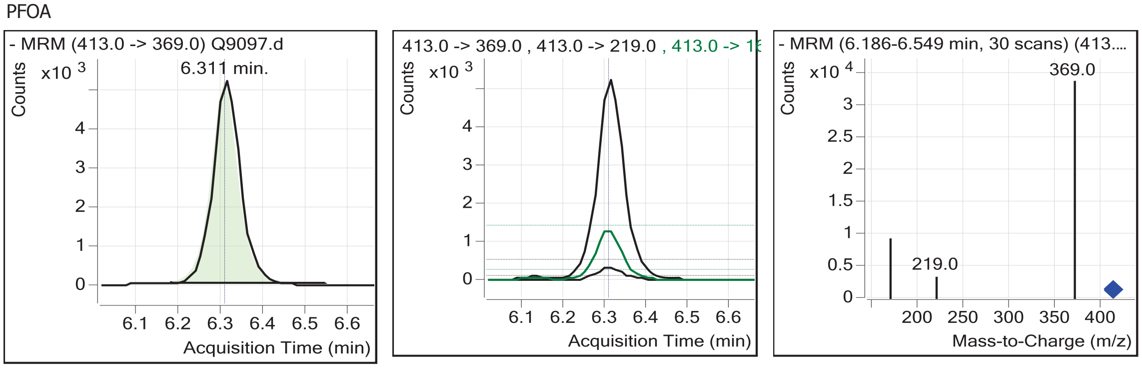
PFHpS



13C2-PFOA

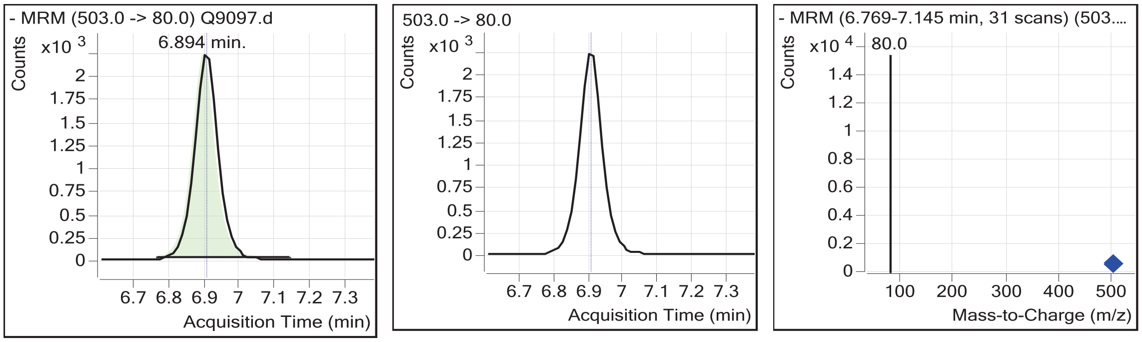


PFOA

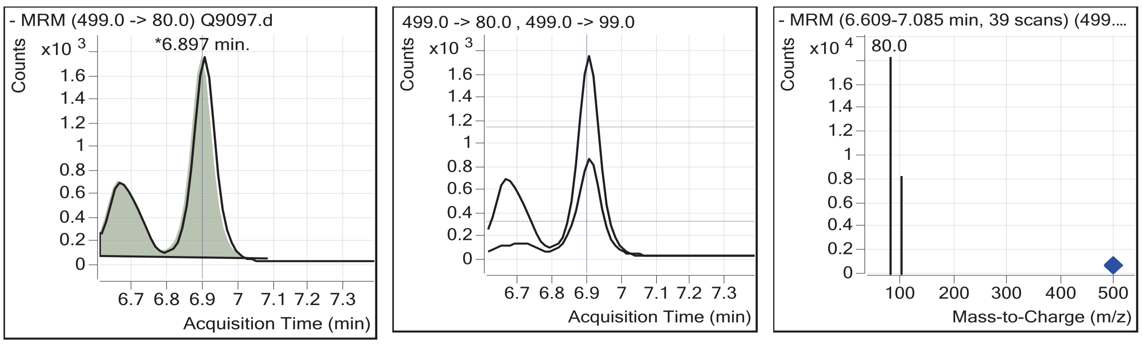


Perfluorinated Compounds by LC/MS/MS.

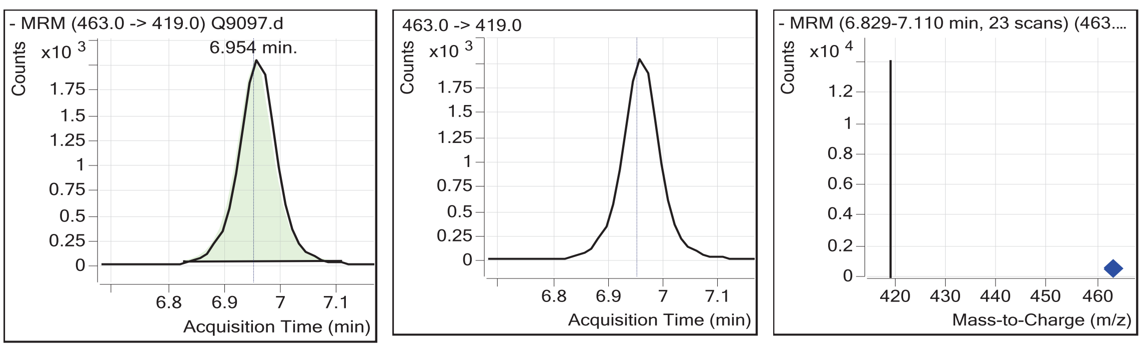
13C4-PFOS



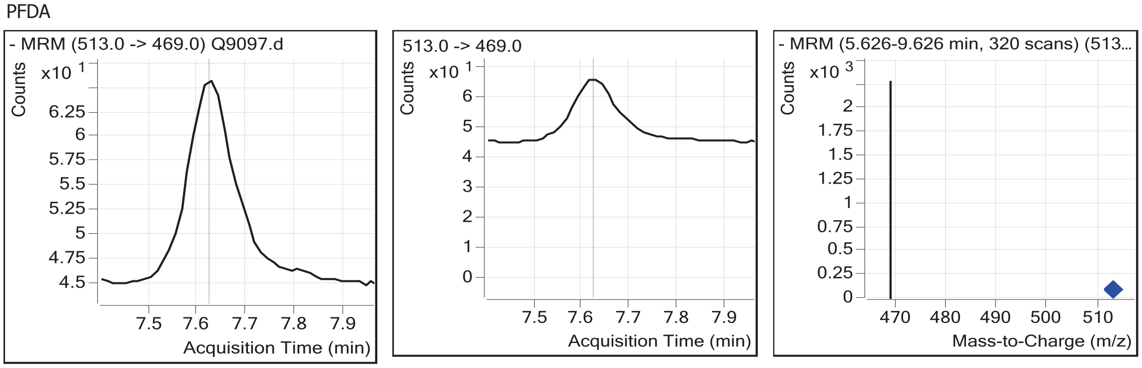
PFOS



PFNA

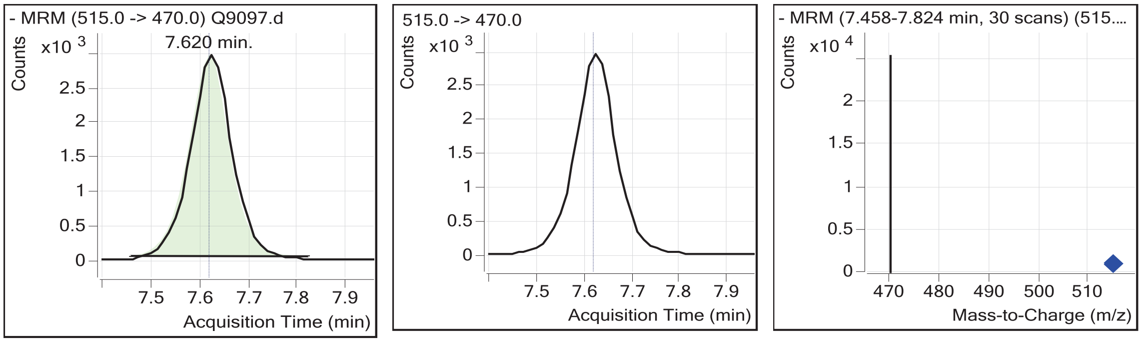


PFDA

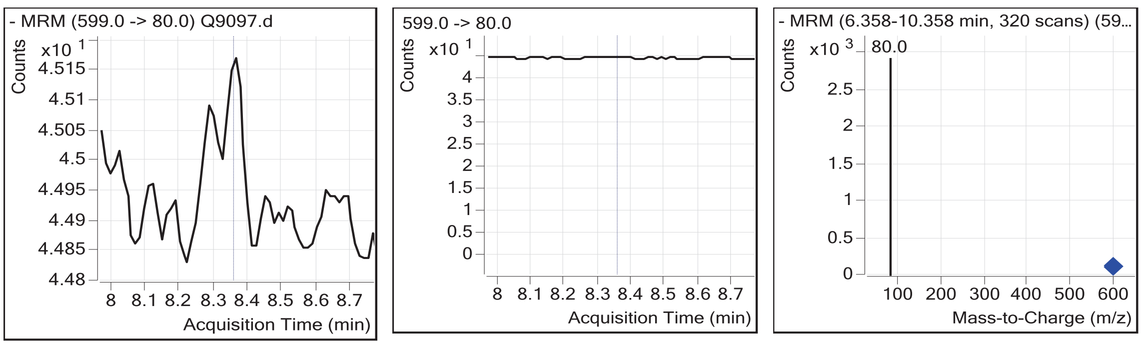


Perfluorinated Compounds by LC/MS/MS.

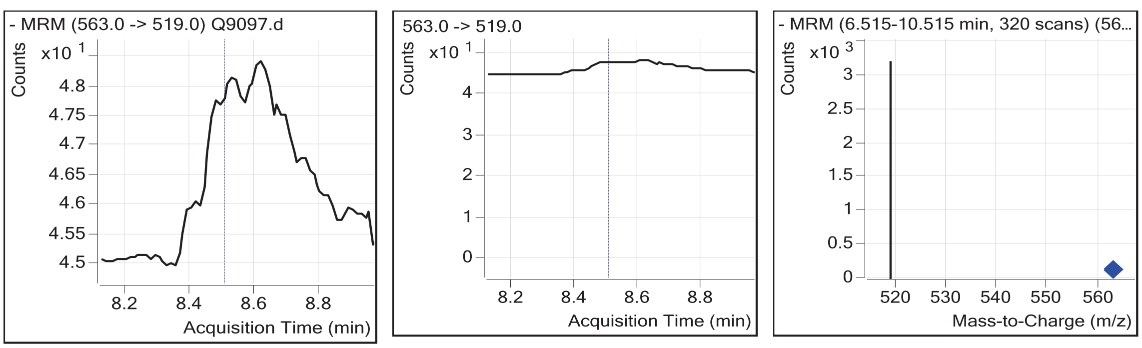
13C2-PFDA



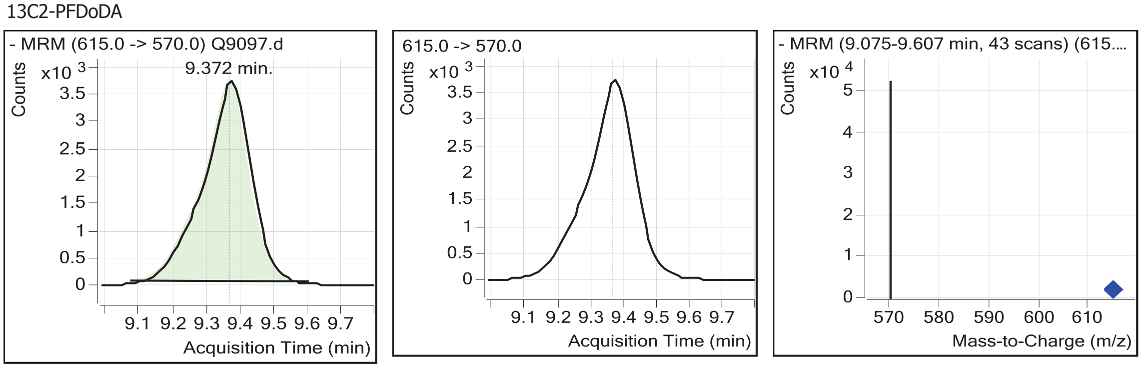
PFDS



PFUnDA

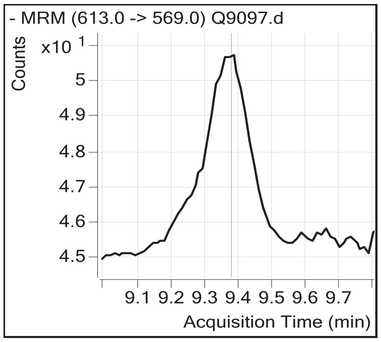


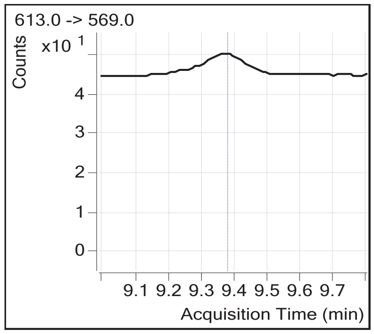
13C2-PFDoDA

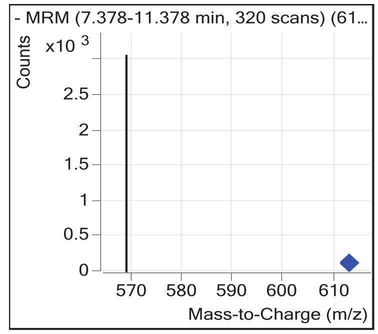


Perfluorinated Compounds by LC/MS/MS.

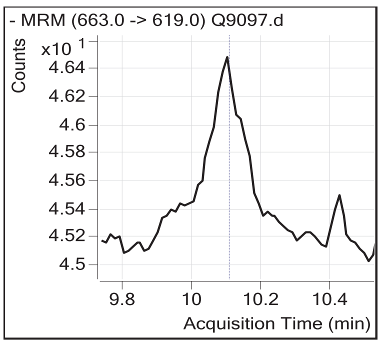
PFDoDA

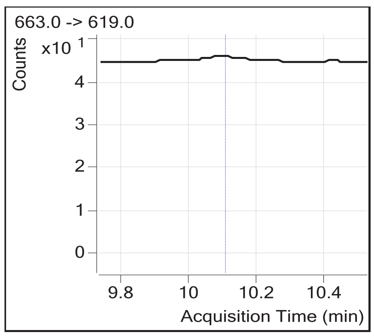


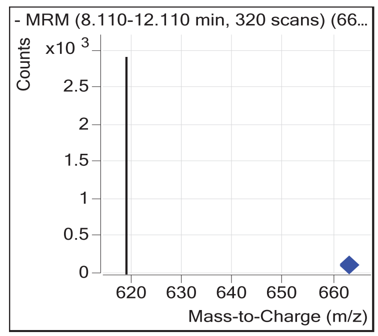




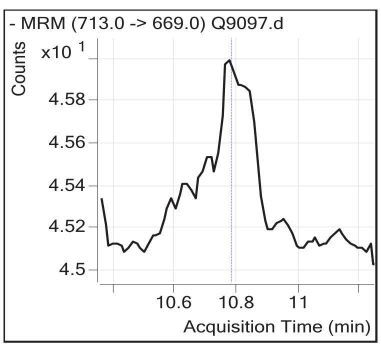
PFTrDA

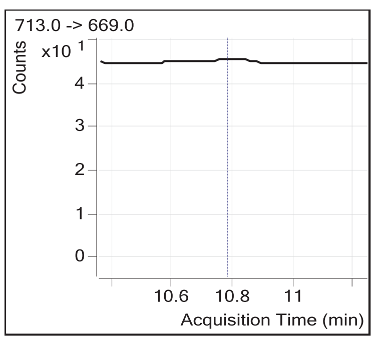


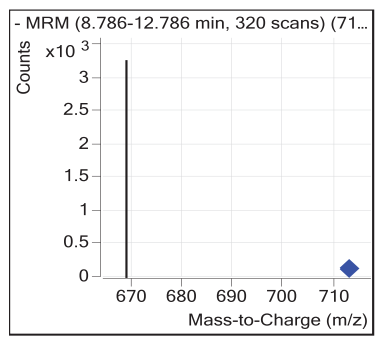




PFTeDA







Manual Integration Approval Summary

Sample Number:	OP54279-MS	**Method:**	EPA 537 MOD	
Lab FileID:	Q9097.D	**Analyst approved:**	12/22/14 10:29	Mike Eger
Injection Time:	12/19/14 22:41	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.62	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

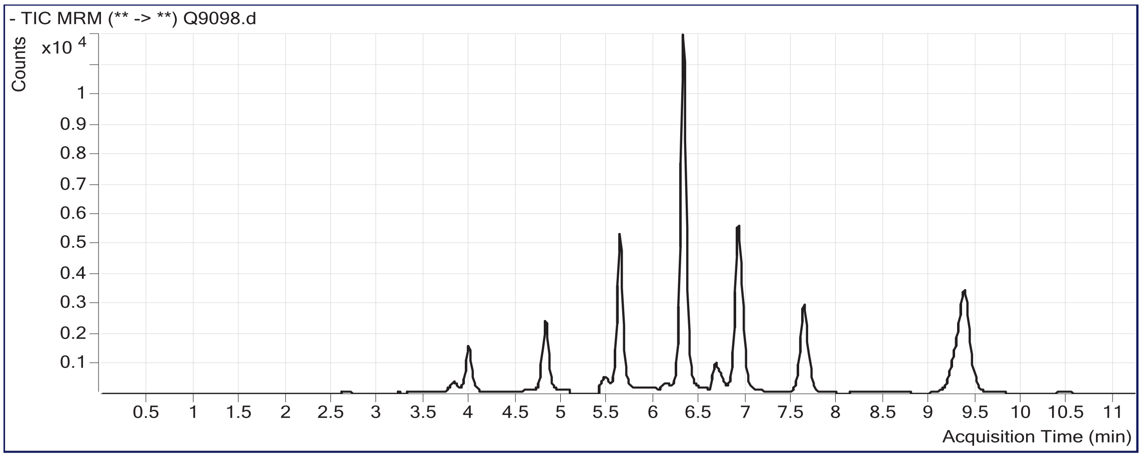
Data File	:	Q9098.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 23:01
Sample Name	:	OP54279-MSD
Vial	:	Vial 26
Sample Info	:	OP54279,SQ290,60,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.308	415.0 -> 370.0	20589	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	10054	20.000	µg/L		-0.013
13C2-PFDoDA	9.359	615.0 -> 570.0	34727	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	4.804	315.0 -> 270.0	7950	25.18	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 125.91%				
13C2-PFDA	7.620	515.0 -> 470.0	17262	25.38	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 126.89%				
Target Compounds							**Qvalue**
PFBA	2.652	213.0 -> 169.0	439	1.516	µg/L		100
PFPeA	3.824	263.0 -> 219.0	1246	9.555	µg/L		100
PFBS	3.978	299.0 -> 80.0	4595	26.886	µg/L		98
PFHxA	4.808	313.0 -> 269.0	2686	8.160	µg/L		98
PFHxS	5.617	399.0 -> 80.0	8801	34.713	µg/L	m	87
PFHpA	5.622	363.0 -> 319.0	7373	22.906	µg/L		97
PFOA	6.311	413.0 -> 369.0	25612	24.392	µg/L		81
PFOS	6.897	499.0 -> 80.0	12801	25.576	µg/L	m	100
PFNA	6.954	463.0 -> 419.0	10098	21.353	µg/L		100

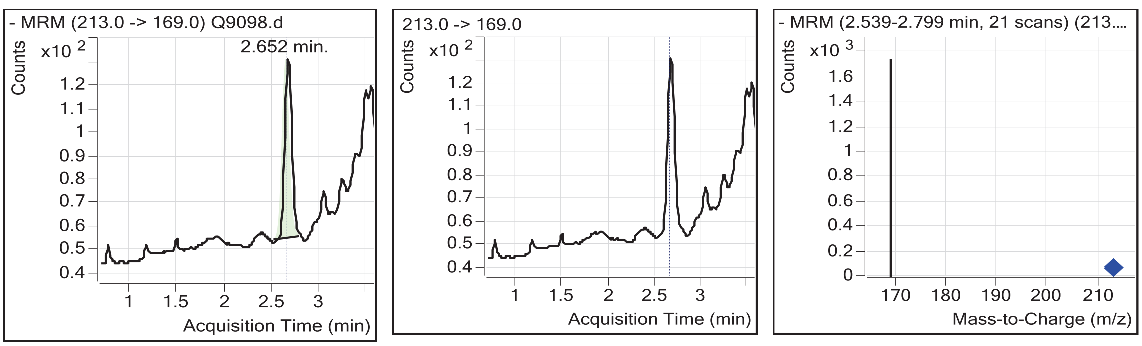
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

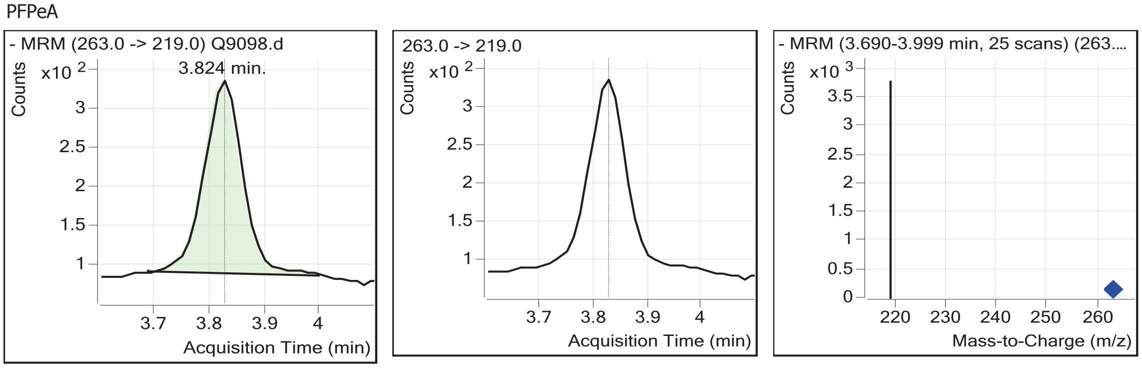
Data File	:	Q9098.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 23:01
Sample Name	:	OP54279-MSD
Vial	:	Vial 26
Sample Info	:	OP54279,SQ290,60,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

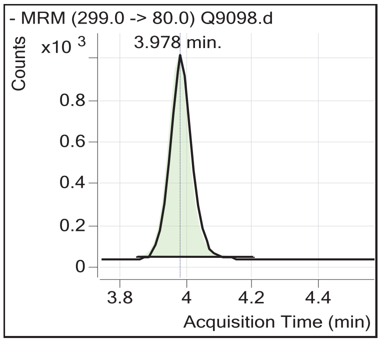


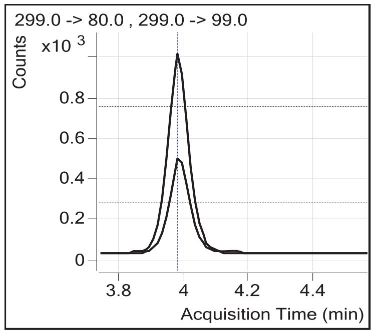
PFPeA

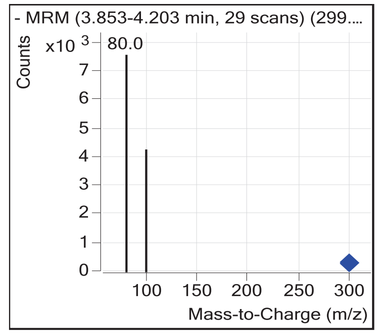


Perfluorinated Compounds by LC/MS/MS.

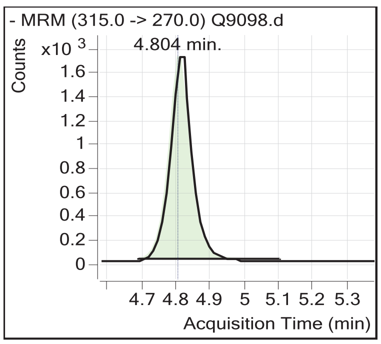
PFBS

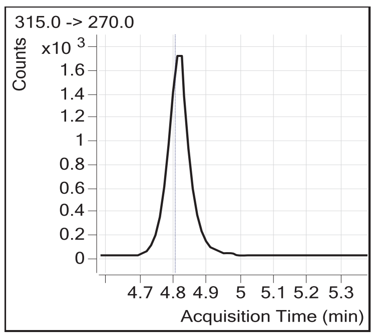


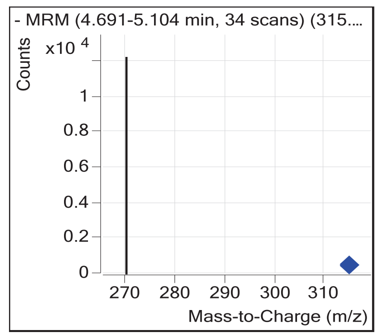




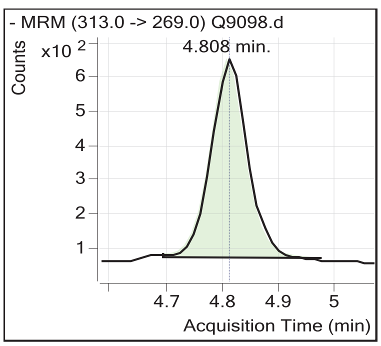
13C2-PFHxA

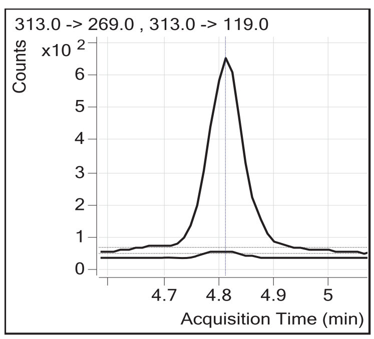


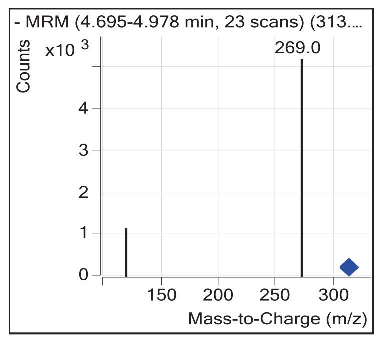




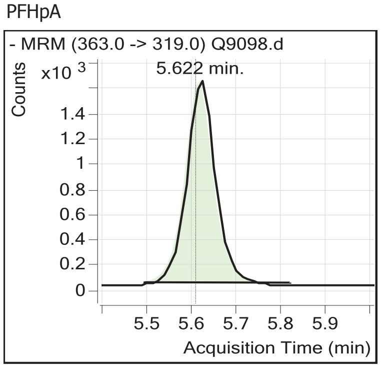
PFHxA

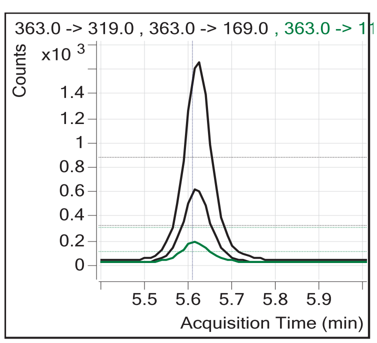


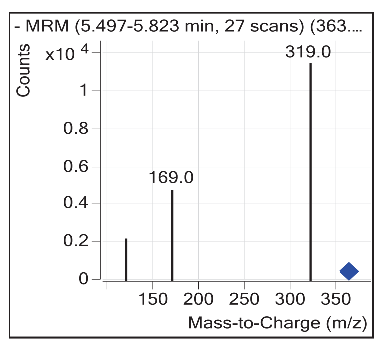




PFHpA

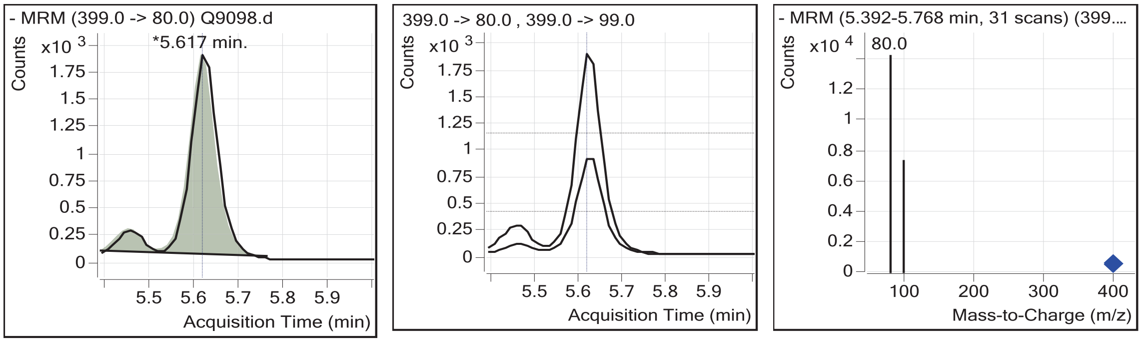




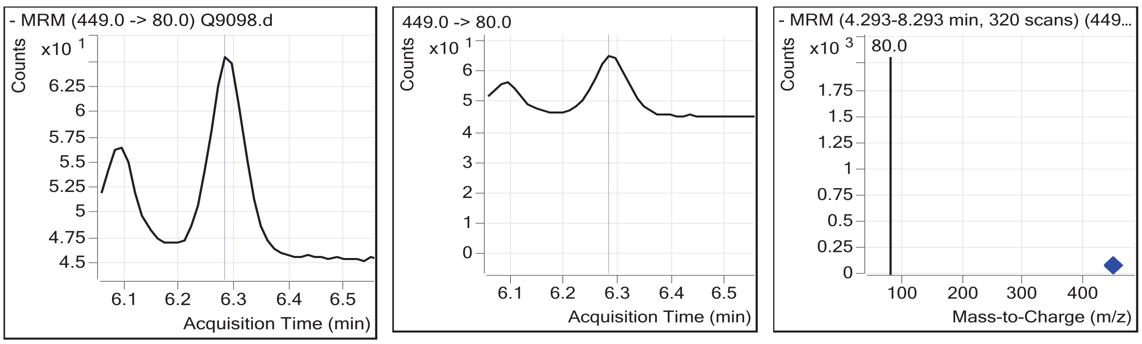


Perfluorinated Compounds by LC/MS/MS.

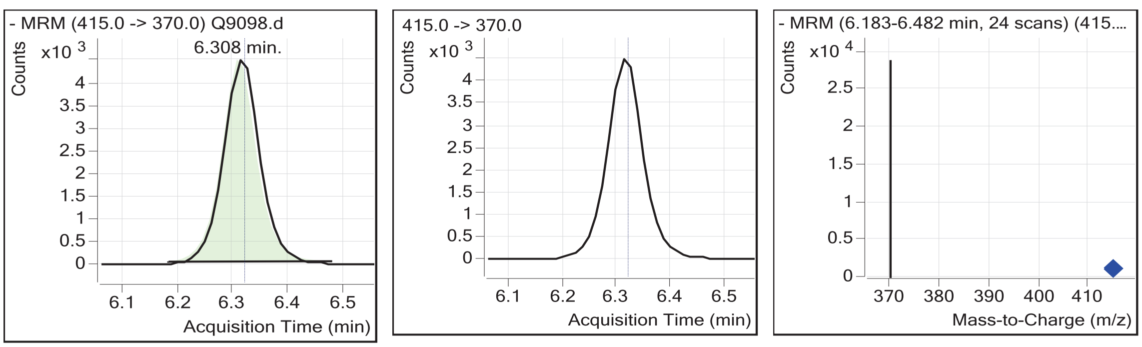
PFHxS



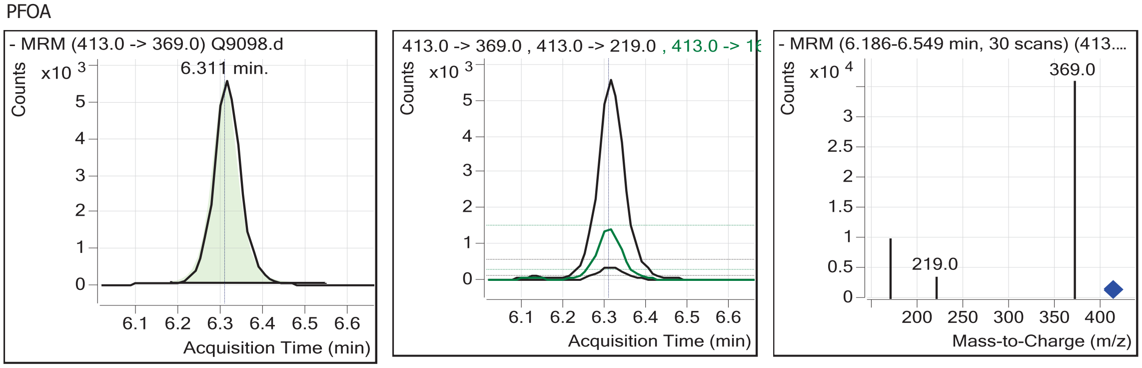
PFHpS



13C2-PFOA

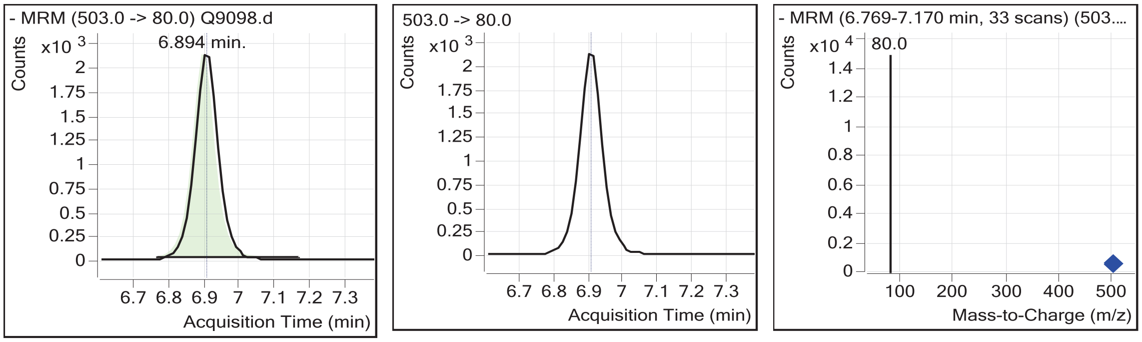


PFOA

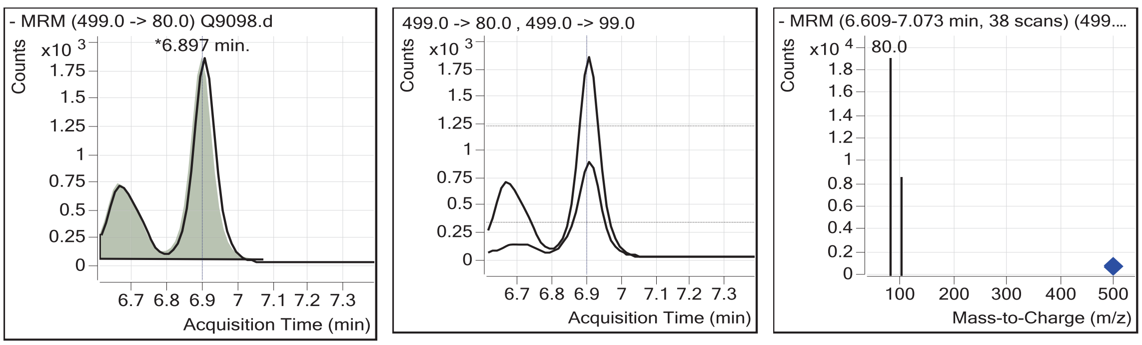


Perfluorinated Compounds by LC/MS/MS.

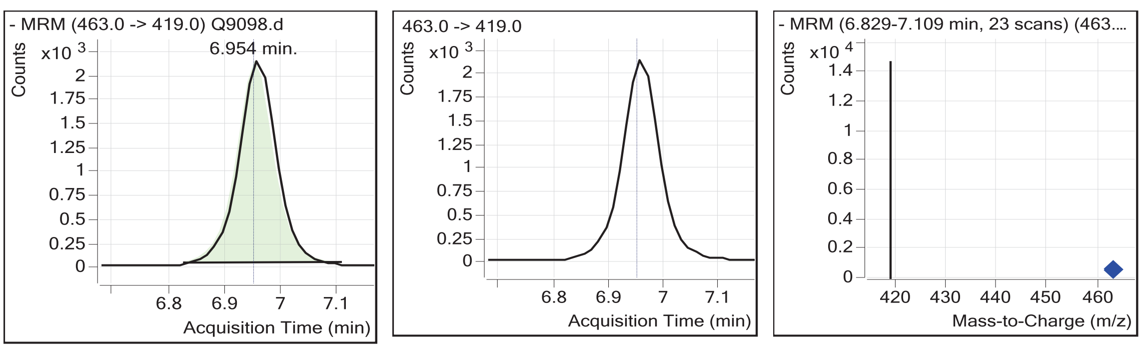
13C4-PFOS



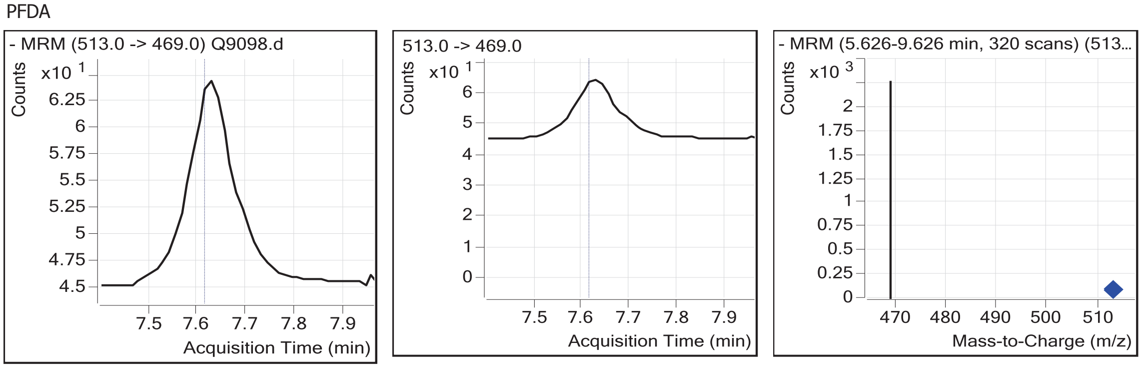
PFOS



PFNA

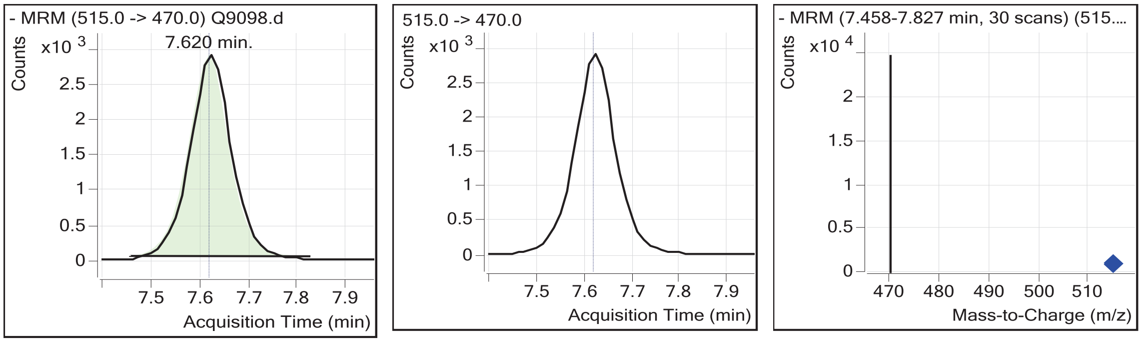


PFDA

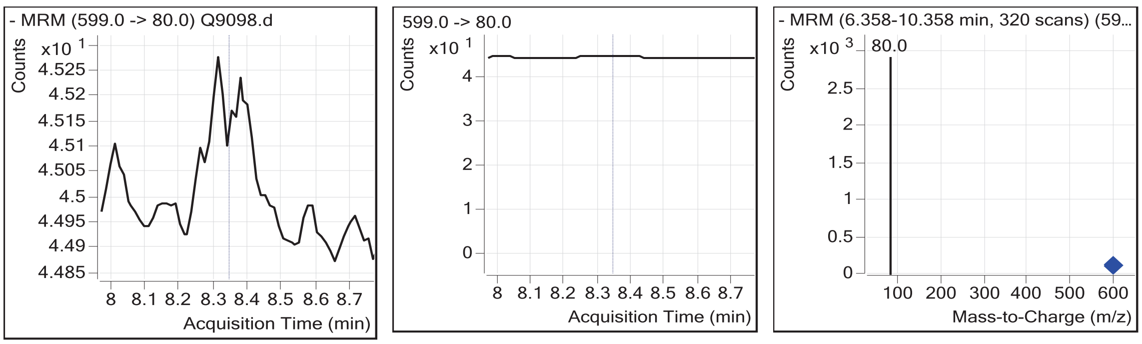


Perfluorinated Compounds by LC/MS/MS.

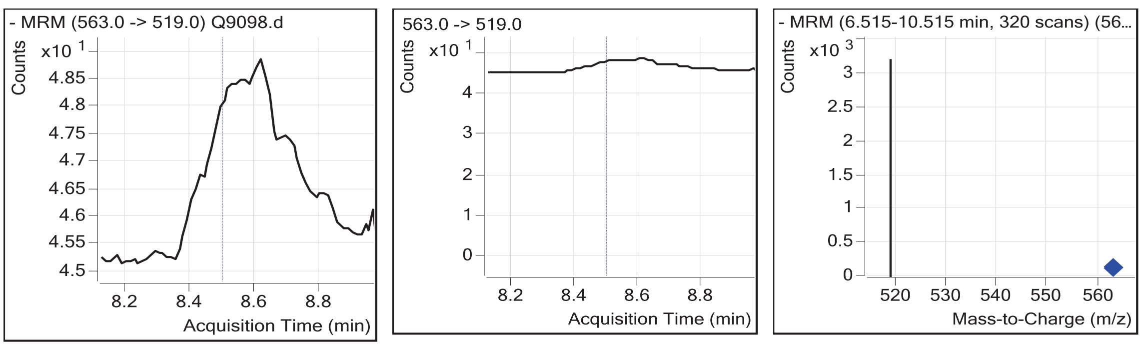
13C2-PFDA



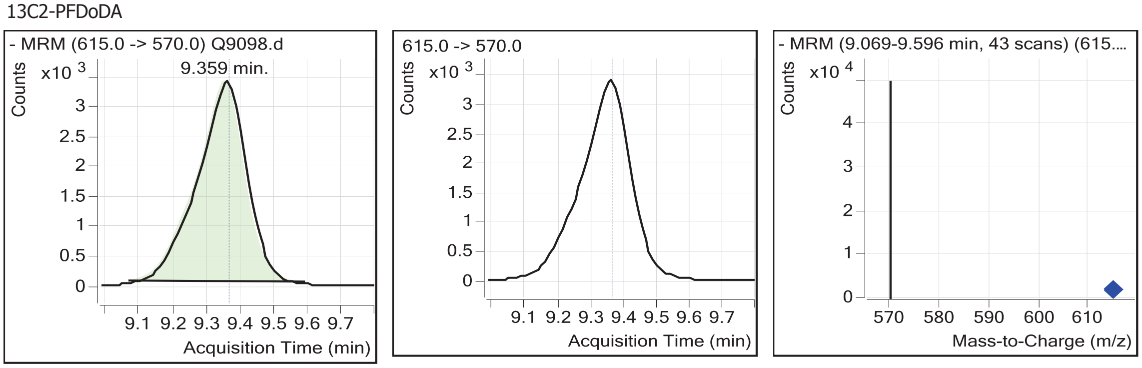
PFDS



PFUnDA

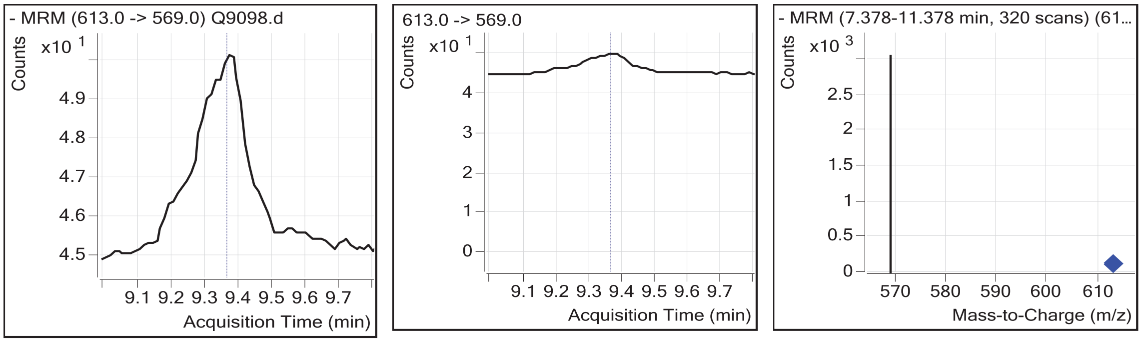


13C2-PFDoDA

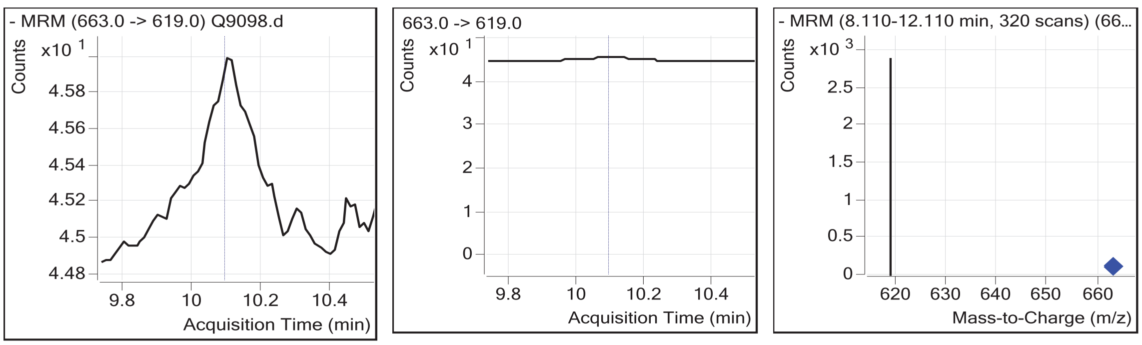


Perfluorinated Compounds by LC/MS/MS.

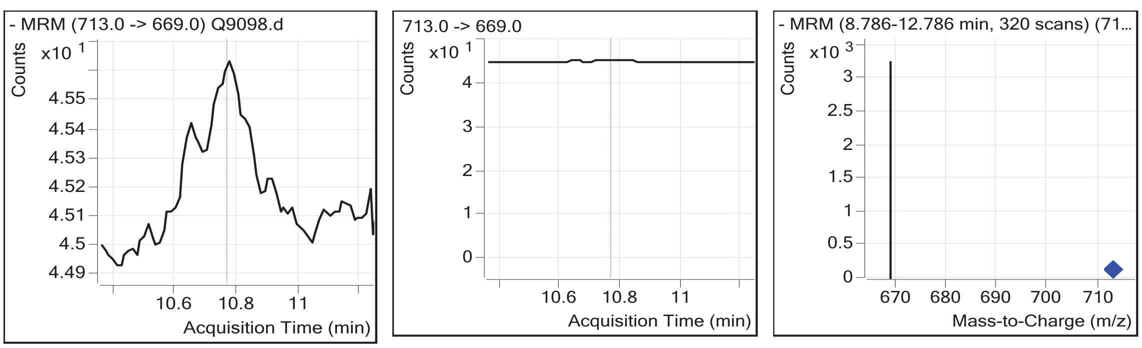
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	OP54279-MSD	**Method:**	EPA 537 MOD	
Lab FileID:	Q9098.D	**Analyst approved:**	12/22/14 10:29	Mike Eger
Injection Time:	12/19/14 23:01	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.62	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Perfluorinated Compounds by LC/MS/MS.

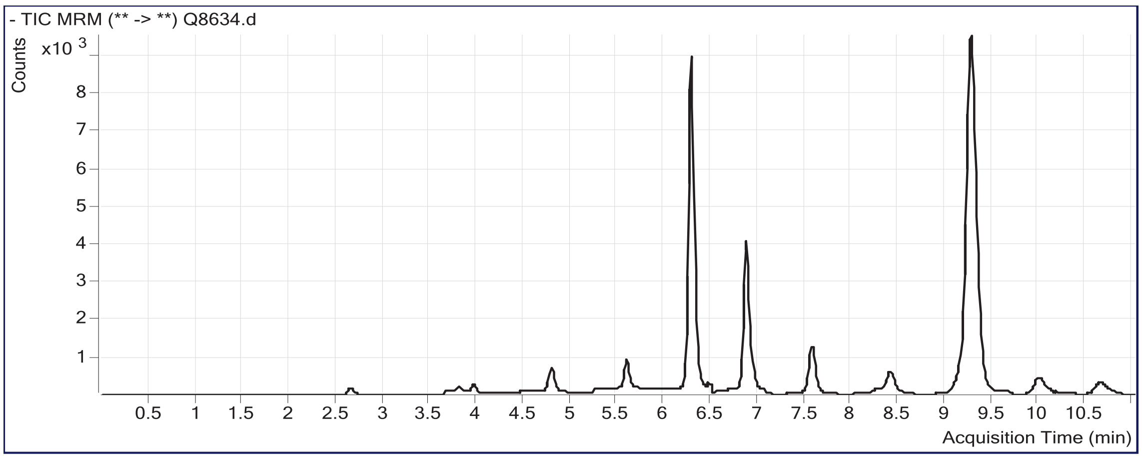
Data File	:	Q8634.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 13:34
Sample Name	:	IC280-2.5
Vial	:	Vial 2
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.284	415.0 -> 370.0	29440	20.000	µg/L	0.038
13C4-PFOS	6.869	503.0 -> 80.0	13200	20.000	µg/L	0.050
13C2-PFDoDA	9.259	615.0 -> 570.0	72886	20.000	µg/L	-0.013
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	1255	2.59	µg/L	0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 12.97%			
13C2-PFDA	7.570	515.0 -> 470.0	3050	2.43	µg/L	0.063
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 12.14%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	832	2.355	µg/L	100
PFPeA	3.811	263.0 -> 219.0	436	2.469	µg/L	100
PFBS	3.966	299.0 -> 80.0	483	2.476	µg/L	99
PFHxA	4.783	313.0 -> 269.0	1330	2.616	µg/L	99
PFHxS	5.592	399.0 -> 80.0	753	2.403	µg/L	86
PFHpA	5.597	363.0 -> 319.0	1277	2.589	µg/L	99
PFHpS	6.256	449.0 -> 80.0	962	2.458	µg/L	100
PFOA	6.286	413.0 -> 369.0	3945	2.645	µg/L	80
PFOS	6.860	499.0 -> 80.0	1663	2.519	µg/L	87
PFNA	6.916	463.0 -> 419.0	2227	2.511	µg/L	100
PFDA	7.564	513.0 -> 469.0	2962	2.678	µg/L	100
PFDS	8.258	599.0 -> 80.0	791	2.493	µg/L	100
PFUnDA	8.402	563.0 -> 519.0	3964	2.514	µg/L	100
PFDoDA	9.253	613.0 -> 569.0	4194	2.568	µg/L	100
PFTrDA	9.985	663.0 -> 619.0	4419	2.784	µg/L	100
PFTeDA	10.648	713.0 -> 669.0	3561	3.183	µg/L	100

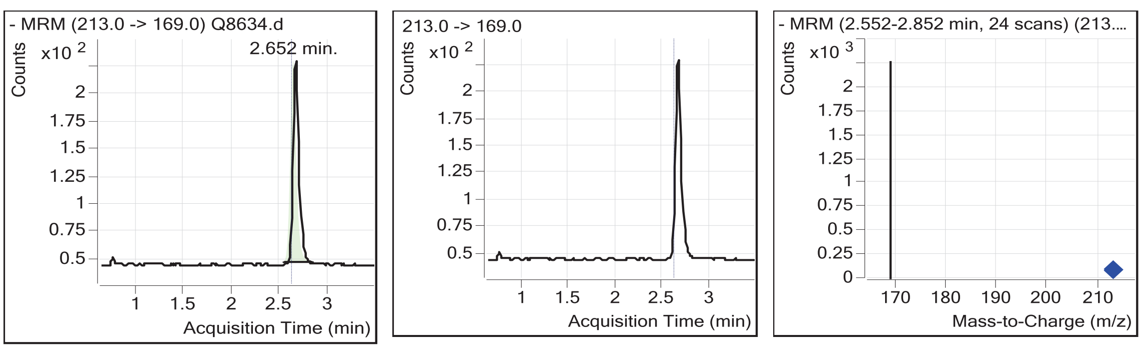
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

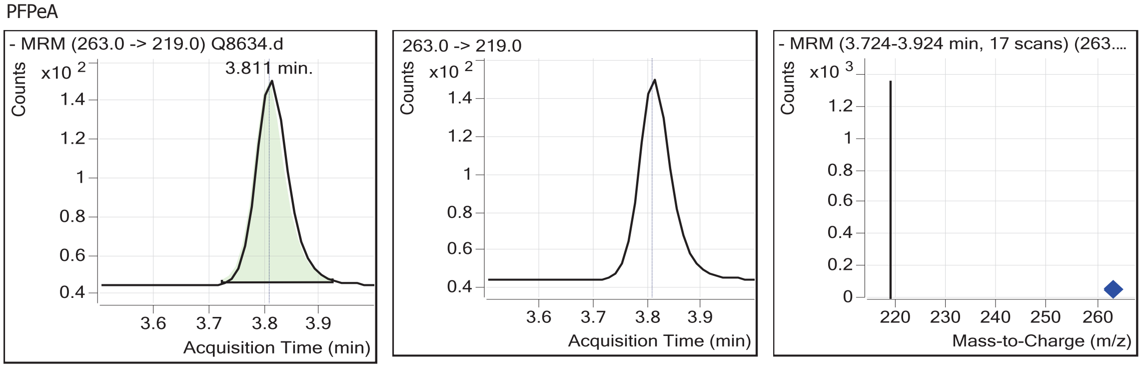
Data File	:	Q8634.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 13:34
Sample Name	:	IC280-2.5
Vial	:	Vial 2
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



PFBA

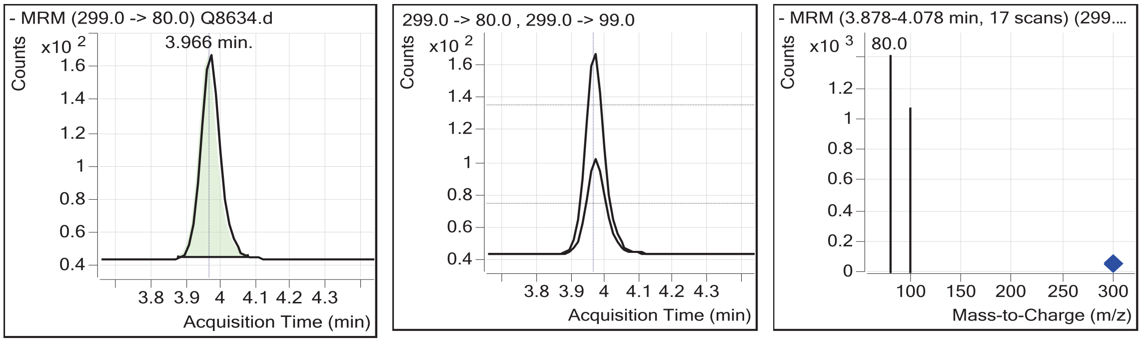


PFPeA

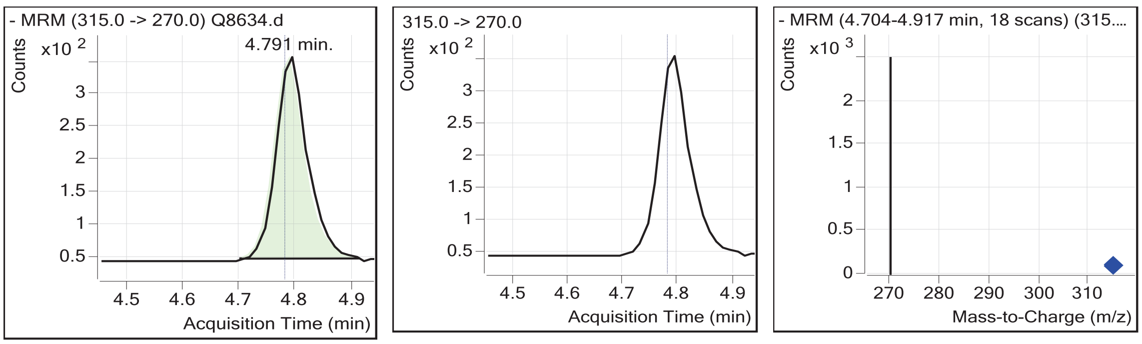


Perfluorinated Compounds by LC/MS/MS.

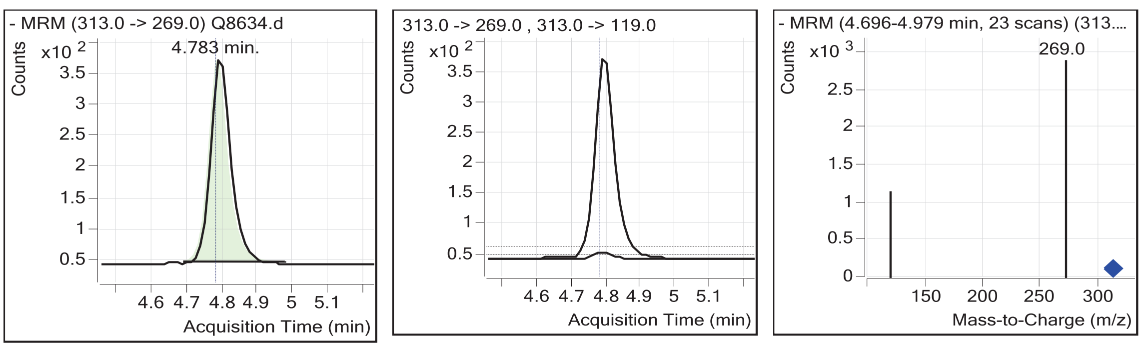
PFBS



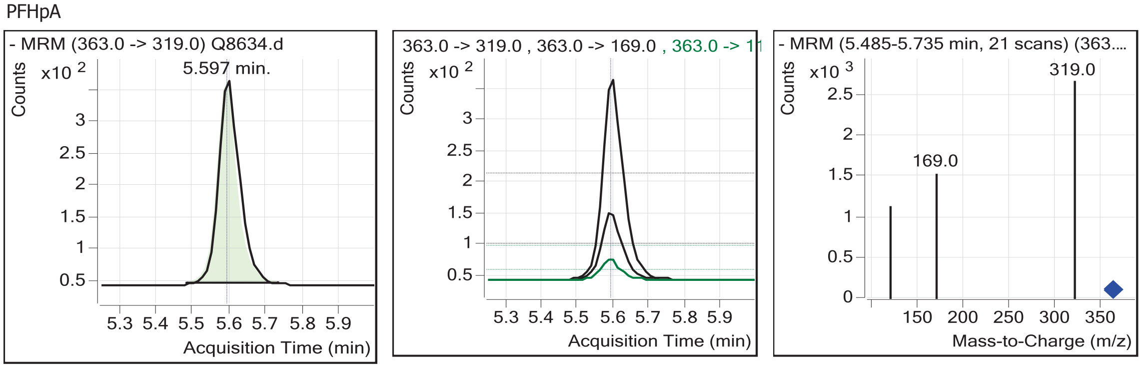
13C2-PFHxA



PFHxA

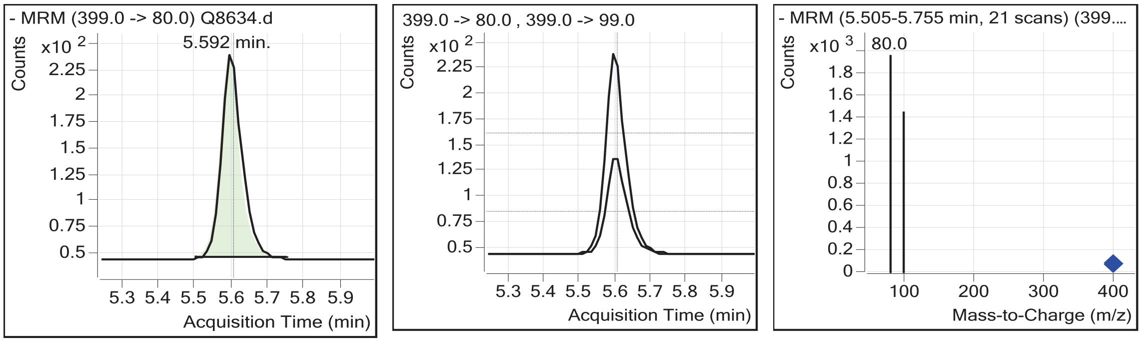


PFHpA

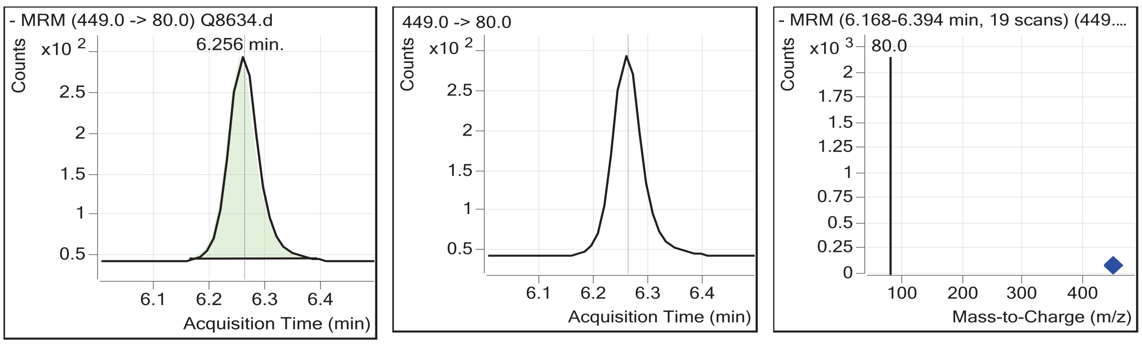


Perfluorinated Compounds by LC/MS/MS.

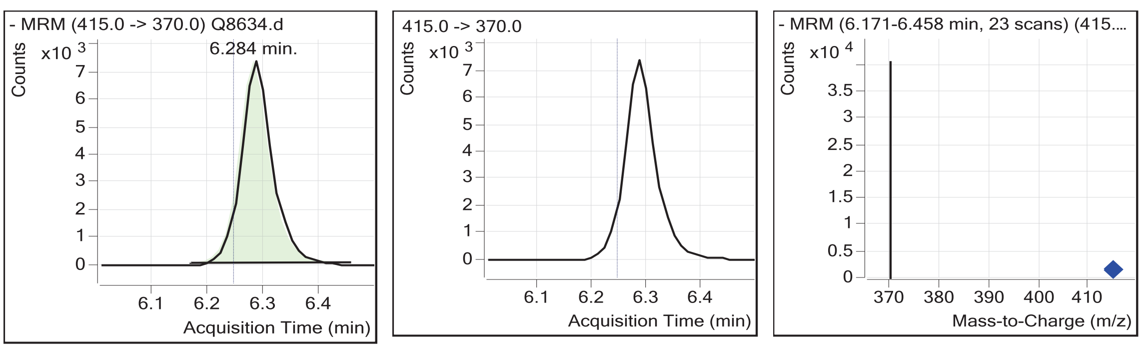
PFHxS



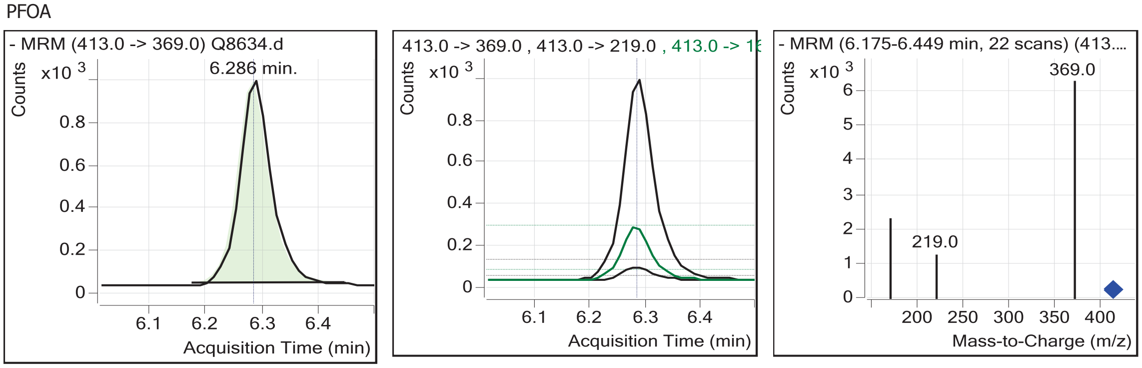
PFHpS



13C2-PFOA



PFOA



7.5.1

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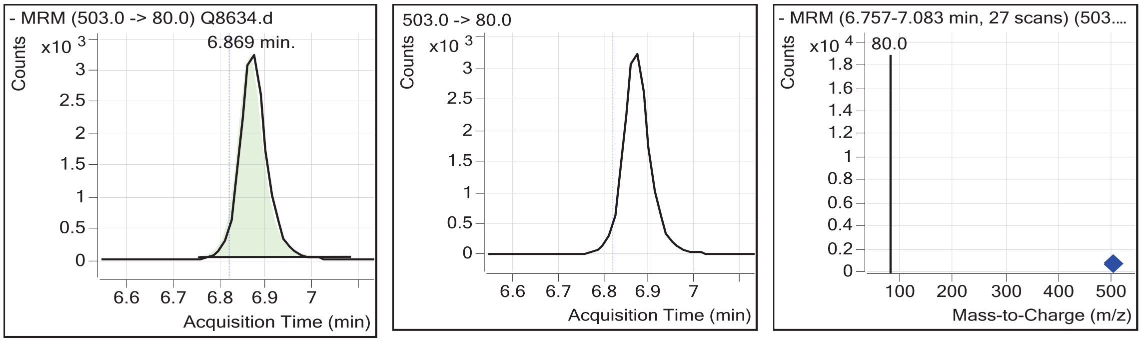
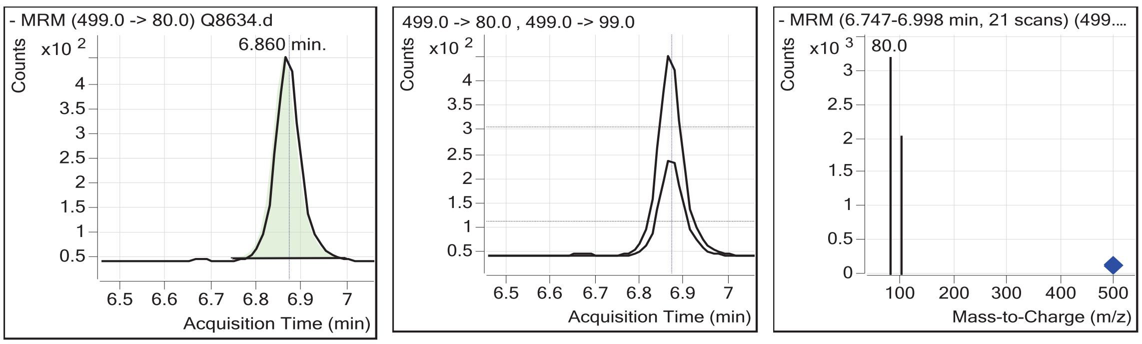
Perfluorinated Compounds by LC/MS/MS.

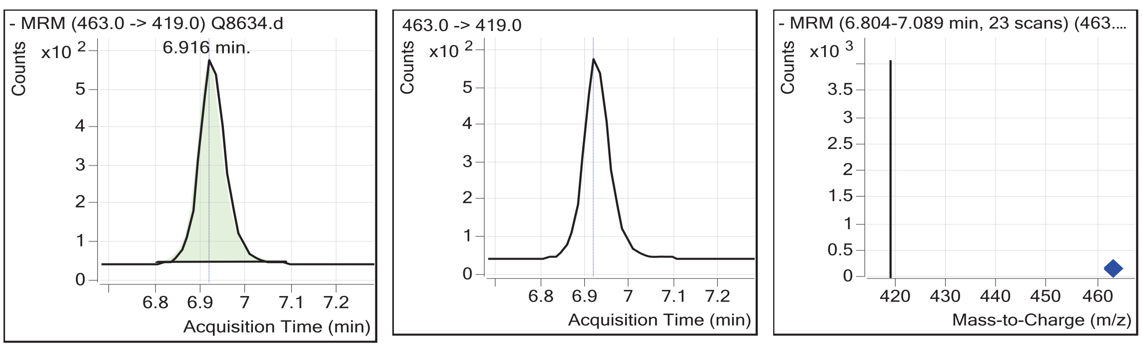
13C4-PFOS



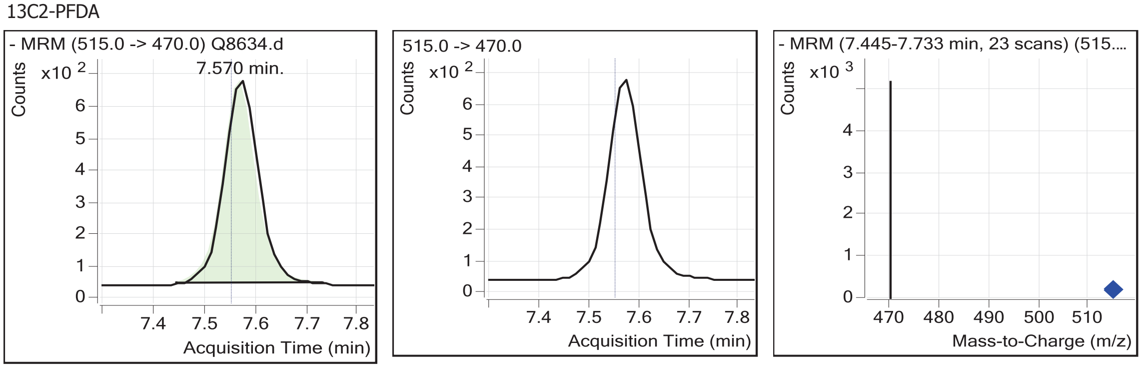
PFOS



PFNA

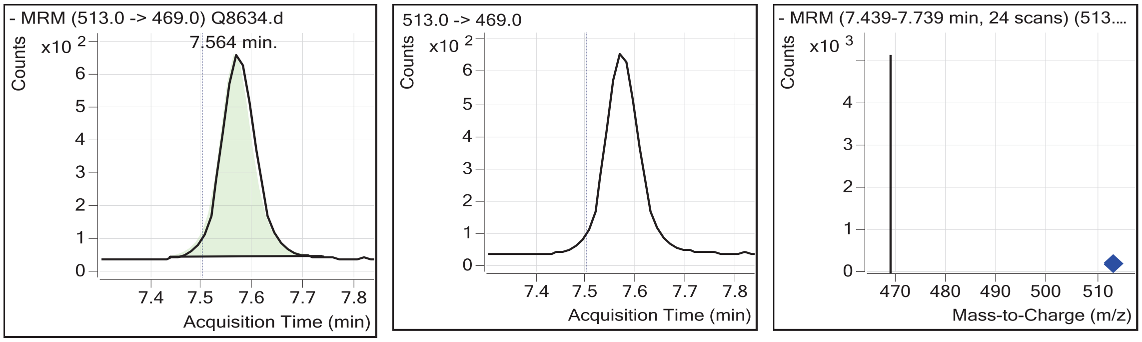


13C2-PFDA

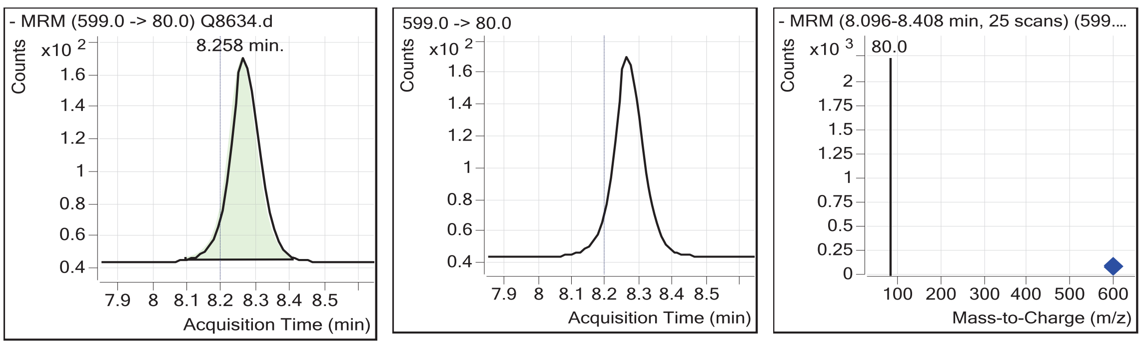


Perfluorinated Compounds by LC/MS/MS.

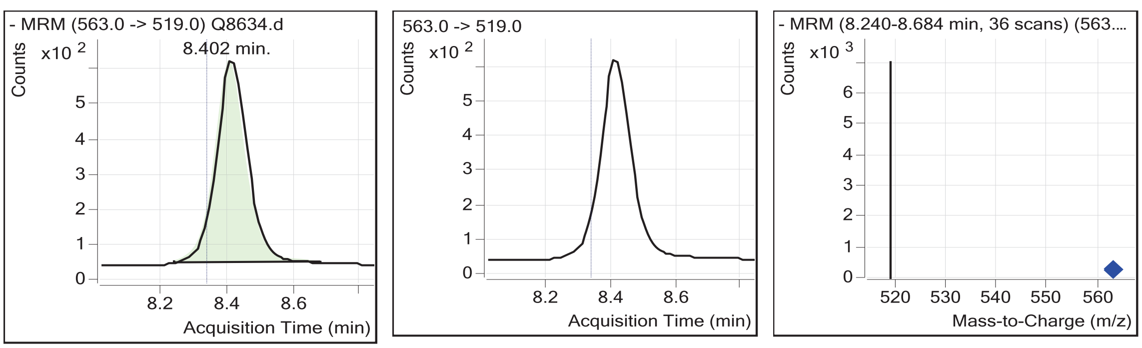
PFDA



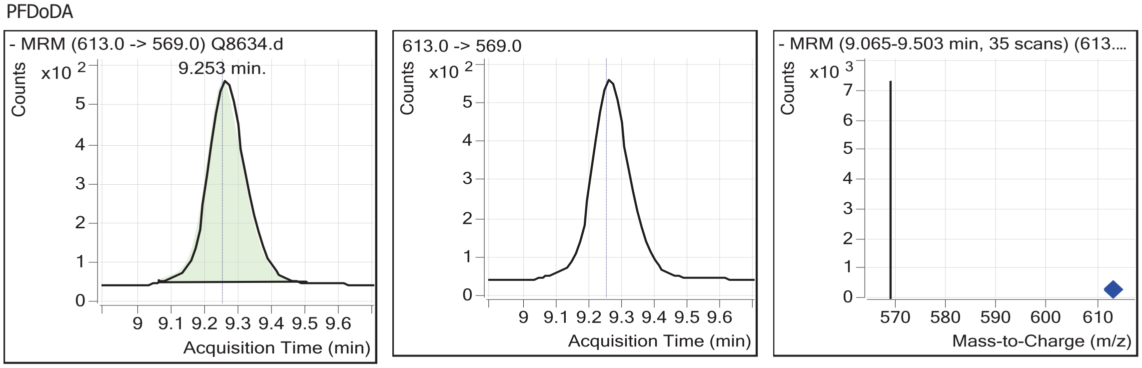
PFDS



PFUnDA

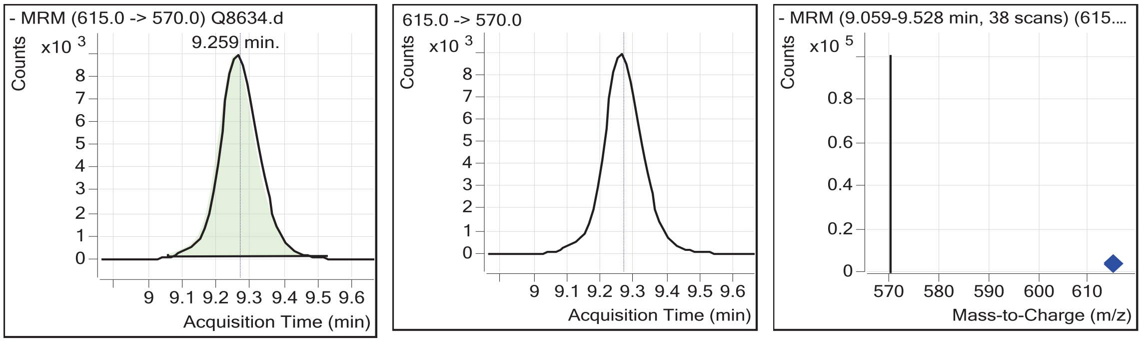


PFDoDA

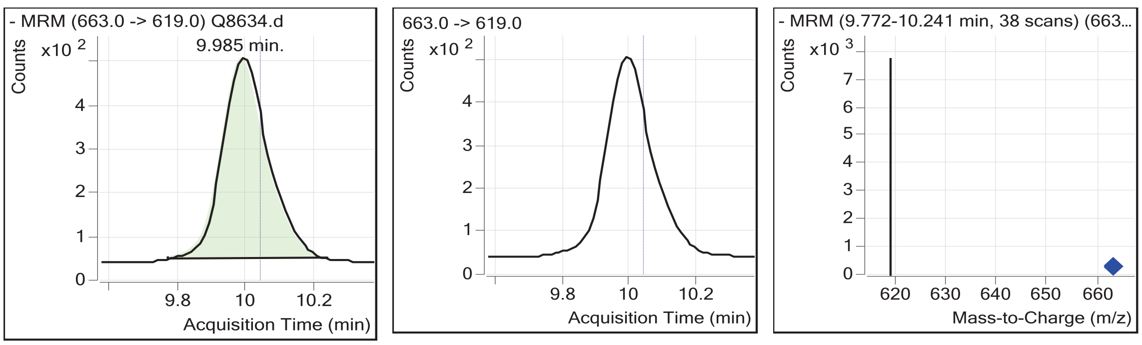


Perfluorinated Compounds by LC/MS/MS.

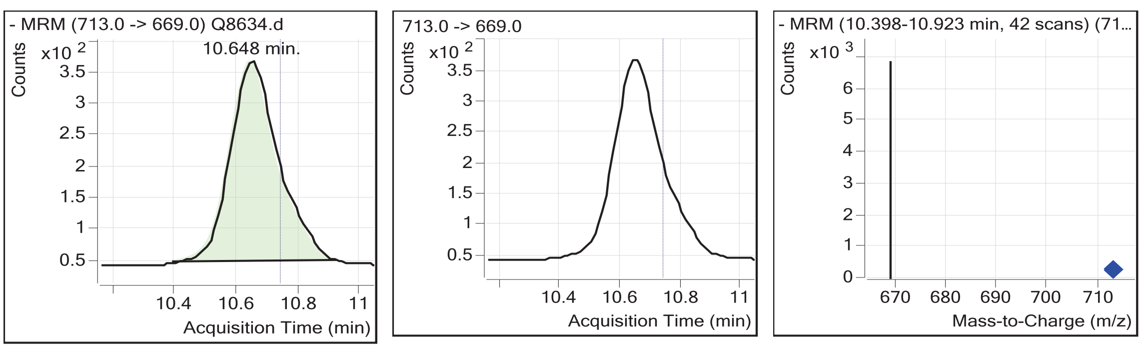
13C2-PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

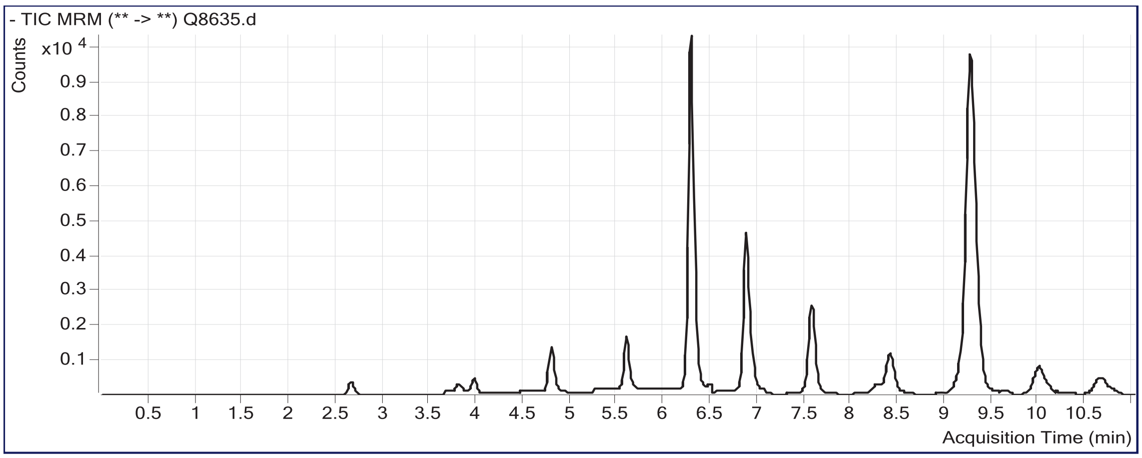
Data File	:	Q8635.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 13:53
Sample Name	:	IC280-5.0
Vial	:	Vial 3
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.284	415.0 -> 370.0	29760	20.000	µg/L	0.038
13C4-PFOS	6.869	503.0 -> 80.0	13017	20.000	µg/L	0.050
13C2-PFDoDA	9.247	615.0 -> 570.0	70813	20.000	µg/L	-0.025
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	2484	5.08	µg/L	0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 25.38%			
13C2-PFDA	7.570	515.0 -> 470.0	6226	4.90	µg/L	0.063
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 24.52%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	1720	4.816	µg/L	100
PFPeA	3.811	263.0 -> 219.0	873	4.890	µg/L	100
PFBS	3.966	299.0 -> 80.0	994	5.169	µg/L	98
PFHxA	4.783	313.0 -> 269.0	2644	5.145	µg/L	100
PFHxS	5.592	399.0 -> 80.0	1545	5.002	µg/L	85
PFHpA	5.597	363.0 -> 319.0	2606	5.228	µg/L	100
PFHpS	6.256	449.0 -> 80.0	1963	5.087	µg/L	100
PFOA	6.286	413.0 -> 369.0	7772	5.156	µg/L	80
PFOS	6.860	499.0 -> 80.0	3313	5.089	µg/L	89
PFNA	6.916	463.0 -> 419.0	4366	4.871	µg/L	100
PFDA	7.564	513.0 -> 469.0	5950	5.537	µg/L	100
PFDS	8.258	599.0 -> 80.0	1535	4.981	µg/L	100
PFUnDA	8.402	563.0 -> 519.0	7815	5.100	µg/L	100
PFDoDA	9.253	613.0 -> 569.0	7835	4.938	µg/L	100
PFTrDA	9.985	663.0 -> 619.0	7634	4.950	µg/L	100
PFTeDA	10.648	713.0 -> 669.0	5499	5.059	µg/L	100

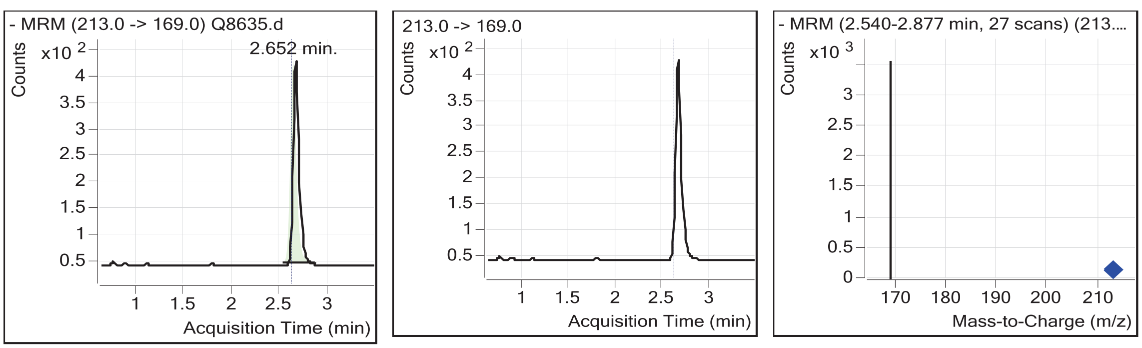
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

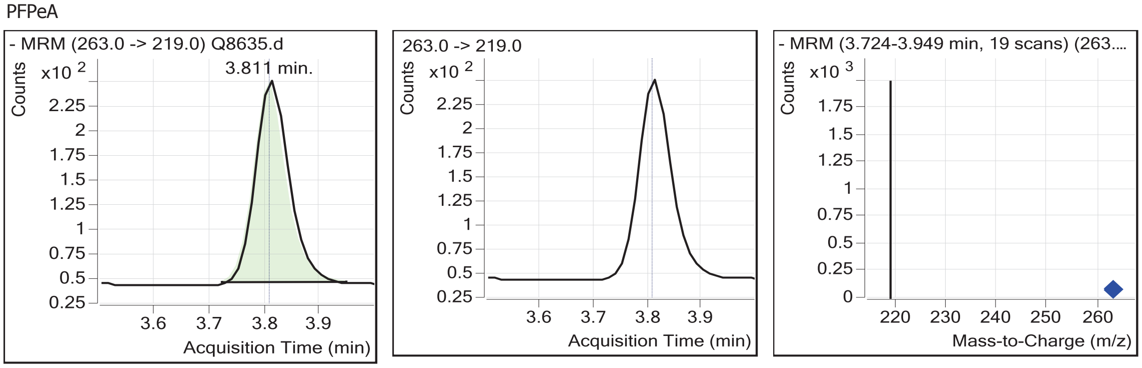
Data File	:	Q8635.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 13:53
Sample Name	:	IC280-5.0
Vial	:	Vial 3
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



PFBA

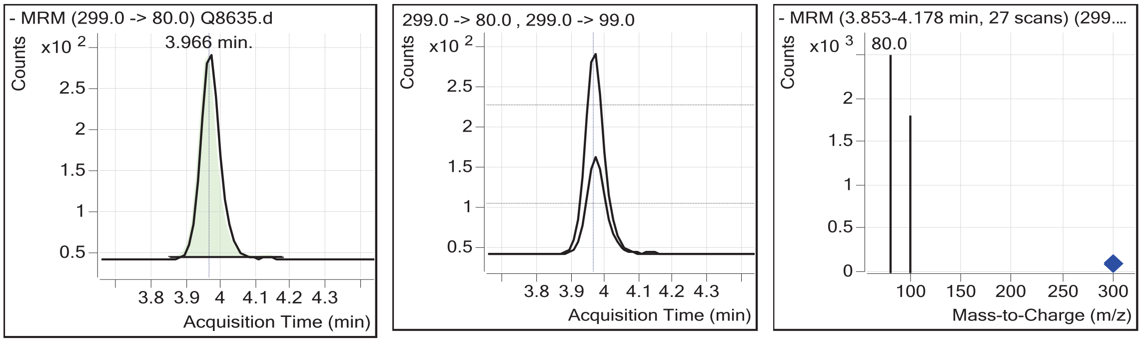


PFPeA

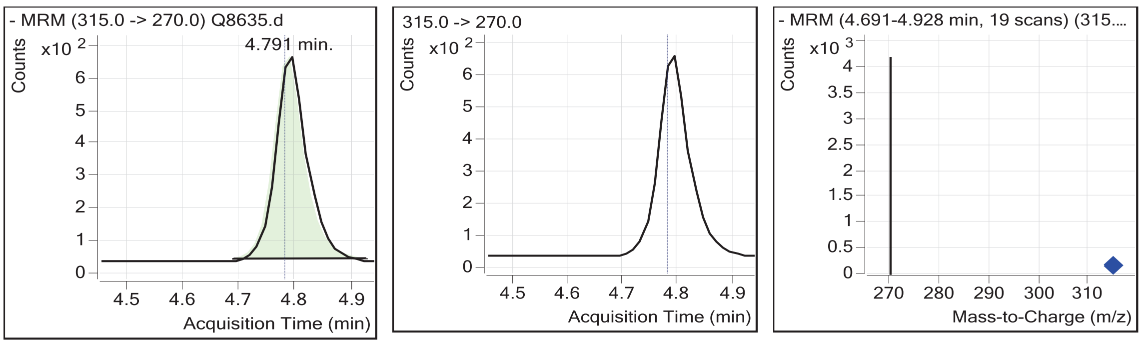


Perfluorinated Compounds by LC/MS/MS.

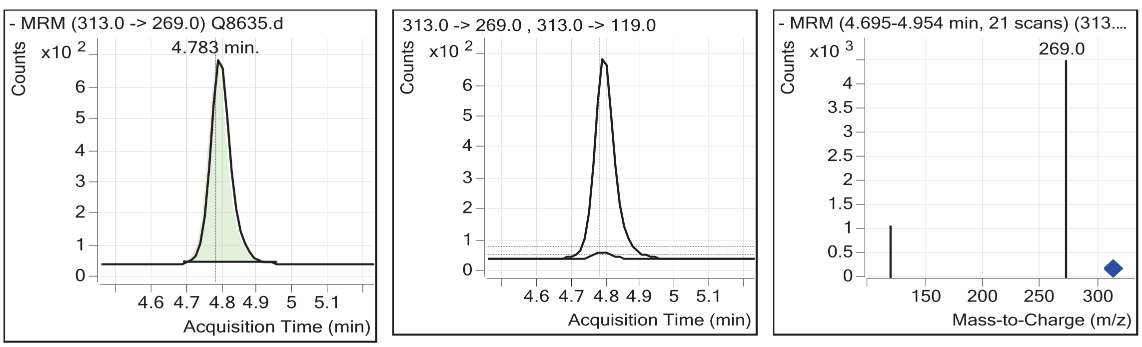
PFBS



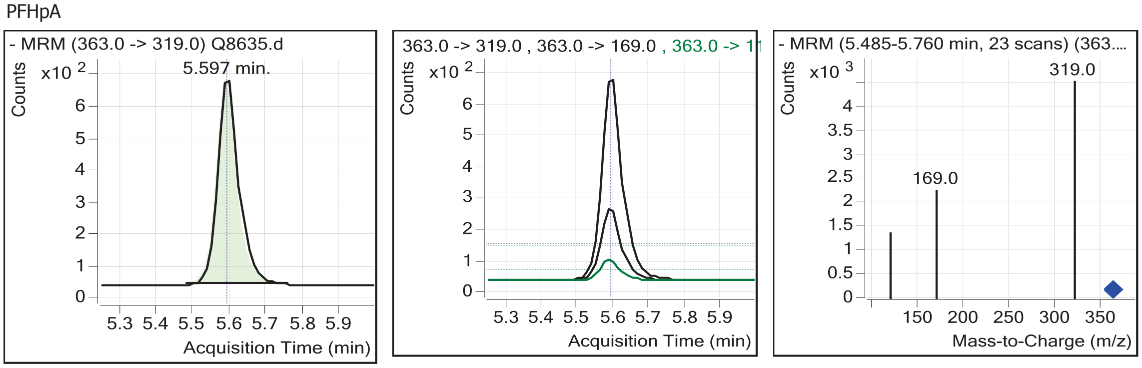
13C2-PFHxA



PFHxA

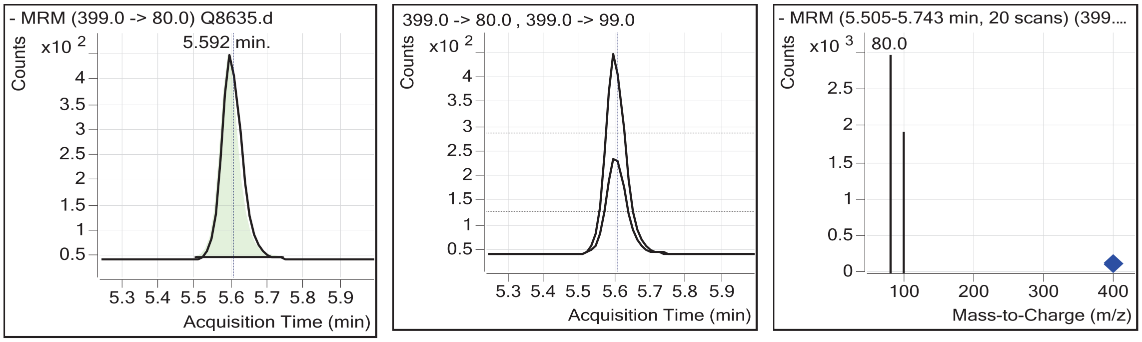


PFHpA

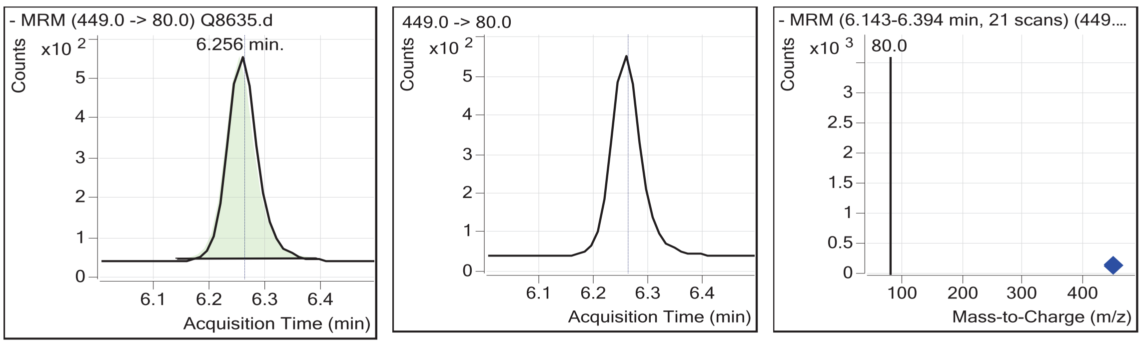


Perfluorinated Compounds by LC/MS/MS.

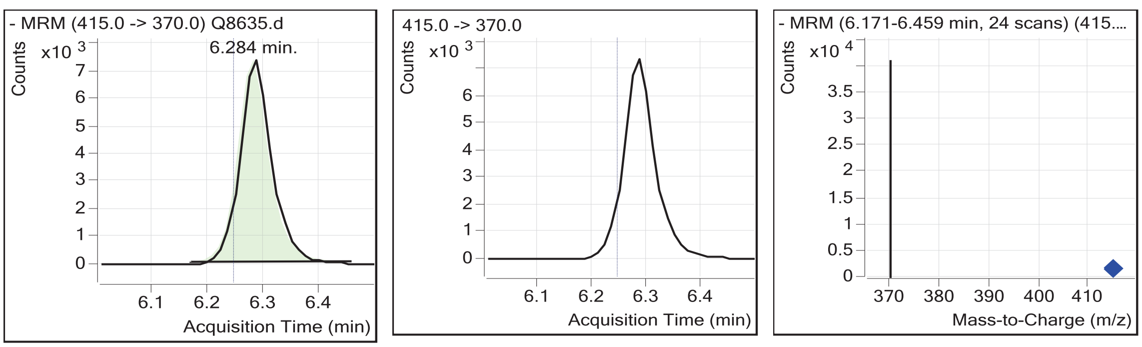
PFHxS



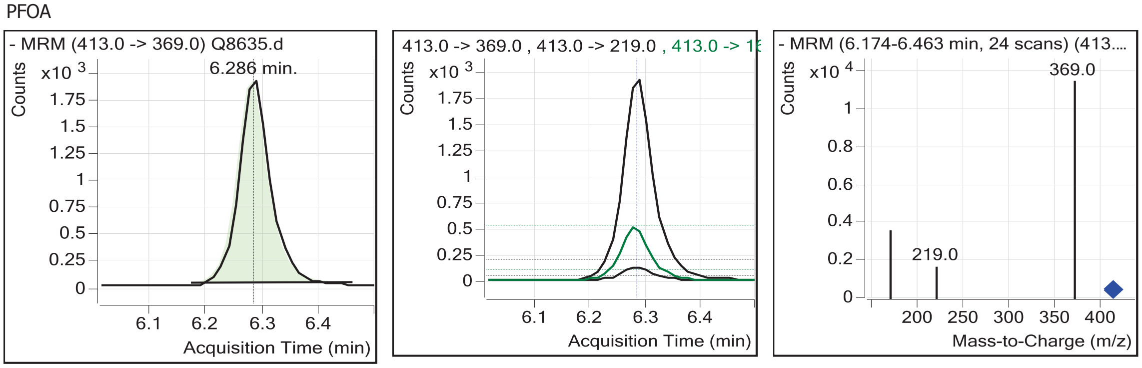
PFHpS



13C2-PFOA

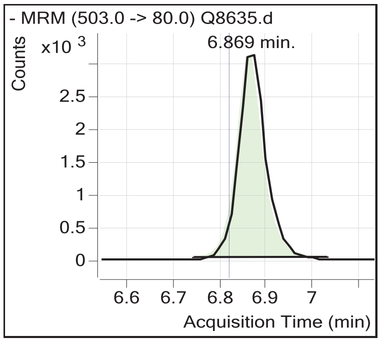


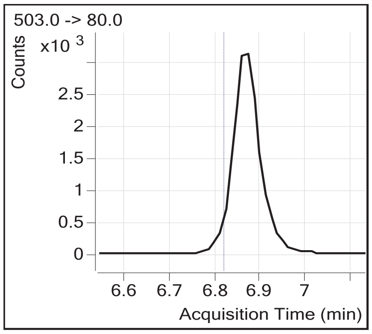
PFOA

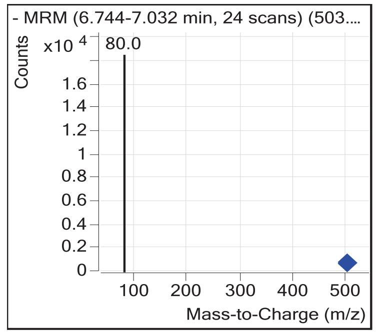


Perfluorinated Compounds by LC/MS/MS.

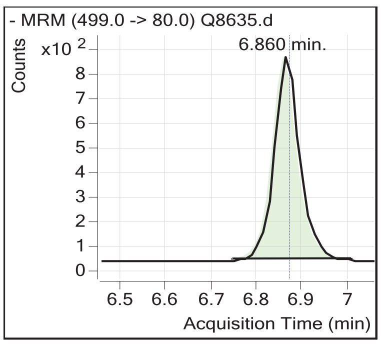
13C4-PFOS

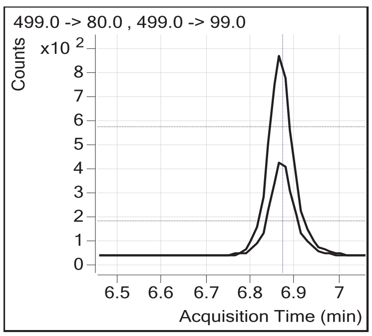


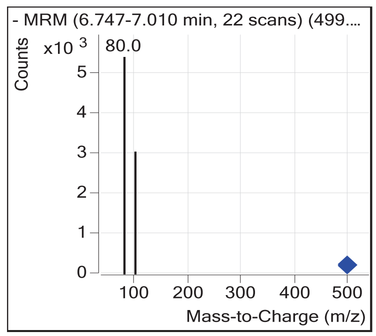




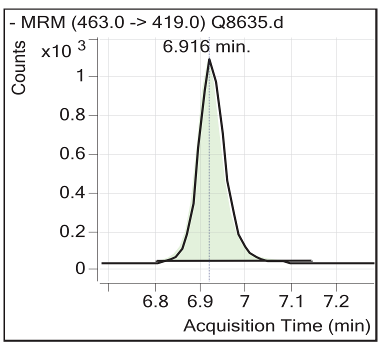
PFOS

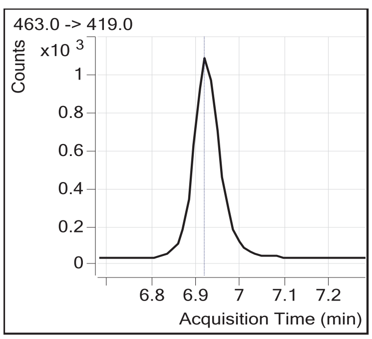


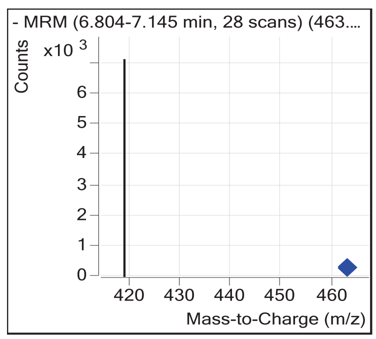




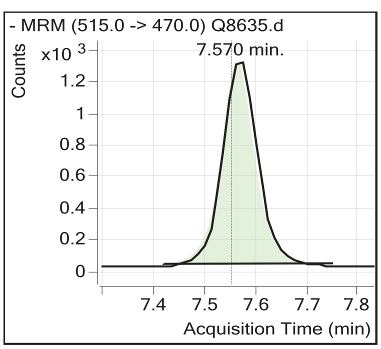
PFNA

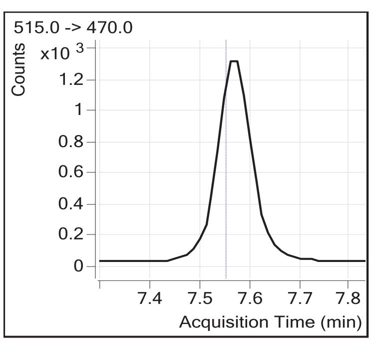


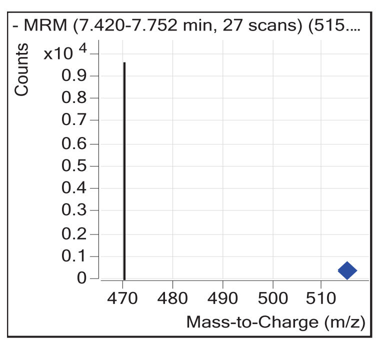




13C2-PFDA

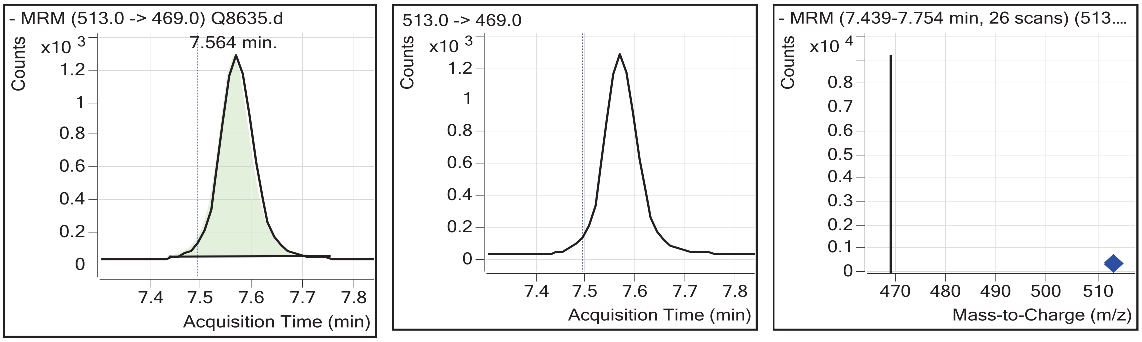




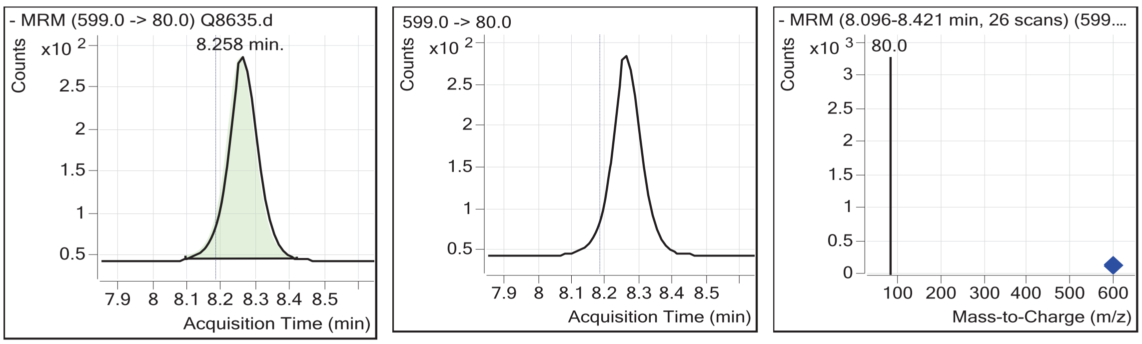


Perfluorinated Compounds by LC/MS/MS.

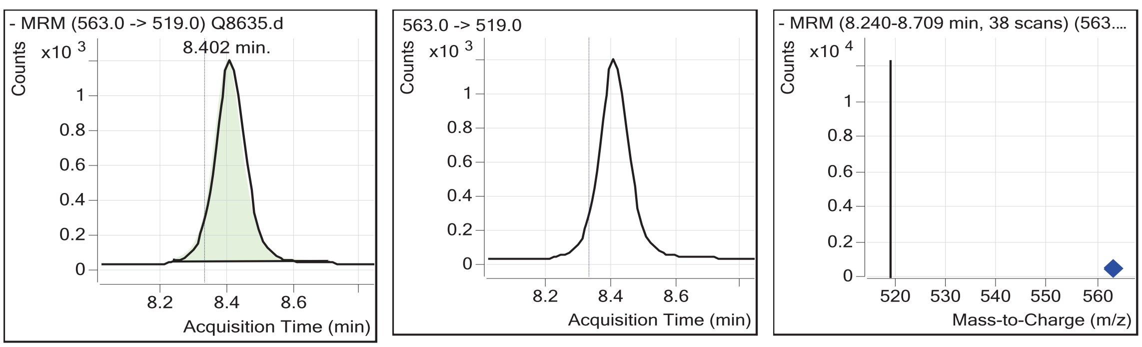
PFDA



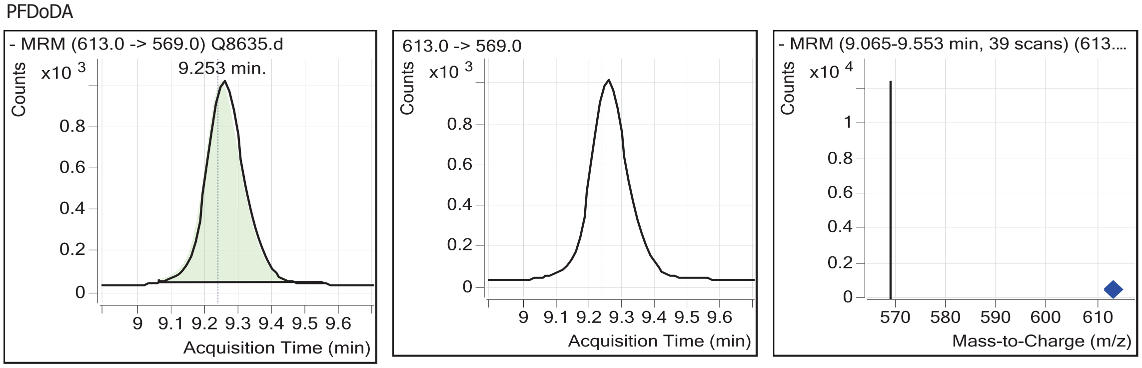
PFDS



PFUnDA



PFDoDA



7.5.2

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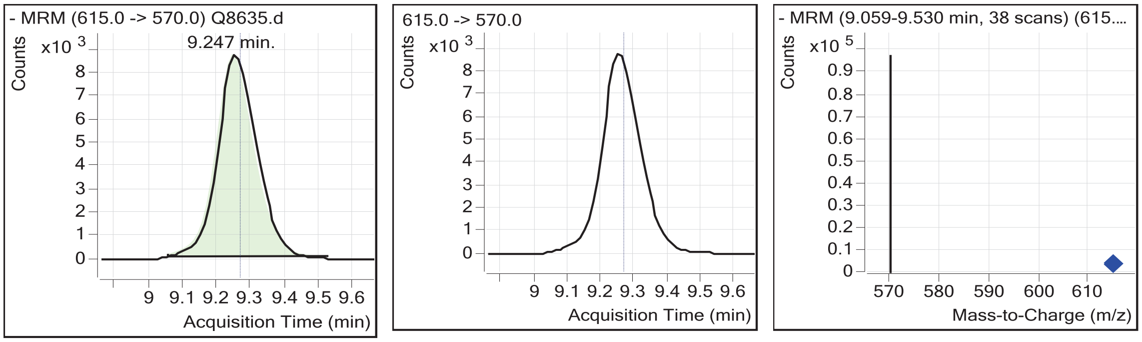
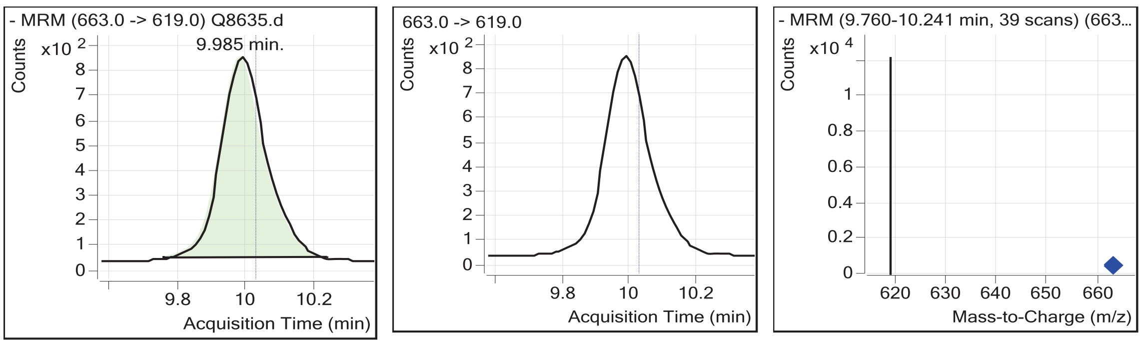
Perfluorinated Compounds by LC/MS/MS.

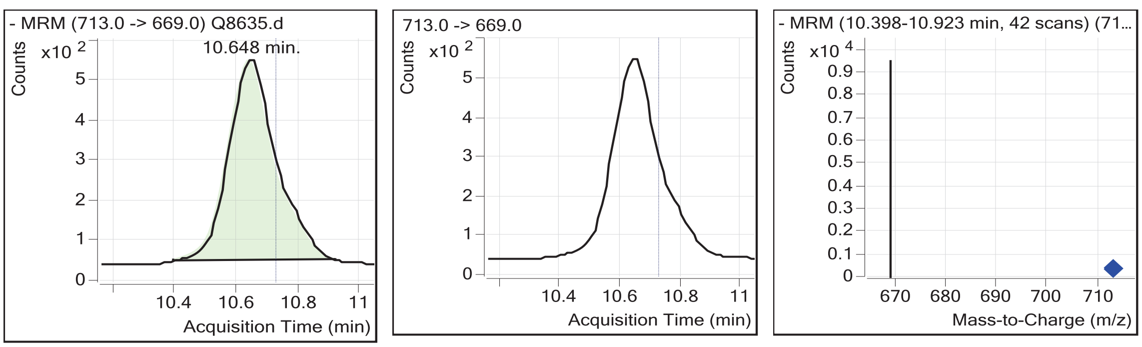
13C2-PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

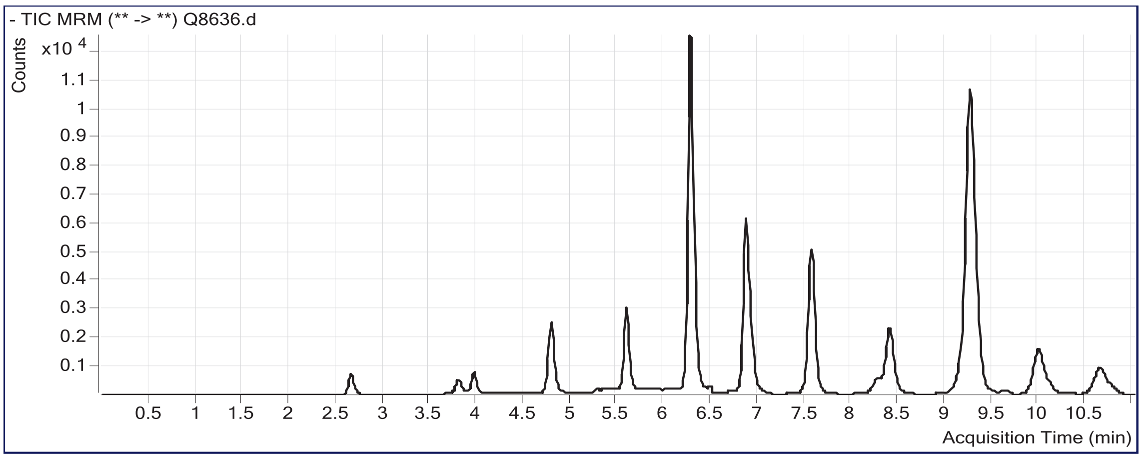
Data File	:	Q8636.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:13
Sample Name	:	IC280-10
Vial	:	Vial 4
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.284	415.0 -> 370.0	29353	20.000	µg/L	0.038
13C4-PFOS	6.857	503.0 -> 80.0	13312	20.000	µg/L	0.038
13C2-PFDoDA	9.247	615.0 -> 570.0	70537	20.000	µg/L	-0.025
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	4784	9.91	µg/L	0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 49.57%			
13C2-PFDA	7.558	515.0 -> 470.0	12294	9.82	µg/L	0.050
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 49.09%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	3286	9.330	µg/L	100
PFPeA	3.811	263.0 -> 219.0	1710	9.717	µg/L	100
PFBS	3.966	299.0 -> 80.0	1905	9.688	µg/L	98
PFHxA	4.783	313.0 -> 269.0	5113	10.088	µg/L	100
PFHpA	5.585	363.0 -> 319.0	5040	10.252	µg/L	98
PFHxS	5.592	399.0 -> 80.0	3130	9.909	µg/L	88
PFHpS	6.256	449.0 -> 80.0	3912	9.915	µg/L	100
PFOA	6.274	413.0 -> 369.0	14630	9.839	µg/L	80
PFOS	6.860	499.0 -> 80.0	6621	9.944	µg/L	88
PFNA	6.916	463.0 -> 419.0	8655	9.790	µg/L	100
PFDA	7.564	513.0 -> 469.0	11642	10.877	µg/L	100
PFDS	8.246	599.0 -> 80.0	3022	9.842	µg/L	100
PFUnDA	8.402	563.0 -> 519.0	15469	10.135	µg/L	100
PFDoDA	9.253	613.0 -> 569.0	15356	9.715	µg/L	100
PFTrDA	9.985	663.0 -> 619.0	14709	9.576	µg/L	100
PFTeDA	10.635	713.0 -> 669.0	10265	9.481	µg/L	100

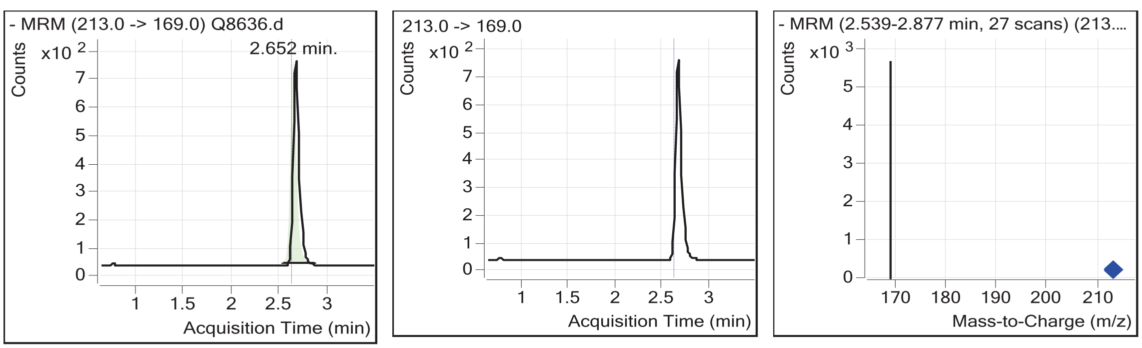
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

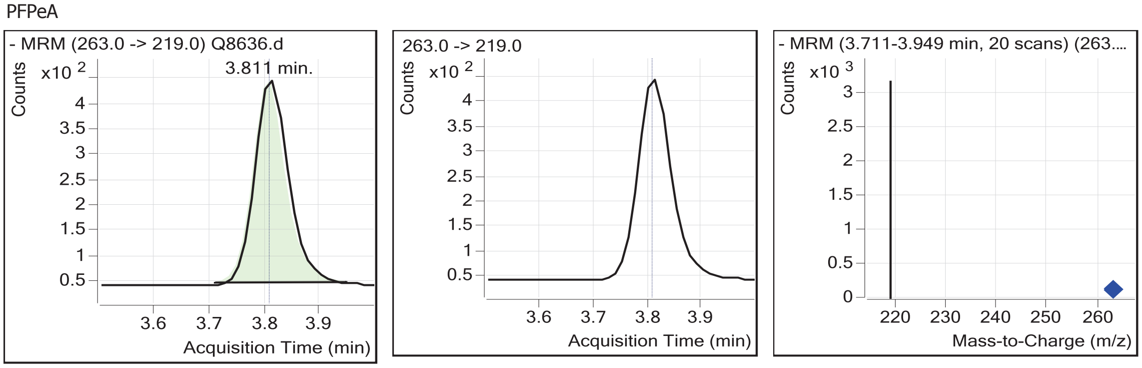
Data File	:	Q8636.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:13
Sample Name	:	IC280-10
Vial	:	Vial 4
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



PFBA

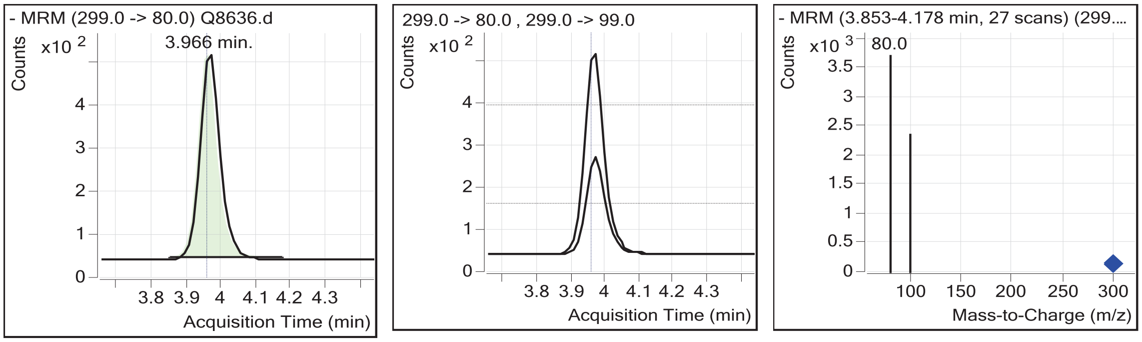


PFPeA

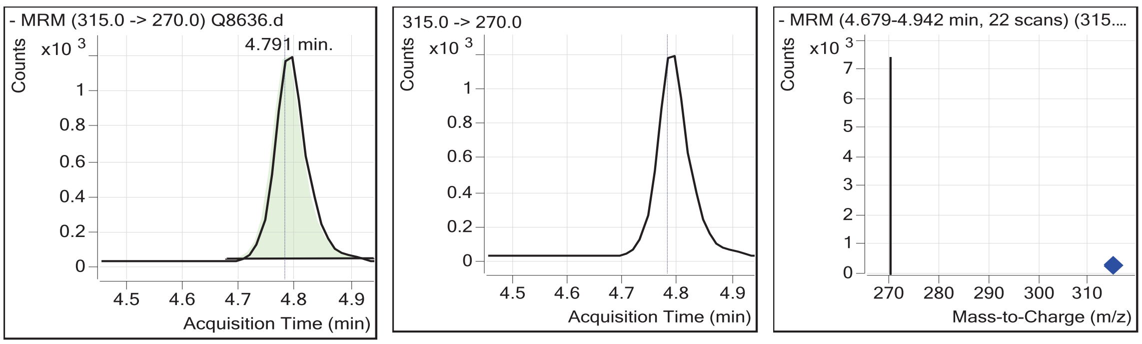


Perfluorinated Compounds by LC/MS/MS.

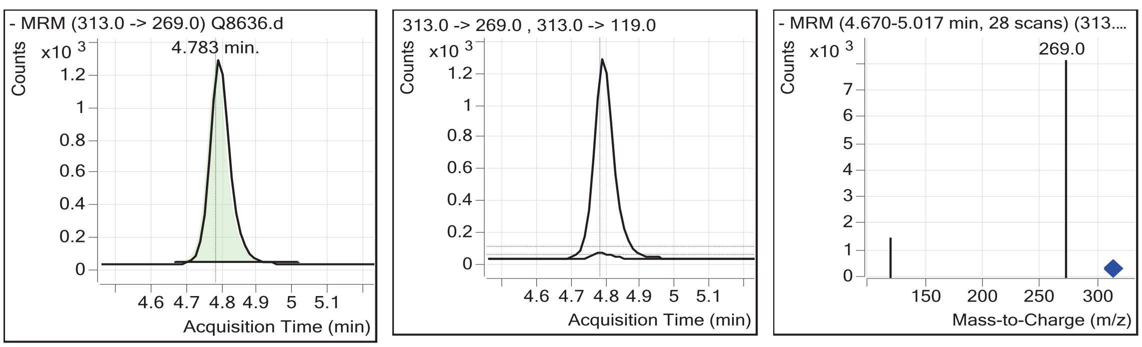
PFBS



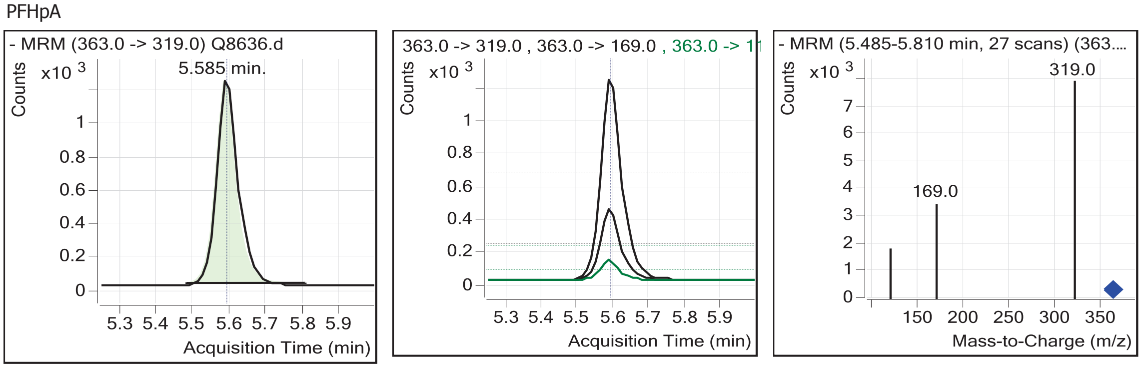
13C2-PFHxA



PFHxA

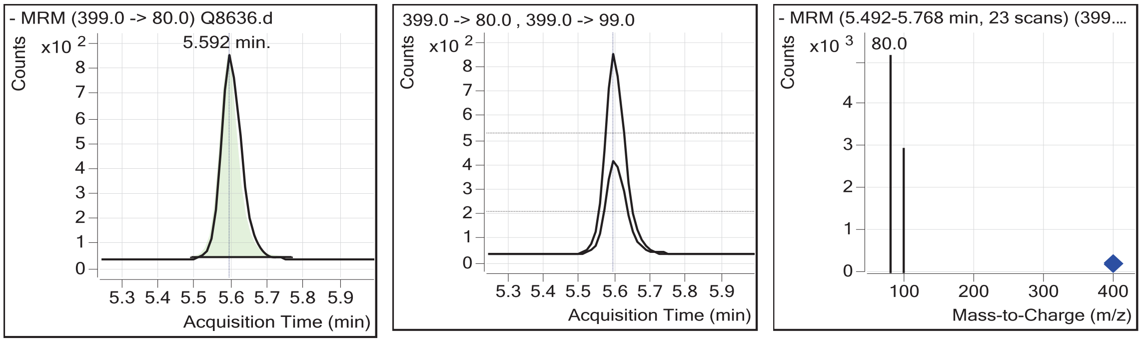


PFHpA

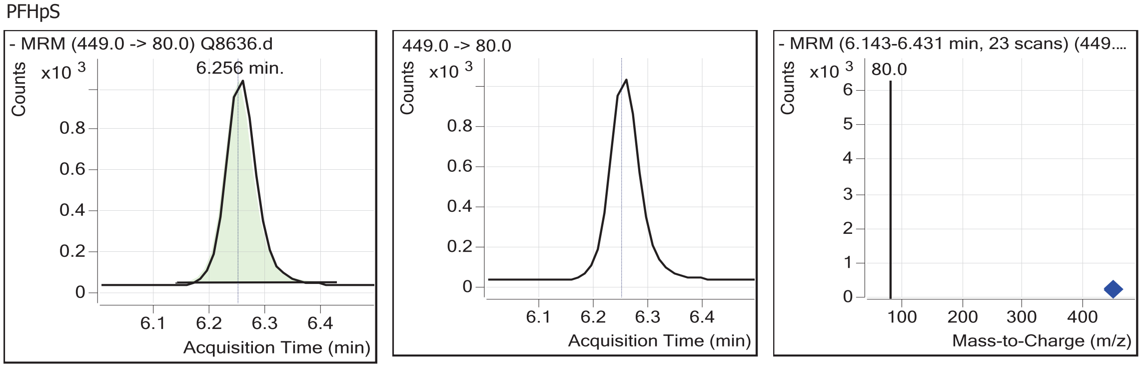


Perfluorinated Compounds by LC/MS/MS.

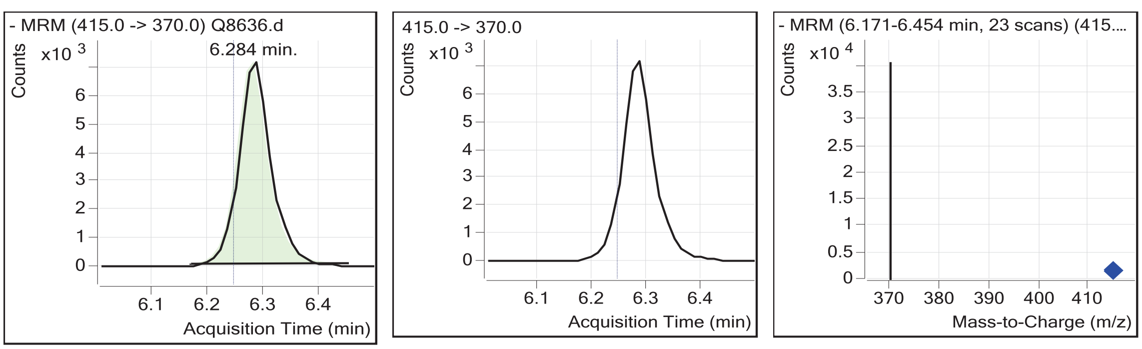
PFHxS



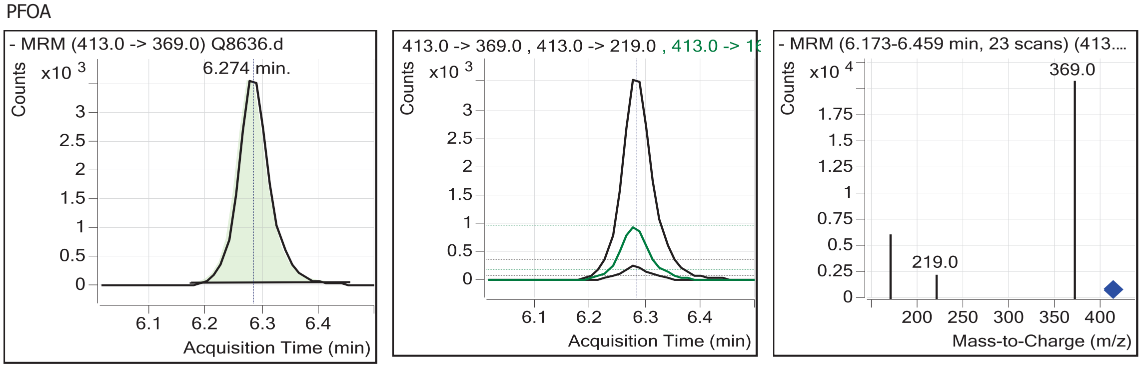
PFHpS



13C2-PFOA



PFOA

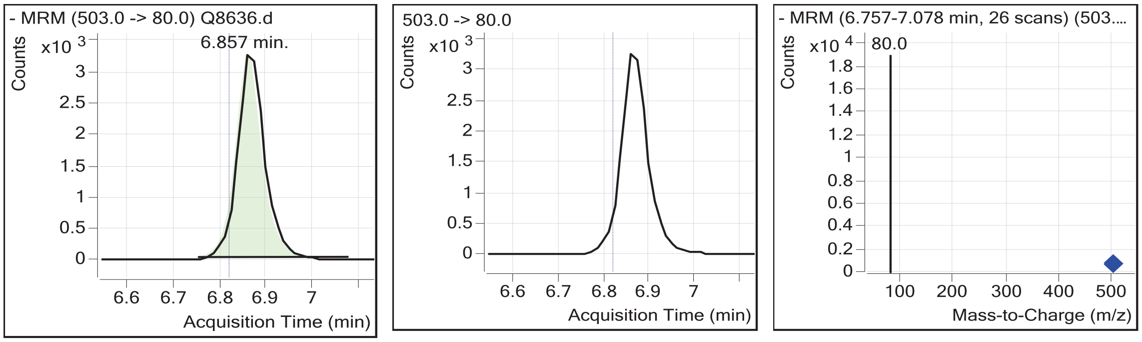


7.5.3

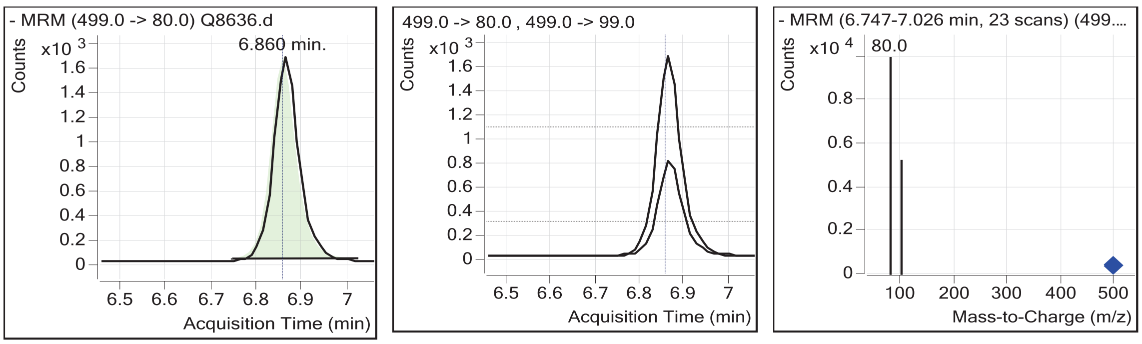
7

Perfluorinated Compounds by LC/MS/MS.

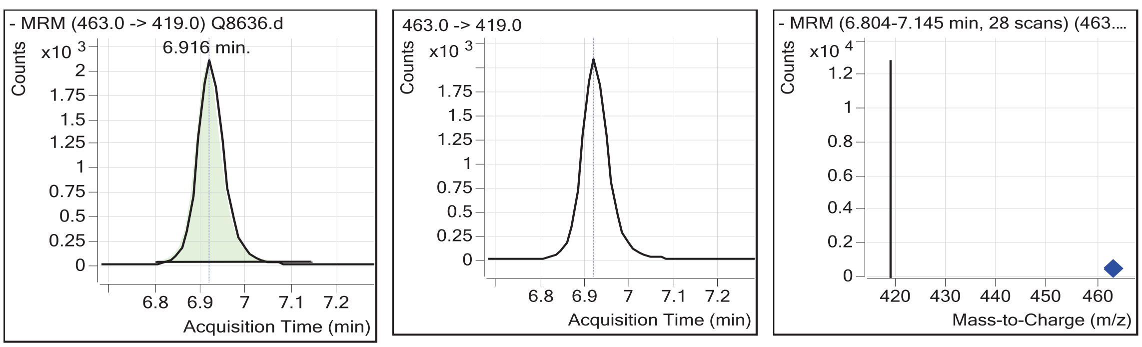
13C4-PFOS



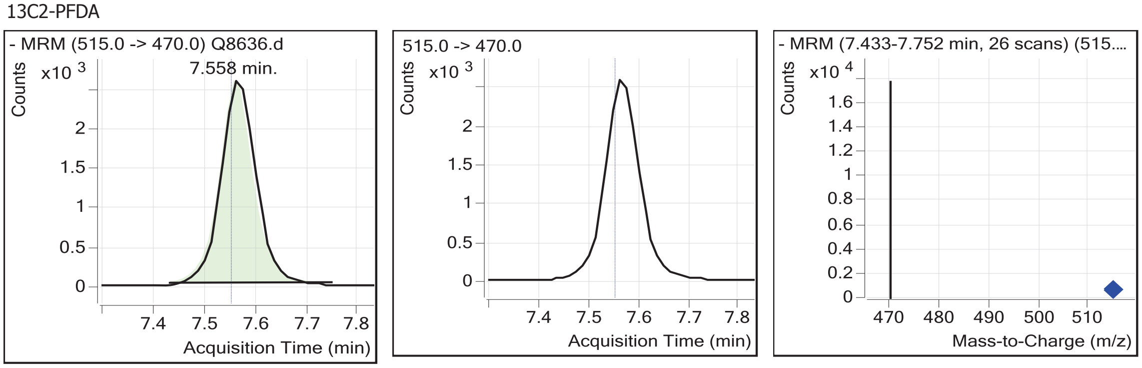
PFOS



PFNA

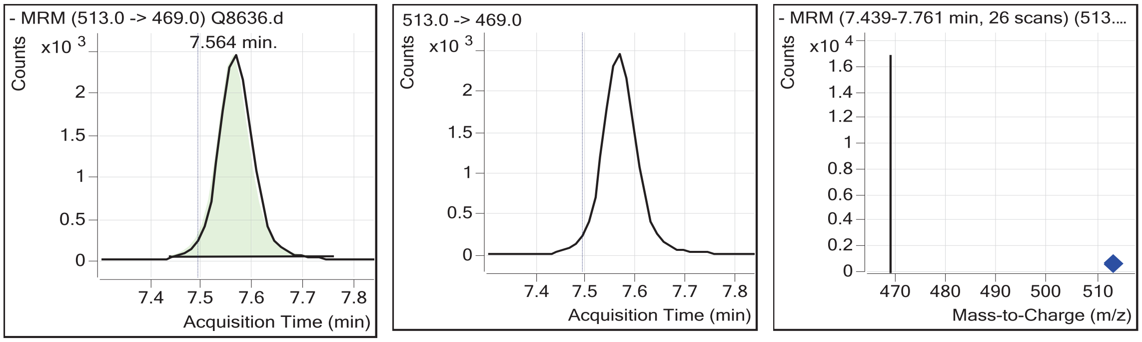


13C2-PFDA

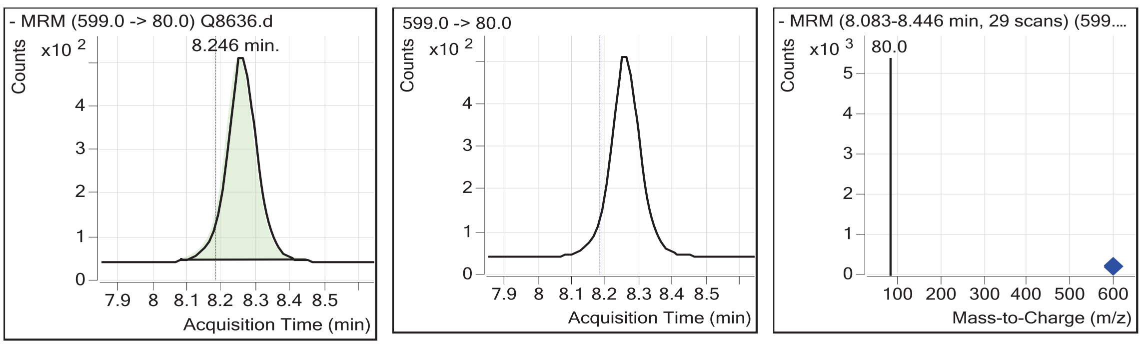


Perfluorinated Compounds by LC/MS/MS.

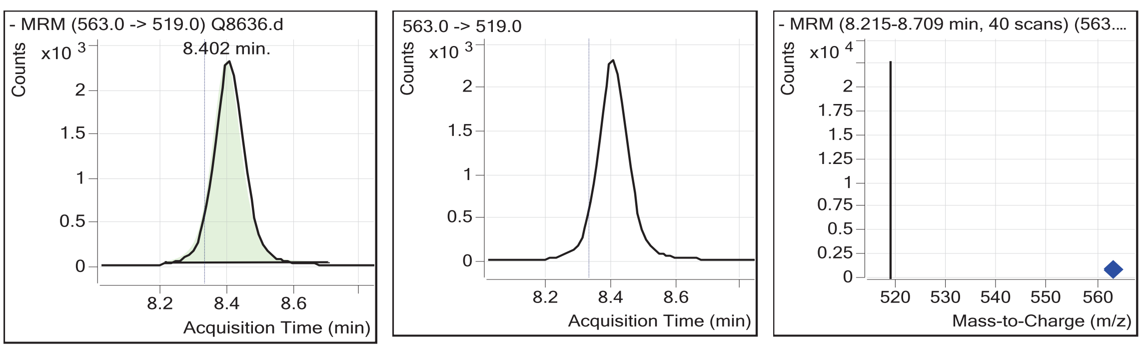
PFDA



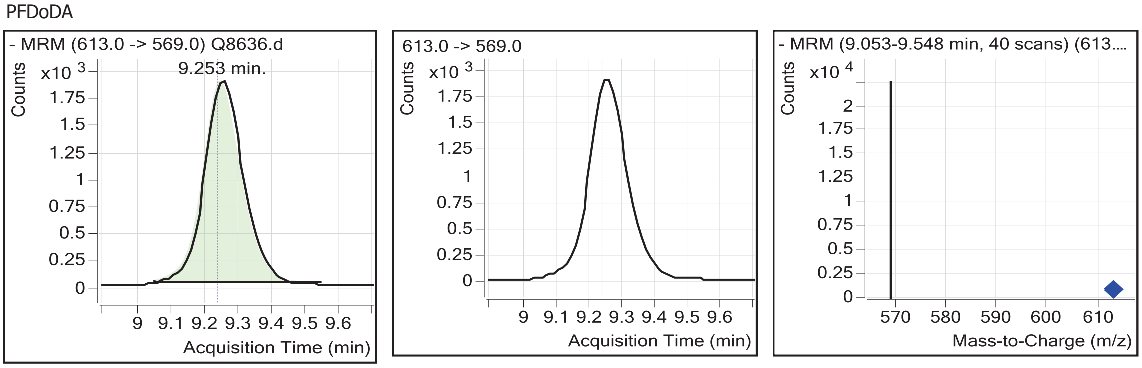
PFDS



PFUnDA

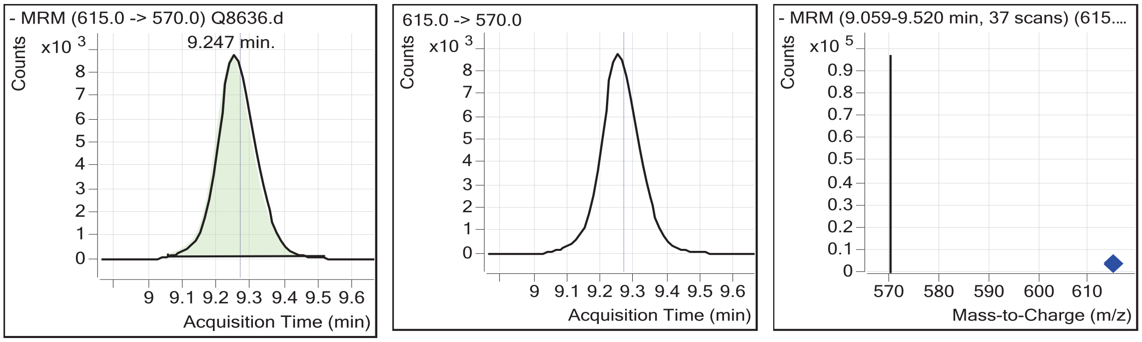


PFDoDA

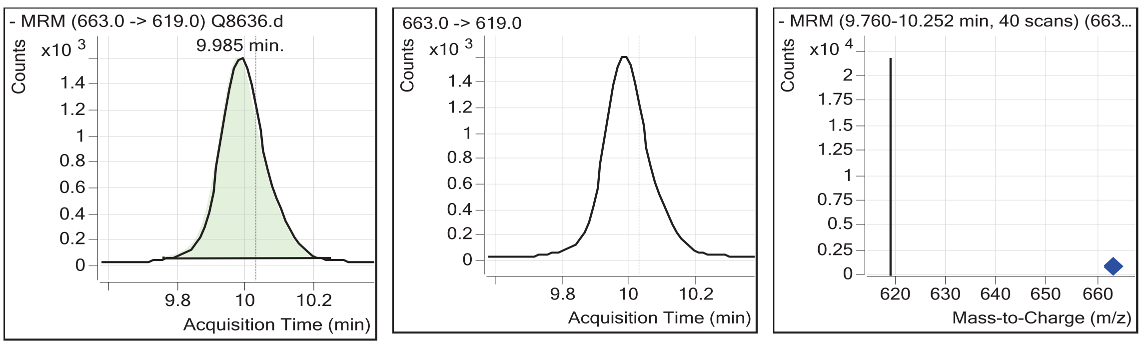


Perfluorinated Compounds by LC/MS/MS.

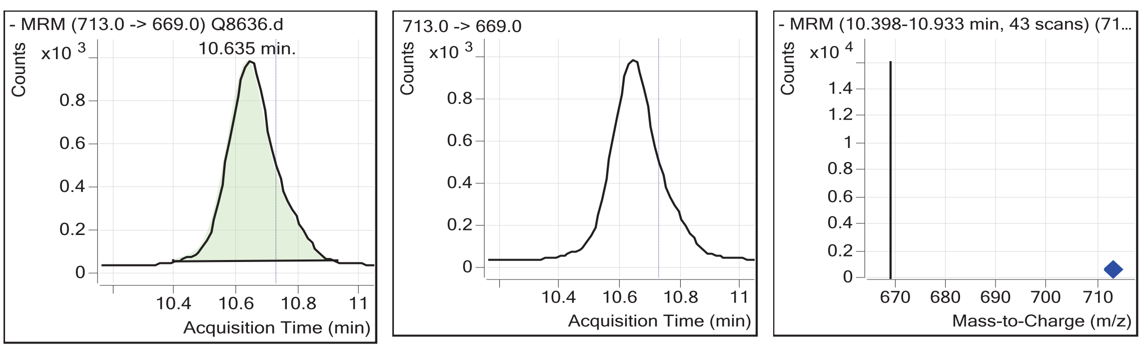
13C2-PFDoDA



PFTrDA



PFTeDA



7.5.3

7

Perfluorinated Compounds by LC/MS/MS.

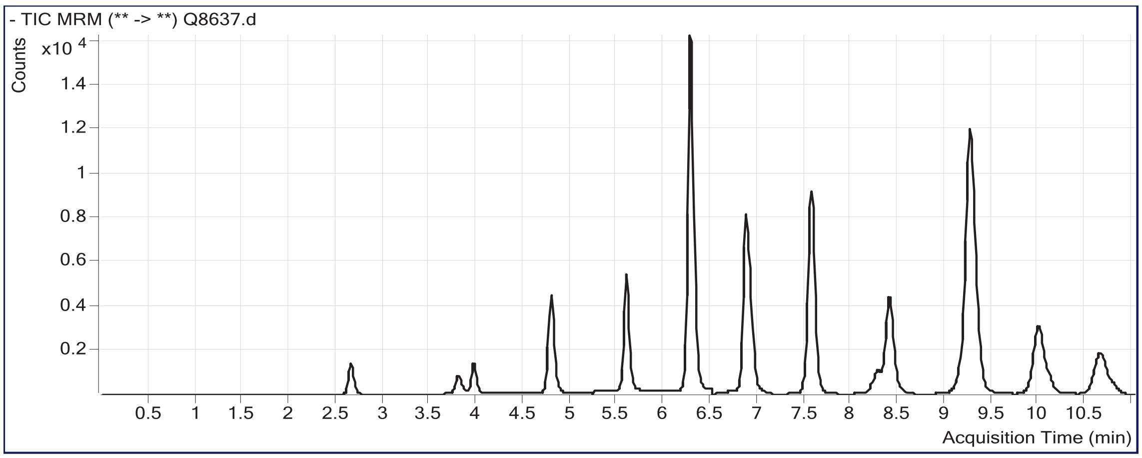
Data File	:	Q8637.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:34
Sample Name	:	ICC280-20
Vial	:	Vial 5
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.284	415.0 -> 370.0	25663	20.000	µg/L	0.038
13C4-PFOS	6.857	503.0 -> 80.0	11700	20.000	µg/L	0.038
13C2-PFDoDA	9.247	615.0 -> 570.0	66167	20.000	µg/L	-0.025
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	8892	21.07	µg/L	0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 105.37%			
13C2-PFDA	7.558	515.0 -> 470.0	22775	20.80	µg/L	0.050
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 104.02%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	6371	20.687	µg/L	100
PFPeA	3.811	263.0 -> 219.0	3170	20.597	µg/L	100
PFBS	3.966	299.0 -> 80.0	3642	21.071	µg/L	97
PFHxA	4.783	313.0 -> 269.0	9322	21.038	µg/L	100
PFHpA	5.585	363.0 -> 319.0	9070	21.101	µg/L	99
PFHxS	5.592	399.0 -> 80.0	5807	20.916	µg/L	87
PFHpS	6.256	449.0 -> 80.0	7296	21.039	µg/L	100
PFOA	6.286	413.0 -> 369.0	27060	20.815	µg/L	80
PFOS	6.860	499.0 -> 80.0	12347	21.100	µg/L	87
PFNA	6.916	463.0 -> 419.0	16199	20.957	µg/L	100
PFDA	7.564	513.0 -> 469.0	21766	21.678	µg/L	100
PFDS	8.246	599.0 -> 80.0	5872	20.391	µg/L	100
PFUnDA	8.402	563.0 -> 519.0	29476	20.589	µg/L	100
PFDoDA	9.253	613.0 -> 569.0	30454	20.540	µg/L	100
PFTrDA	9.985	663.0 -> 619.0	29155	20.234	µg/L	100
PFTeDA	10.635	713.0 -> 669.0	20569	20.254	µg/L	100

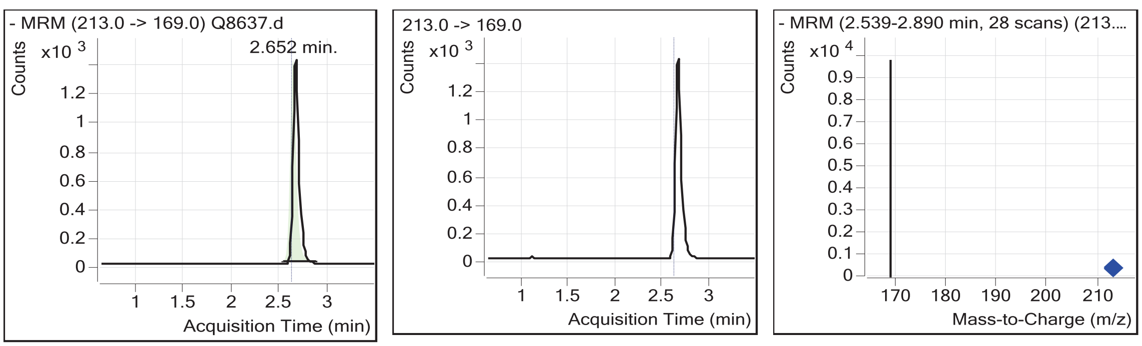
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

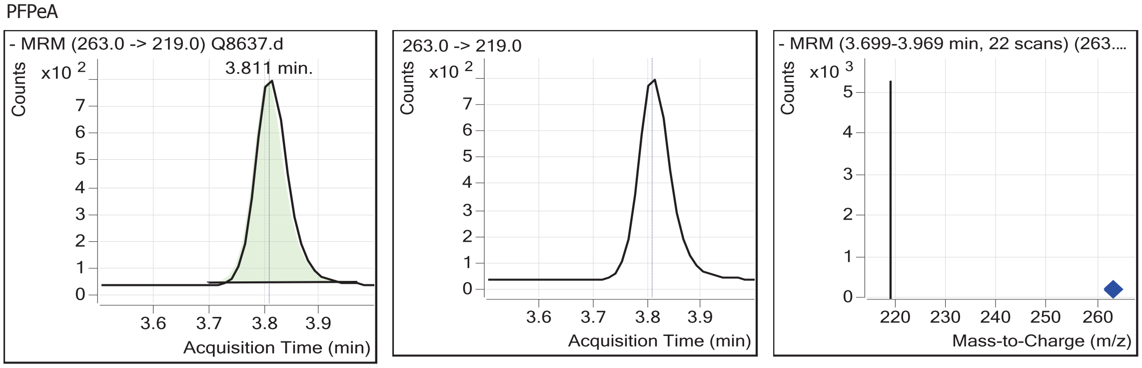
Data File	:	Q8637.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:34
Sample Name	:	ICC280-20
Vial	:	Vial 5
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



PFBA

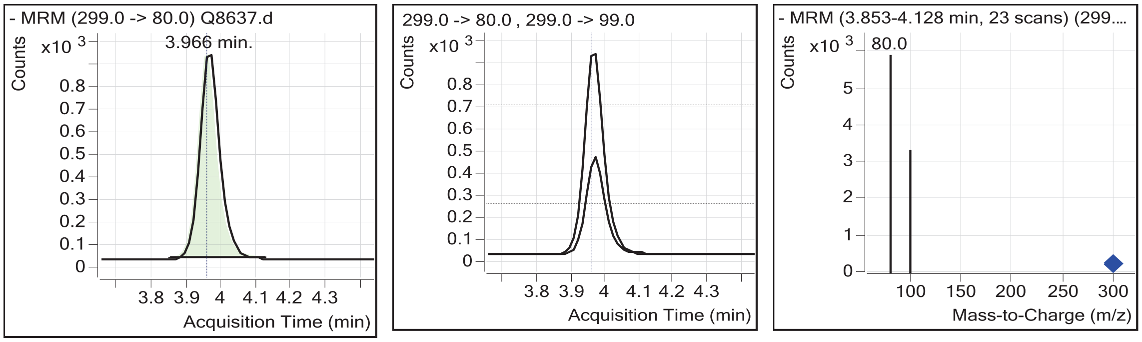


PFPeA

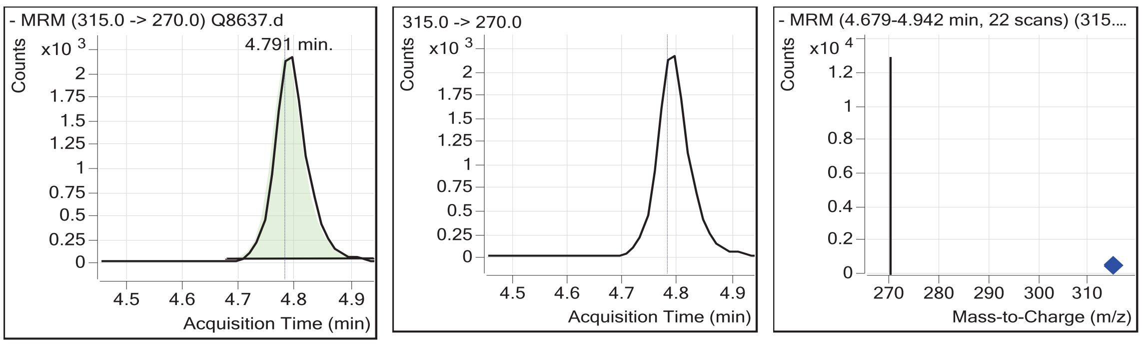


Perfluorinated Compounds by LC/MS/MS.

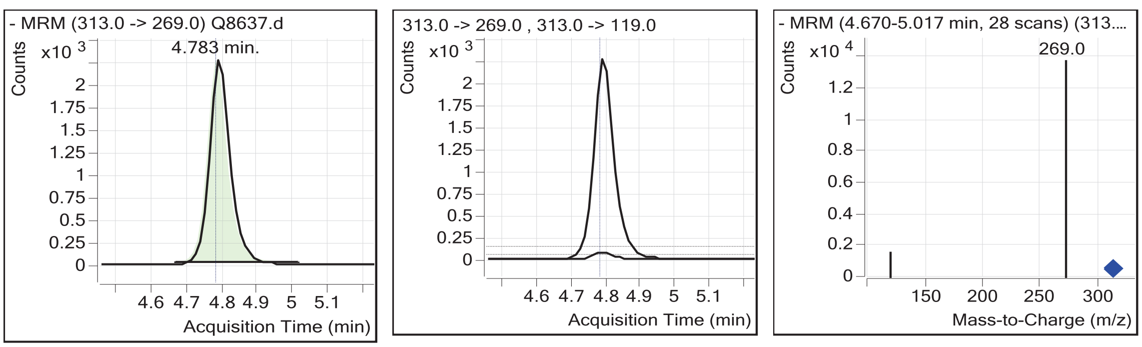
PFBS



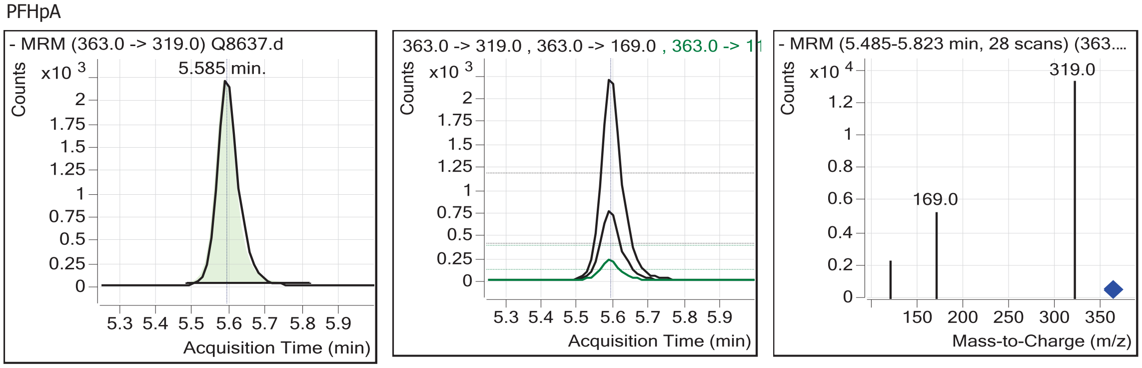
13C2-PFHxA



PFHxA

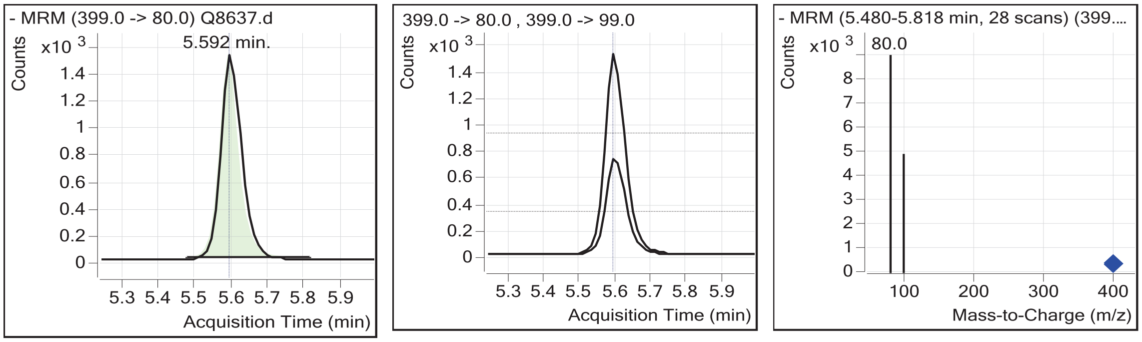


PFHpA

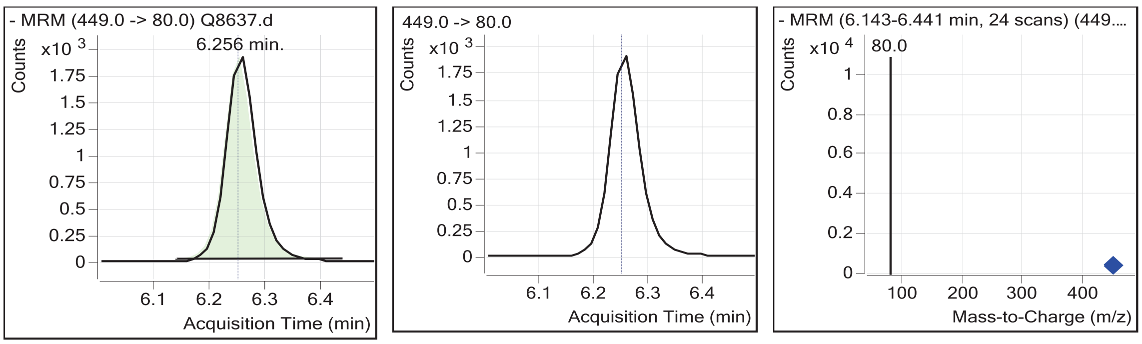


Perfluorinated Compounds by LC/MS/MS.

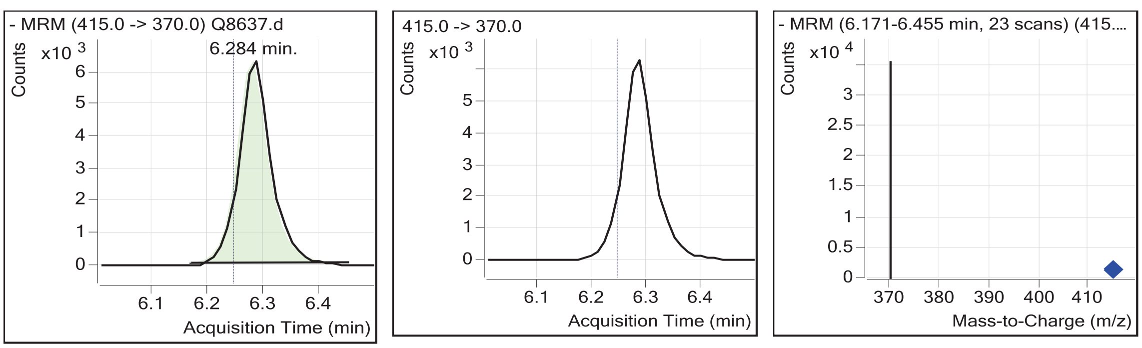
PFHxS



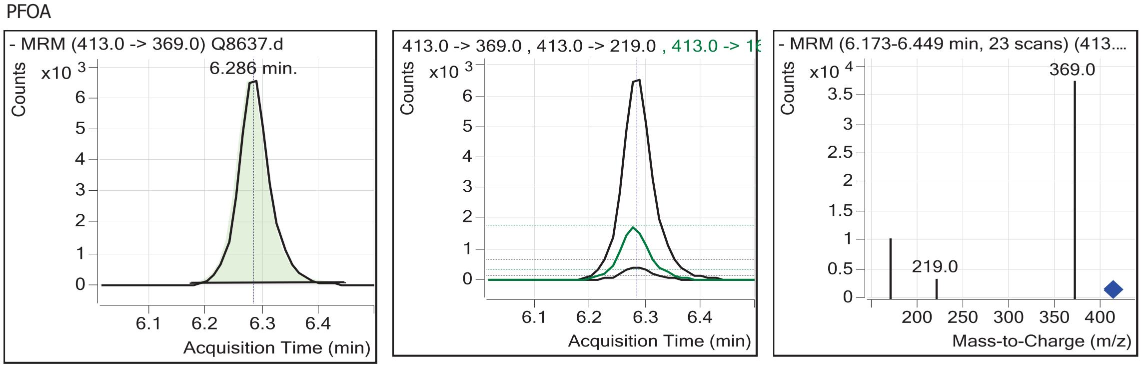
PFHpS



13C2-PFOA

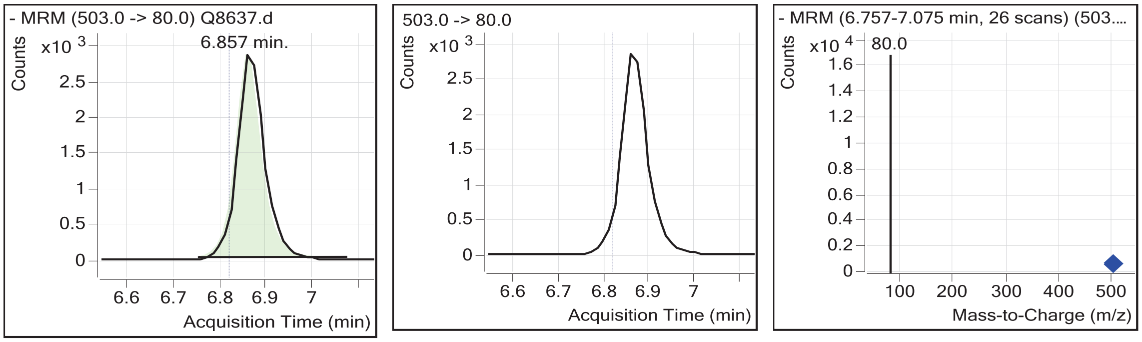


PFOA

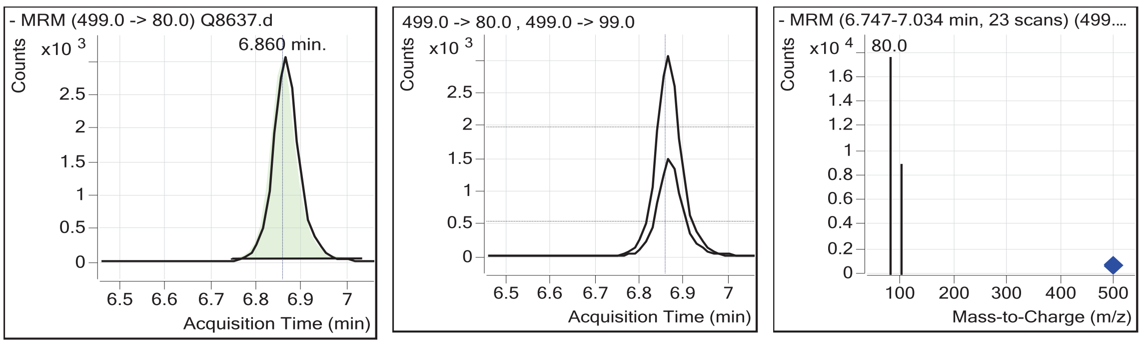


Perfluorinated Compounds by LC/MS/MS.

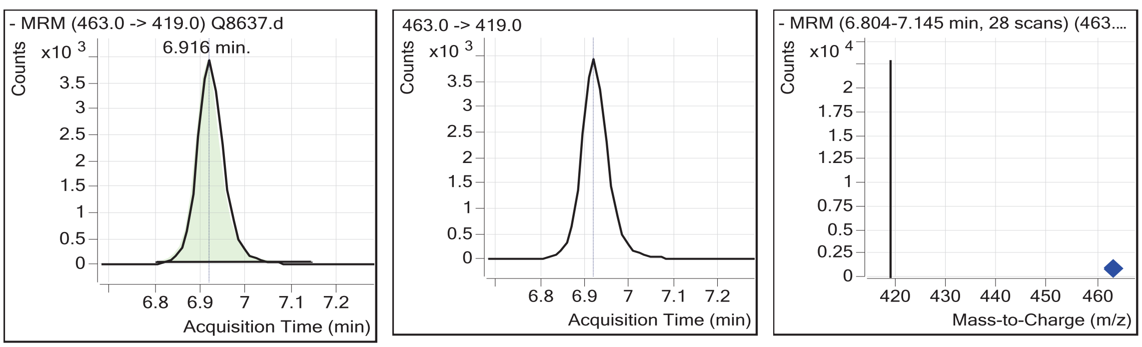
13C4-PFOS



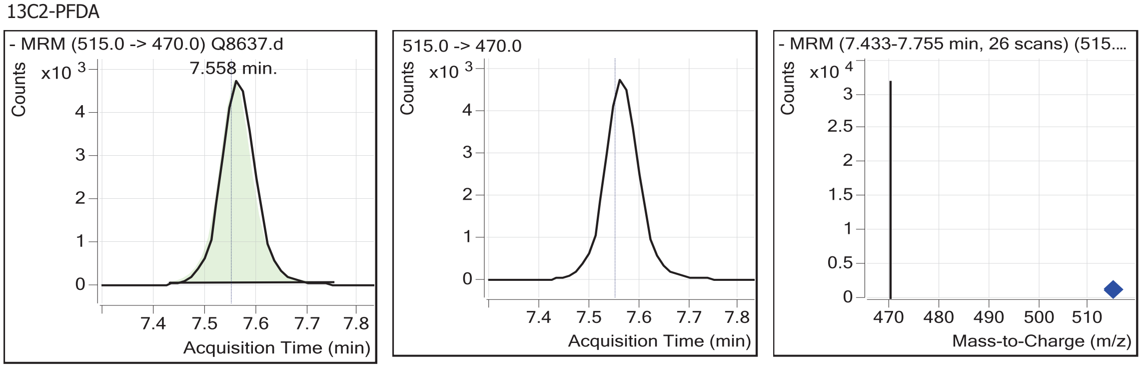
PFOS



PFNA

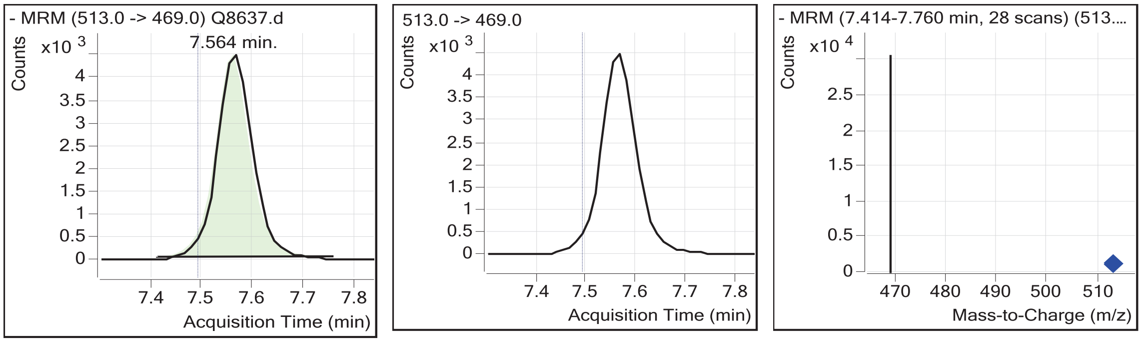


13C2-PFDA

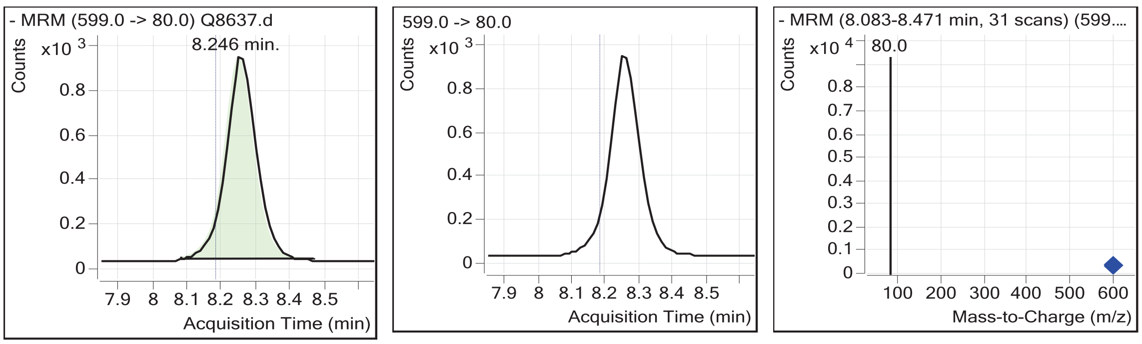


Perfluorinated Compounds by LC/MS/MS.

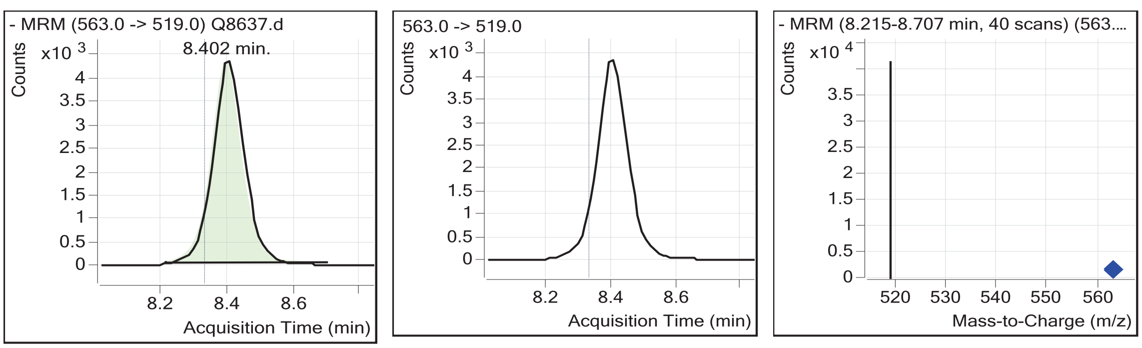
PFDA



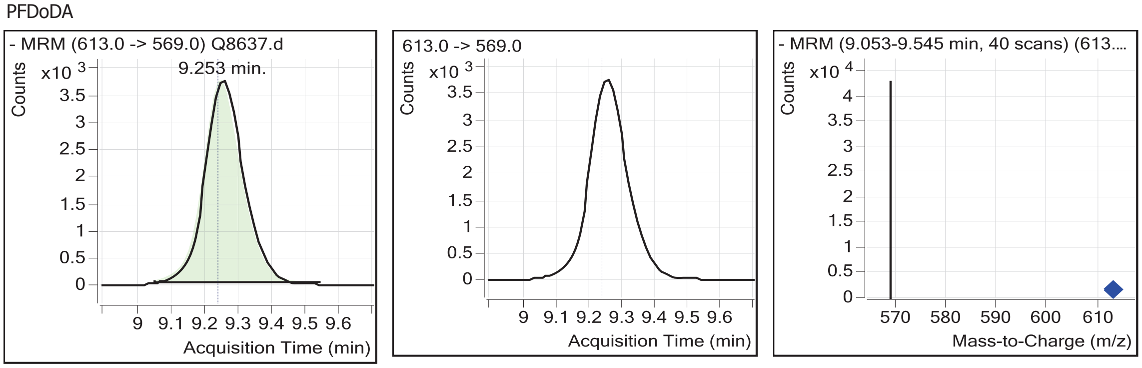
PFDS



PFUnDA

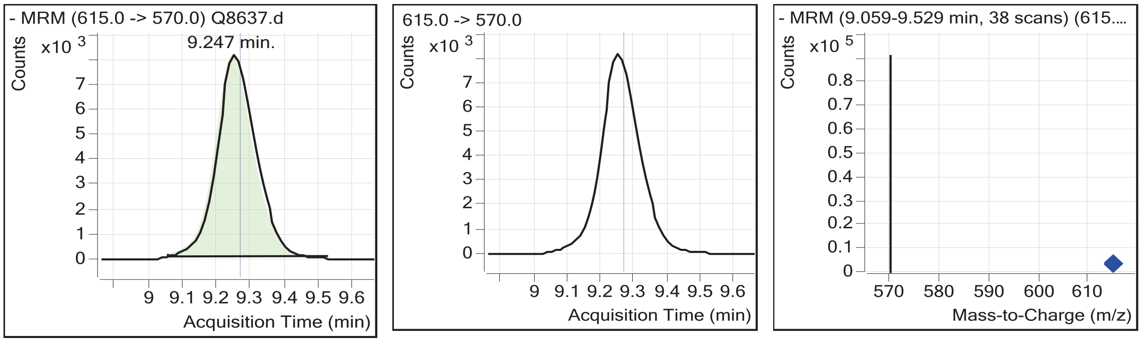


PFDoDA

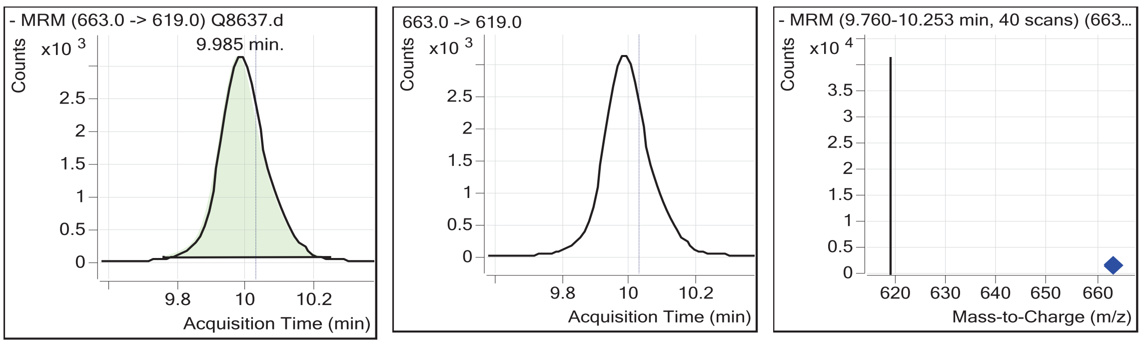


Perfluorinated Compounds by LC/MS/MS.

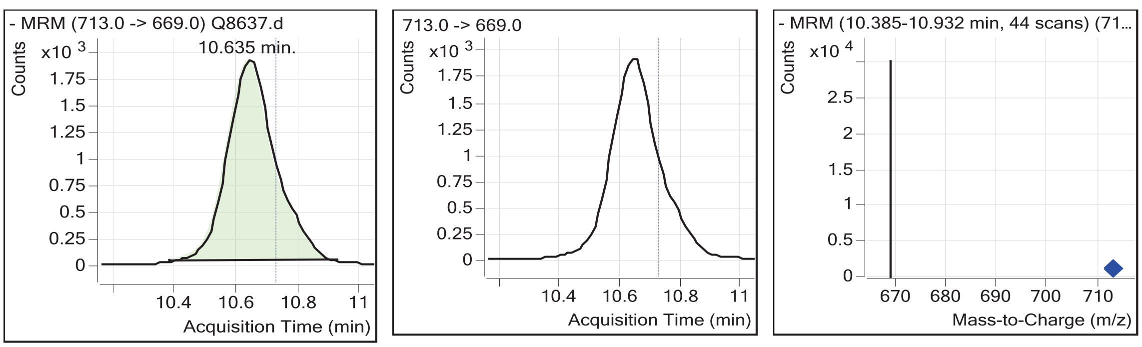
13C2-PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

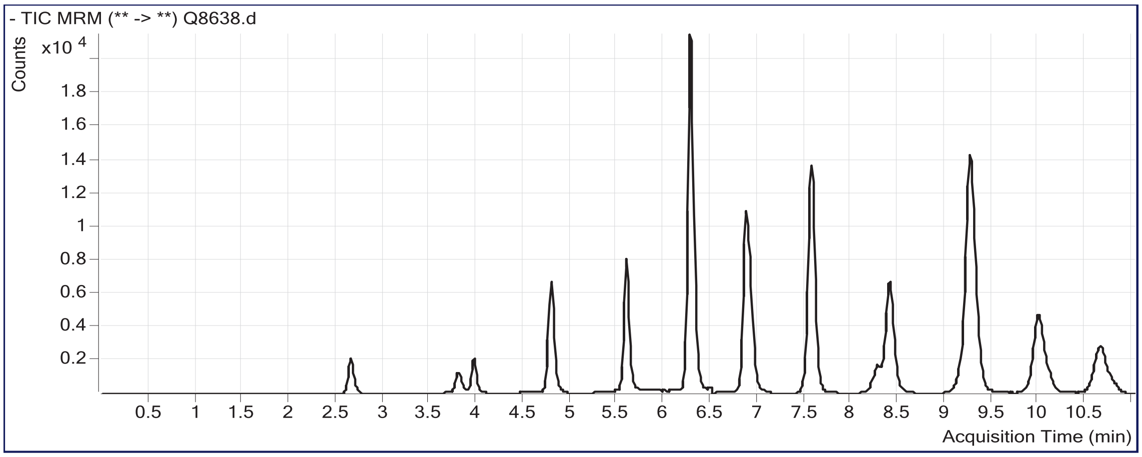
Data File	:	Q8638.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:53
Sample Name	:	IC280-30
Vial	:	Vial 6
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.284	415.0 -> 370.0	26973	20.000	µg/L	0.038
13C4-PFOS	6.857	503.0 -> 80.0	12504	20.000	µg/L	0.038
13C2-PFDoDA	9.247	615.0 -> 570.0	69164	20.000	µg/L	-0.025
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	13392	30.20	µg/L	0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 150.98%			
13C2-PFDA	7.558	515.0 -> 470.0	34137	29.67	µg/L	0.050
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 148.34%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	9654	29.826	µg/L	100
PFPeA	3.811	263.0 -> 219.0	4819	29.791	µg/L	100
PFBS	3.966	299.0 -> 80.0	5530	29.936	µg/L	97
PFHxA	4.783	313.0 -> 269.0	14010	30.083	µg/L	99
PFHpA	5.585	363.0 -> 319.0	13600	30.104	µg/L	98
PFHxS	5.592	399.0 -> 80.0	8833	29.773	µg/L	88
PFHpS	6.256	449.0 -> 80.0	11071	29.871	µg/L	100
PFOA	6.286	413.0 -> 369.0	40614	29.724	µg/L	81
PFOS	6.860	499.0 -> 80.0	18715	29.926	µg/L	89
PFNA	6.916	463.0 -> 419.0	24164	29.743	µg/L	100
PFDA	7.564	513.0 -> 469.0	32590	31.052	µg/L	100
PFDS	8.258	599.0 -> 80.0	9006	29.918	µg/L	100
PFUnDA	8.402	563.0 -> 519.0	45479	30.390	µg/L	100
PFDoDA	9.253	613.0 -> 569.0	46238	29.835	µg/L	100
PFTrDA	9.985	663.0 -> 619.0	44148	29.312	µg/L	100
PFTeDA	10.635	713.0 -> 669.0	30849	29.059	µg/L	100

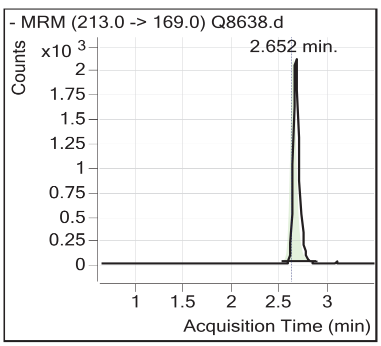
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

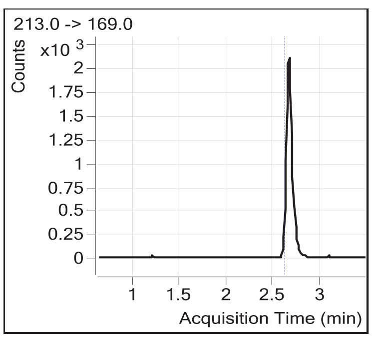
Perfluorinated Compounds by LC/MS/MS.

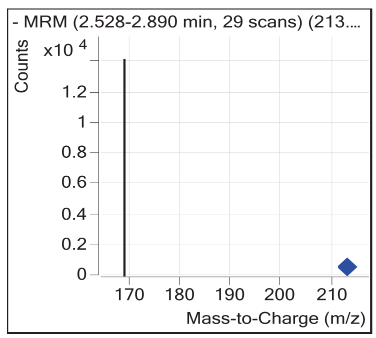
Data File	:	Q8638.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:53
Sample Name	:	IC280-30
Vial	:	Vial 6
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



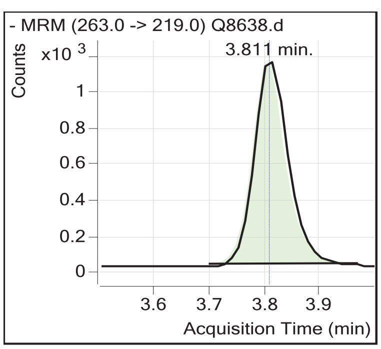
PFBA

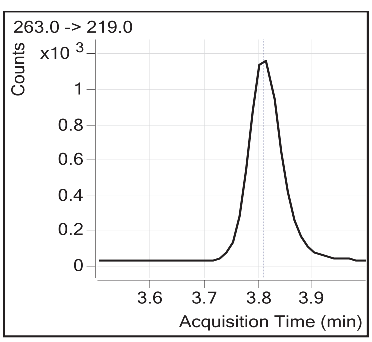


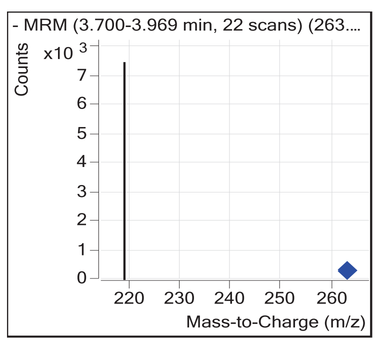




PFPeA

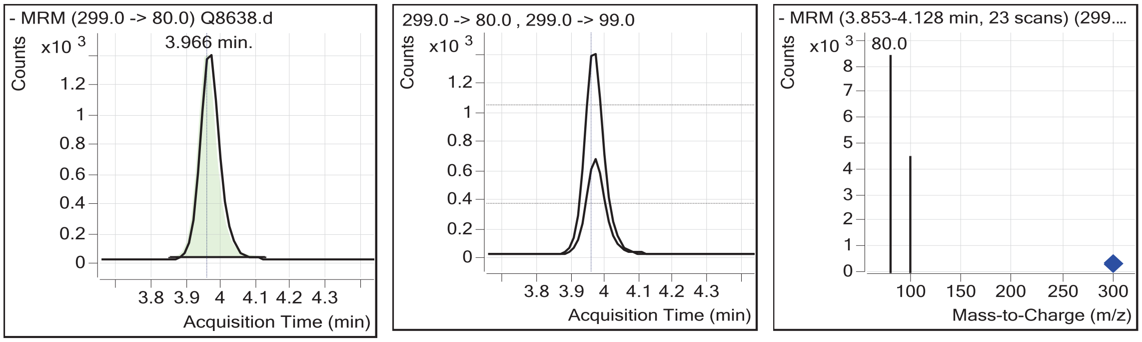




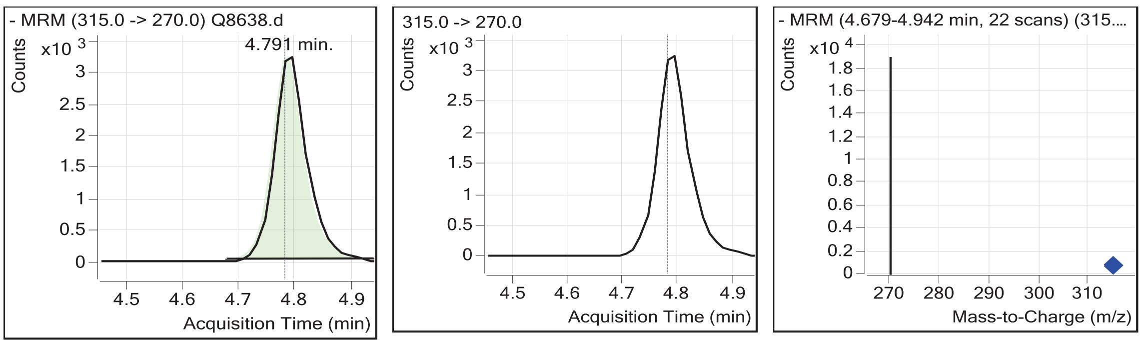


Perfluorinated Compounds by LC/MS/MS.

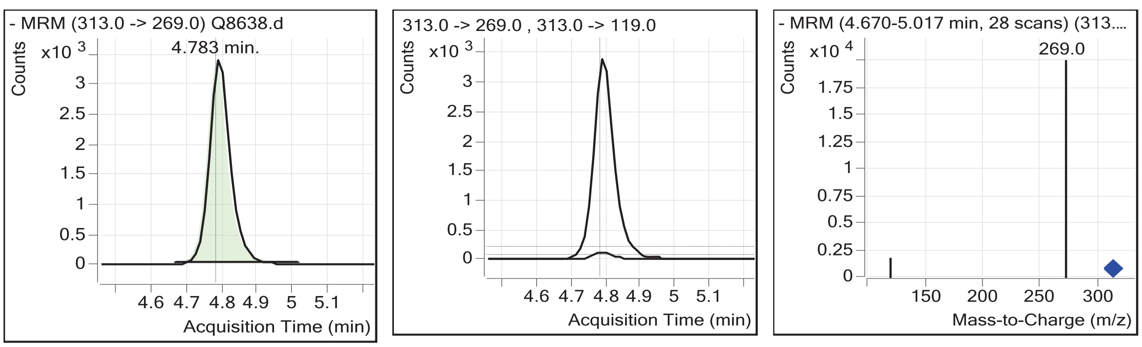
PFBS



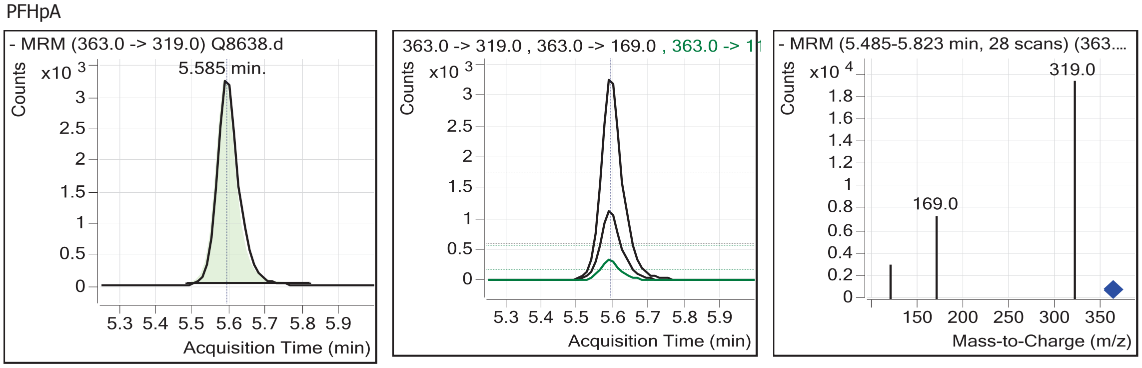
13C2-PFHxA



PFHxA

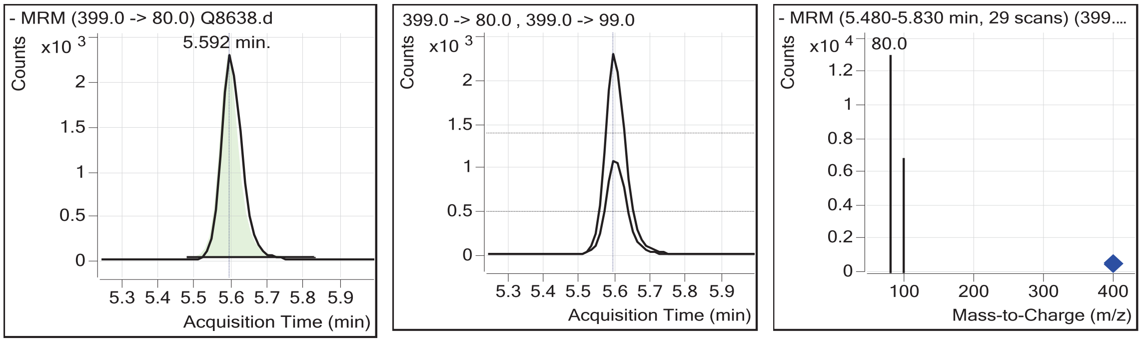


PFHpA

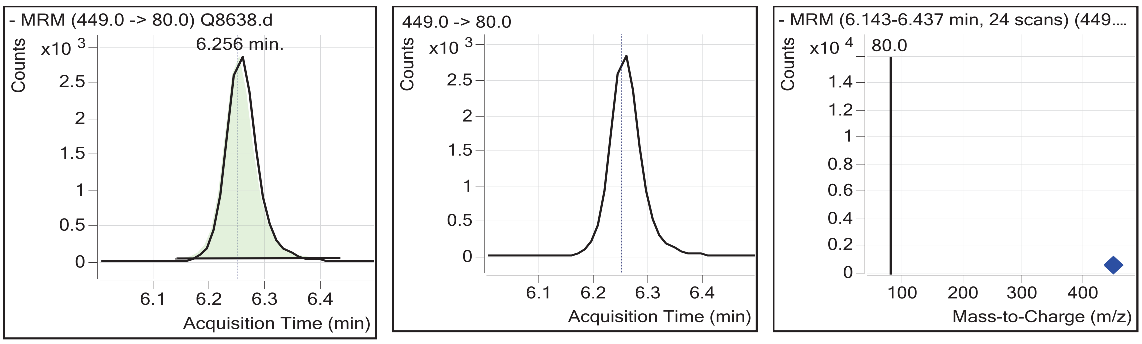


Perfluorinated Compounds by LC/MS/MS.

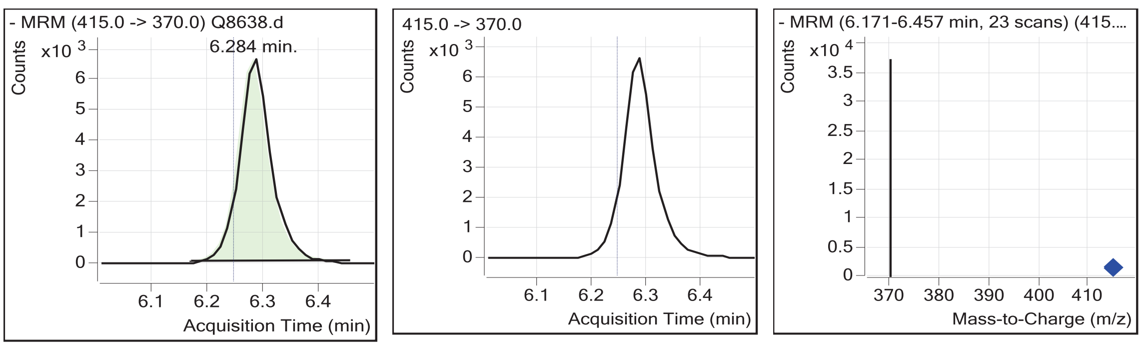
PFHxS



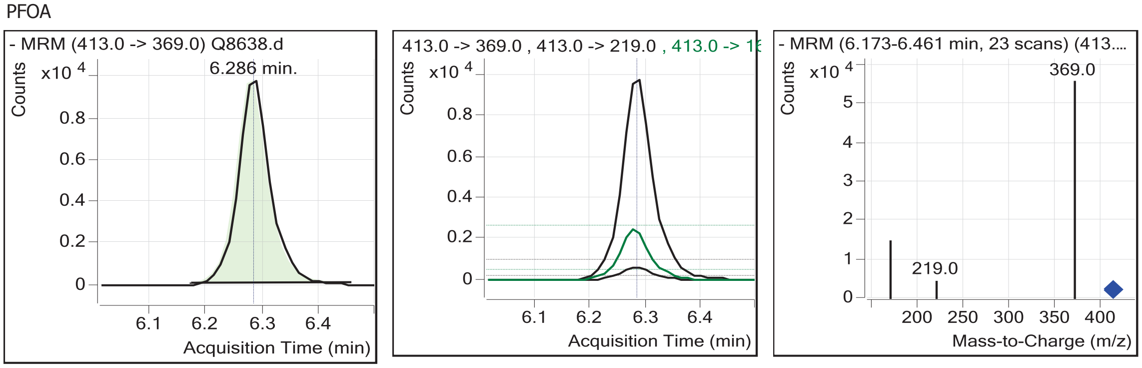
PFHpS



13C2-PFOA



PFOA

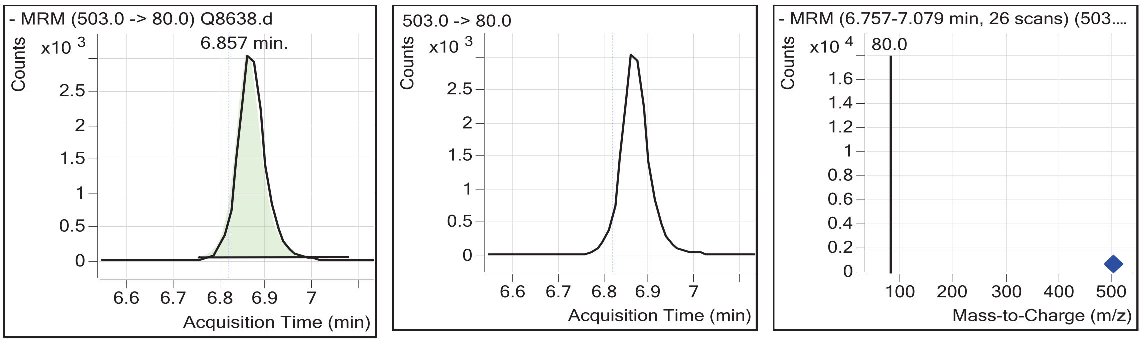


7.5.5

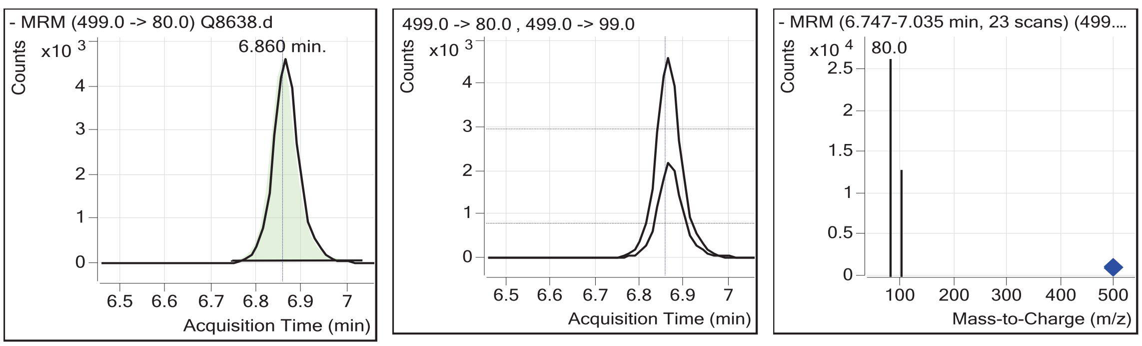
7

Perfluorinated Compounds by LC/MS/MS.

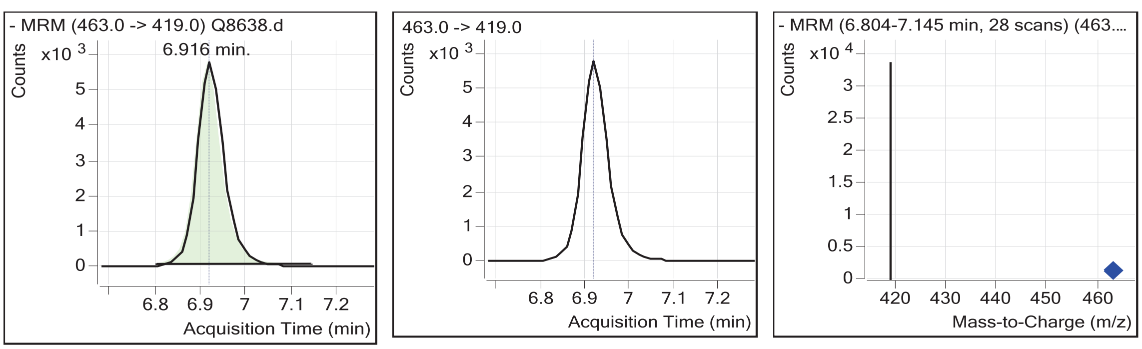
13C4-PFOS



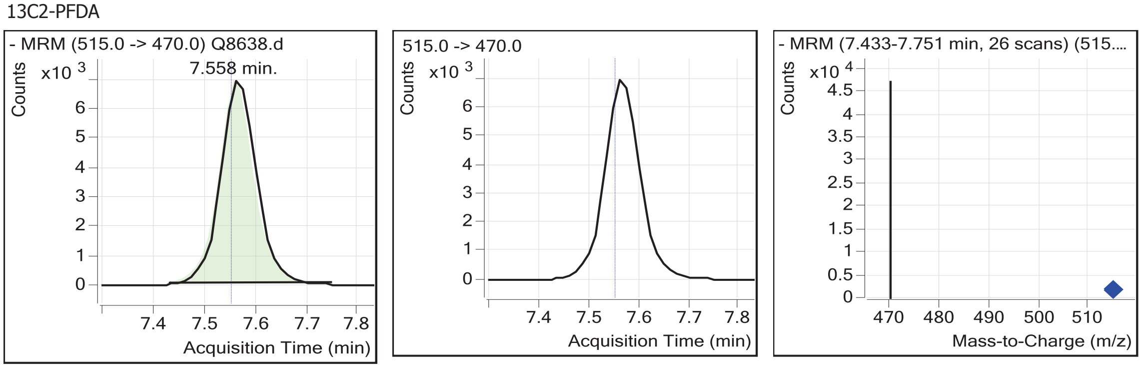
PFOS



PFNA

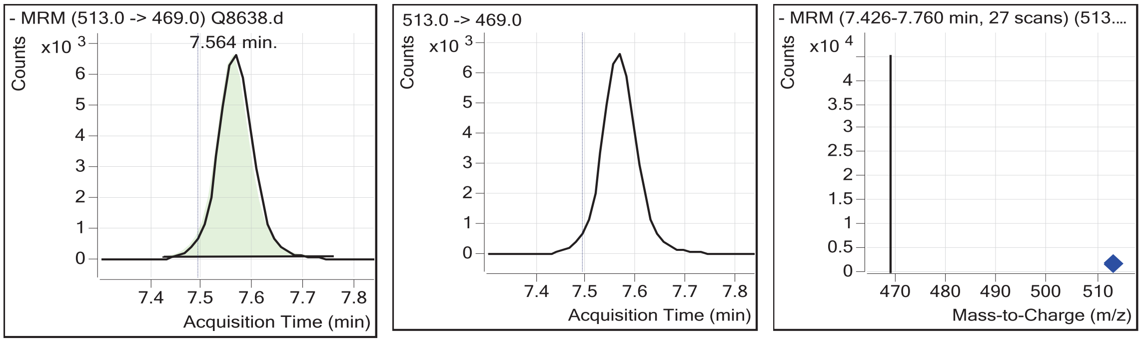


13C2-PFDA

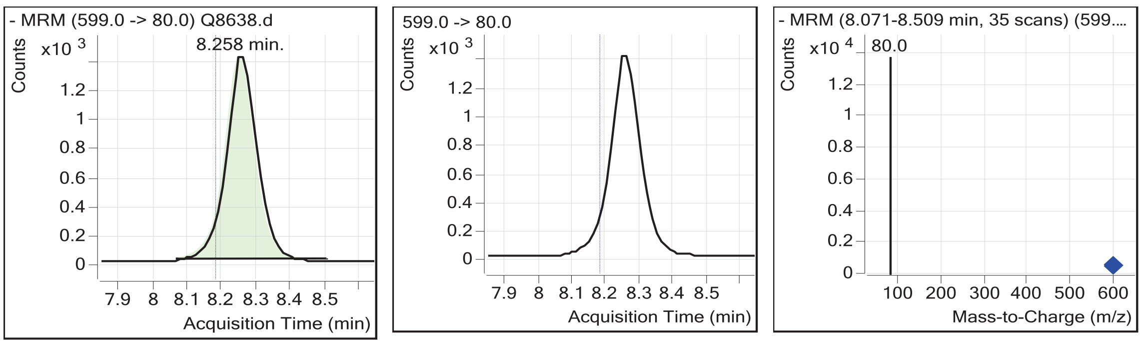


Perfluorinated Compounds by LC/MS/MS.

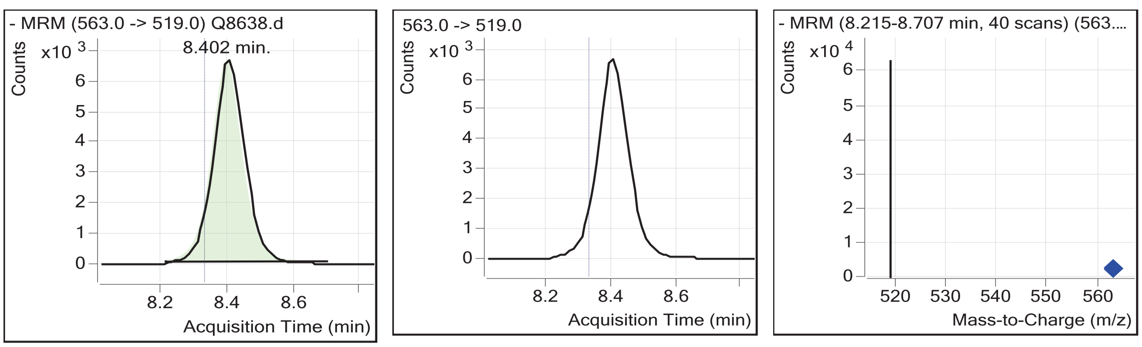
PFDA



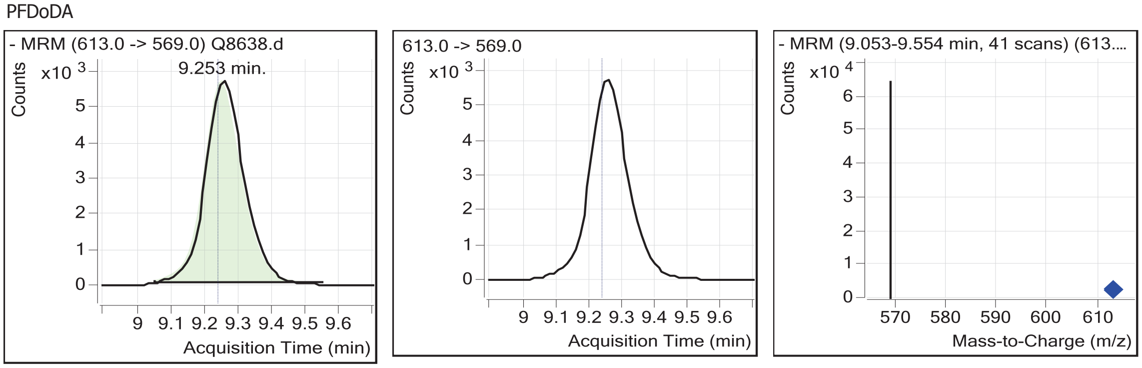
PFDS



PFUnDA

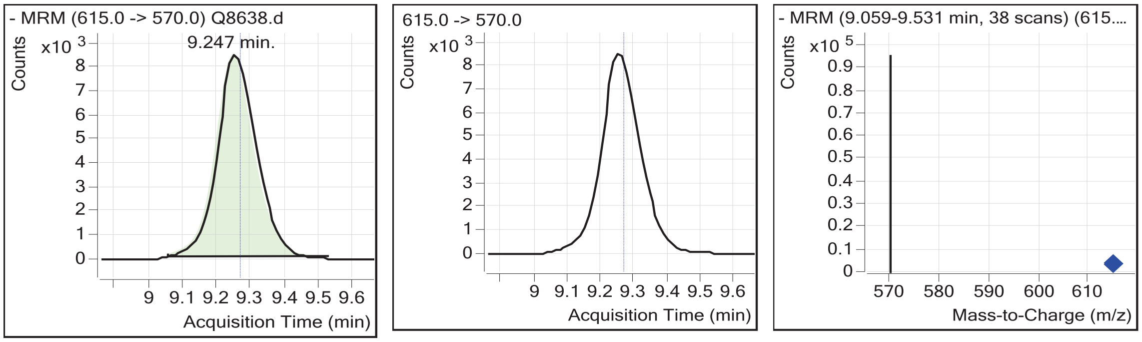


PFDoDA

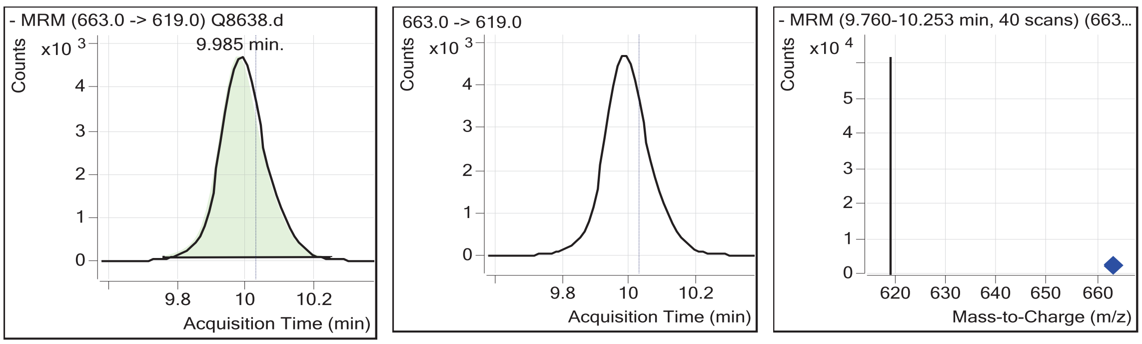


Perfluorinated Compounds by LC/MS/MS.

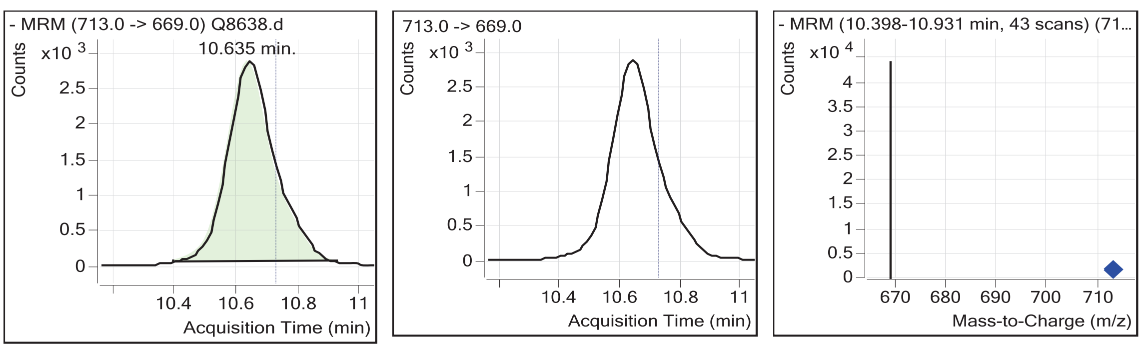
13C2-PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

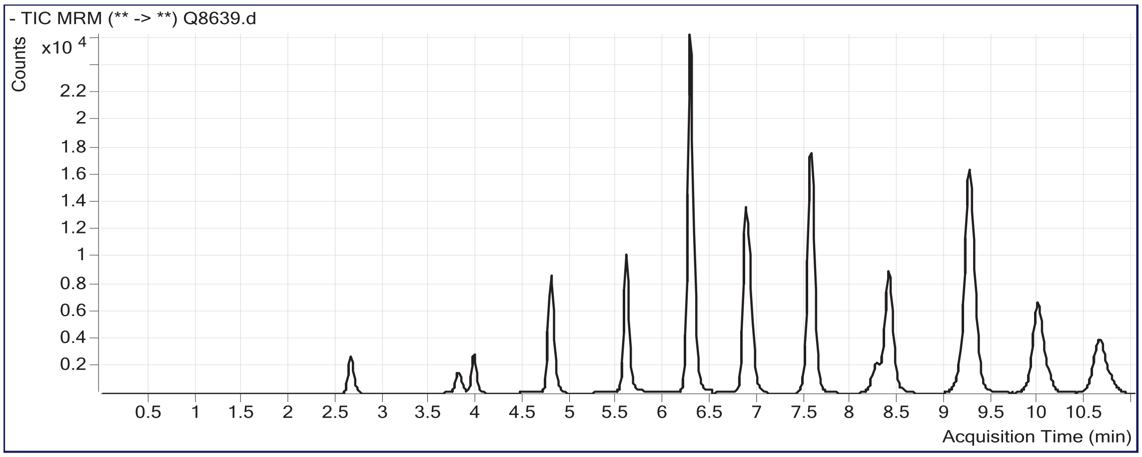
Data File	:	Q8639.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:12
Sample Name	:	IC280-40
Vial	:	Vial 7
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.284	415.0 -> 370.0	26433	20.000	µg/L	0.038
13C4-PFOS	6.857	503.0 -> 80.0	12665	20.000	µg/L	0.038
13C2-PFDoDA	9.247	615.0 -> 570.0	70333	20.000	µg/L	-0.025
System Monitoring Compounds						
13C2-PFHxA	4.779	315.0 -> 270.0	17024	39.17	µg/L	0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 195.85%			
13C2-PFDA	7.558	515.0 -> 470.0	45093	39.99	µg/L	0.050
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 199.95%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	12730	40.133	µg/L	100
PFPeA	3.811	263.0 -> 219.0	6378	40.238	µg/L	100
PFBS	3.953	299.0 -> 80.0	7537	40.280	µg/L	97
PFHxA	4.783	313.0 -> 269.0	17974	39.382	µg/L	99
PFHpA	5.585	363.0 -> 319.0	17495	39.517	µg/L	99
PFHxS	5.592	399.0 -> 80.0	11548	38.426	µg/L	88
PFHpS	6.256	449.0 -> 80.0	14725	39.223	µg/L	100
PFOA	6.274	413.0 -> 369.0	53318	39.817	µg/L	81
PFOS	6.860	499.0 -> 80.0	24911	39.327	µg/L	88
PFNA	6.916	463.0 -> 419.0	31986	40.176	µg/L	100
PFDA	7.551	513.0 -> 469.0	42943	40.236	µg/L	100
PFDS	8.246	599.0 -> 80.0	12123	39.601	µg/L	100
PFUnDA	8.390	563.0 -> 519.0	60094	39.489	µg/L	100
PFDoDA	9.240	613.0 -> 569.0	62325	39.546	µg/L	100
PFTrDA	9.972	663.0 -> 619.0	60798	39.695	µg/L	100
PFTeDA	10.635	713.0 -> 669.0	42945	39.782	µg/L	100

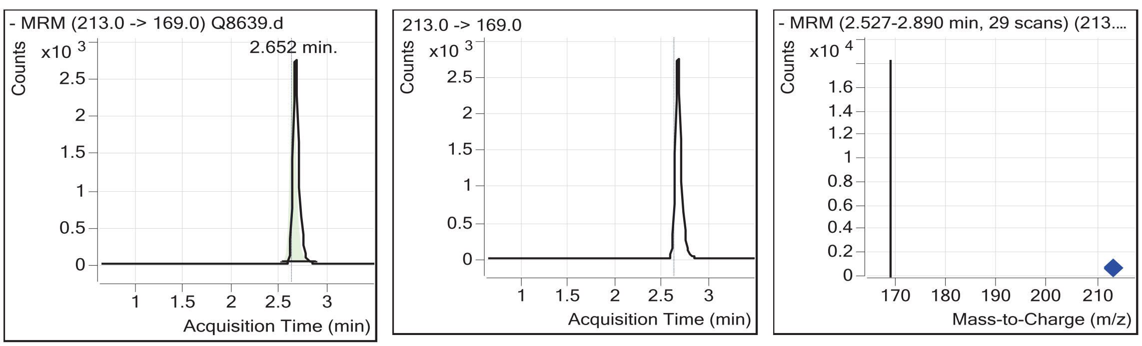
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

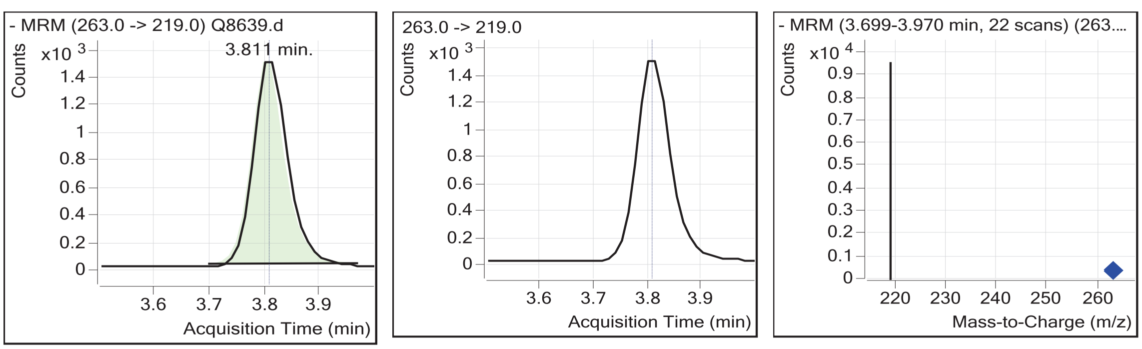
Data File	:	Q8639.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:12
Sample Name	:	IC280-40
Vial	:	Vial 7
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



PFBA

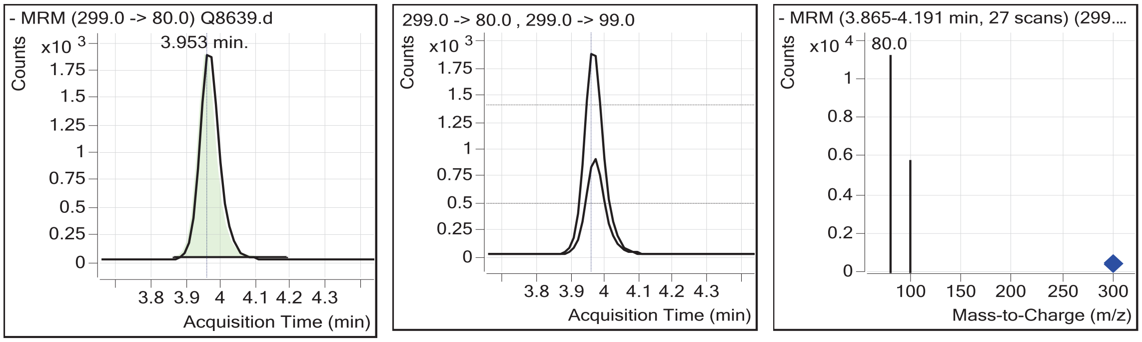


PFPeA

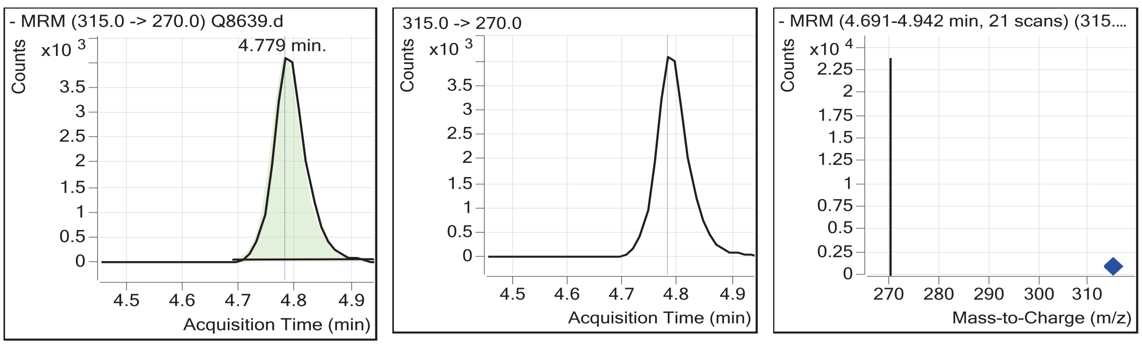


Perfluorinated Compounds by LC/MS/MS.

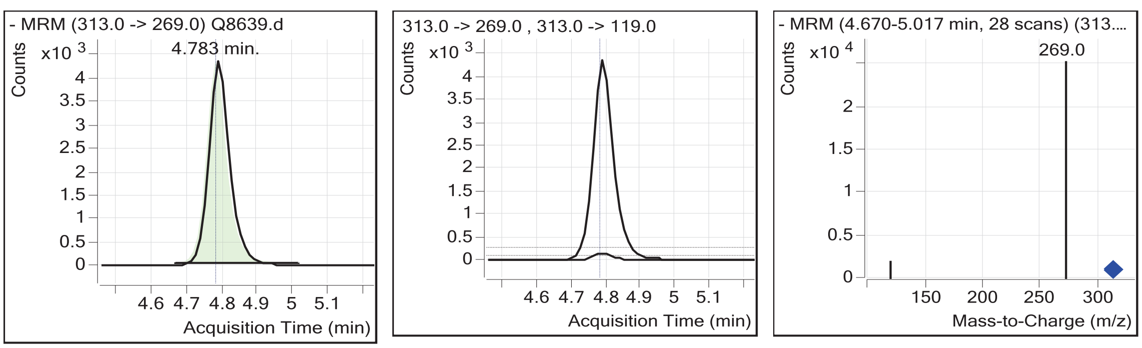
PFBS



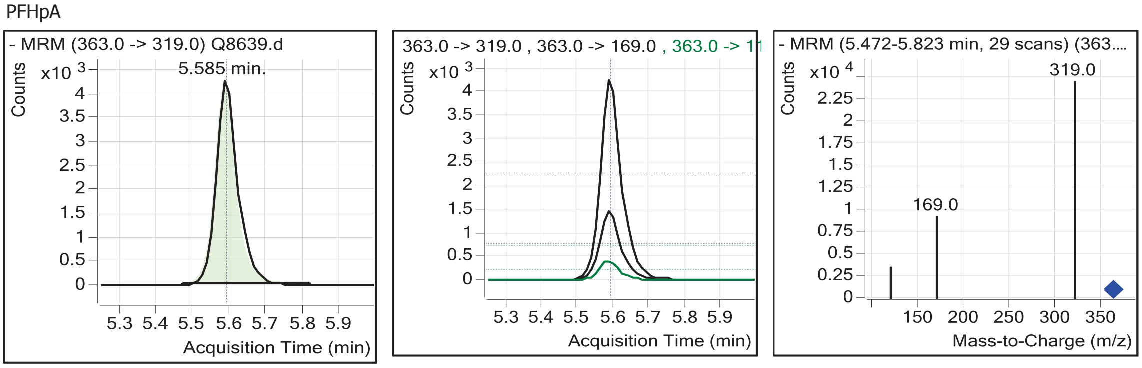
13C2-PFHxA



PFHxA

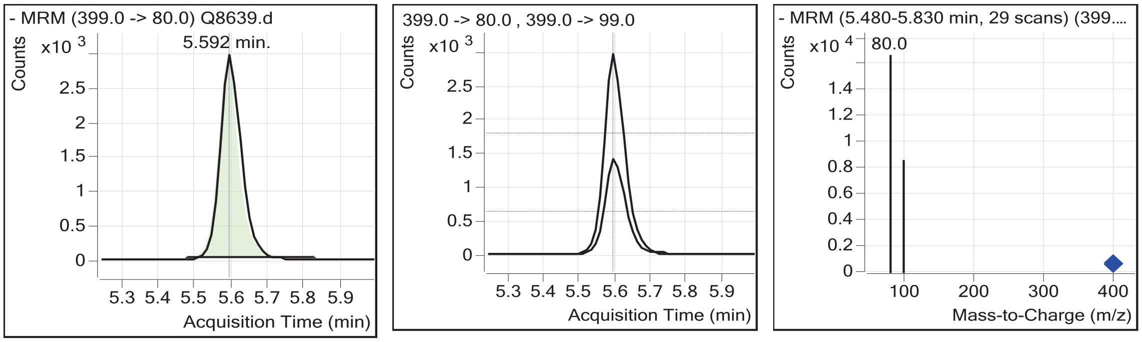


PFHpA

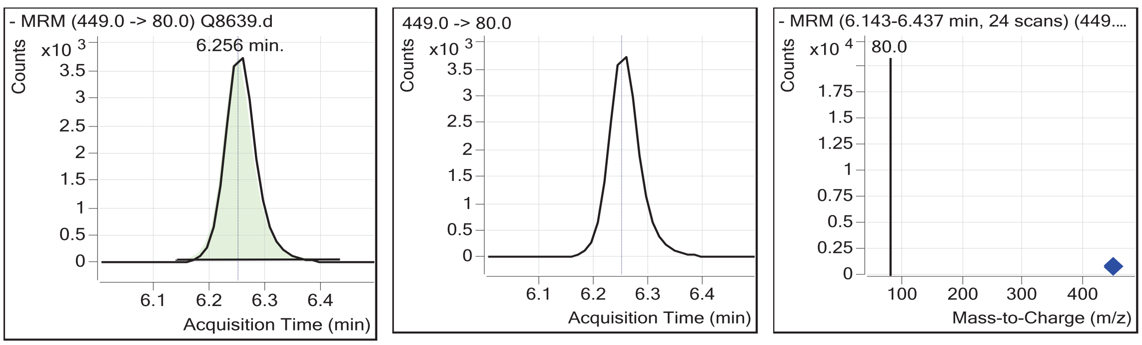


Perfluorinated Compounds by LC/MS/MS.

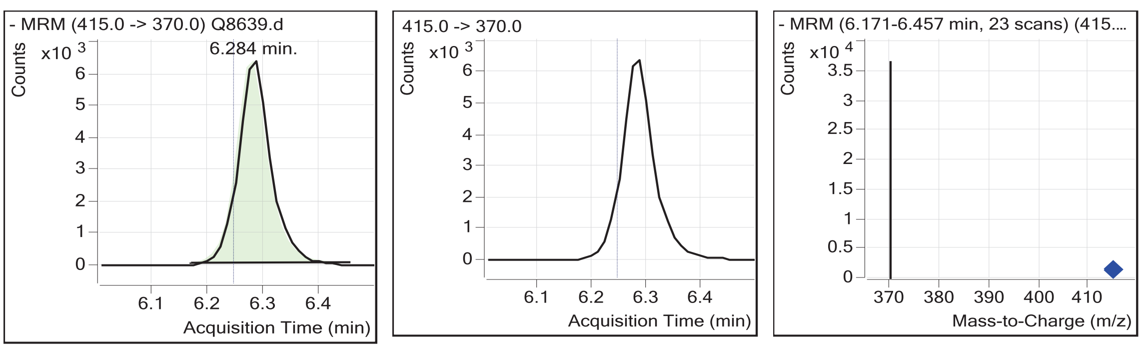
PFHxS



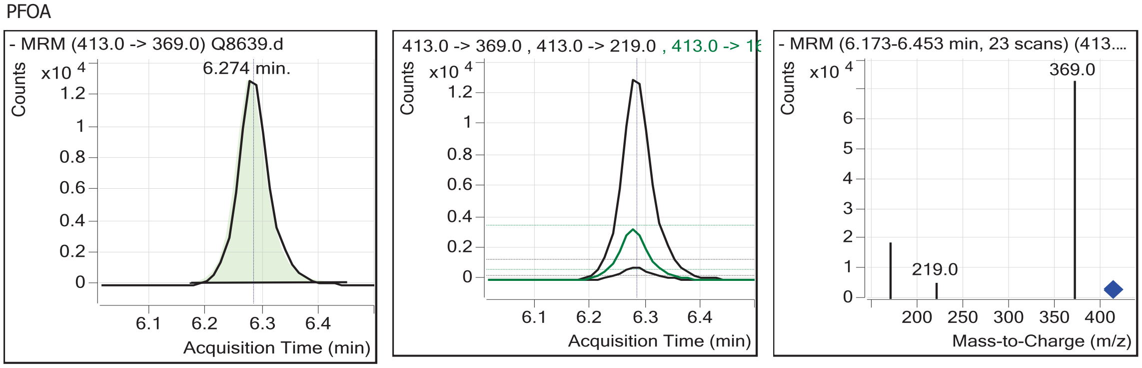
PFHpS



13C2-PFOA

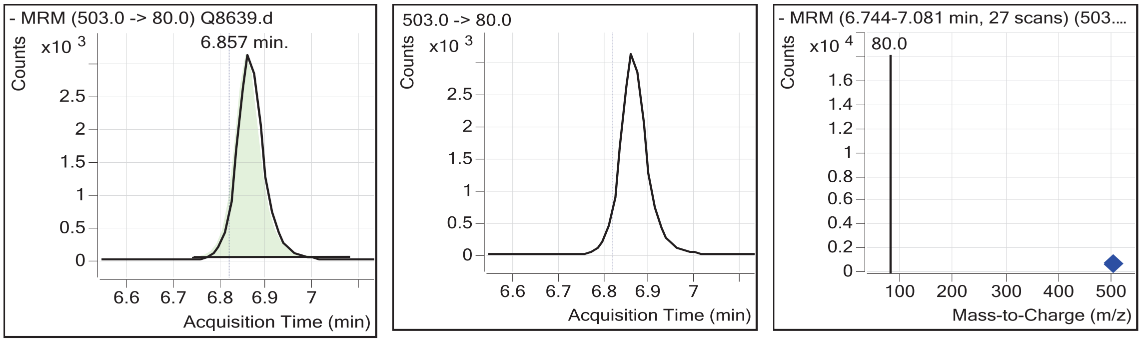


PFOA

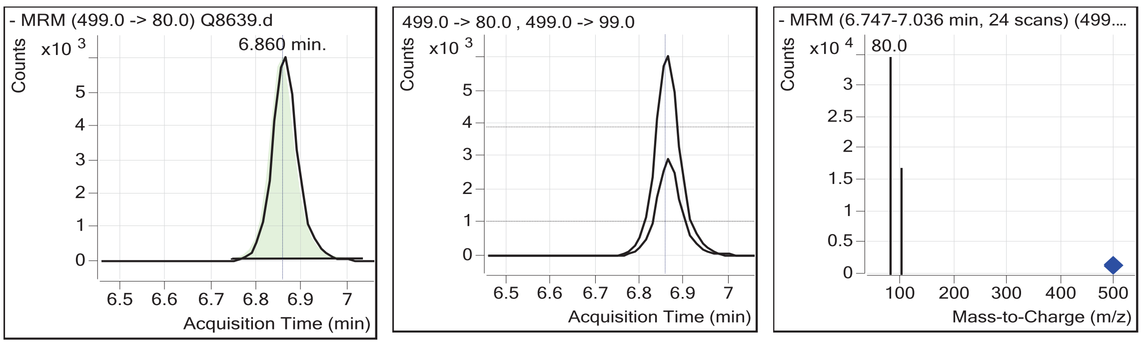


Perfluorinated Compounds by LC/MS/MS.

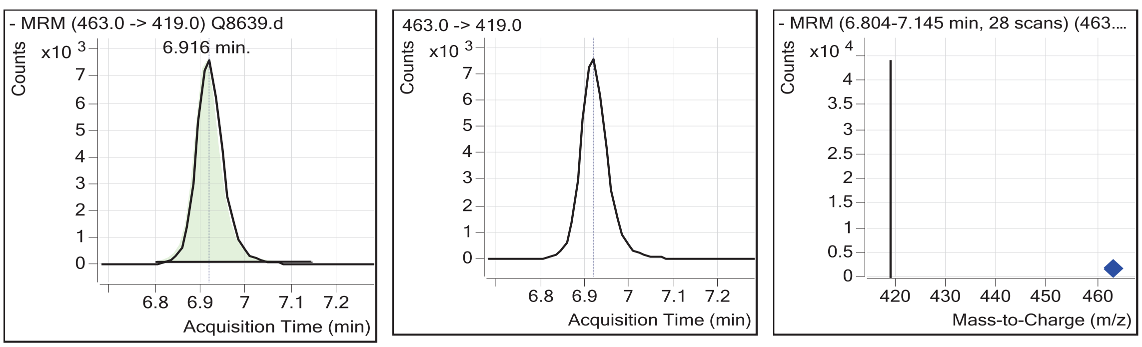
13C4-PFOS



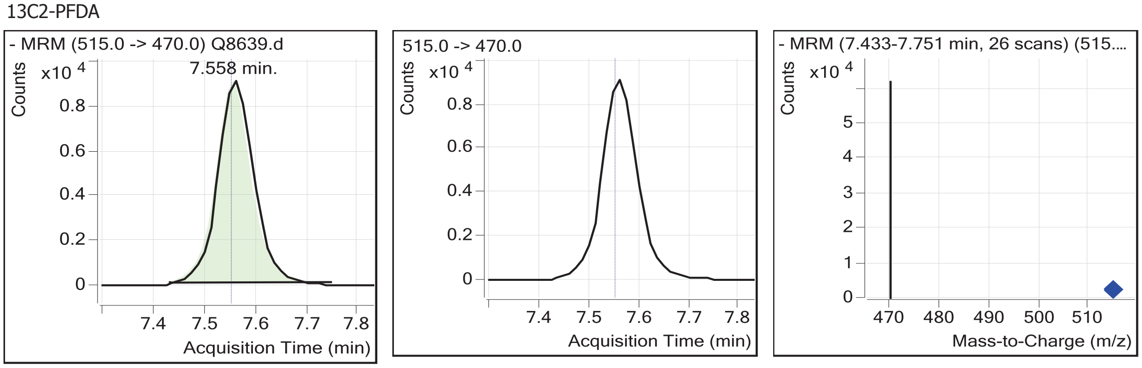
PFOS



PFNA

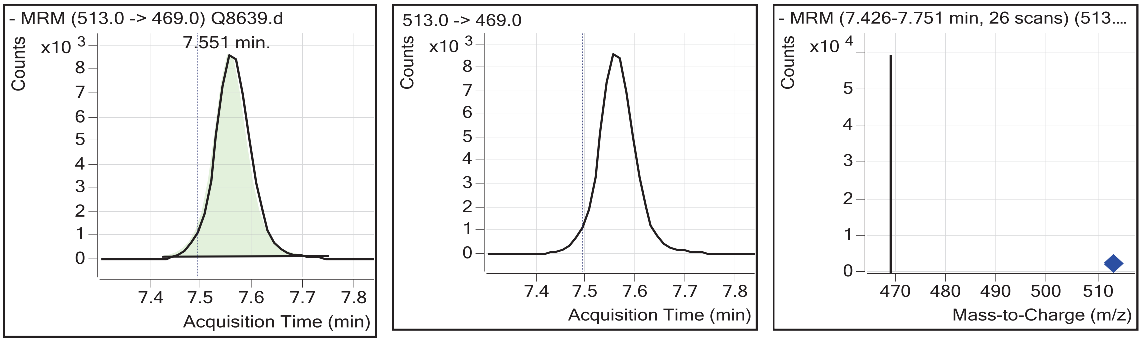


13C2-PFDA

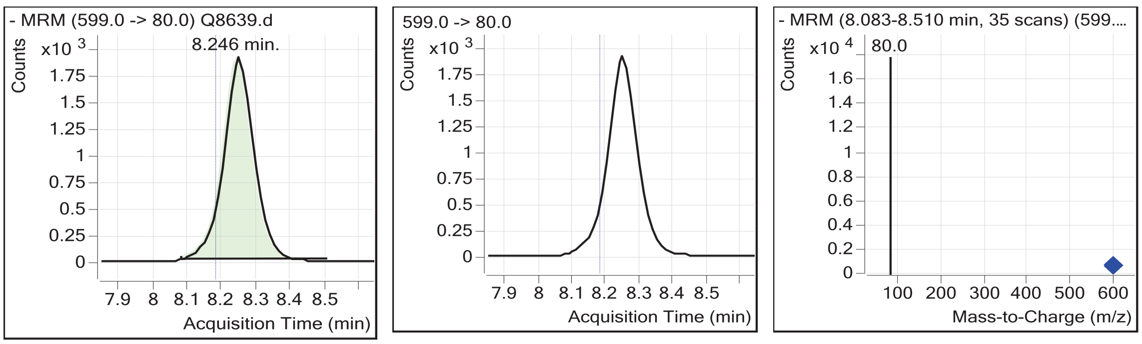


Perfluorinated Compounds by LC/MS/MS.

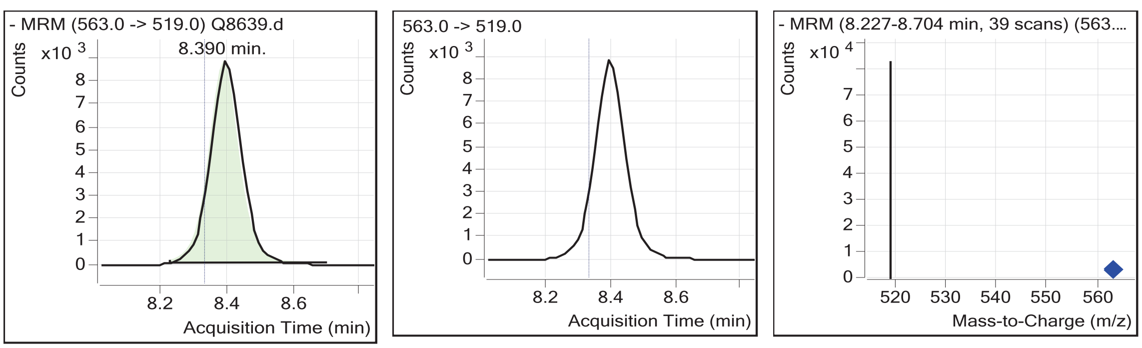
PFDA



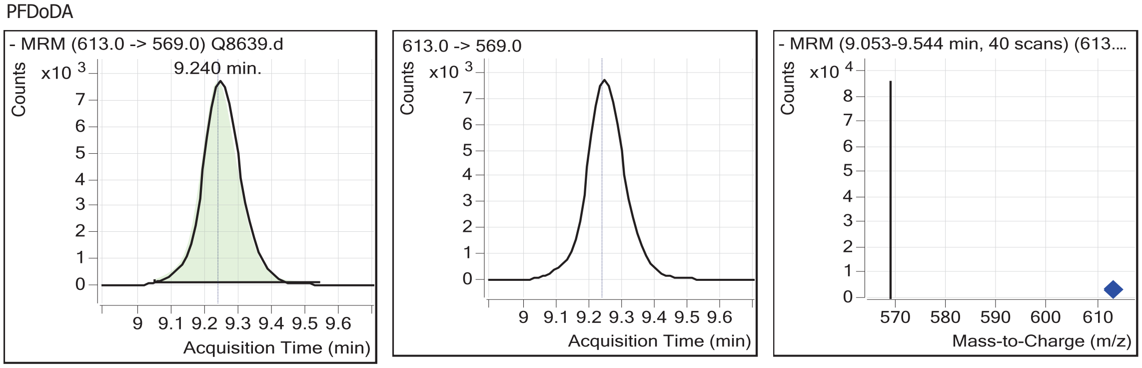
PFDS



PFUnDA



PFDoDA

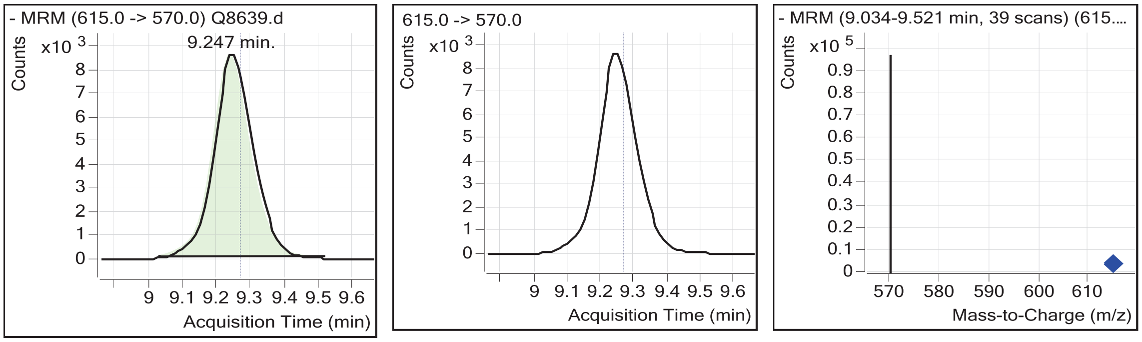


7.5.6

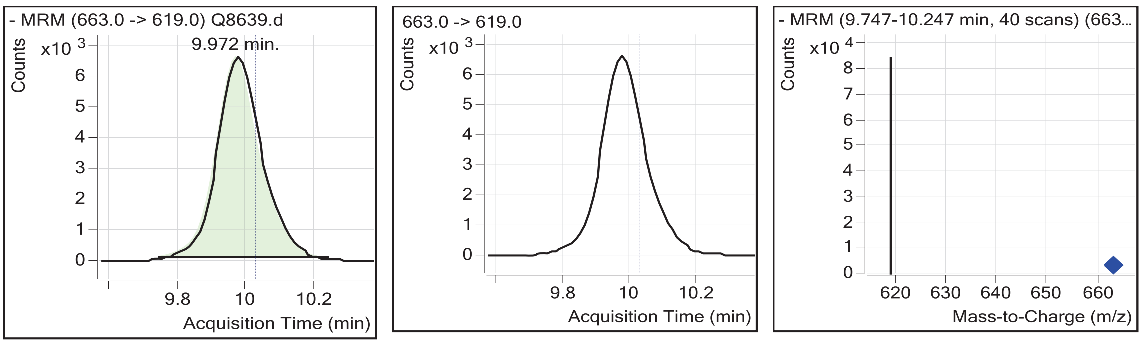
7

Perfluorinated Compounds by LC/MS/MS.

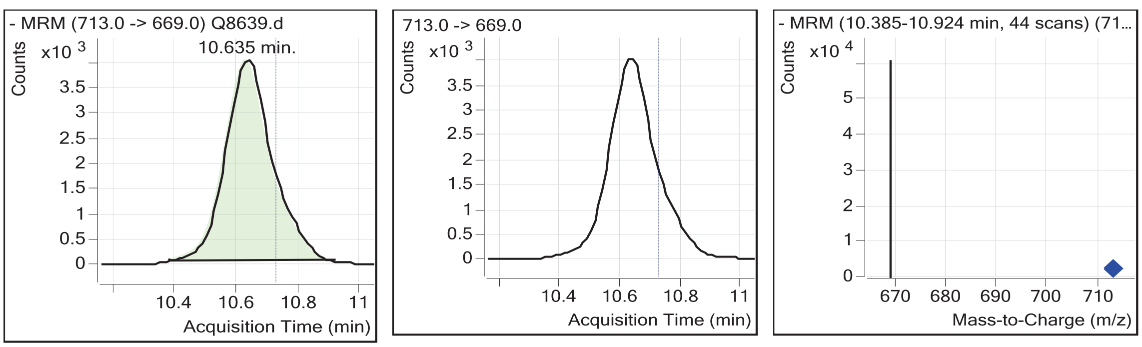
13C2-PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

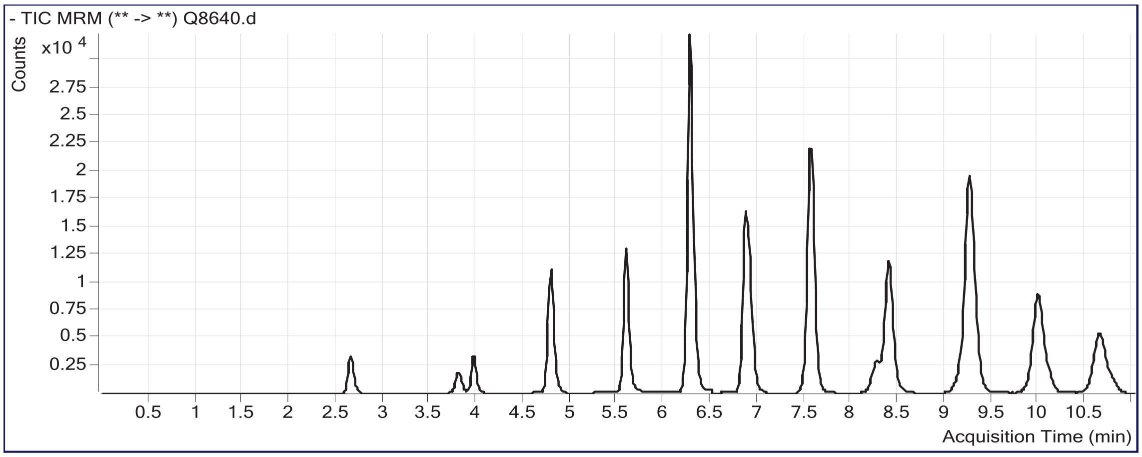
Data File	:	Q8640.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:31
Sample Name	:	IC280-50
Vial	:	Vial 8
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.271	415.0 -> 370.0	26999	20.000	µg/L	0.025
13C4-PFOS	6.857	503.0 -> 80.0	12759	20.000	µg/L	0.038
13C2-PFDoDA	9.247	615.0 -> 570.0	74475	20.000	µg/L	-0.025
System Monitoring Compounds						
13C2-PFHxA	4.779	315.0 -> 270.0	22250	50.12	µg/L	0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 250.61%			
13C2-PFDA	7.558	515.0 -> 470.0	57516	49.94	µg/L	0.050
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 249.68%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	16161	49.883	µg/L	100
PFPeA	3.799	263.0 -> 219.0	8057	49.765	µg/L	100
PFBS	3.953	299.0 -> 80.0	9318	49.433	µg/L	97
PFHxA	4.783	313.0 -> 269.0	23304	49.991	µg/L	99
PFHpA	5.585	363.0 -> 319.0	22522	49.806	µg/L	99
PFHxS	5.592	399.0 -> 80.0	15456	51.051	µg/L	88
PFHpS	6.256	449.0 -> 80.0	19022	50.294	µg/L	100
PFOA	6.274	413.0 -> 369.0	68380	49.995	µg/L	81
PFOS	6.860	499.0 -> 80.0	32001	50.145	µg/L	88
PFNA	6.916	463.0 -> 419.0	40404	49.685	µg/L	100
PFDA	7.551	513.0 -> 469.0	54551	48.270	µg/L	100
PFDS	8.246	599.0 -> 80.0	16287	50.245	µg/L	100
PFUnDA	8.390	563.0 -> 519.0	80411	49.901	µg/L	100
PFDoDA	9.240	613.0 -> 569.0	83950	50.305	µg/L	100
PFTrDA	9.972	663.0 -> 619.0	82127	50.639	µg/L	100
PFTeDA	10.635	713.0 -> 669.0	57956	50.701	µg/L	100

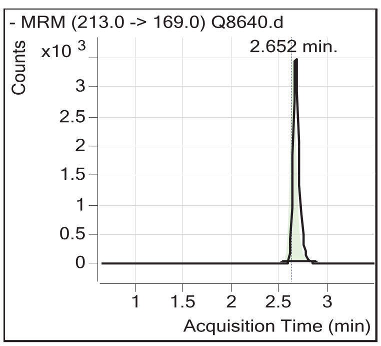
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

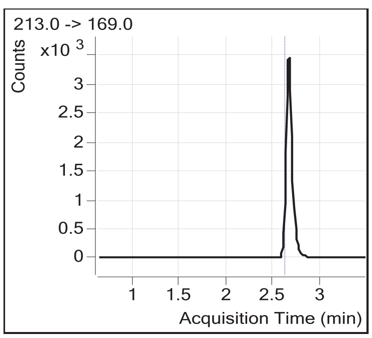
Perfluorinated Compounds by LC/MS/MS.

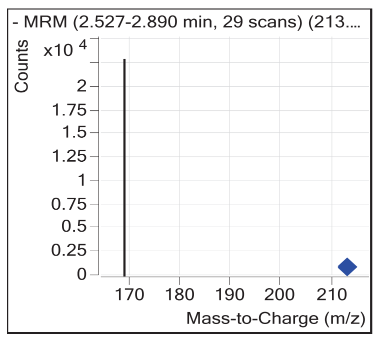
Data File	:	Q8640.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:31
Sample Name	:	IC280-50
Vial	:	Vial 8
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



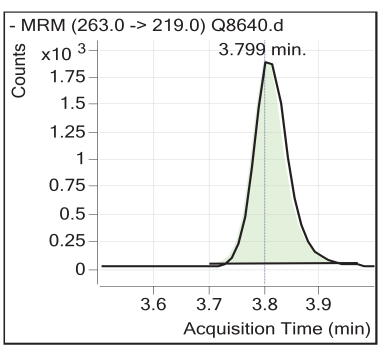
PFBA

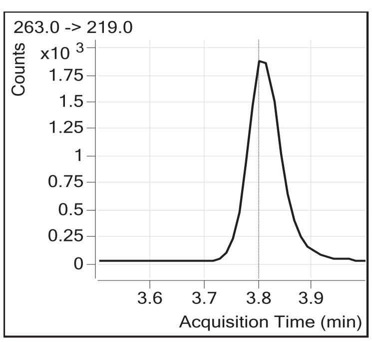


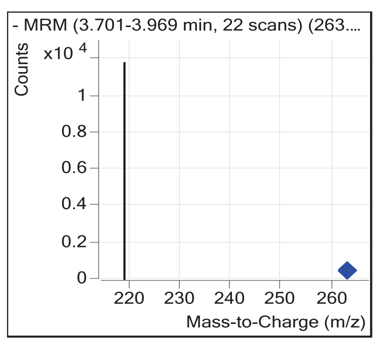




PFPeA

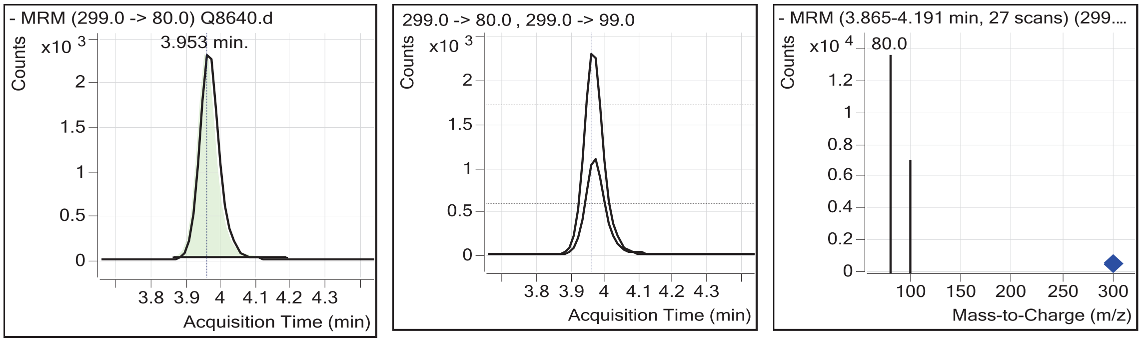




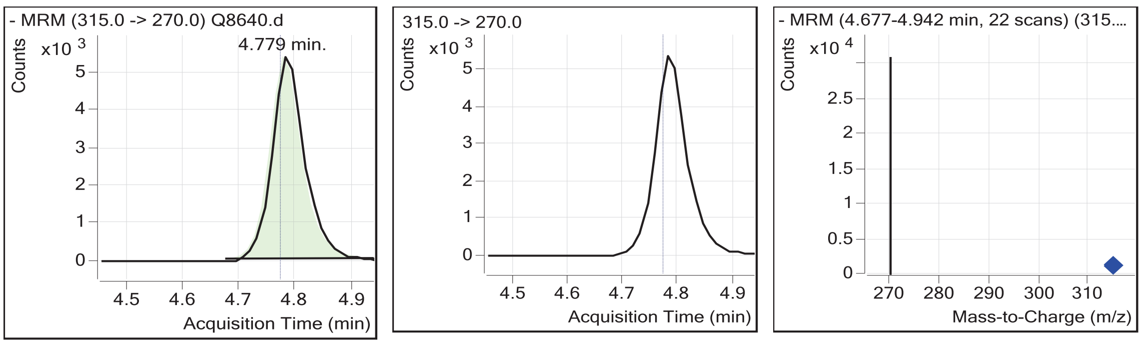


Perfluorinated Compounds by LC/MS/MS.

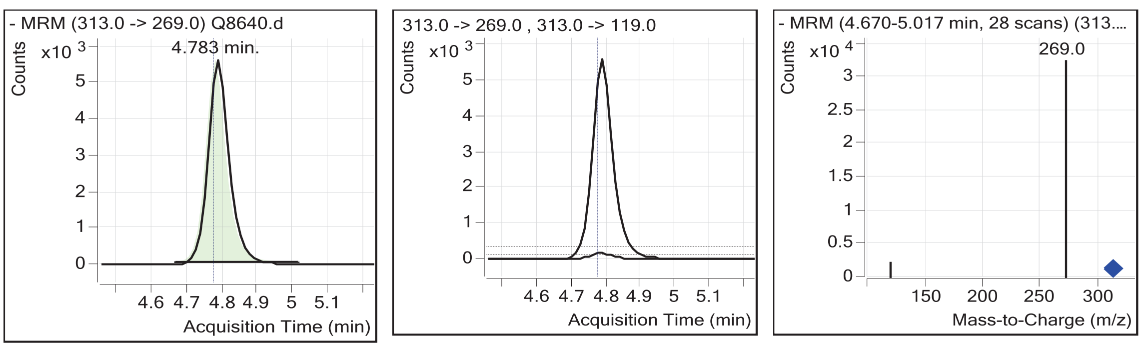
PFBS



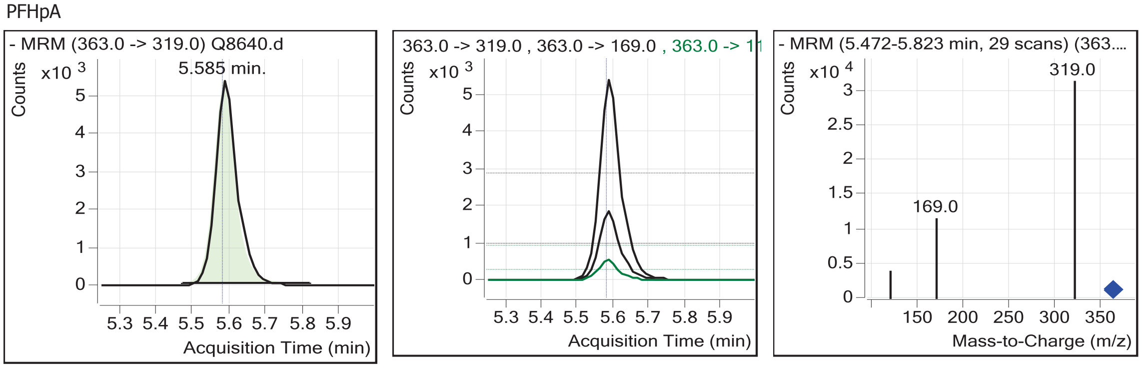
13C2-PFHxA



PFHxA

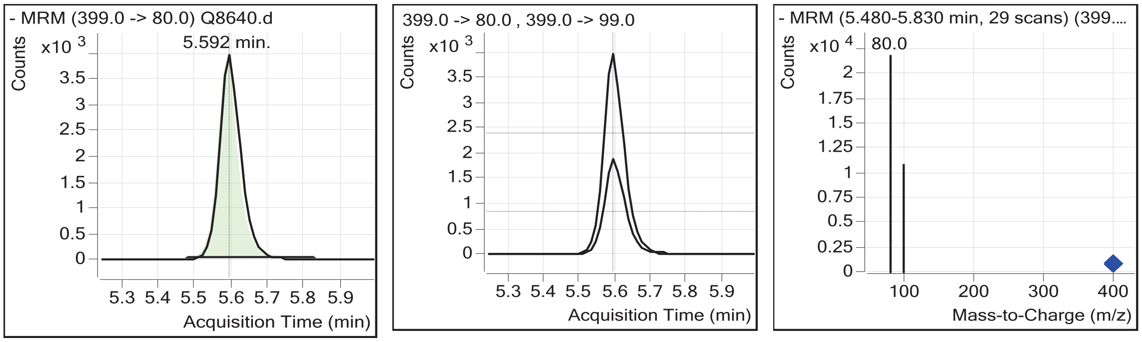


PFHpA

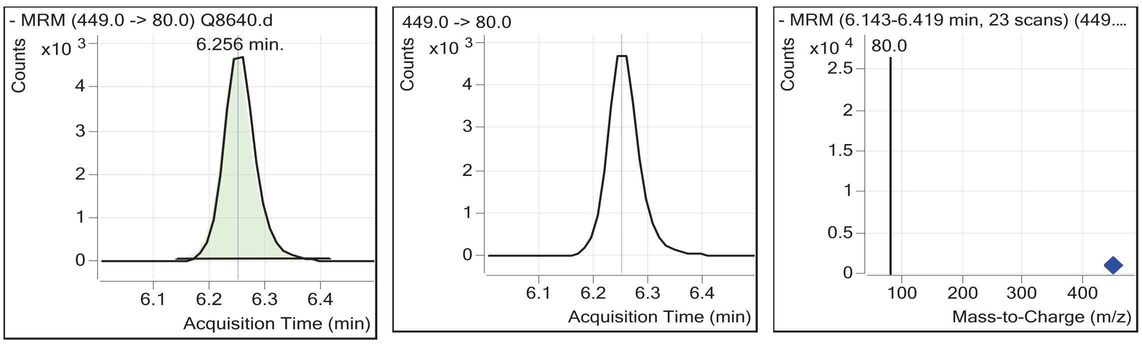


Perfluorinated Compounds by LC/MS/MS.

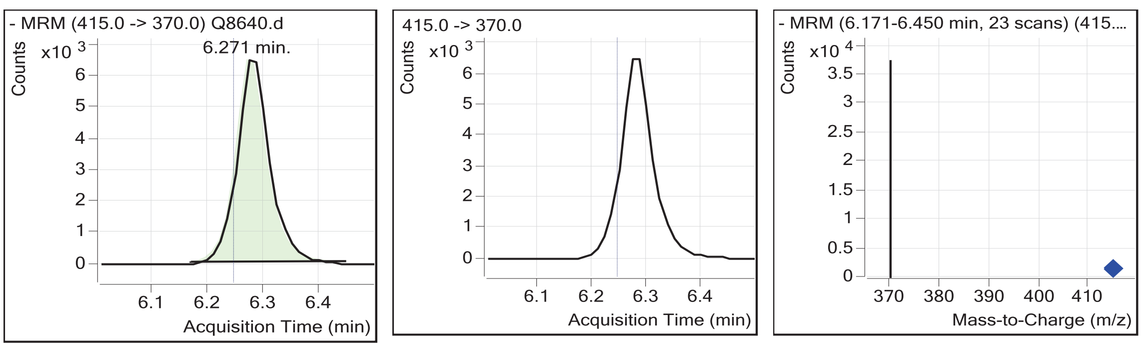
PFHxS



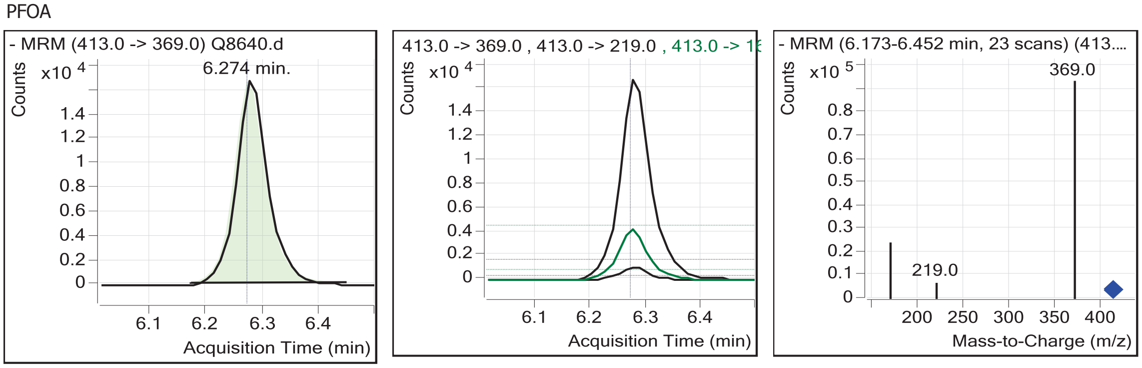
PFHpS



13C2-PFOA

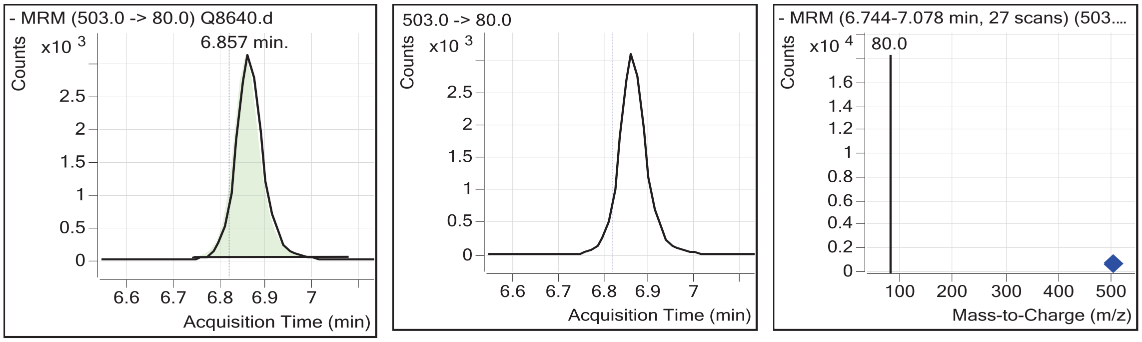


PFOA

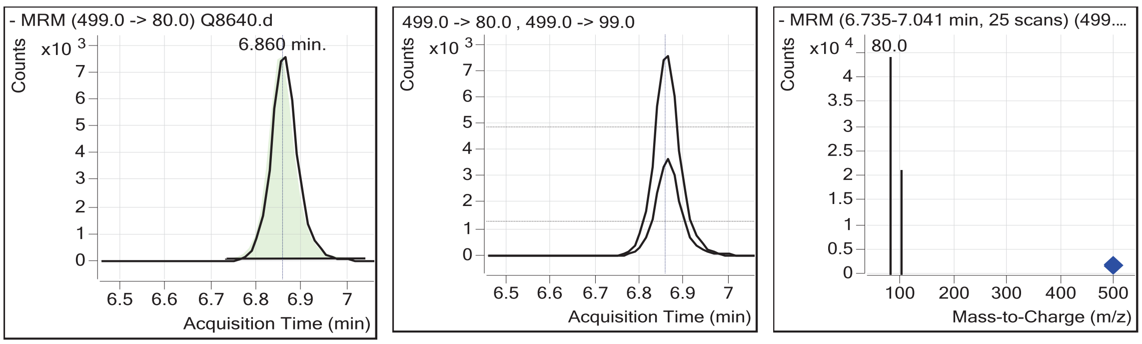


Perfluorinated Compounds by LC/MS/MS.

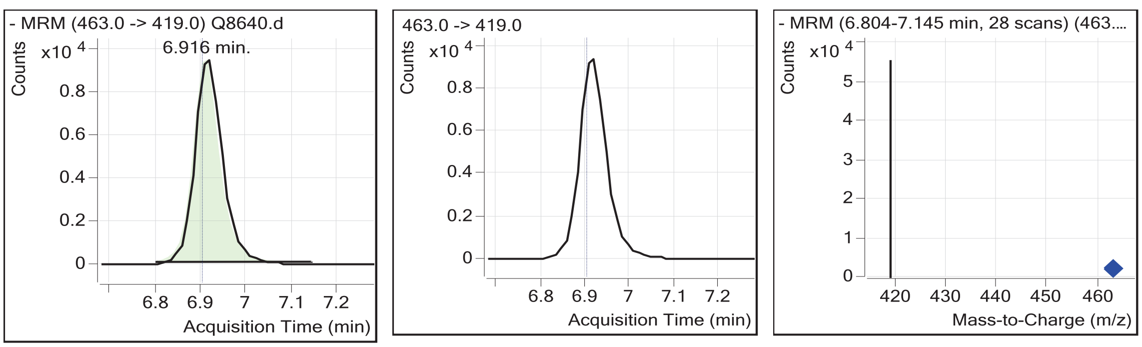
13C4-PFOS



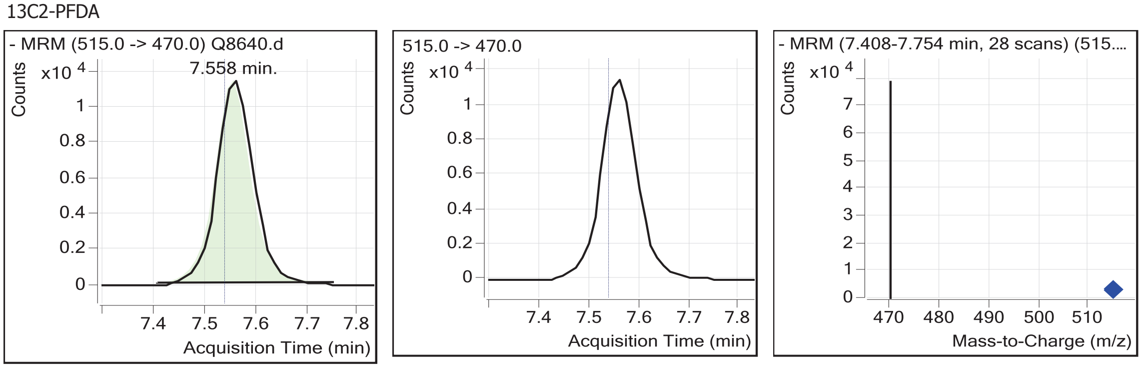
PFOS



PFNA



13C2-PFDA

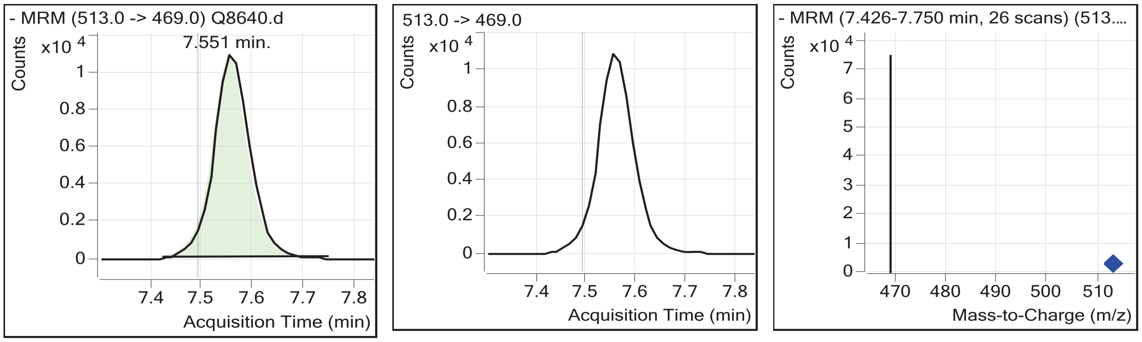


7.5.7

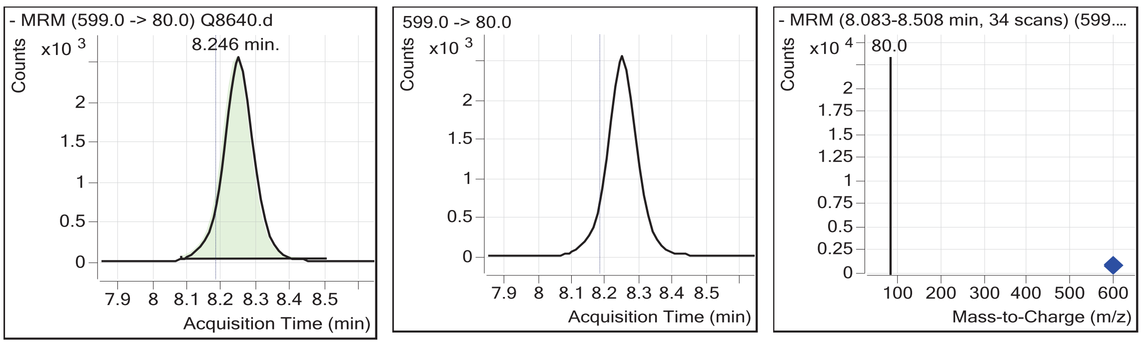
7

Perfluorinated Compounds by LC/MS/MS.

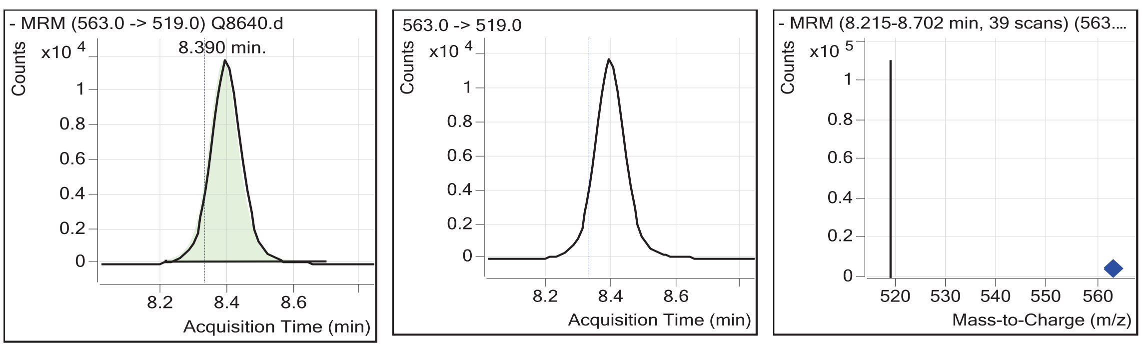
PFDA



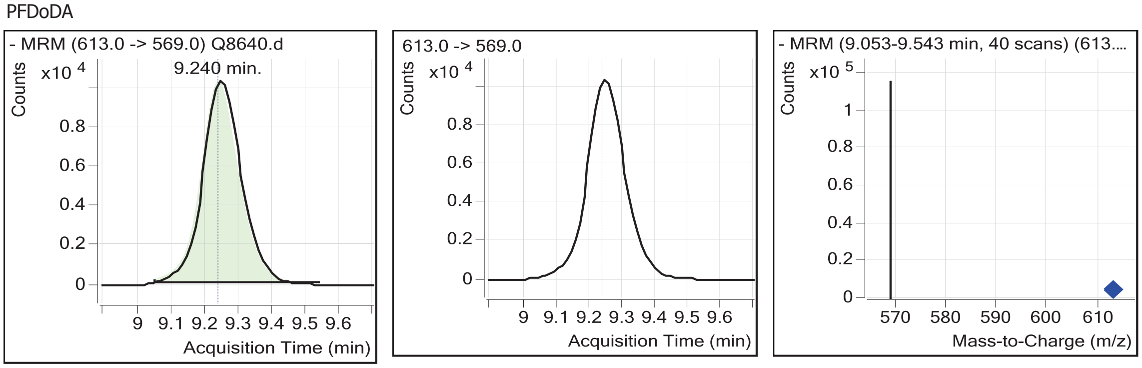
PFDS



PFUnDA

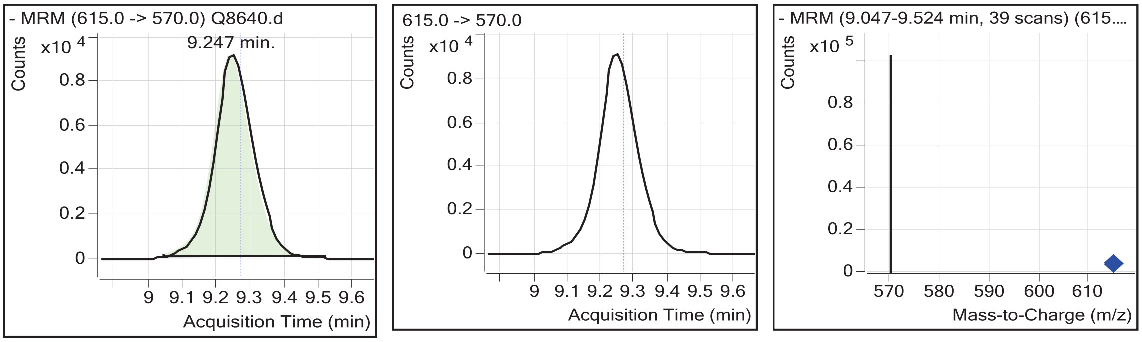


PFDoDA

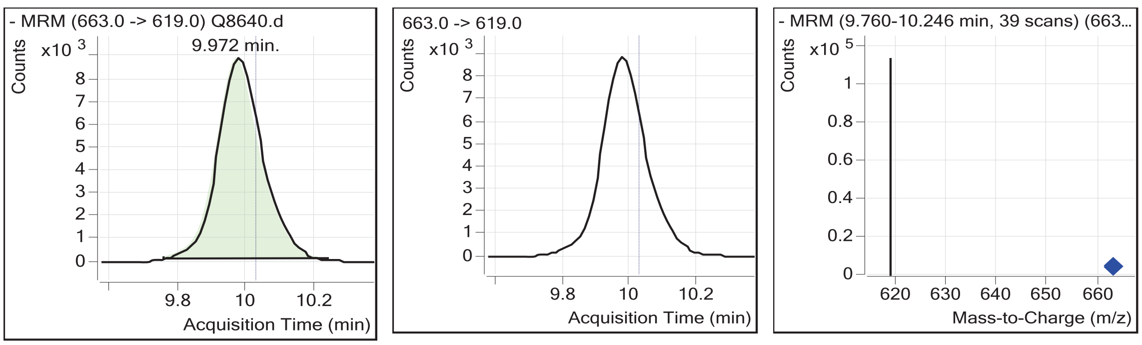


Perfluorinated Compounds by LC/MS/MS.

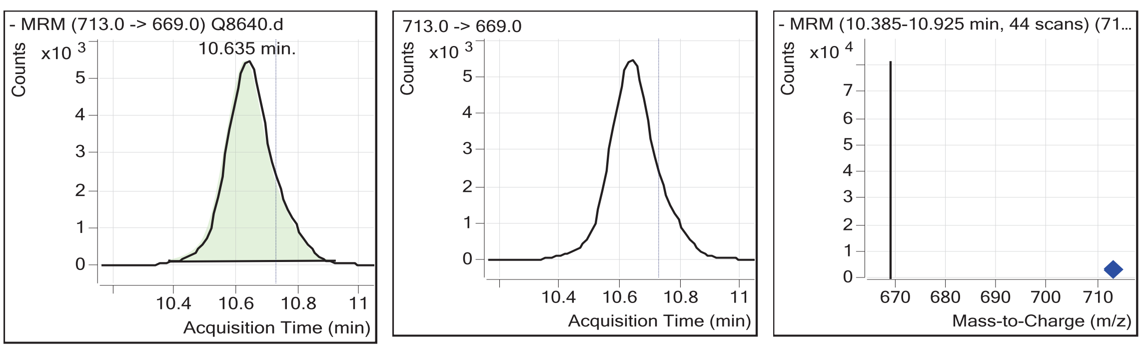
13C2-PFDoDA



PFTrDA



PFTeDA



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/09/14 16:00

Perfluorinated Compounds by LC/MS/MS.

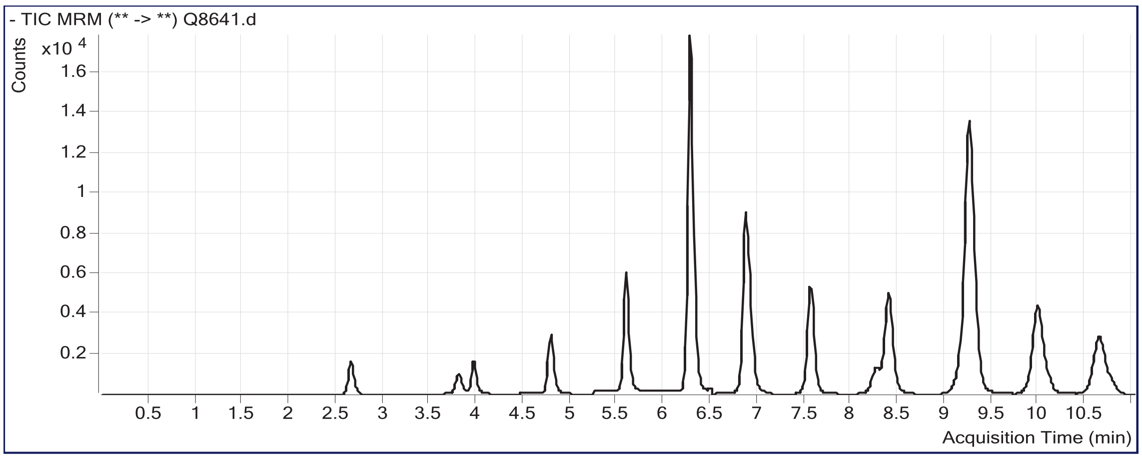
Data File	:	Q8641.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:51
Sample Name	:	ICV280-20
Vial	:	Vial 9
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.271	415.0 -> 370.0	30356	20.000	µg/L	0.025
13C4-PFOS	6.857	503.0 -> 80.0	12942	20.000	µg/L	0.038
13C2-PFDoDA	9.234	615.0 -> 570.0	69947	20.000	µg/L	-0.038
System Monitoring Compounds						
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	7698	21.132	µg/L	100
PFPeA	3.811	263.0 -> 219.0	3784	20.786	µg/L	100
PFBS	3.953	299.0 -> 80.0	4350	22.749	µg/L	96
PFHxA	4.783	313.0 -> 269.0	11197	21.363	µg/L	100
PFHpA	5.585	363.0 -> 319.0	10563	20.775	µg/L	98
PFHxS	5.592	399.0 -> 80.0	6570	21.395	µg/L	86
PFOA	6.274	413.0 -> 369.0	32080	20.861	µg/L	81
PFOS	6.860	499.0 -> 80.0	13607	21.021	µg/L	88
PFNA	6.916	463.0 -> 419.0	17806	19.475	µg/L	100
PFDA	7.551	513.0 -> 469.0	25383	23.915	µg/L	100
PFDS	8.246	599.0 -> 80.0	7213	23.692	µg/L	100
PFUnDA	8.390	563.0 -> 519.0	33780	22.320	µg/L	100
PFDoDA	9.240	613.0 -> 569.0	37734	24.075	µg/L	100
PFTrDA	9.972	663.0 -> 619.0	40000	26.260	µg/L	100
PFTeDA	10.623	713.0 -> 669.0	30022	27.964	µg/L	100

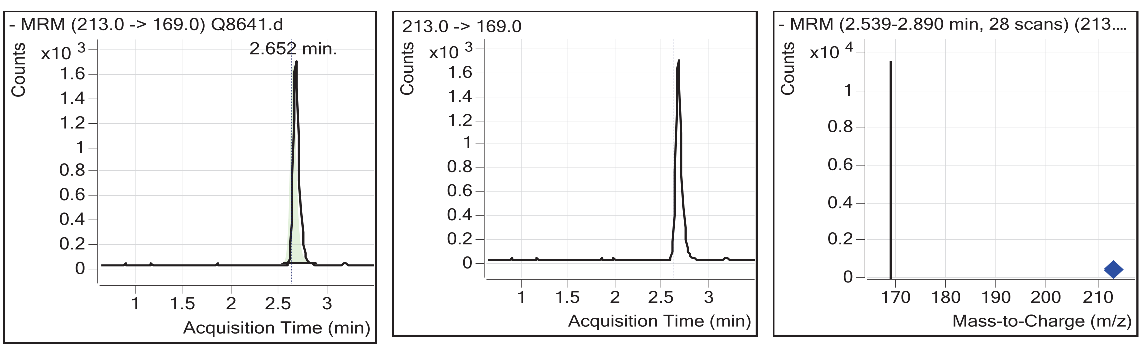
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

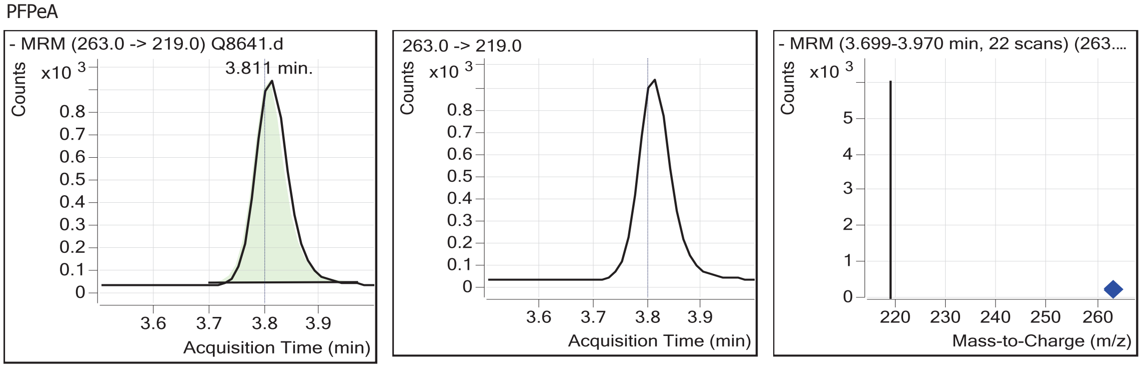
Data File	:	Q8641.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:51
Sample Name	:	ICV280-20
Vial	:	Vial 9
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



PFBA

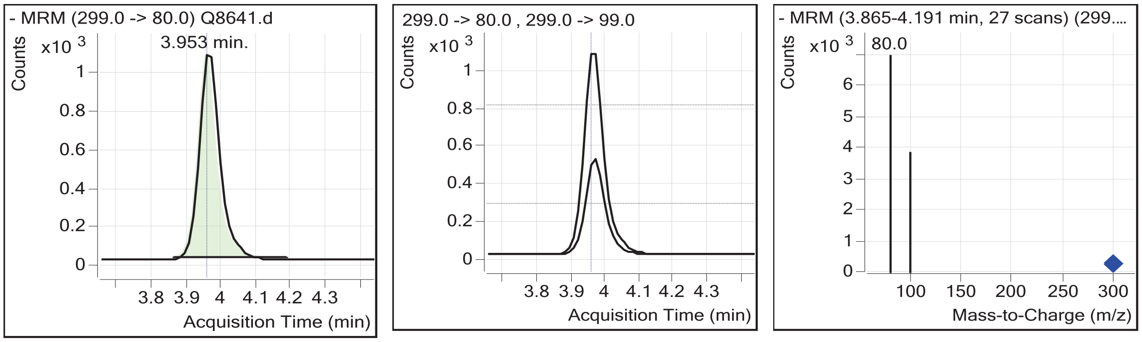


PFPeA

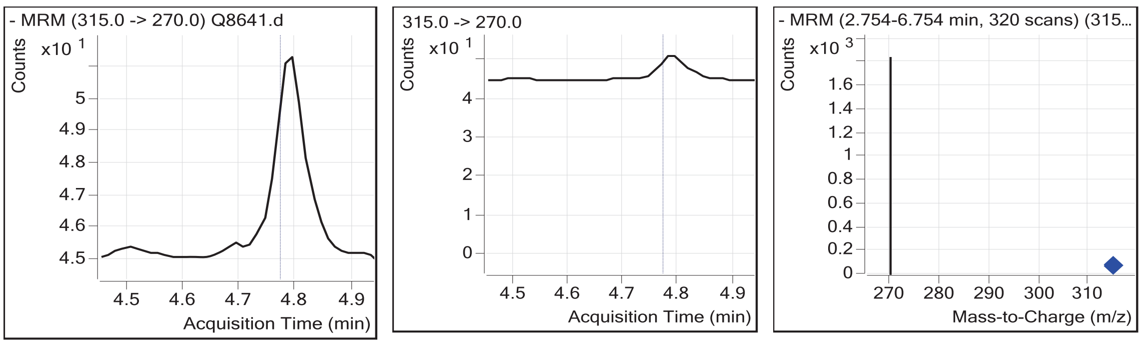


Perfluorinated Compounds by LC/MS/MS.

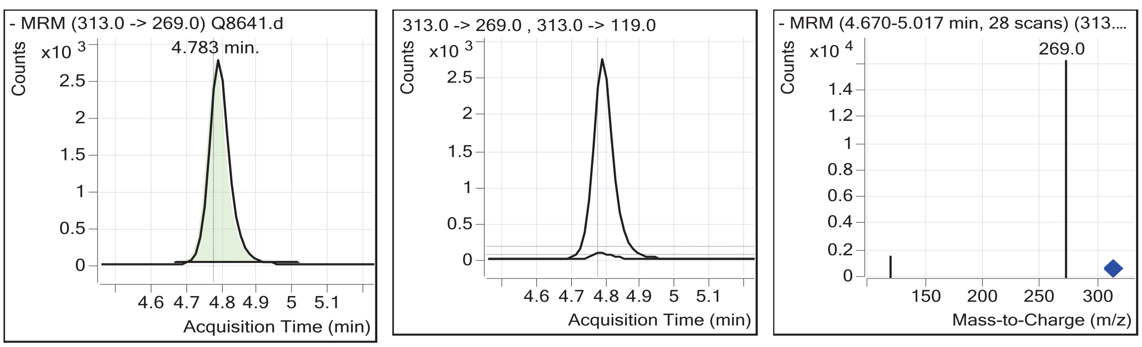
PFBS



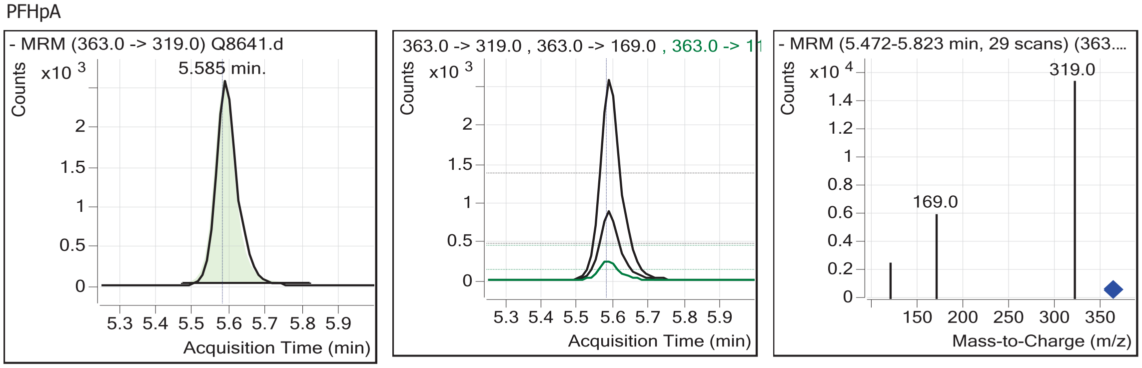
13C2-PFHxA



PFHxA



PFHpA

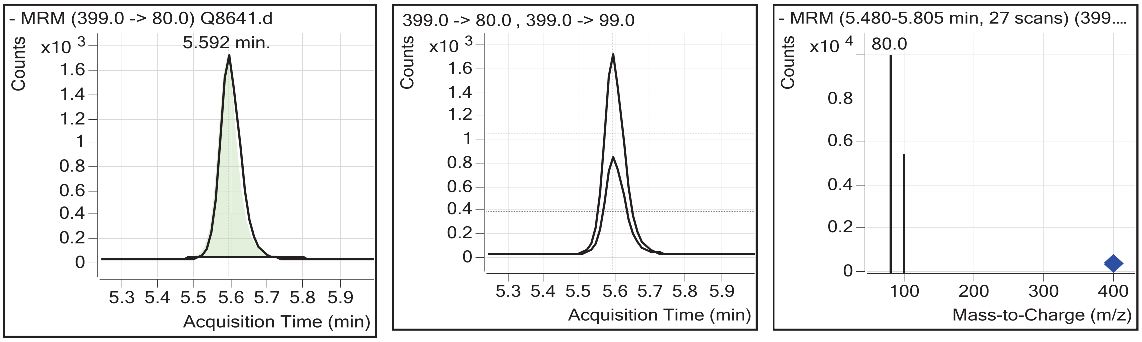


7.5.8

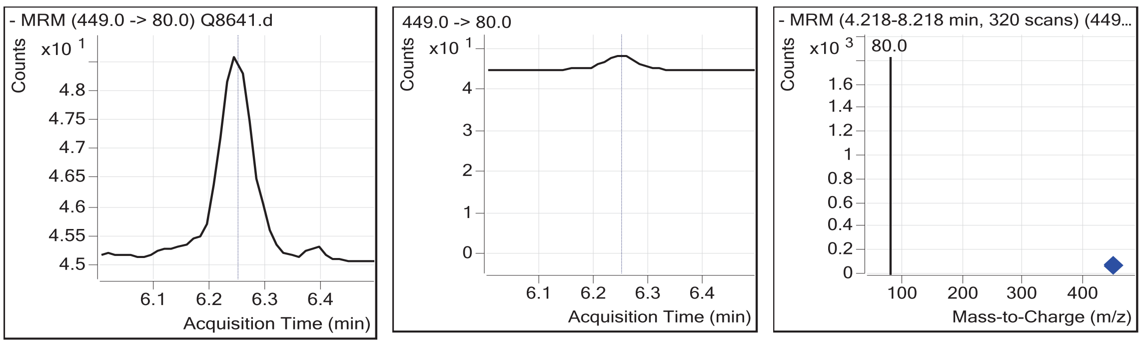
7

Perfluorinated Compounds by LC/MS/MS.

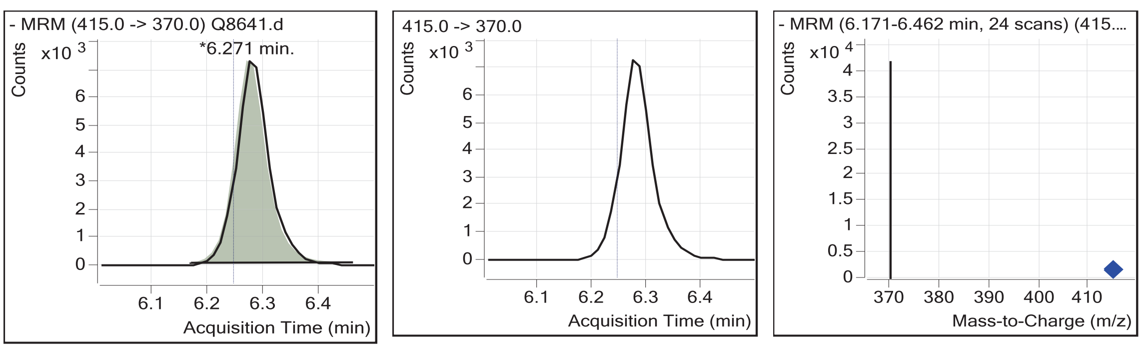
PFHxS



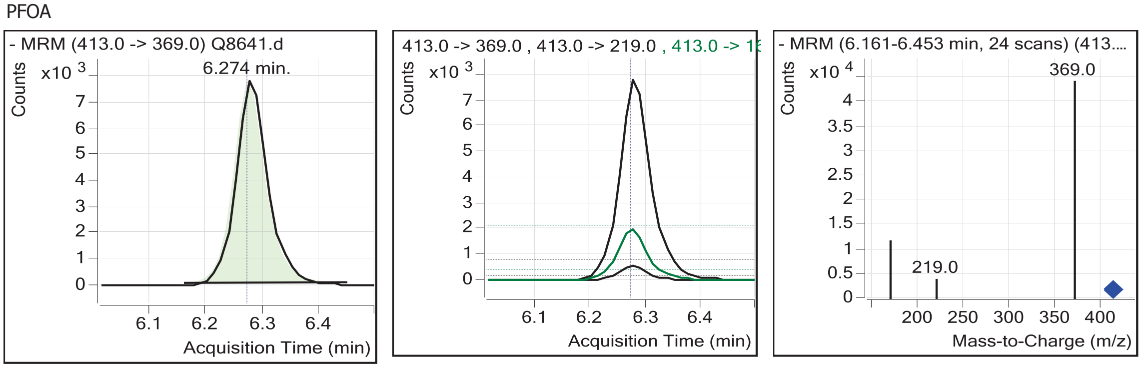
PFHpS



13C2-PFOA

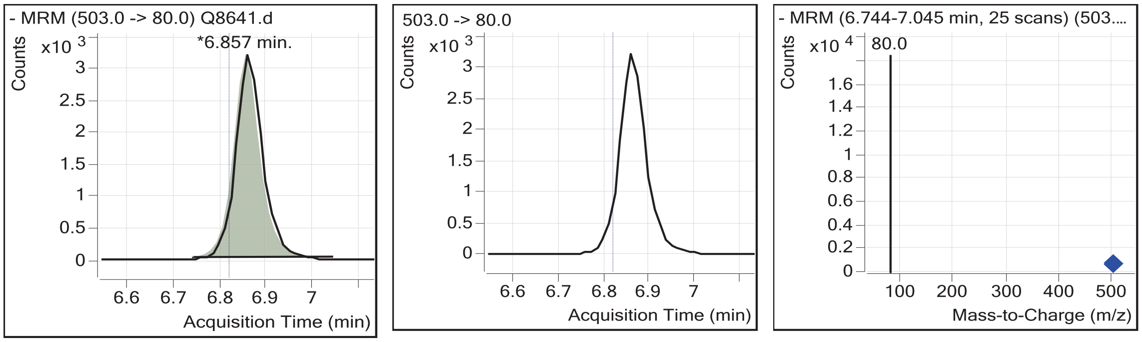


PFOA

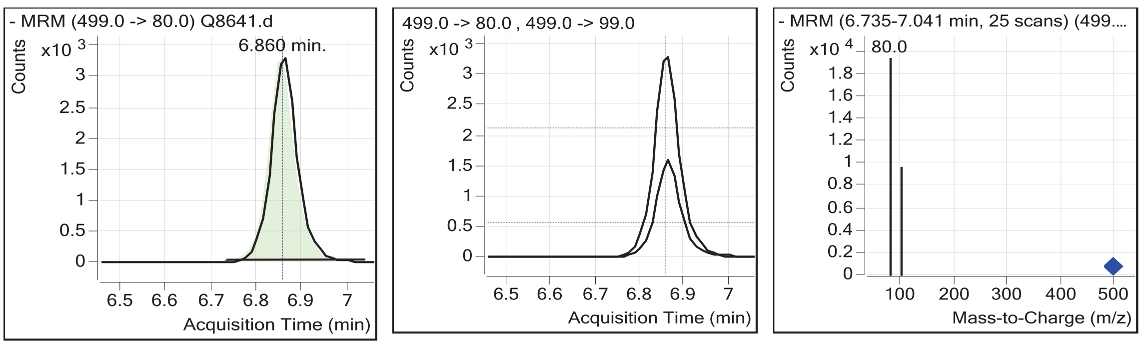


Perfluorinated Compounds by LC/MS/MS.

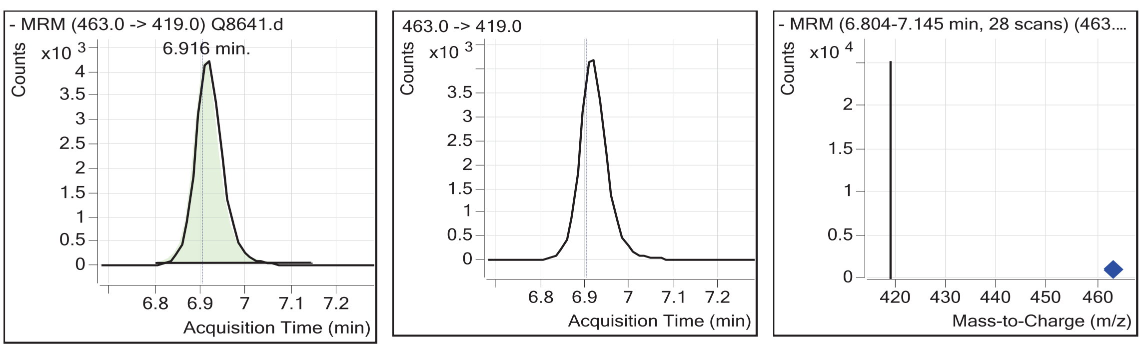
13C4-PFOS



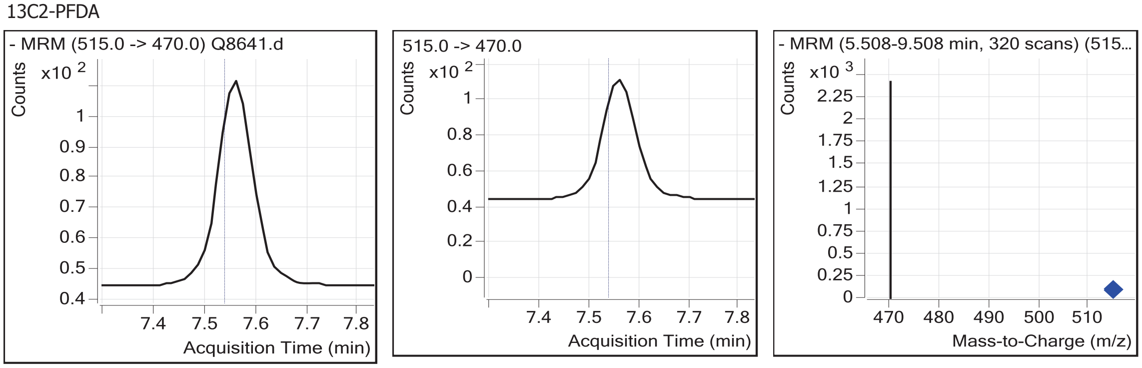
PFOS



PFNA



13C2-PFDA

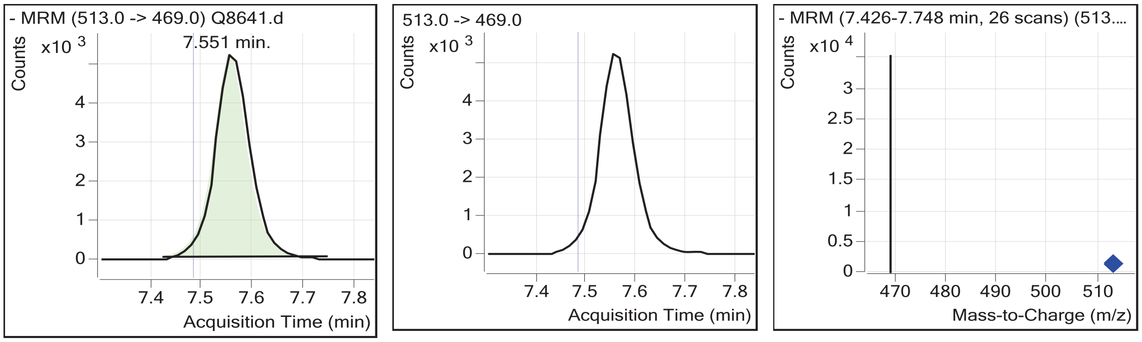


7.5.8

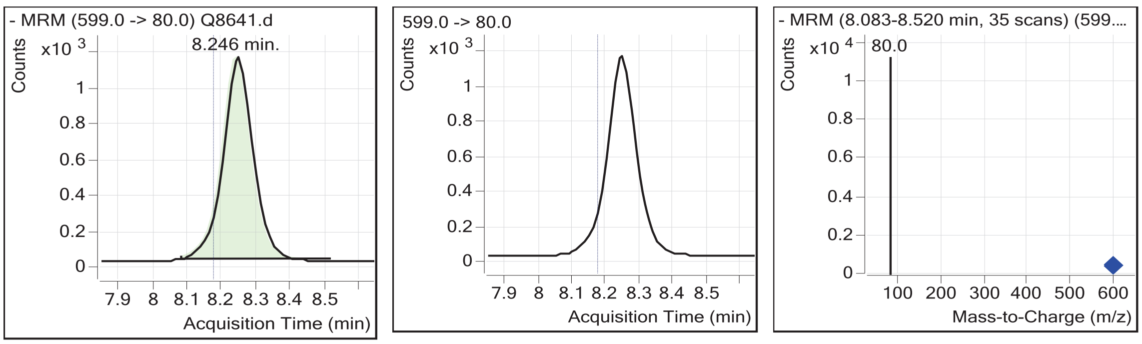
7

Perfluorinated Compounds by LC/MS/MS.

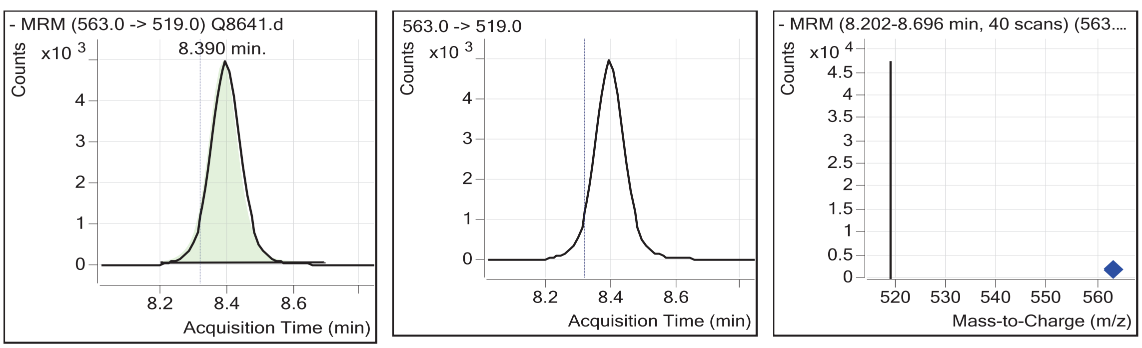
PFDA



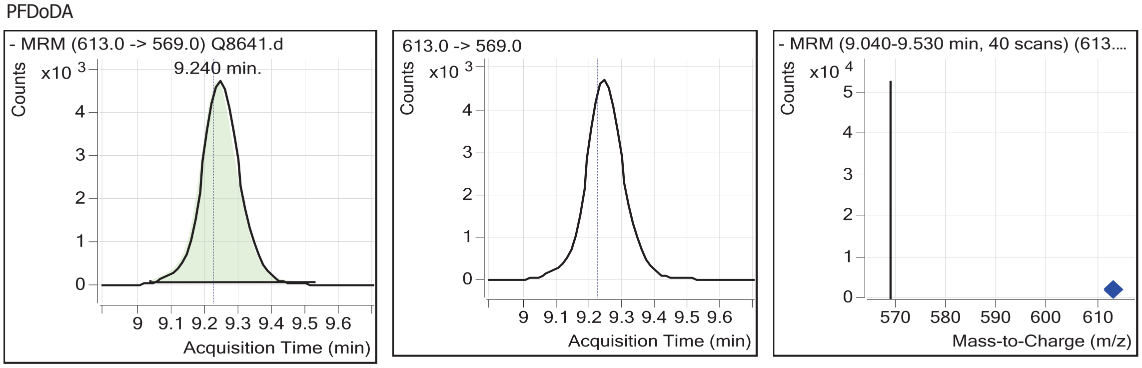
PFDS



PFUnDA

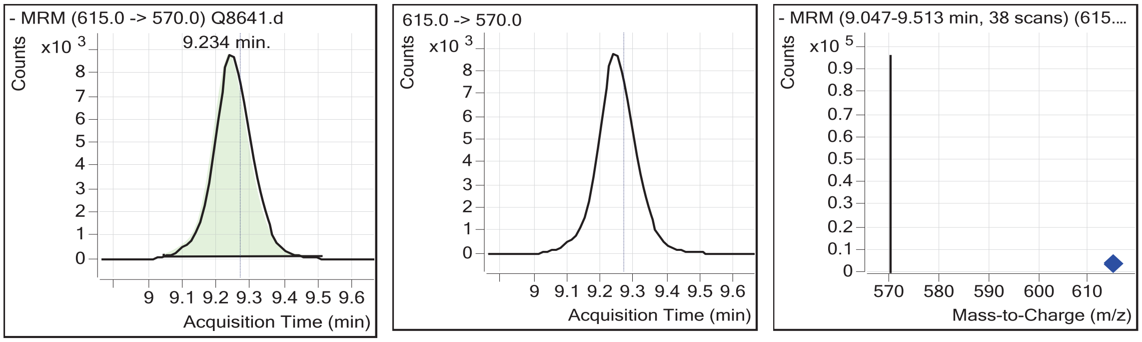


PFDoDA

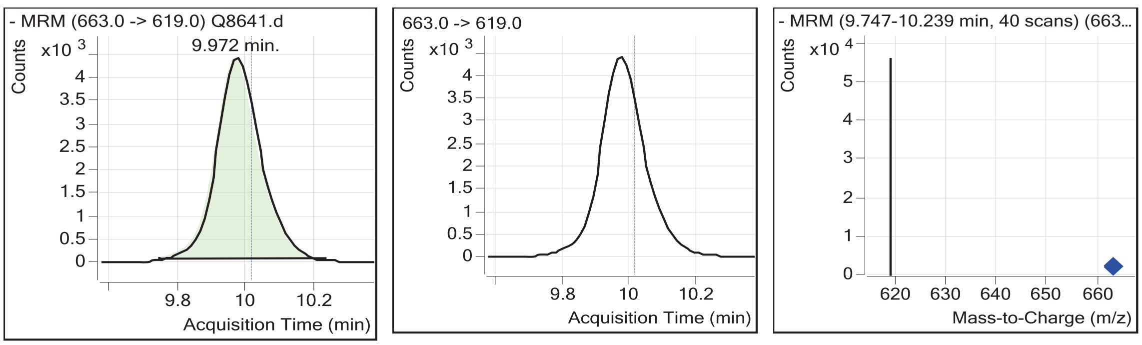


Perfluorinated Compounds by LC/MS/MS.

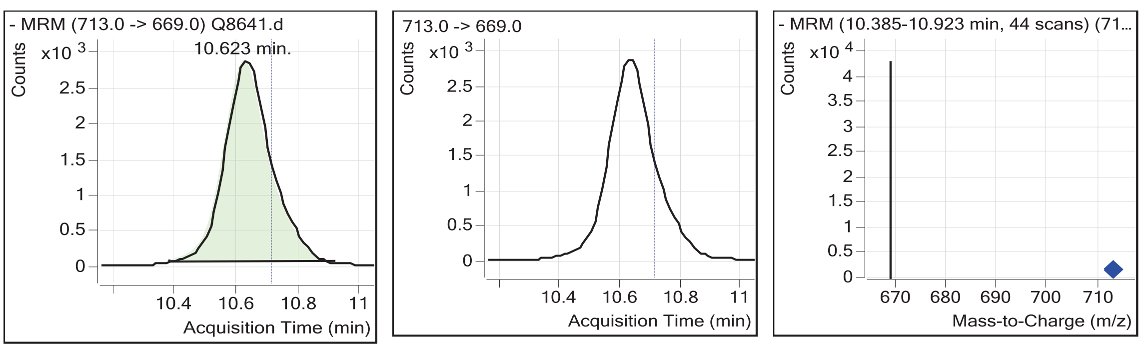
13C2-PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	SQ280-ICV280	**Method:**	EPA 537 MOD	
Lab FileID:	Q8641.D	**Analyst approved:**	12/09/14 11:29	Mike Eger
Injection Time:	12/08/14 15:51	**Supervisor approved:**	12/09/14 16:00	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
13C2-PFOA			6.27	Split peak
13C4-PFOS			6.86	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/09/14 16:00

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q8642.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 16:10
Sample Name	:	ICV280-20
Vial	:	Vial 10
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.271	415.0 -> 370.0	30950	20.000	µg/L		0.025
13C4-PFOS	6.857	503.0 -> 80.0	13135	20.000	µg/L		0.038
13C2-PFDoDA	9.234	615.0 -> 570.0	71468	20.000	µg/L		-0.038
System Monitoring Compounds							
Target Compounds							**Qvalue**
PFBS	3.966	299.0 -> 80.0	4524	23.312	µg/L		97
PFHpA	5.585	363.0 -> 319.0	9409	18.151	µg/L		99
PFHxS	5.592	399.0 -> 80.0	6867	22.032	µg/L	m	88
PFOA	6.274	413.0 -> 369.0	29724	18.958	µg/L		81
PFOS	6.860	499.0 -> 80.0	13071	19.895	µg/L	m	99
PFNA	6.916	463.0 -> 419.0	17821	19.117	µg/L		100
PFDS	8.246	599.0 -> 80.0	0	0.000	µg/L	m	1
PFUnDA	8.390	563.0 -> 519.0	0	0.000	µg/L	m	1
PFDoDA	9.240	613.0 -> 569.0	0	0.000	µg/L	m	1
PFTrDA	9.972	663.0 -> 619.0	0	0.000	µg/L	m	1
PFTeDA	10.635	713.0 -> 669.0	0	0.000	µg/L	m	1

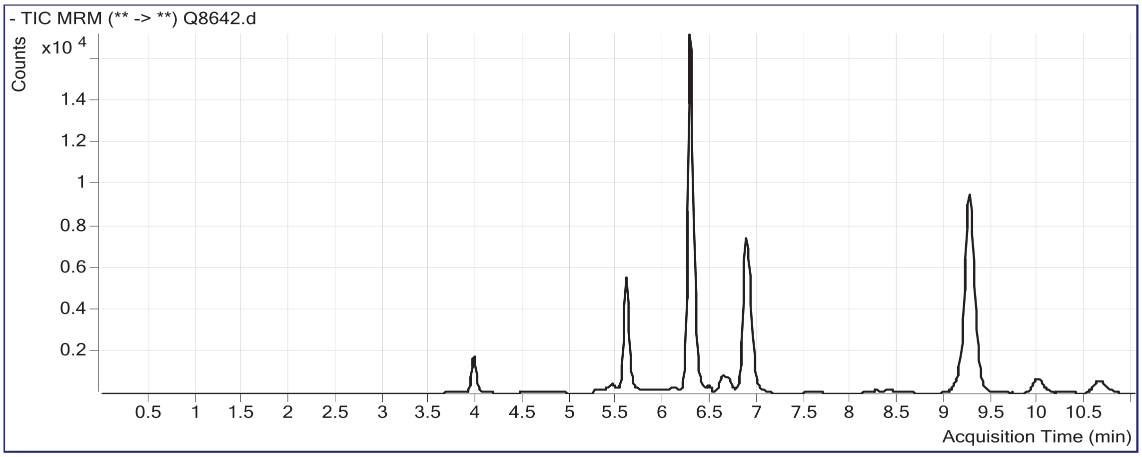
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.9

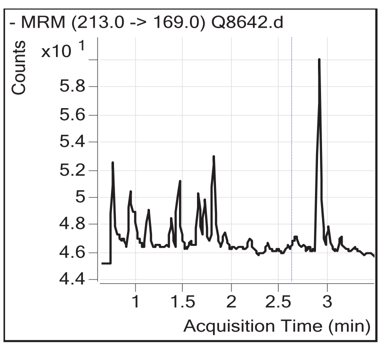
7

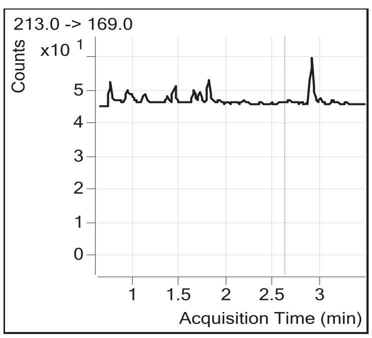
Perfluorinated Compounds by LC/MS/MS.

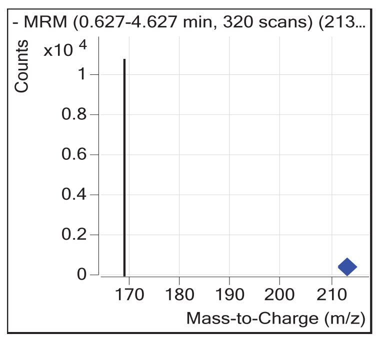
Data File	:	Q8642.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 16:10
Sample Name	:	ICV280-20
Vial	:	Vial 10
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09 08:01



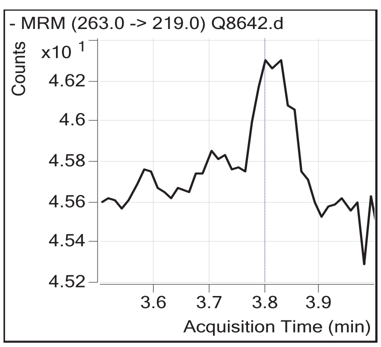
PFBA

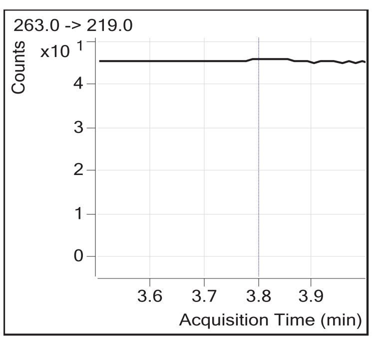


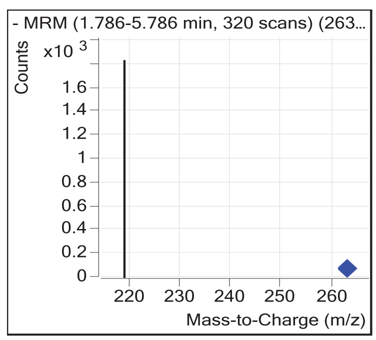




PFPeA

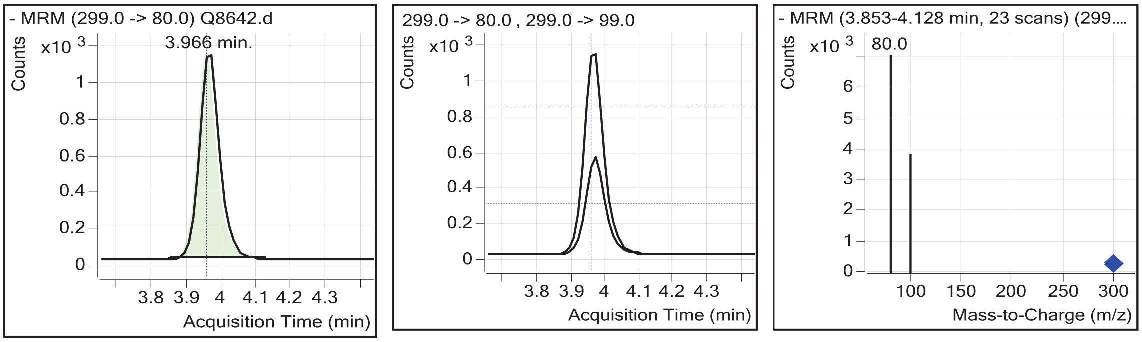




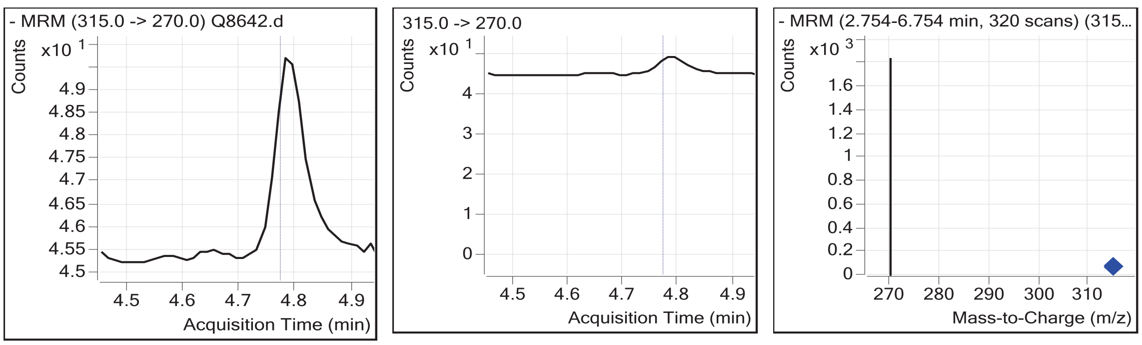


Perfluorinated Compounds by LC/MS/MS.

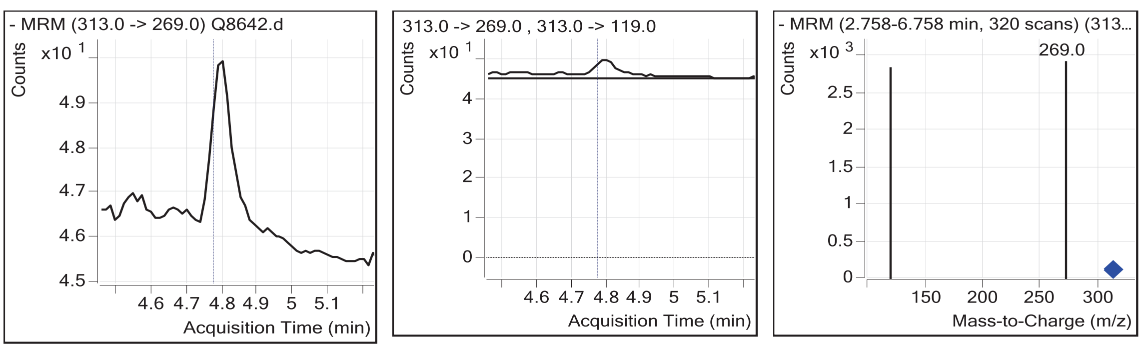
PFBS



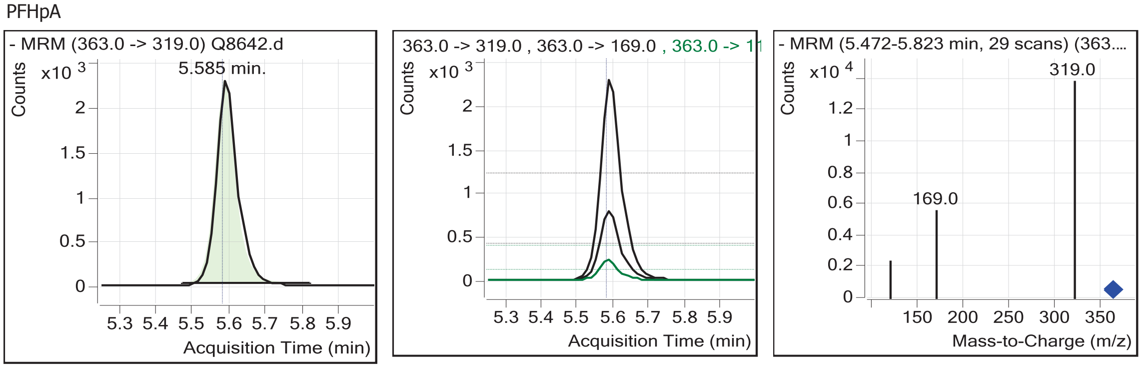
13C2-PFHxA



PFHxA



PFHpA

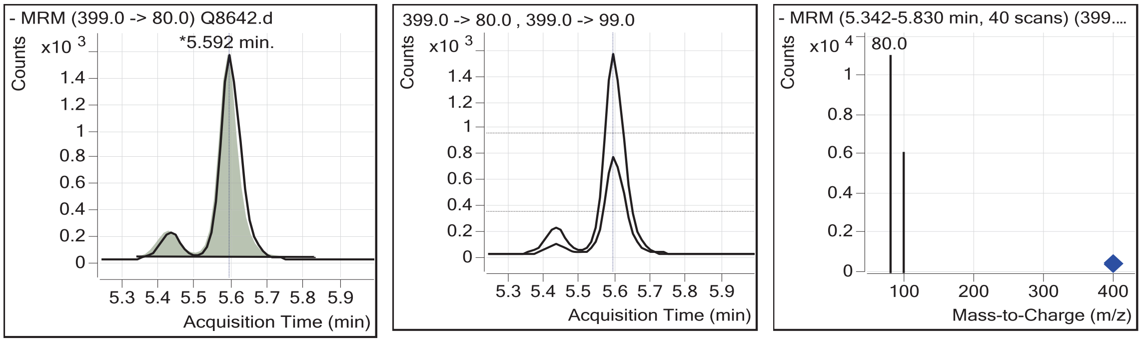


7.5.9

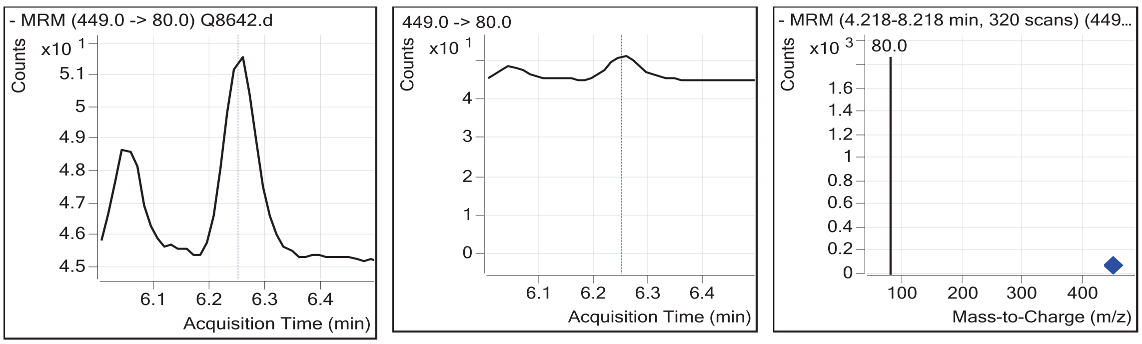
7

Perfluorinated Compounds by LC/MS/MS.

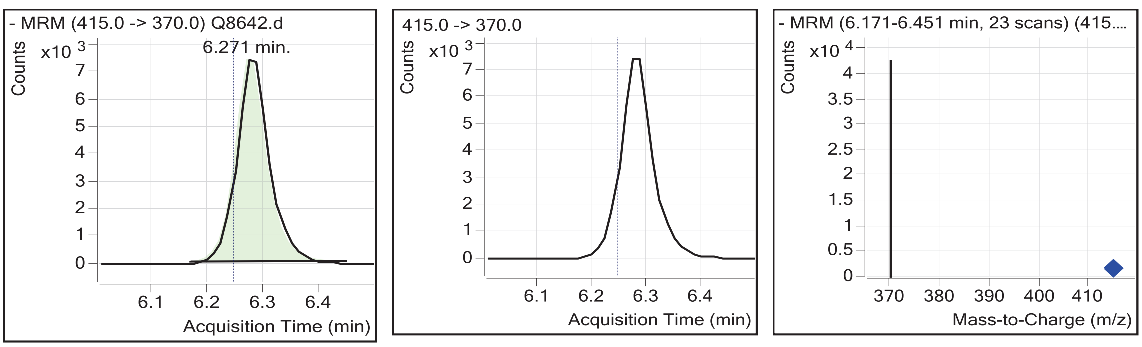
PFHxS



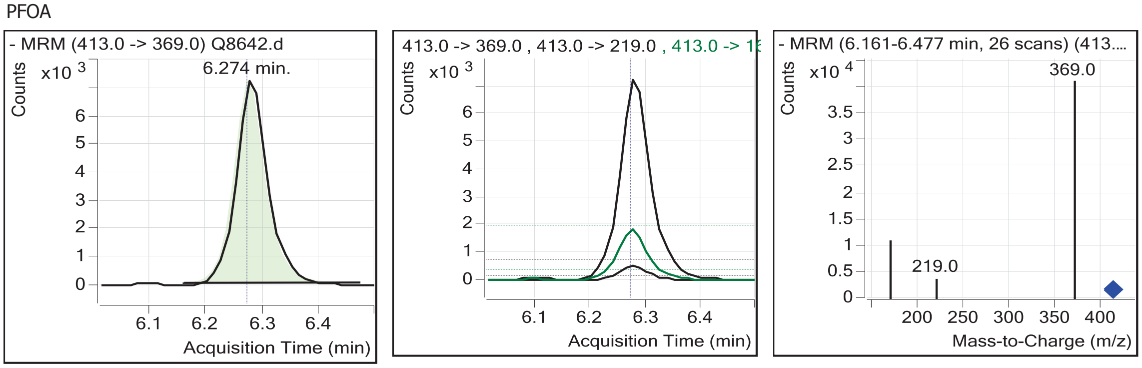
PFHpS



13C2-PFOA

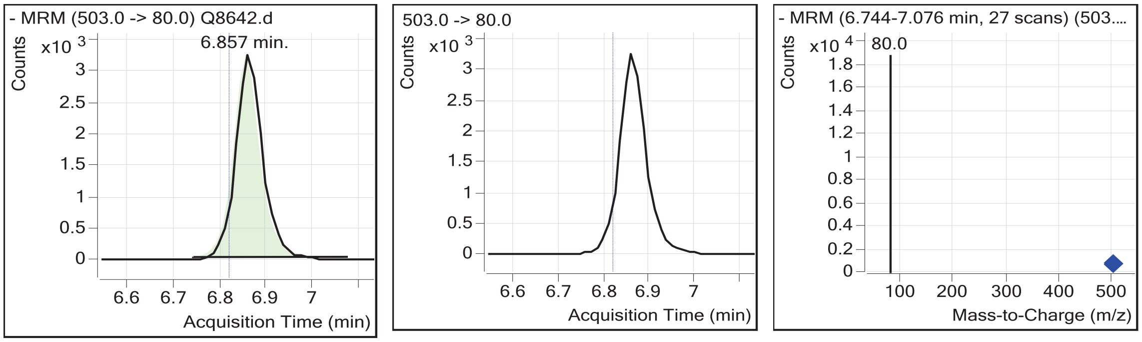


PFOA

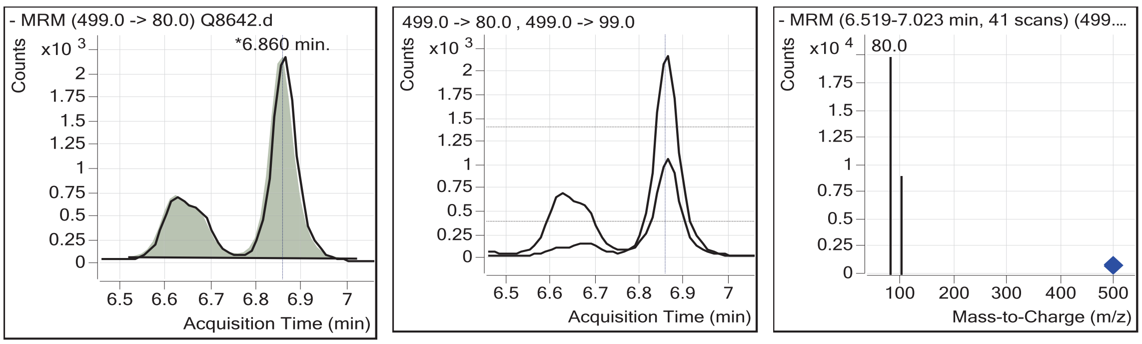


Perfluorinated Compounds by LC/MS/MS.

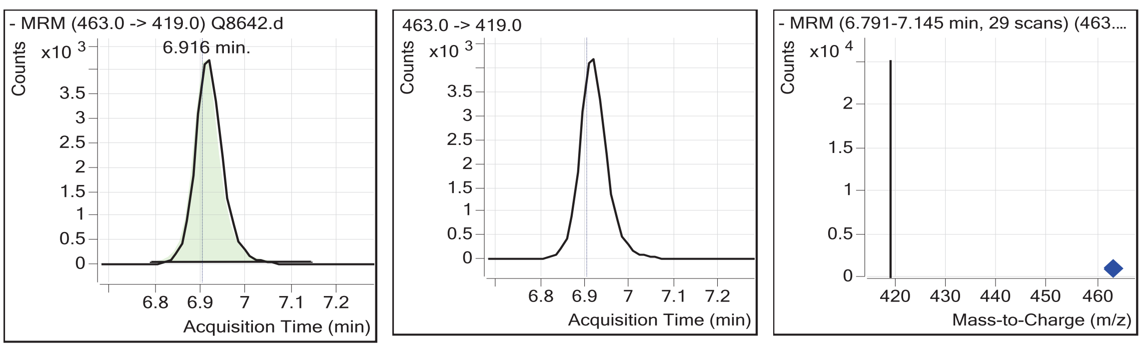
13C4-PFOS



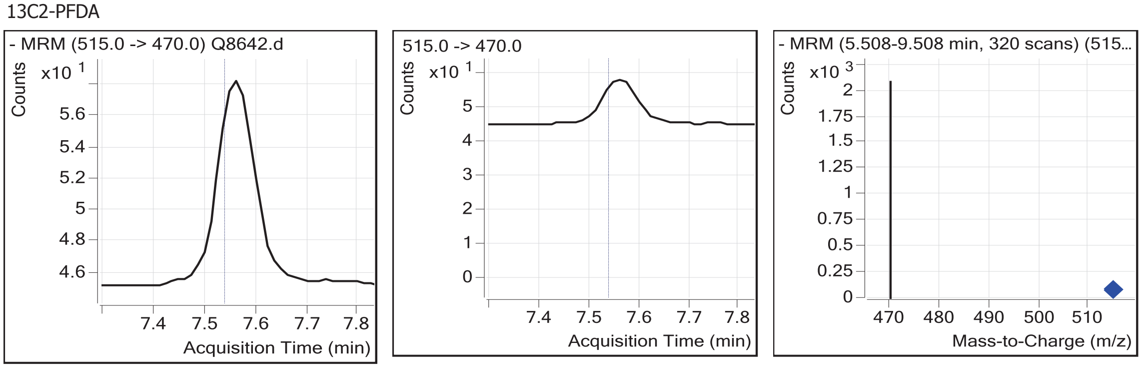
PFOS



PFNA

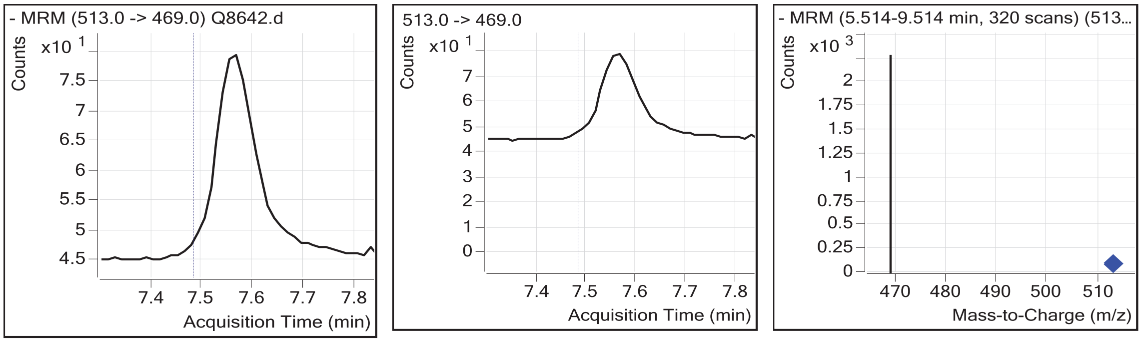


13C2-PFDA

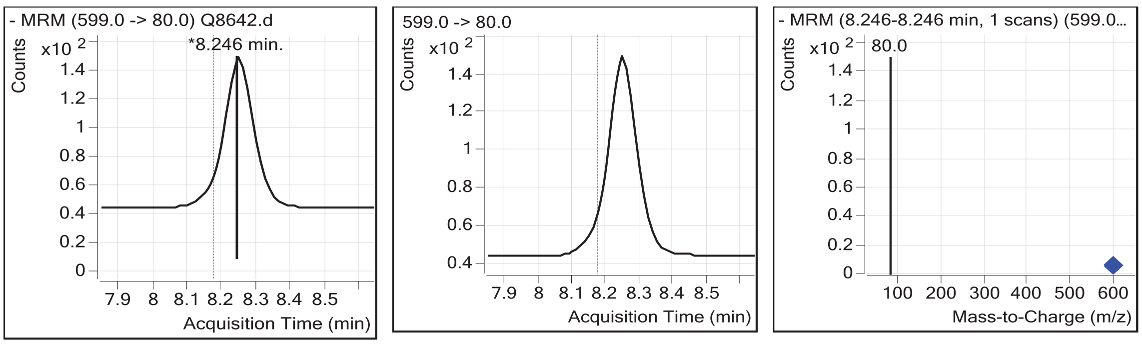


Perfluorinated Compounds by LC/MS/MS.

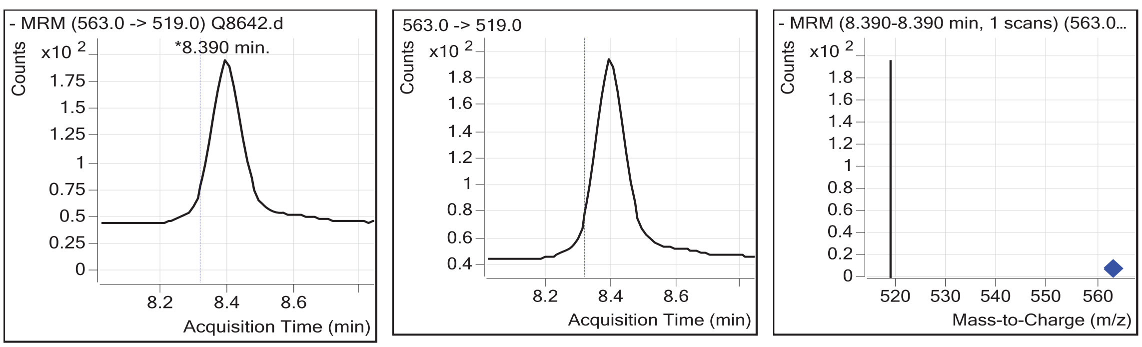
PFDA



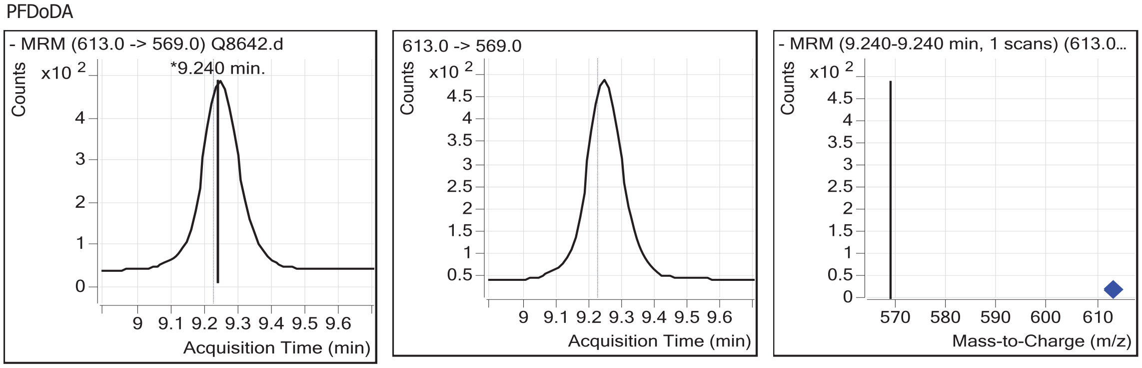
PFDS



PFUnDA

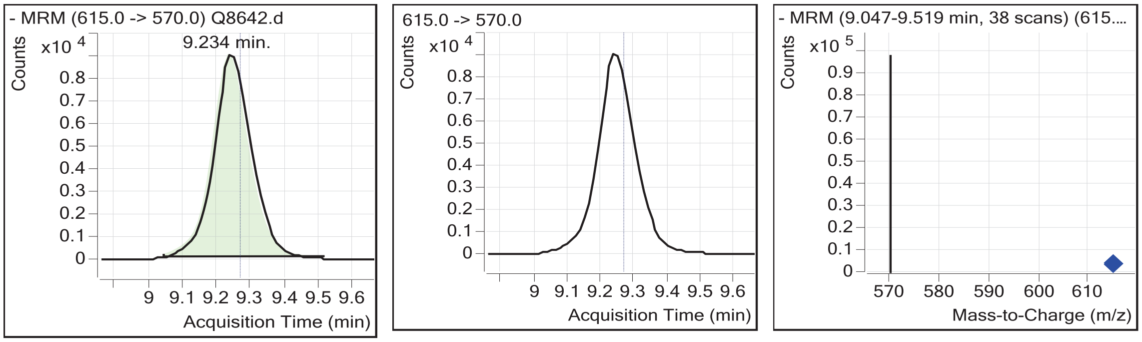


PFDoDA

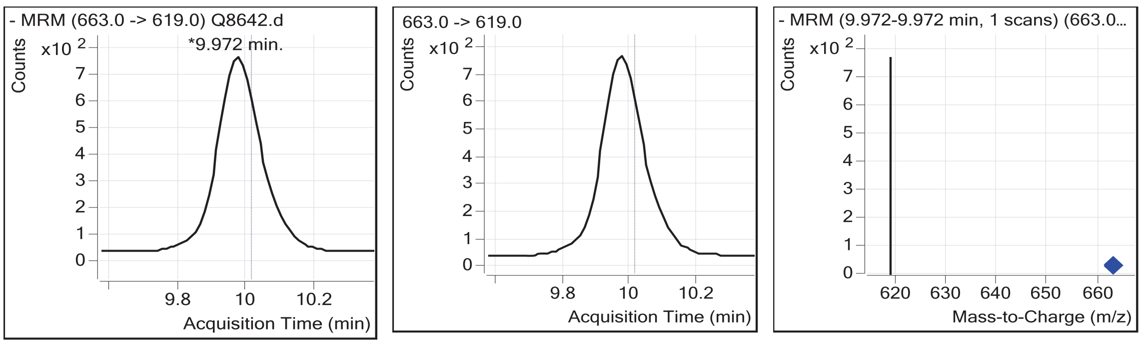


Perfluorinated Compounds by LC/MS/MS.

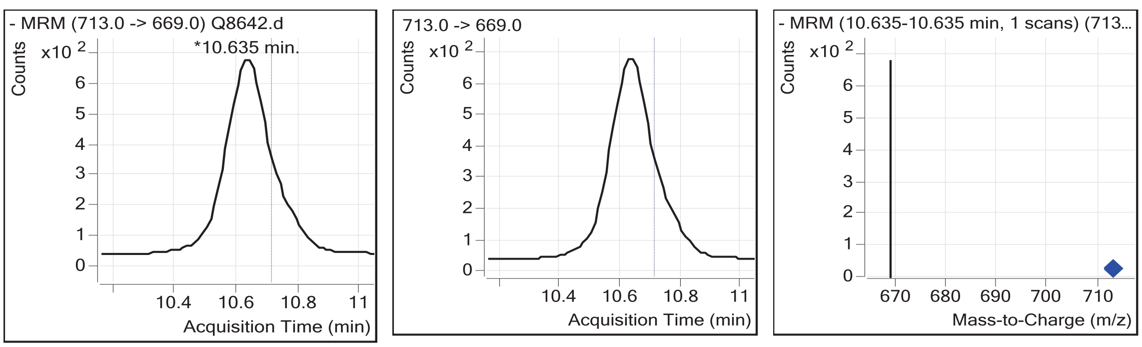
13C2-PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	SQ280-ICV280	**Method:**	EPA 537 MOD
Lab FileID:	Q8642.D	**Analyst approved:**	12/09/14 11:29 Mike Eger
Injection Time:	12/08/14 16:10	**Supervisor approved:**	12/09/14 16:00 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.59	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.86	Split peak
Perfluorodecanesulfonic acid	335-77-3		8.25	Split peak
Perfluoroundecanoic acid	2058-94-8		8.39	Split peak
Perfluorododecanoic acid	307-55-1		9.24	Split peak
Perfluorotridecanoic acid	72629-94-8		9.97	Split peak
Perfluorotetradecanoic acid	376-06-7		10.63	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/19/14 11:30

Perfluorinated Compounds by LC/MS/MS.

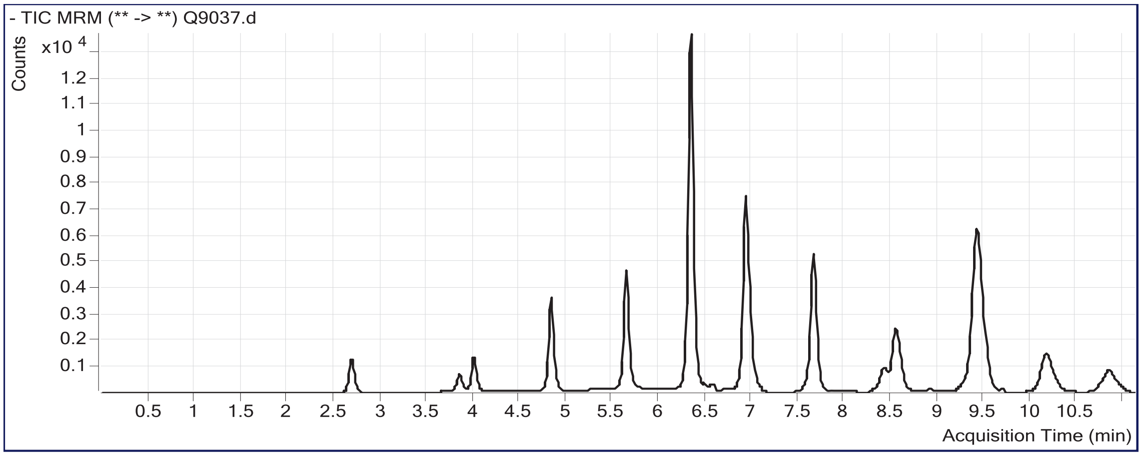
Data File	:	Q9037.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 18:11
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.334	415.0 -> 370.0	21760	20.000	µg/L	0.000
13C4-PFOS	6.920	503.0 -> 80.0	11905	20.000	µg/L	0.000
13C2-PFDoDA	9.410	615.0 -> 570.0	36885	20.000	µg/L	0.063
System Monitoring Compounds						
13C2-PFHxA	4.829	315.0 -> 270.0	6857	19.17	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 95.83%			
13C2-PFDA	7.658	515.0 -> 470.0	13942	15.02	µg/L	0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 75.10%			
Target Compounds						**Qvalue**
PFBA	2.677	213.0 -> 169.0	5948	22.780	µg/L	100
PFPeA	3.849	263.0 -> 219.0	2704	20.725	µg/L	100
PFBS	4.003	299.0 -> 80.0	3550	20.186	µg/L	100
PFHxA	4.833	313.0 -> 269.0	7405	19.710	µg/L	99
PFHpA	5.635	363.0 -> 319.0	6889	18.902	µg/L	96
PFHxS	5.643	399.0 -> 80.0	5870	20.779	µg/L	88
PFHpS	6.306	449.0 -> 80.0	7430	21.055	µg/L	100
PFOA	6.336	413.0 -> 369.0	22404	20.325	µg/L	81
PFOS	6.923	499.0 -> 80.0	11931	20.037	µg/L	87
PFNA	6.979	463.0 -> 419.0	9628	14.691	µg/L	100
PFDA	7.652	513.0 -> 469.0	13162	23.516	µg/L	100
PFDS	8.396	599.0 -> 80.0	5421	33.765	µg/L	100
PFUnDA	8.540	563.0 -> 519.0	16993	21.292	µg/L	100
PFDoDA	9.416	613.0 -> 569.0	16348	19.780	µg/L	100
PFTrDA	10.160	663.0 -> 619.0	14991	18.663	µg/L	100
PFTeDA	10.823	713.0 -> 669.0	9552	16.873	µg/L	100

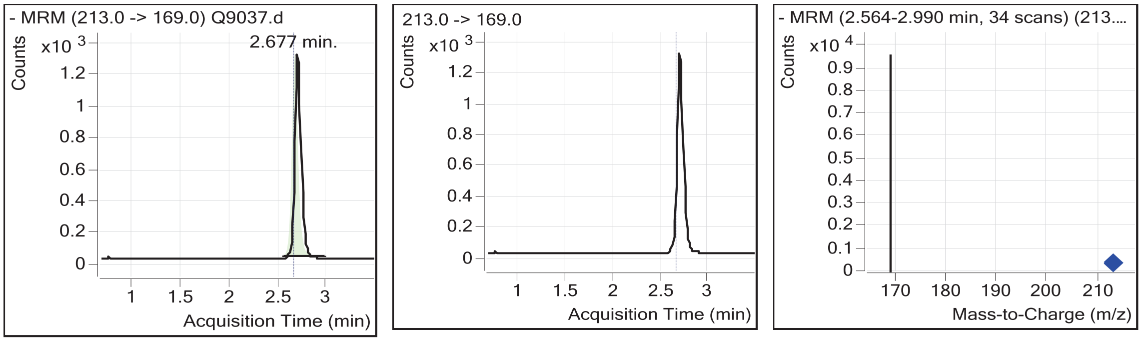
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

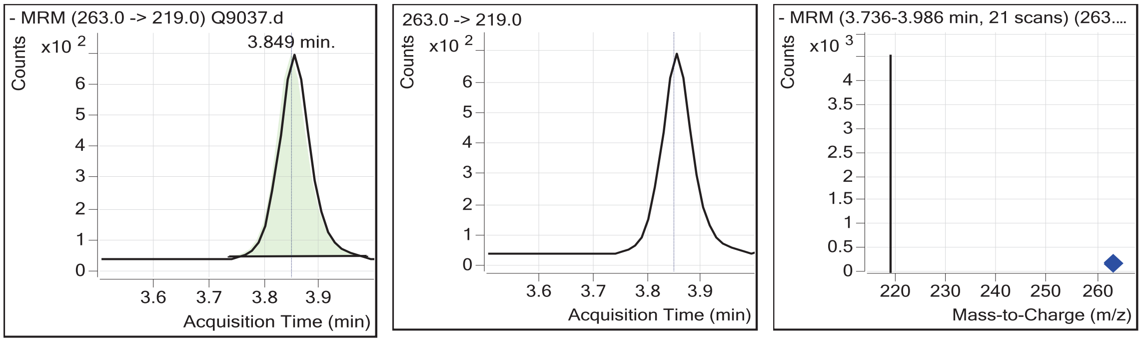
Data File	:	Q9037.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 18:11
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



PFBA

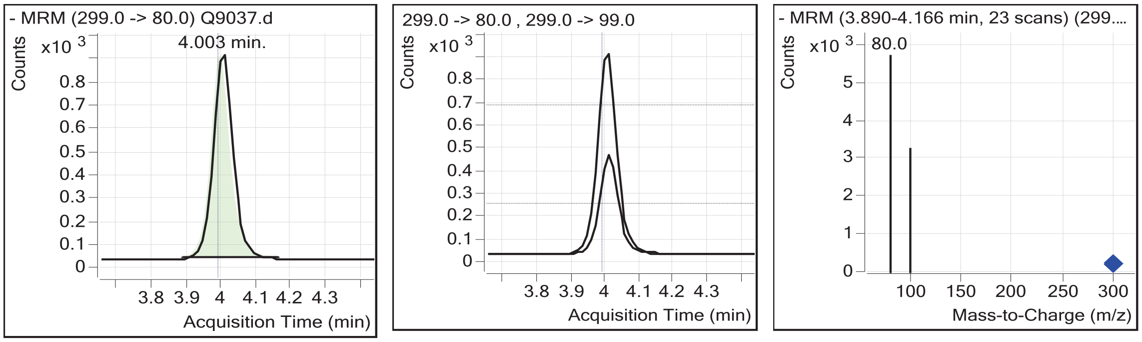


PFPeA

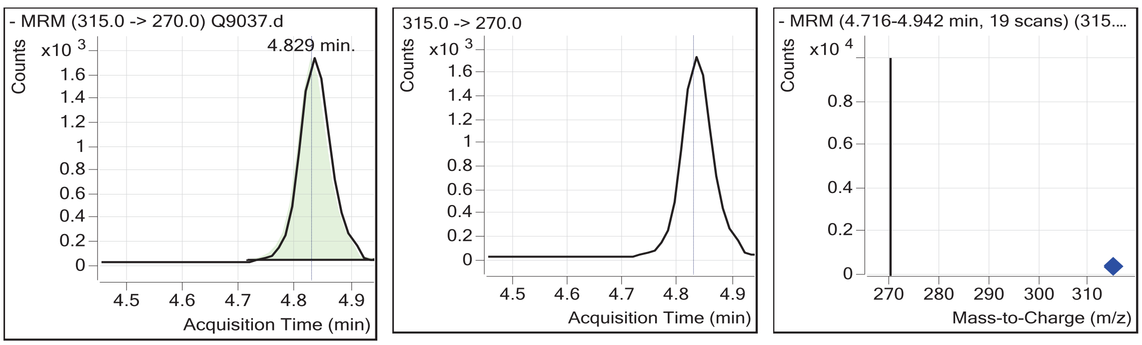


Perfluorinated Compounds by LC/MS/MS.

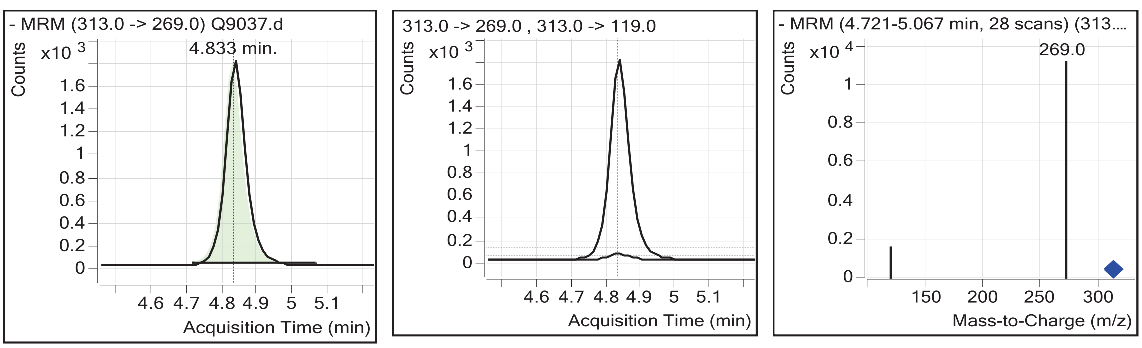
PFBS



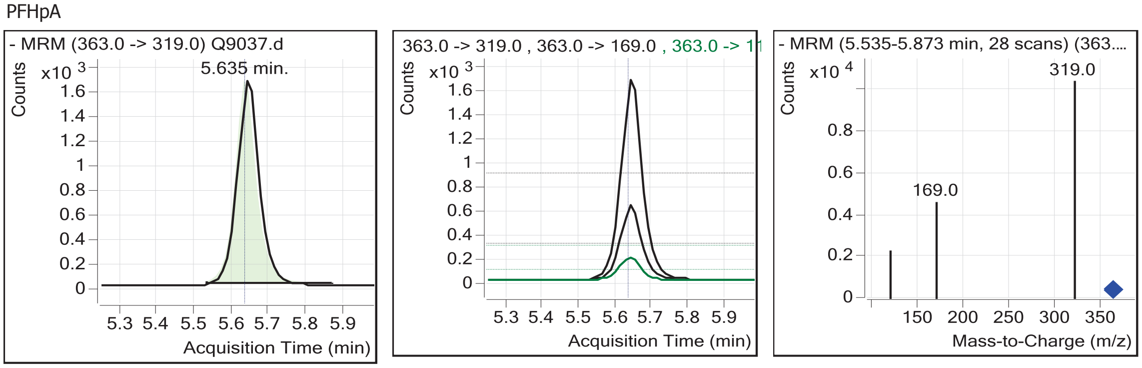
13C2-PFHxA



PFHxA

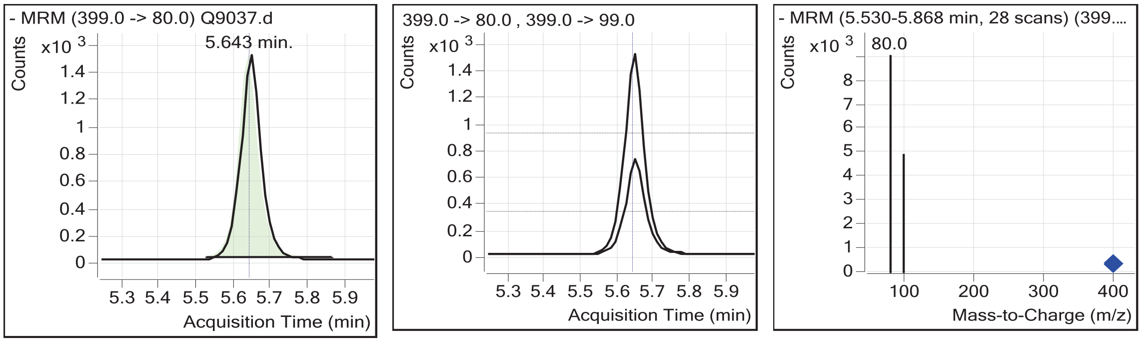


PFHpA

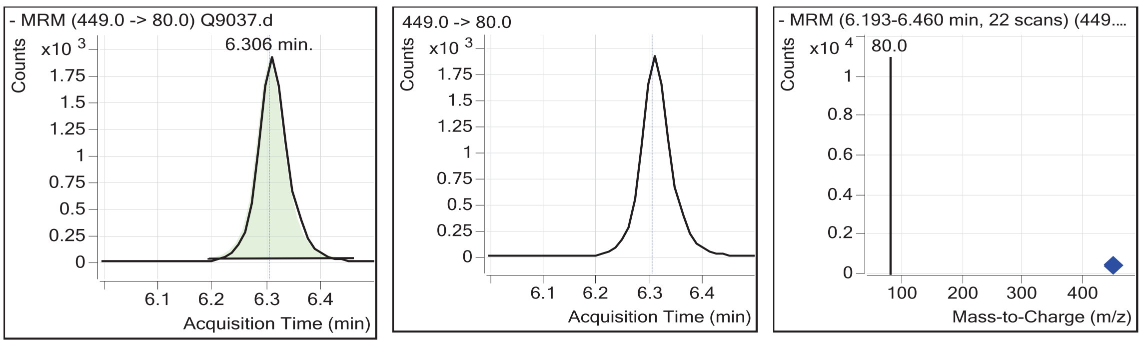


Perfluorinated Compounds by LC/MS/MS.

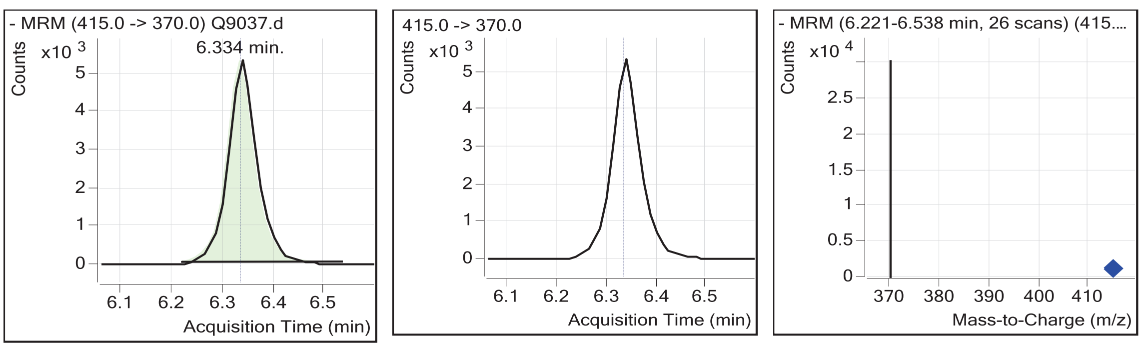
PFHxS



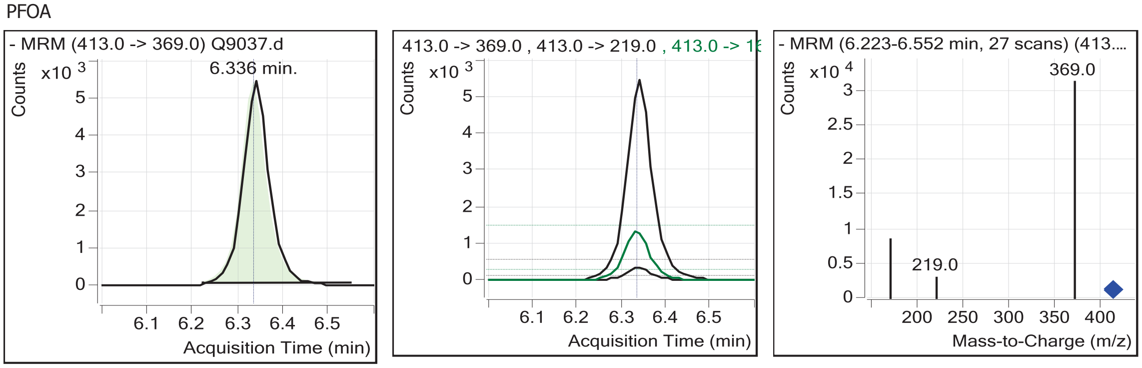
PFHpS



13C2-PFOA

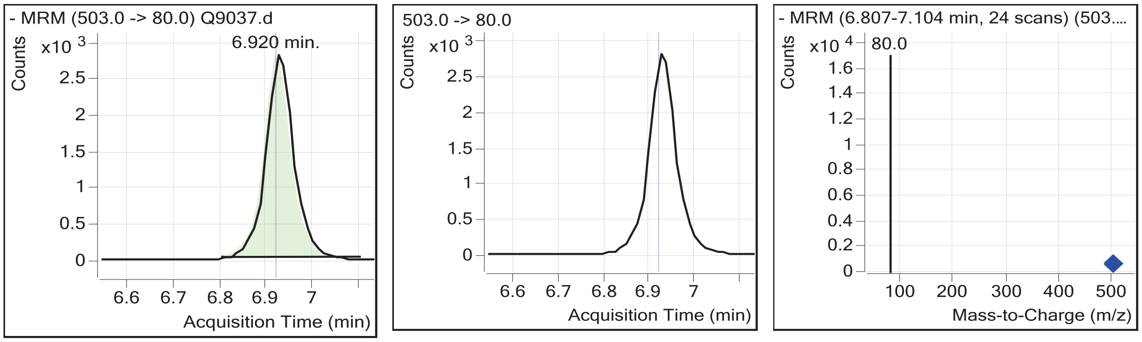


PFOA

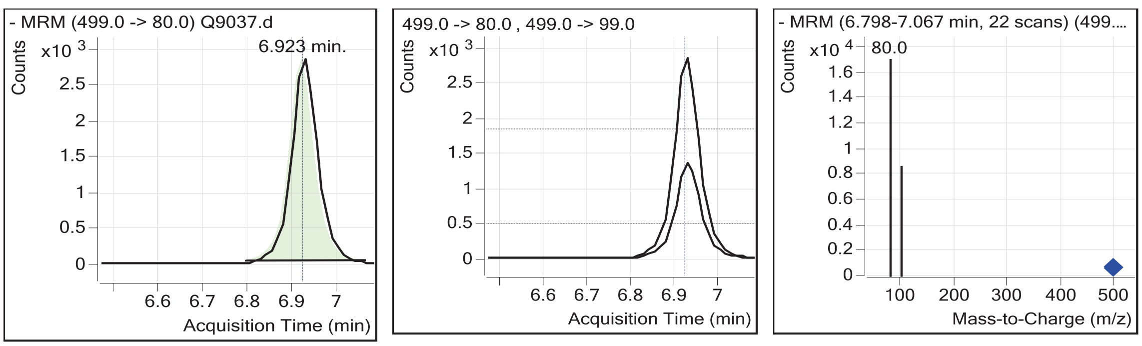


Perfluorinated Compounds by LC/MS/MS.

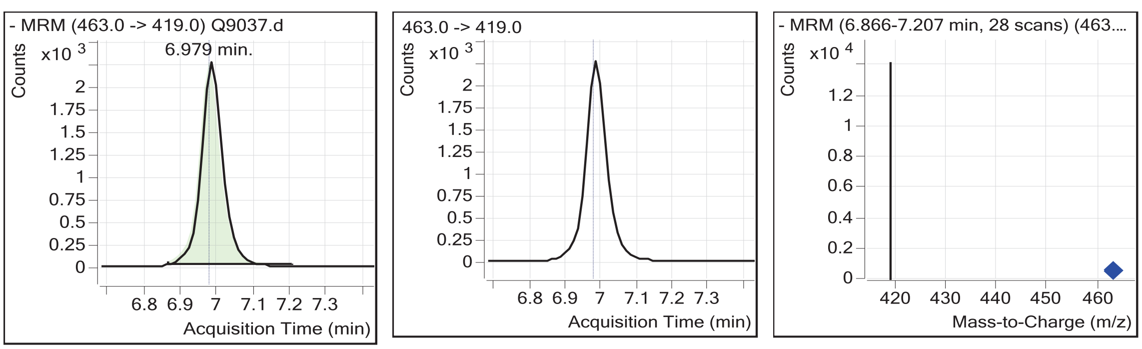
13C4-PFOS



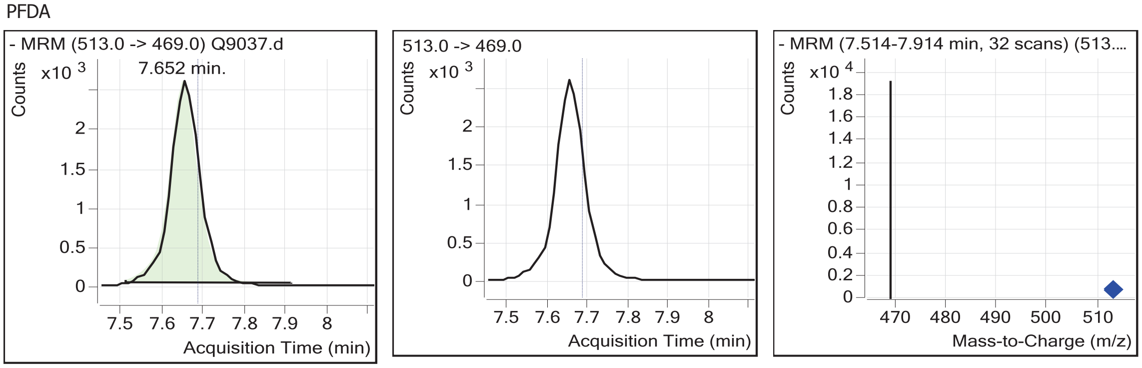
PFOS



PFNA



PFDA

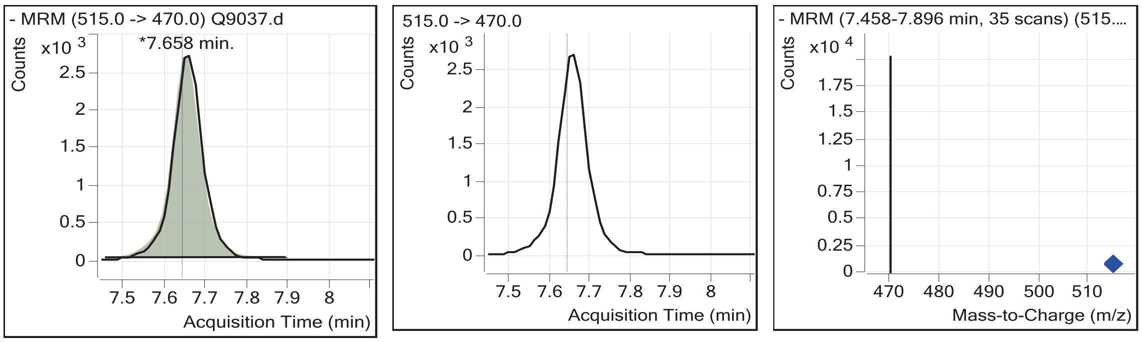


7.5.10

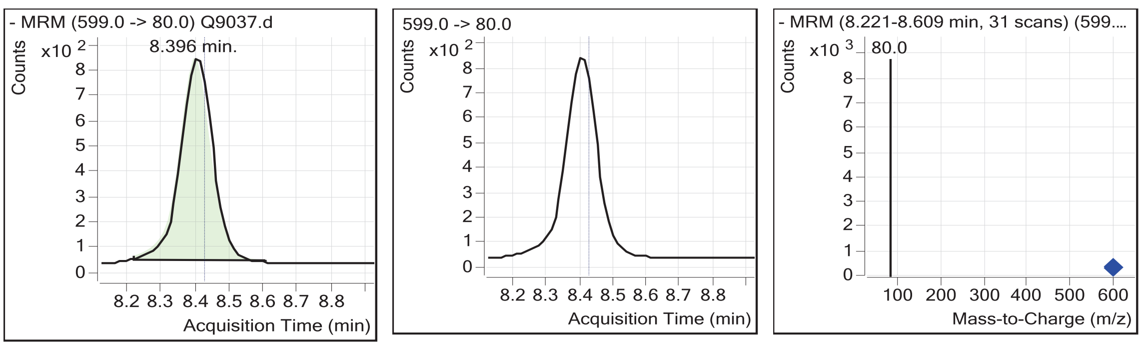
7

Perfluorinated Compounds by LC/MS/MS.

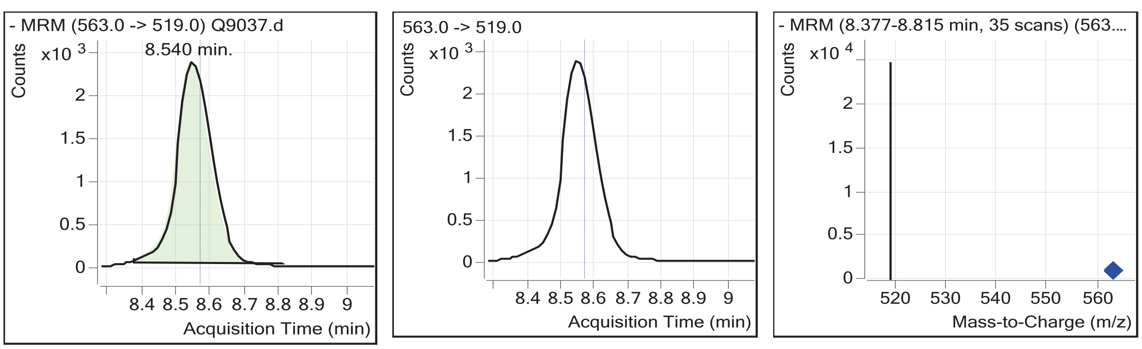
13C2-PFDA



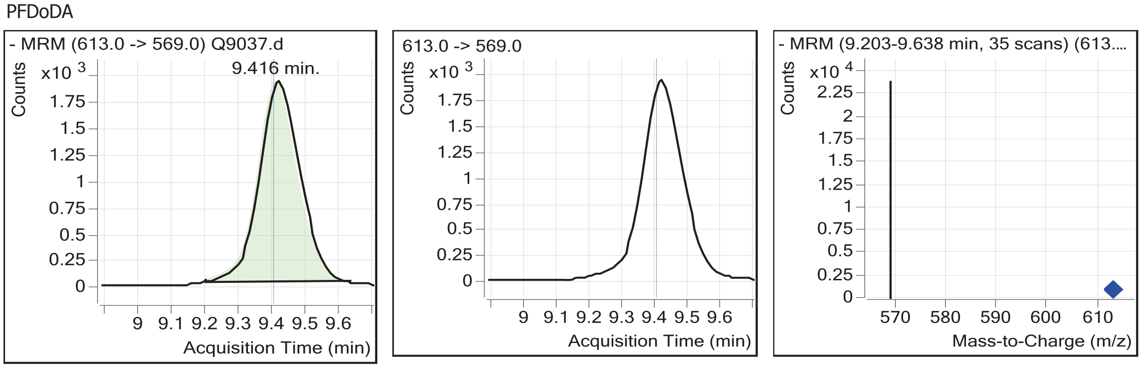
PFDS



PFUnDA

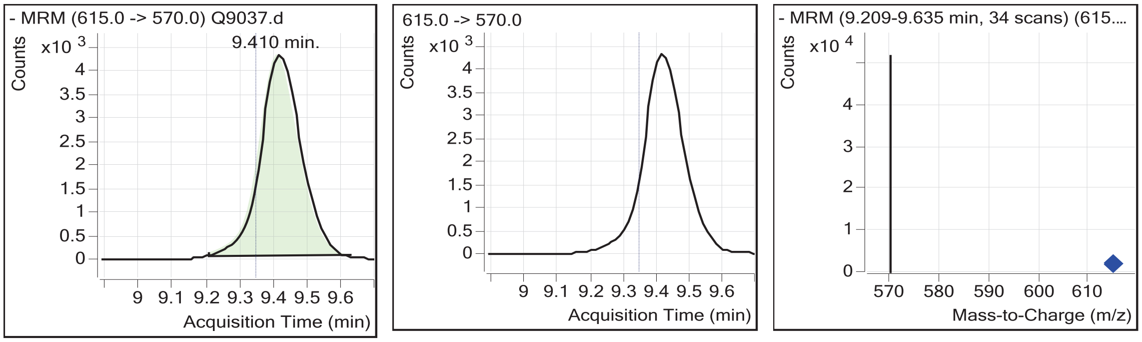


PFDoDA

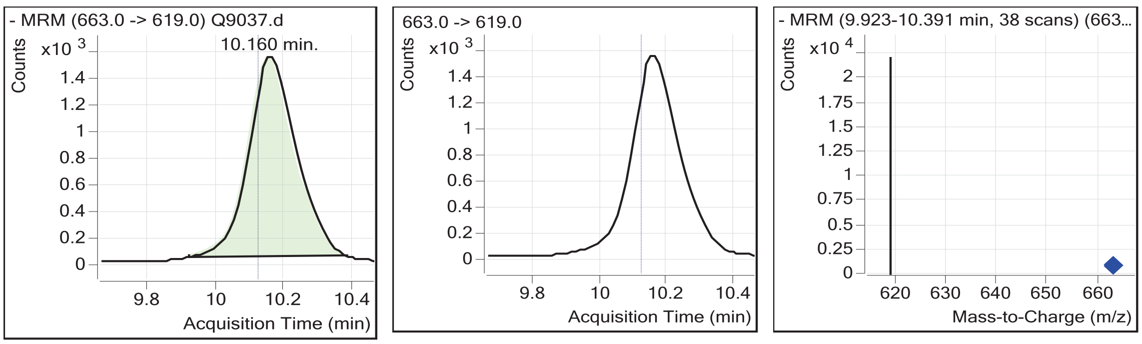


Perfluorinated Compounds by LC/MS/MS.

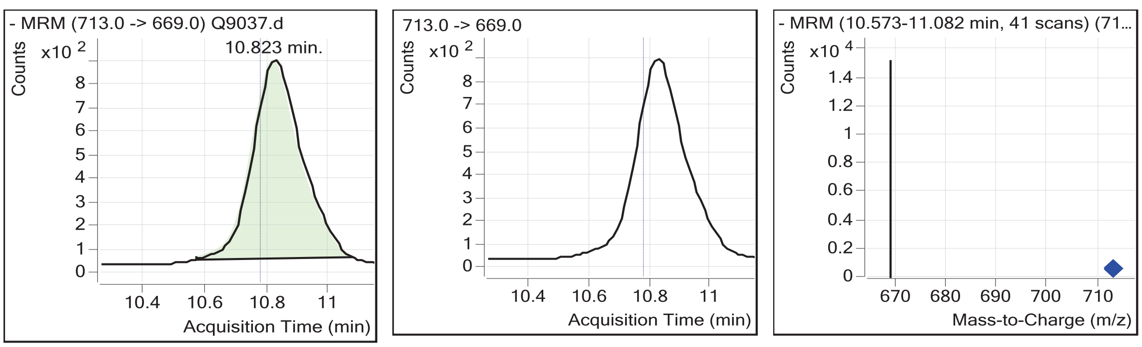
13C2-PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	SQ289-CC280	**Method:**	EPA 537 MOD
Lab FileID:	Q9037.D	**Analyst approved:**	12/19/14 09:24 Mike Eger
Injection Time:	12/18/14 18:11	**Supervisor approved:**	12/19/14 11:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
13C2-PFDA			7.66	Poor instrument integration

Perfluorinated Compounds by LC/MS/MS.

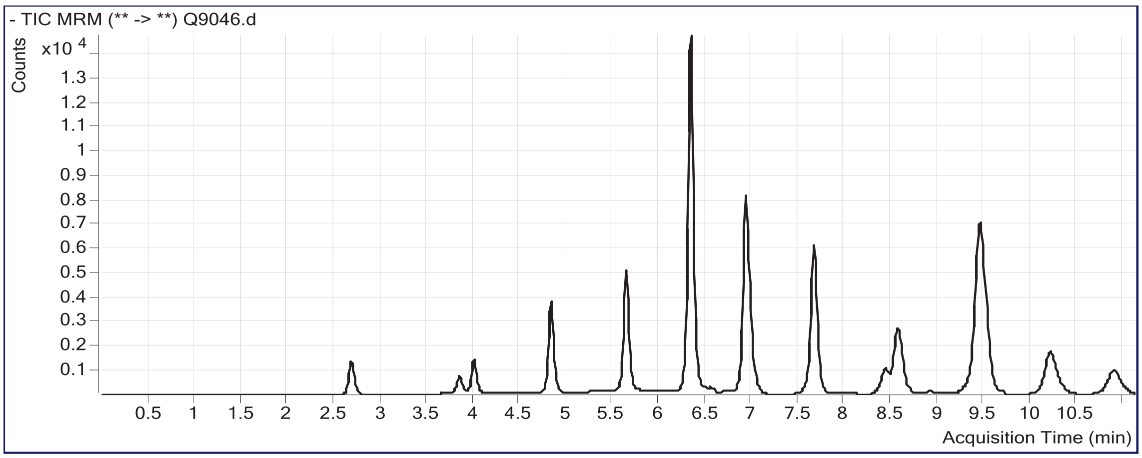
Data File	:	Q9046.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 21:09
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.334	415.0 -> 370.0	24039	20.000	µg/L	0.000
13C4-PFOS	6.920	503.0 -> 80.0	13082	20.000	µg/L	0.000
13C2-PFDoDA	9.447	615.0 -> 570.0	40760	20.000	µg/L	0.100
System Monitoring Compounds						
13C2-PFHxA	4.829	315.0 -> 270.0	7289	18.44	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 92.21%			
13C2-PFDA	7.658	515.0 -> 470.0	16354	15.95	µg/L	0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 79.74%			
Target Compounds						**Qvalue**
PFBA	2.677	213.0 -> 169.0	6375	22.099	µg/L	100
PFPeA	3.849	263.0 -> 219.0	2892	20.065	µg/L	100
PFBS	4.003	299.0 -> 80.0	3827	19.800	µg/L	100
PFHxA	4.833	313.0 -> 269.0	7971	19.204	µg/L	99
PFHpA	5.635	363.0 -> 319.0	7617	18.918	µg/L	97
PFHxS	5.643	399.0 -> 80.0	6524	21.018	µg/L	88
PFHpS	6.306	449.0 -> 80.0	7922	20.430	µg/L	100
PFOA	6.336	413.0 -> 369.0	24236	19.902	µg/L	80
PFOS	6.923	499.0 -> 80.0	13021	19.901	µg/L	88
PFNA	6.979	463.0 -> 419.0	11041	15.249	µg/L	100
PFDA	7.664	513.0 -> 469.0	15598	25.219	µg/L	100
PFDS	8.421	599.0 -> 80.0	6030	33.988	µg/L	100
PFUnDA	8.565	563.0 -> 519.0	19499	22.110	µg/L	100
PFDoDA	9.441	613.0 -> 569.0	18214	19.942	µg/L	100
PFTrDA	10.198	663.0 -> 619.0	16869	19.005	µg/L	100
PFTeDA	10.873	713.0 -> 669.0	10701	17.105	µg/L	100

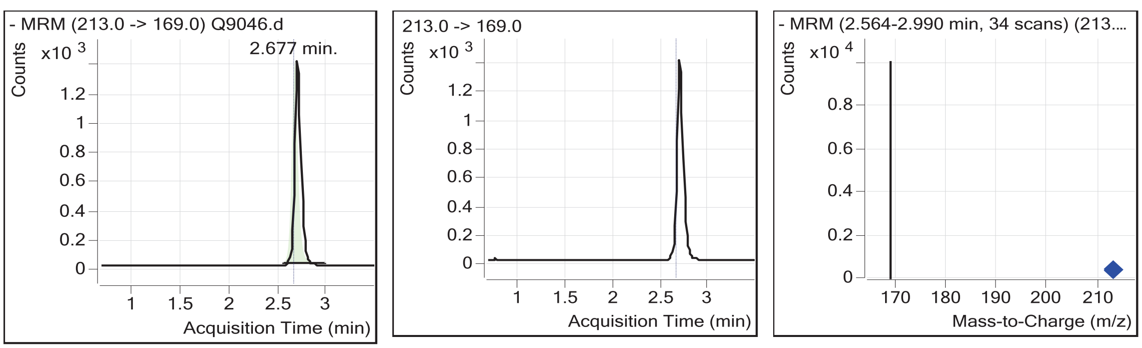
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

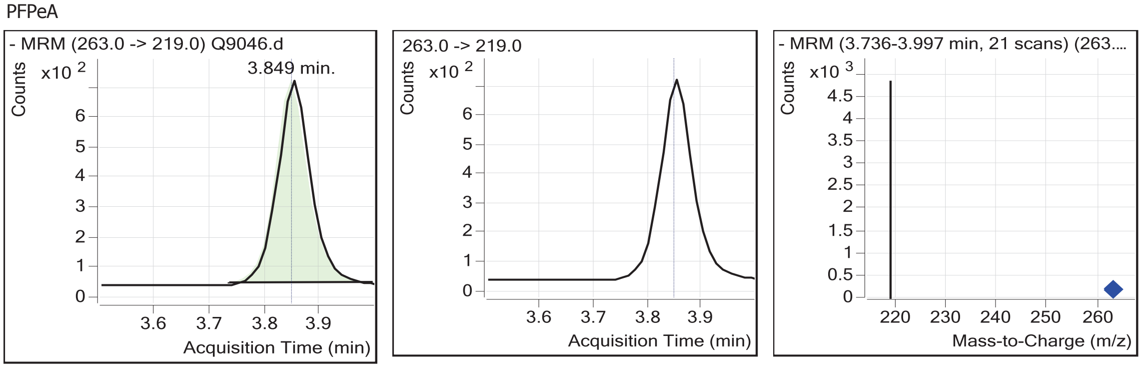
Data File	:	Q9046.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-18 21:09
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



PFBA

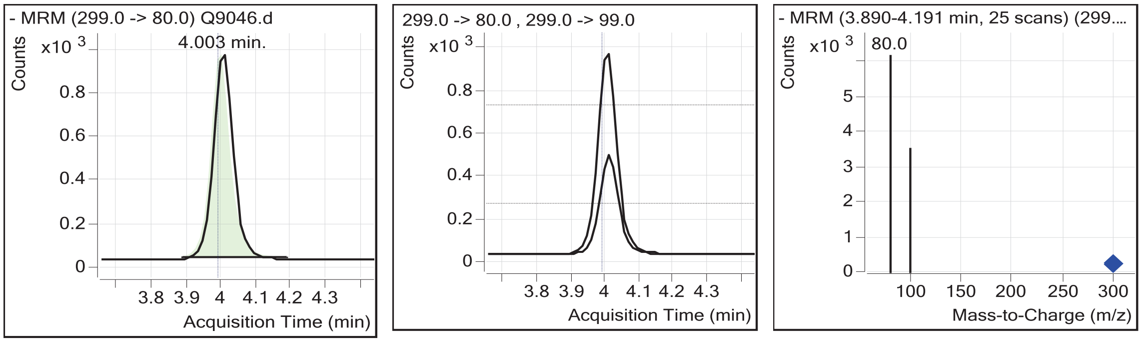


PFPeA

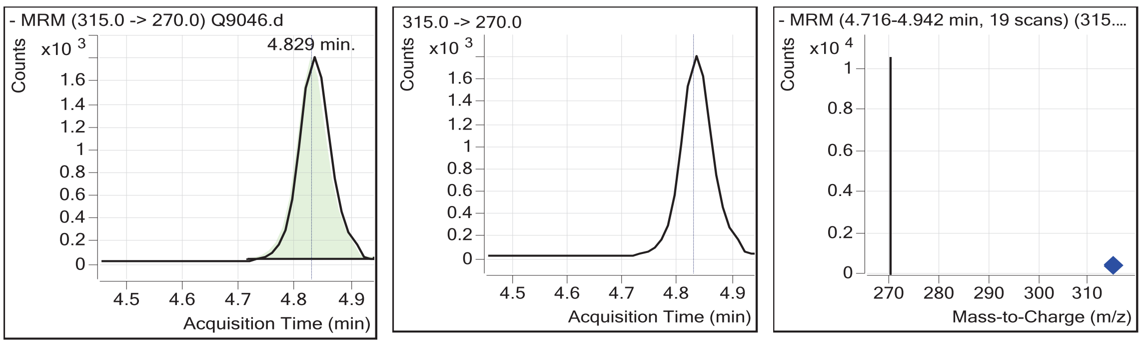


Perfluorinated Compounds by LC/MS/MS.

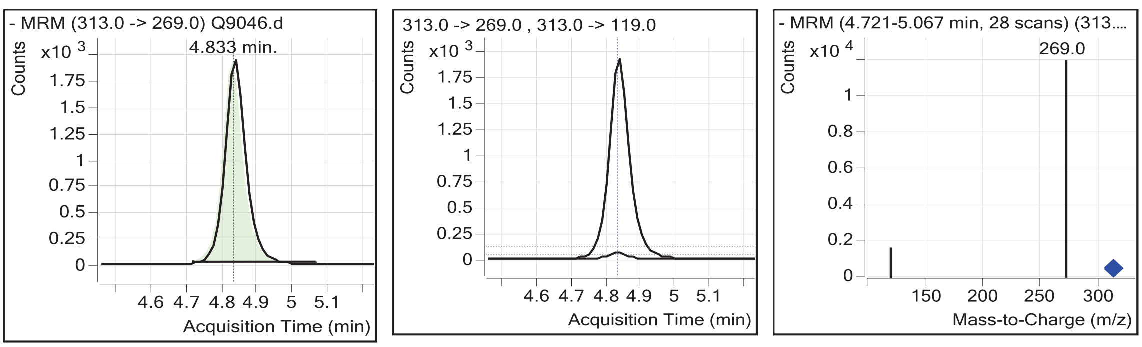
PFBS



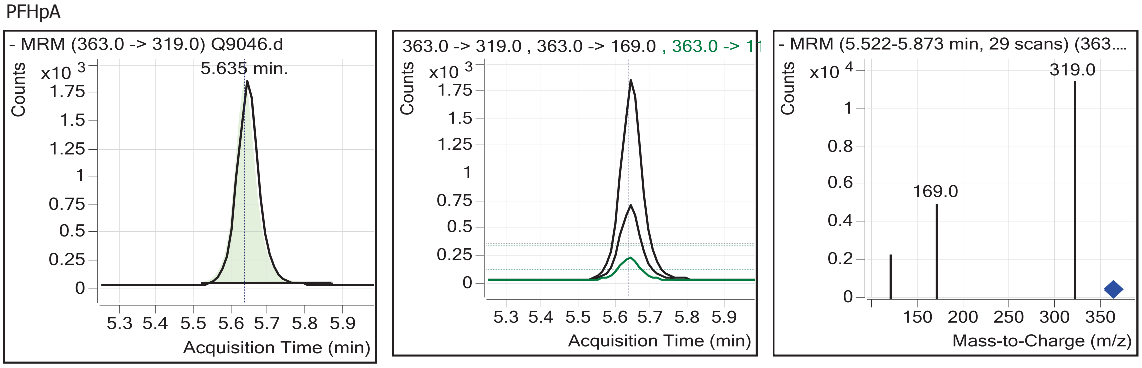
13C2-PFHxA



PFHxA

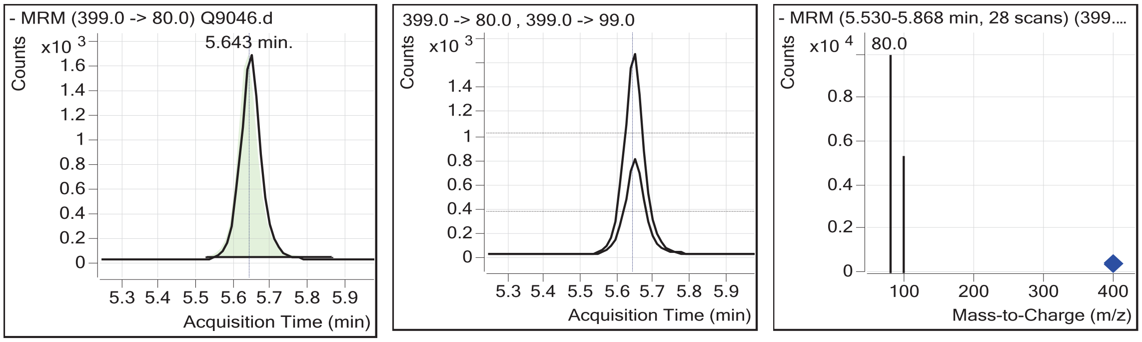


PFHpA

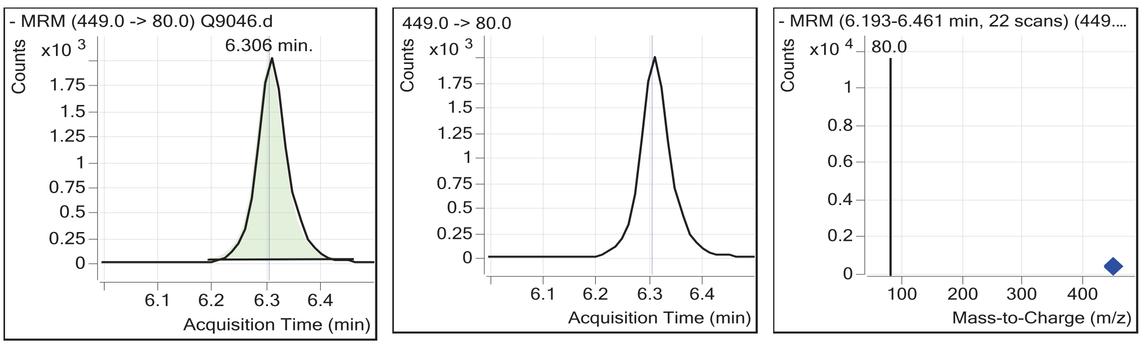


Perfluorinated Compounds by LC/MS/MS.

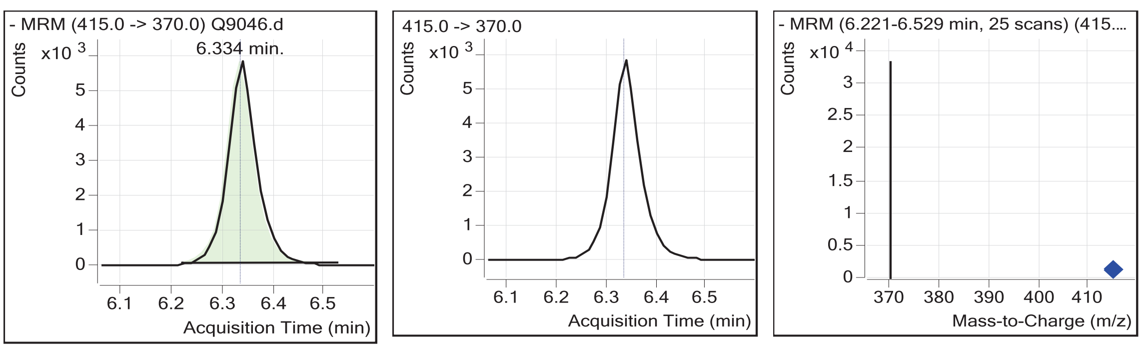
PFHxS



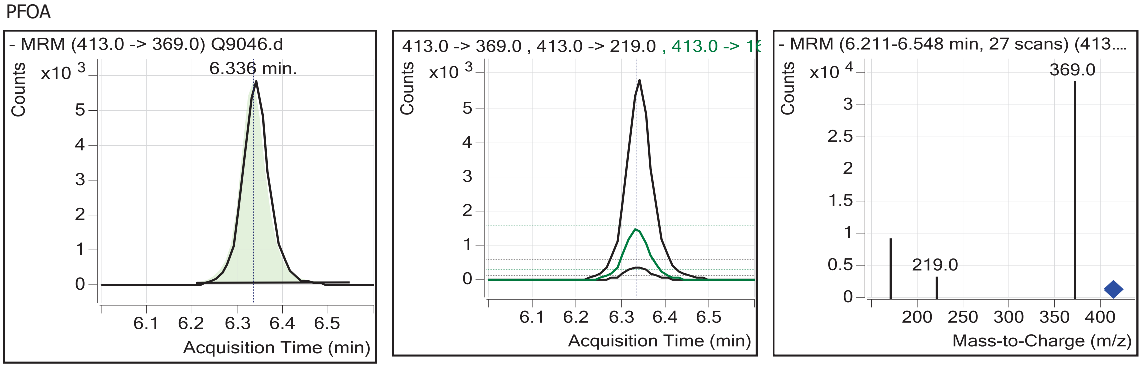
PFHpS



13C2-PFOA

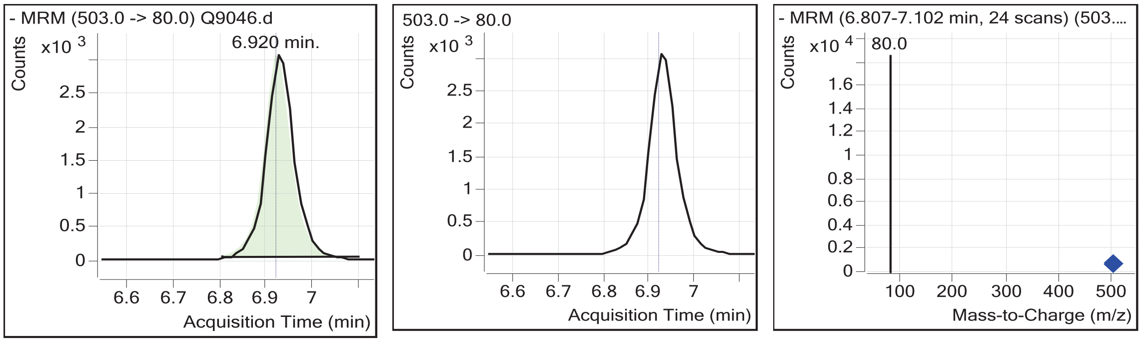


PFOA

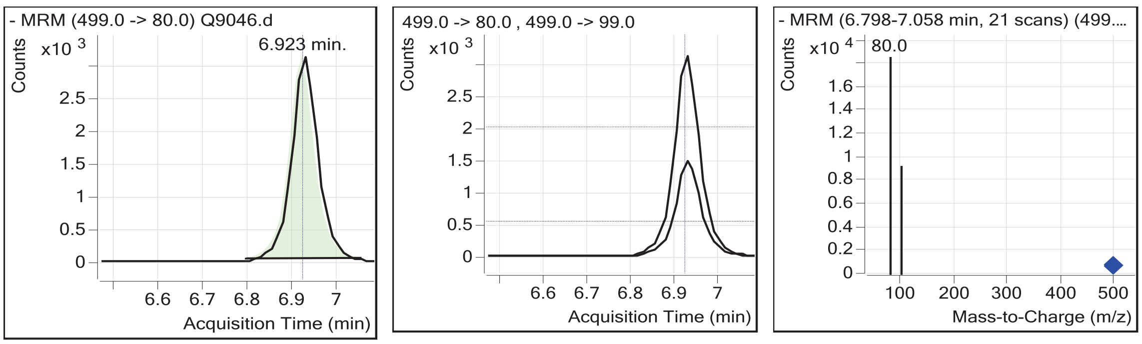


Perfluorinated Compounds by LC/MS/MS.

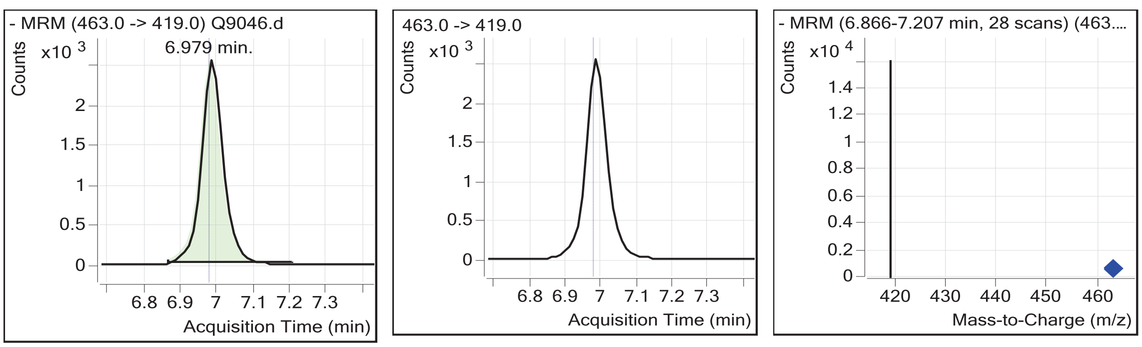
13C4-PFOS



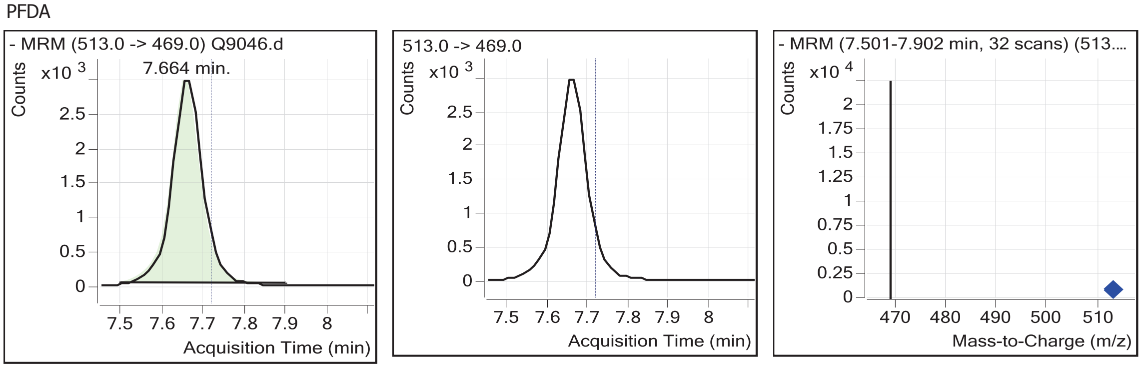
PFOS



PFNA

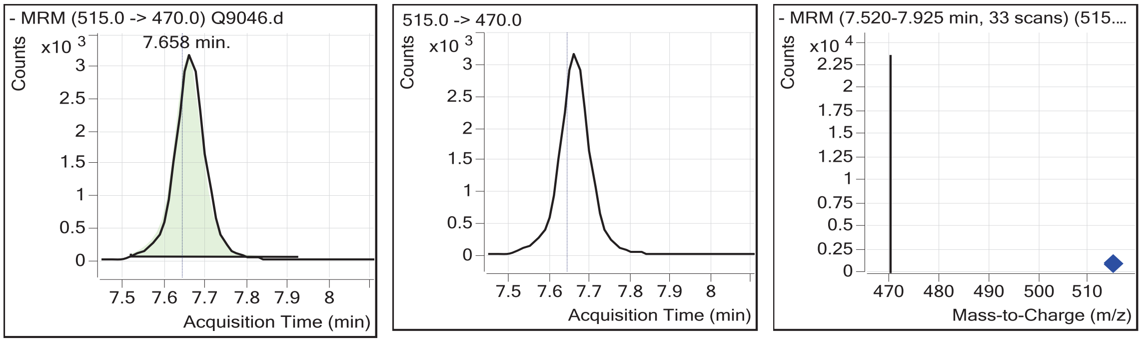


PFDA

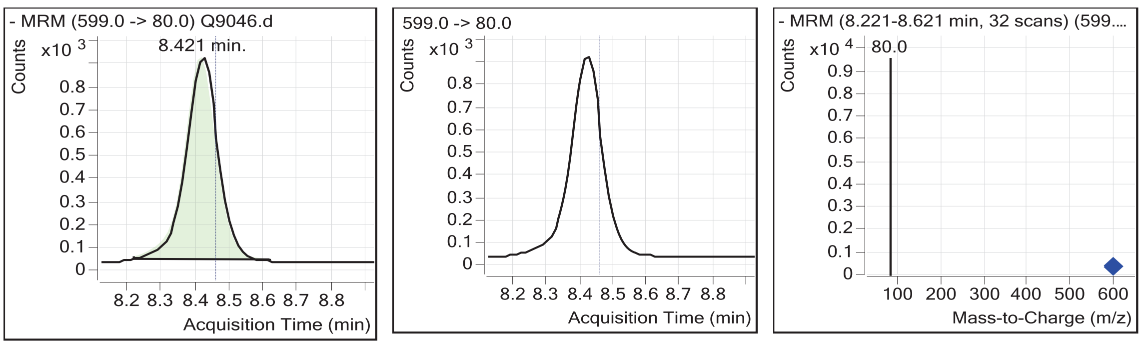


Perfluorinated Compounds by LC/MS/MS.

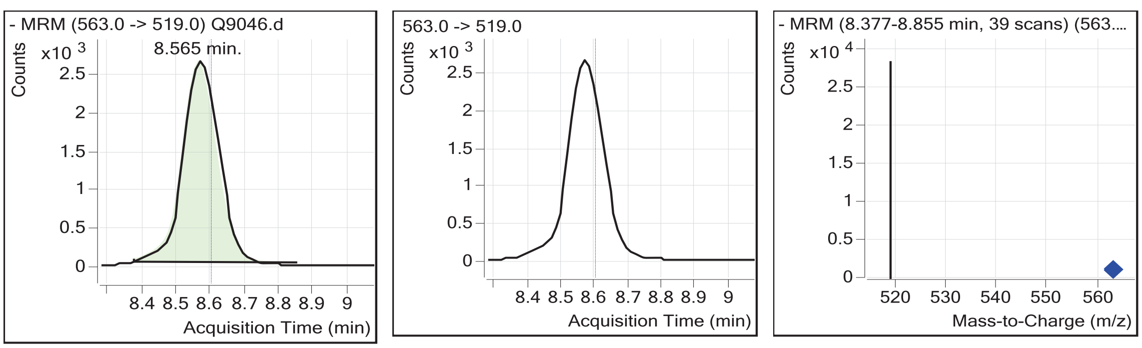
13C2-PFDA



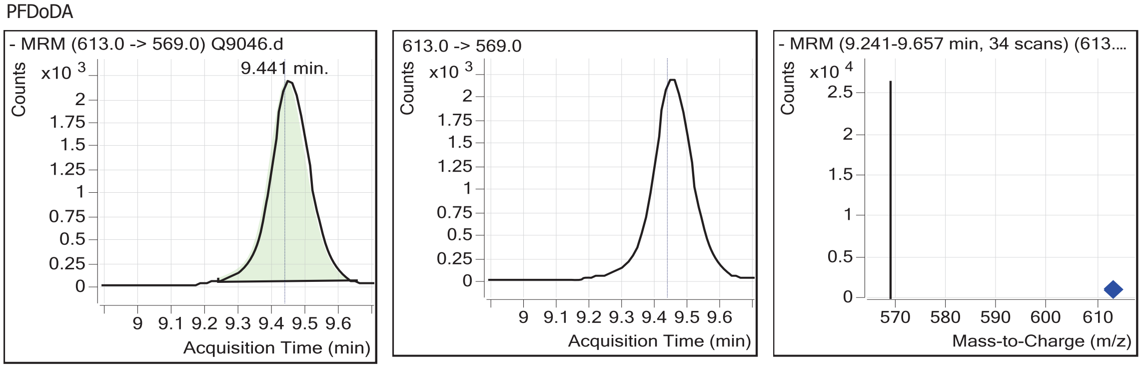
PFDS



PFUnDA

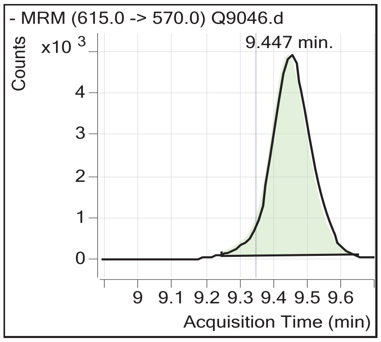


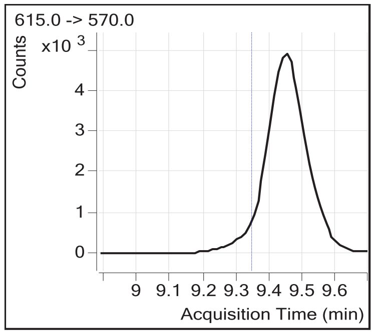
PFDoDA

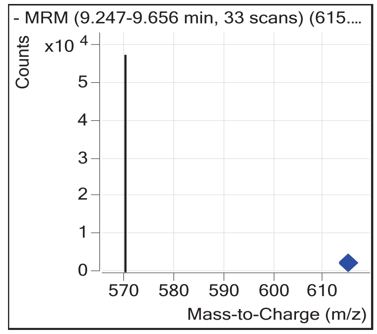


Perfluorinated Compounds by LC/MS/MS.

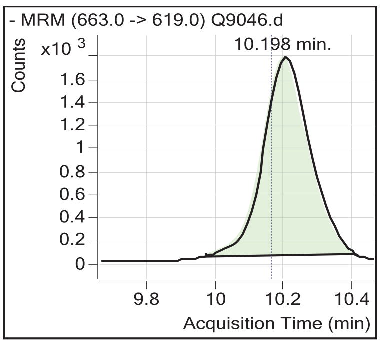
13C2-PFDoDA

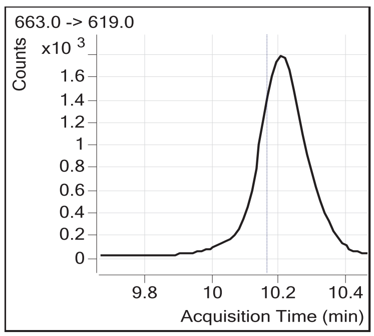


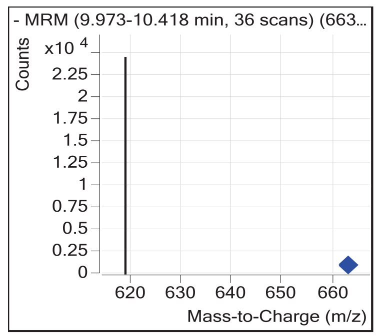




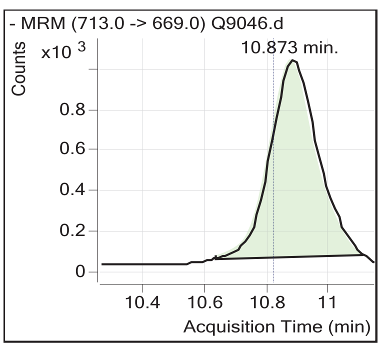
PFTrDA

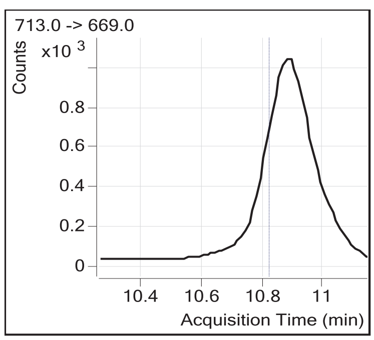


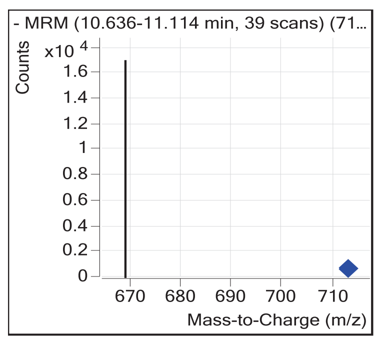




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

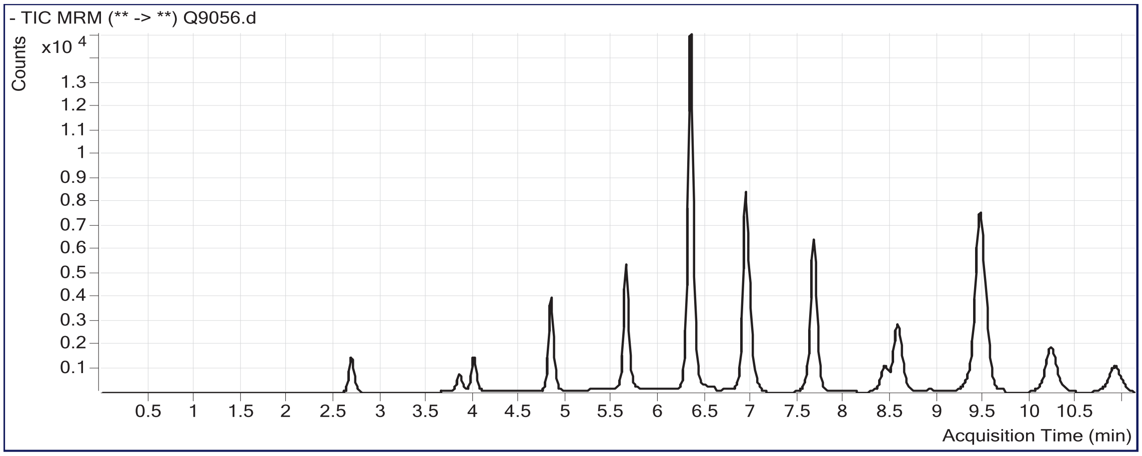
Data File	:	Q9056.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 00:26
Sample Name	:	ECC280-20
Vial	:	Vial 2
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.334	415.0 -> 370.0	24966	20.000	µg/L	0.000
13C4-PFOS	6.920	503.0 -> 80.0	13522	20.000	µg/L	0.000
13C2-PFDoDA	9.447	615.0 -> 570.0	42609	20.000	µg/L	0.100
System Monitoring Compounds						
13C2-PFHxA	4.829	315.0 -> 270.0	7639	18.61	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 93.05%			
13C2-PFDA	7.658	515.0 -> 470.0	17532	16.46	µg/L	0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 82.31%			
Target Compounds						**Qvalue**
PFBA	2.677	213.0 -> 169.0	6689	22.327	µg/L	100
PFPeA	3.849	263.0 -> 219.0	3020	20.172	µg/L	100
PFBS	4.003	299.0 -> 80.0	3988	19.963	µg/L	100
PFHxA	4.833	313.0 -> 269.0	8228	19.088	µg/L	99
PFHpA	5.635	363.0 -> 319.0	8053	19.258	µg/L	96
PFHxS	5.643	399.0 -> 80.0	6868	21.405	µg/L	89
PFHpS	6.306	449.0 -> 80.0	8284	20.668	µg/L	100
PFOA	6.336	413.0 -> 369.0	25441	20.116	µg/L	81
PFOS	6.923	499.0 -> 80.0	13445	19.880	µg/L	87
PFNA	6.979	463.0 -> 419.0	11770	15.652	µg/L	100
PFDA	7.652	513.0 -> 469.0	16665	25.775	µg/L	100
PFDS	8.409	599.0 -> 80.0	6247	33.688	µg/L	100
PFUnDA	8.565	563.0 -> 519.0	20364	22.088	µg/L	100
PFDoDA	9.441	613.0 -> 569.0	19175	20.083	µg/L	100
PFTrDA	10.210	663.0 -> 619.0	17806	19.189	µg/L	100
PFTeDA	10.886	713.0 -> 669.0	11104	16.979	µg/L	100

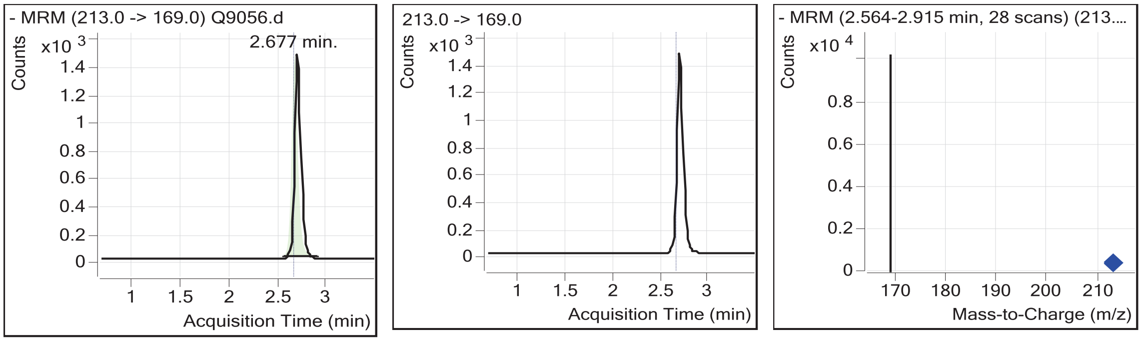
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

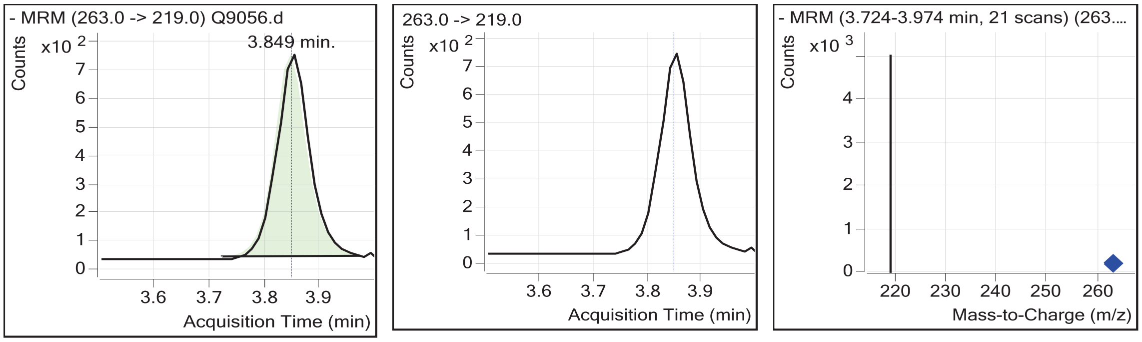
Data File	:	Q9056.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 00:26
Sample Name	:	ECC280-20
Vial	:	Vial 2
Sample Info	:	OP54254,SQ289,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ289.batch.bin
Last Calib Update	:	2014-12-10 09:24



PFBA

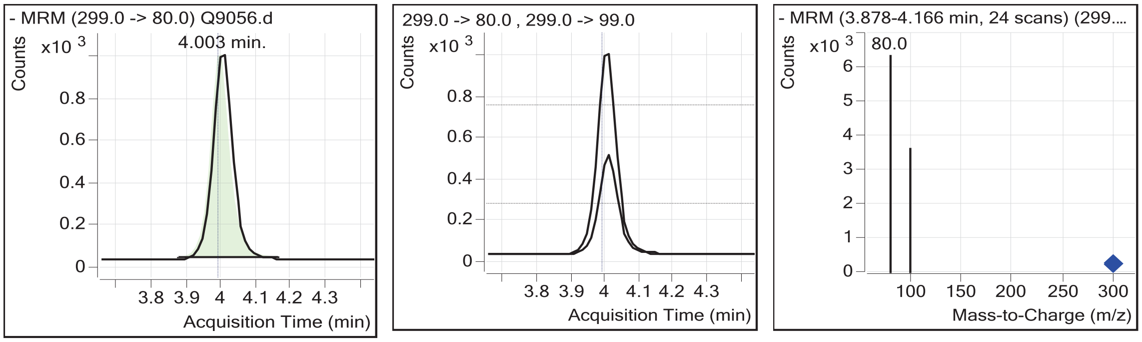


PFPeA

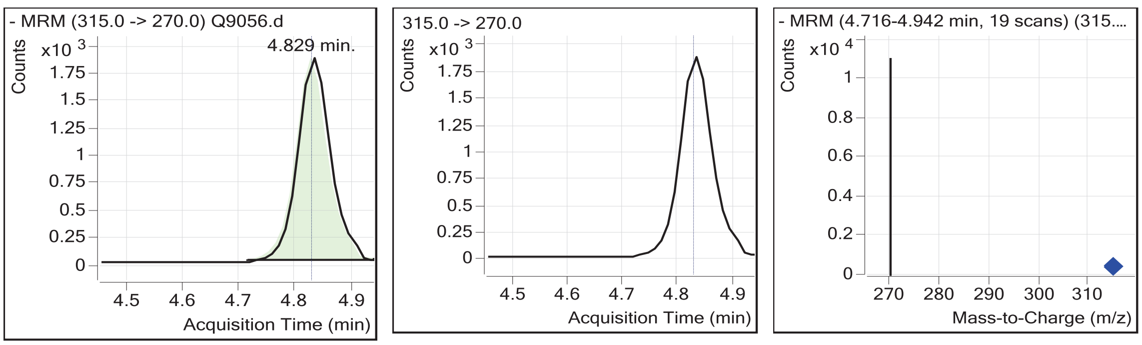


Perfluorinated Compounds by LC/MS/MS.

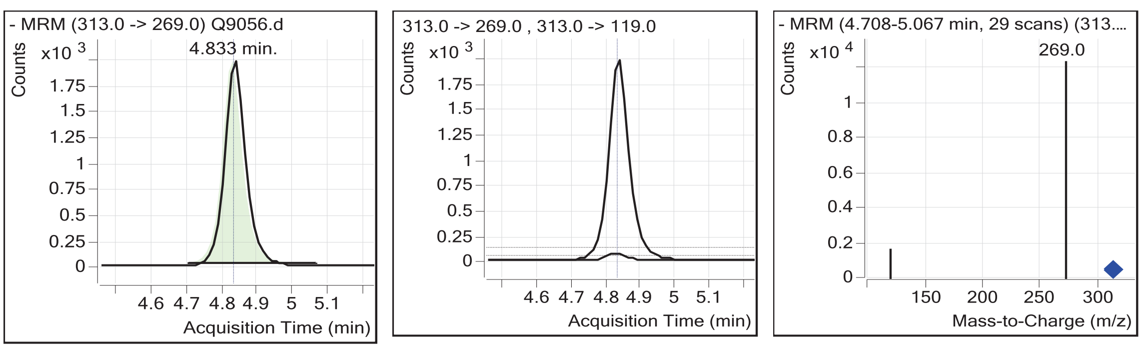
PFBS



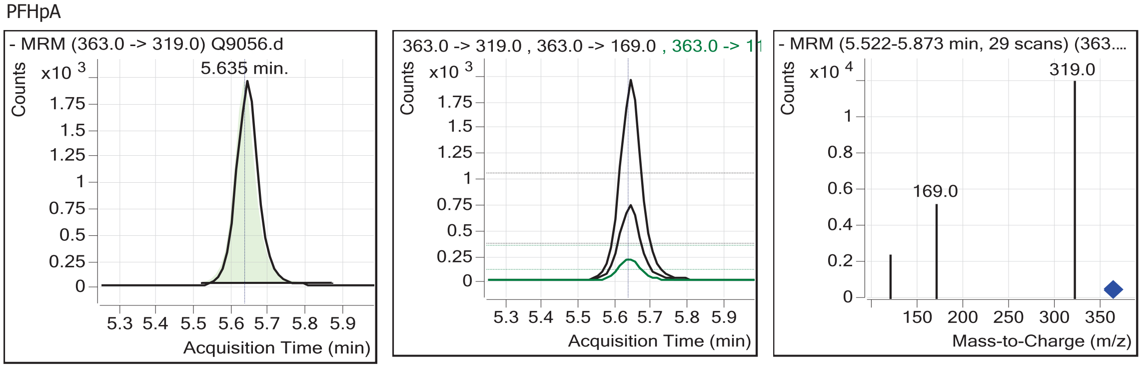
13C2-PFHxA



PFHxA

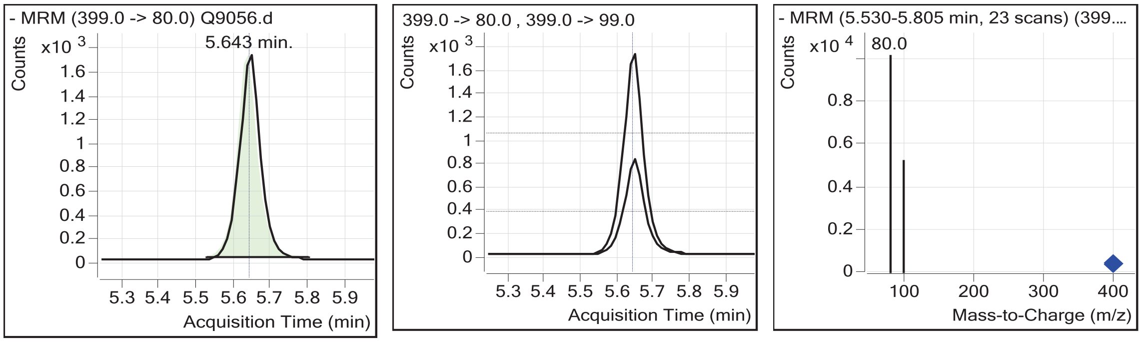


PFHpA

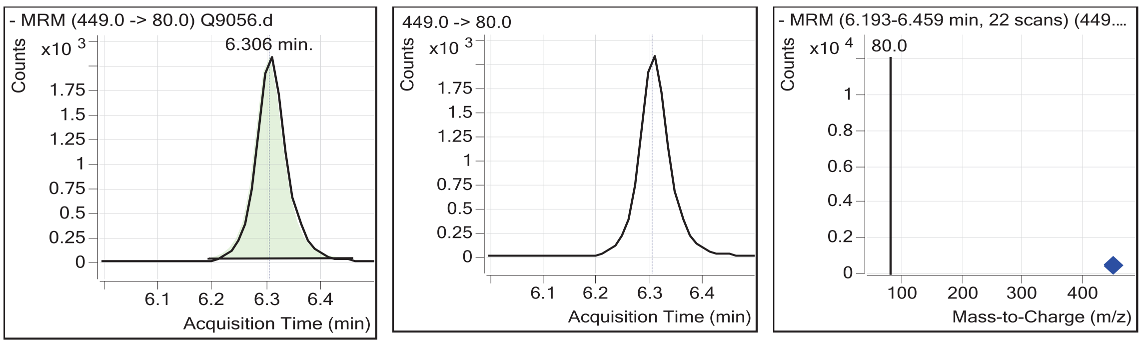


Perfluorinated Compounds by LC/MS/MS.

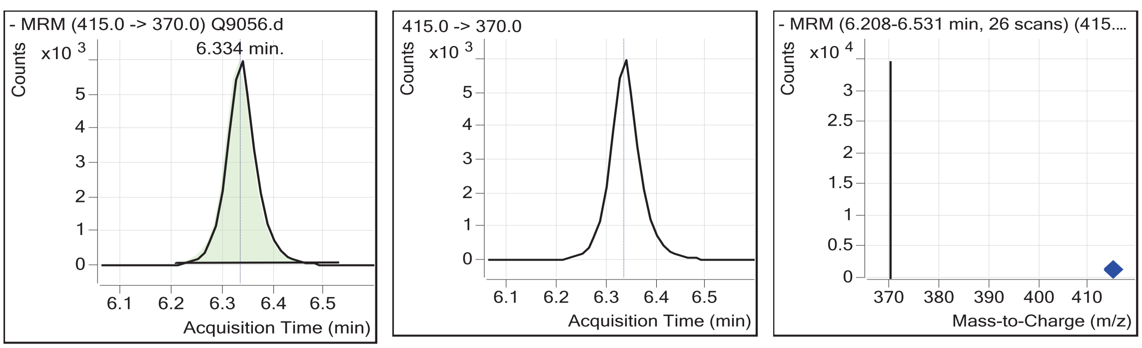
PFHxS



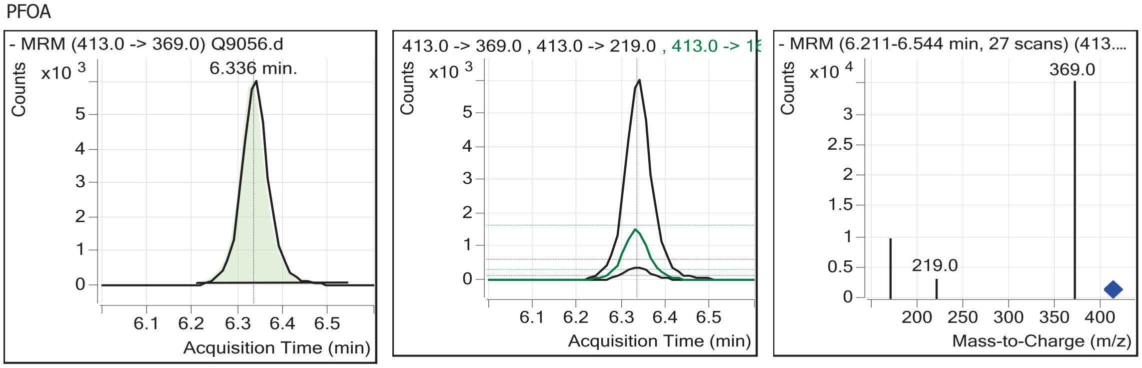
PFHpS



13C2-PFOA



PFOA

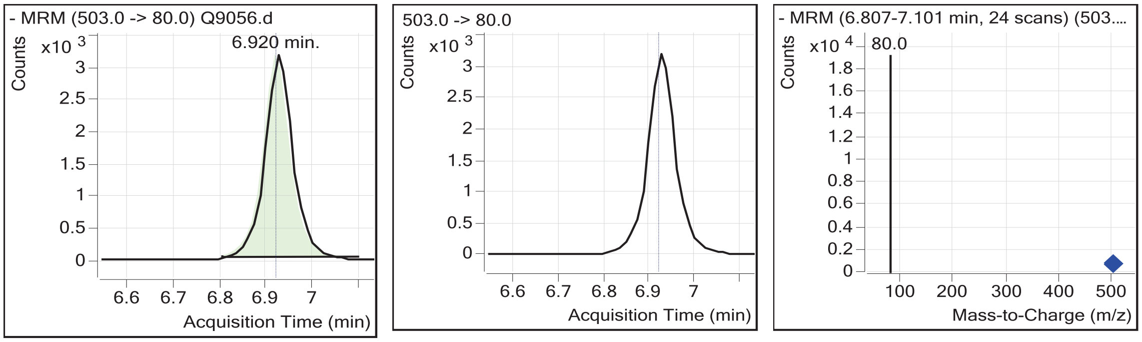


7.5.12

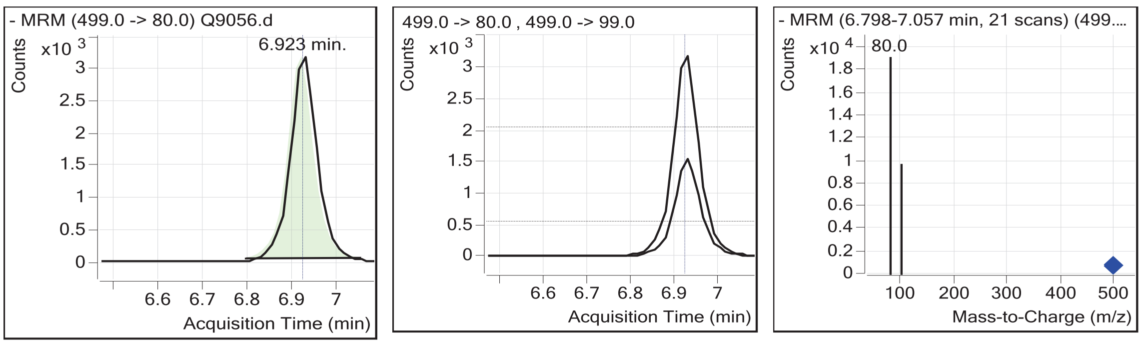
7

Perfluorinated Compounds by LC/MS/MS.

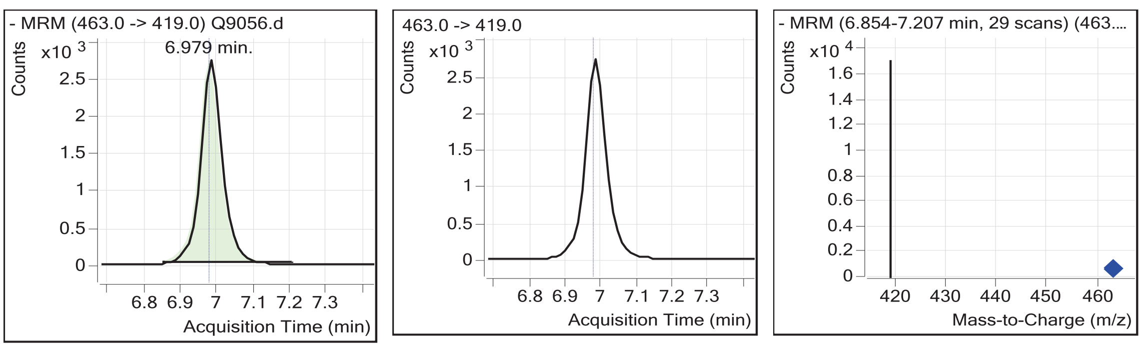
13C4-PFOS



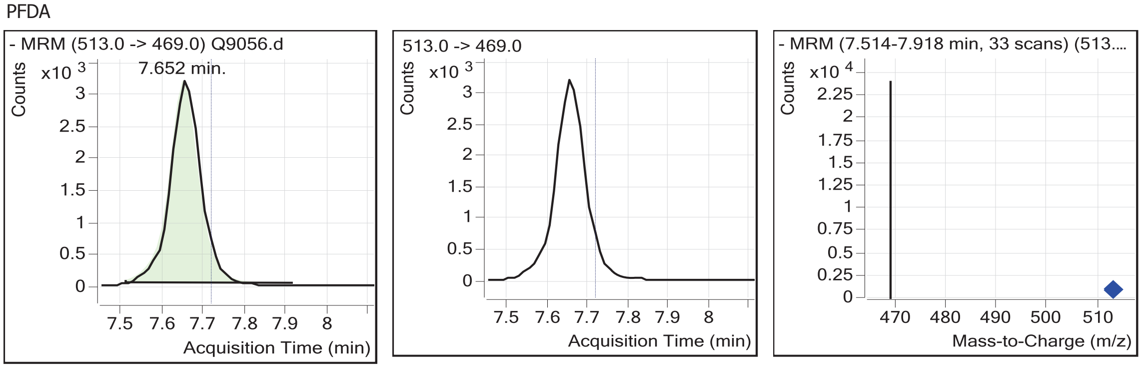
PFOS



PFNA



PFDA

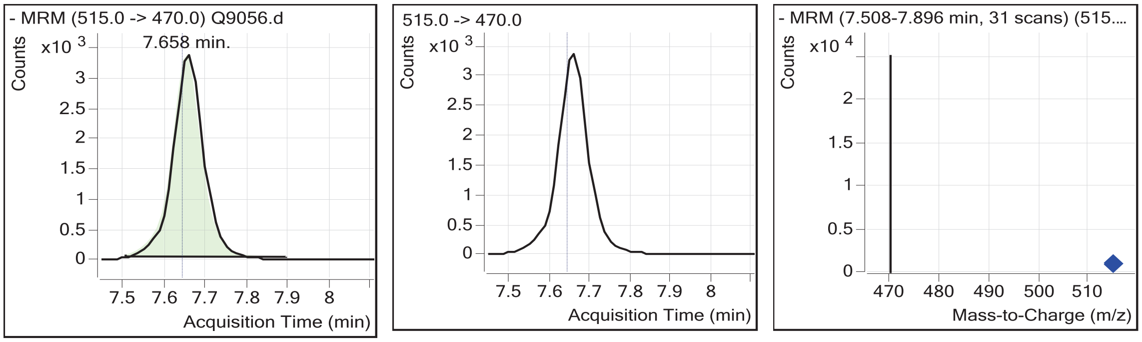


7.5.12

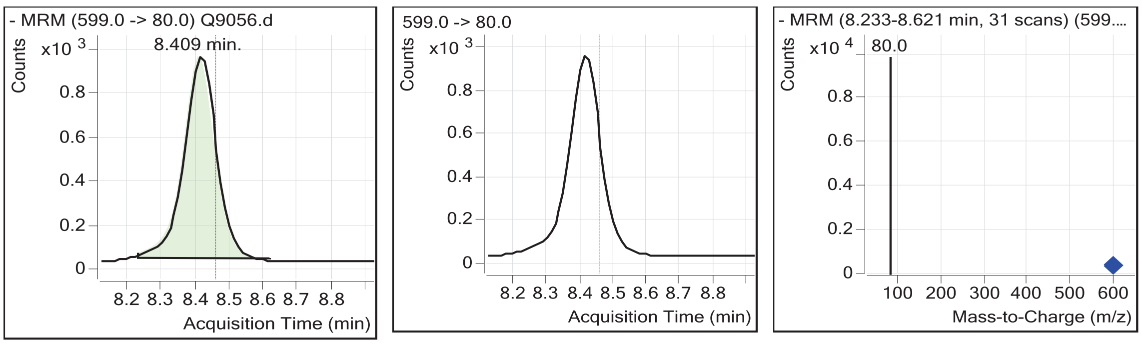
7

Perfluorinated Compounds by LC/MS/MS.

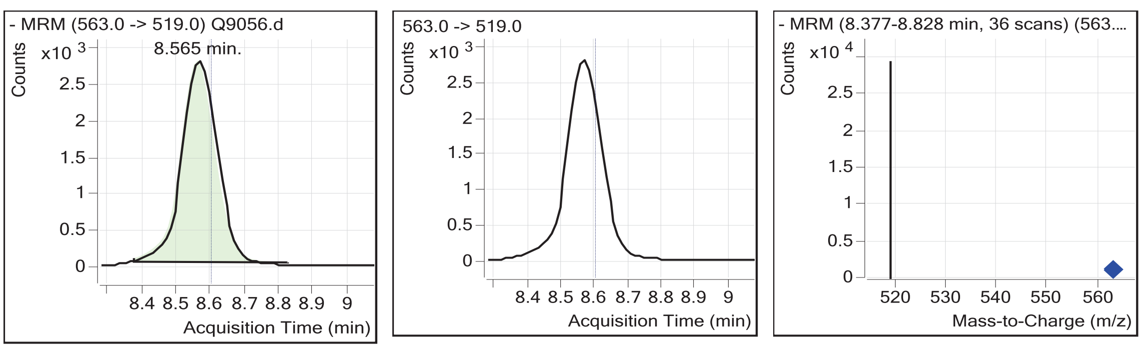
13C2-PFDA



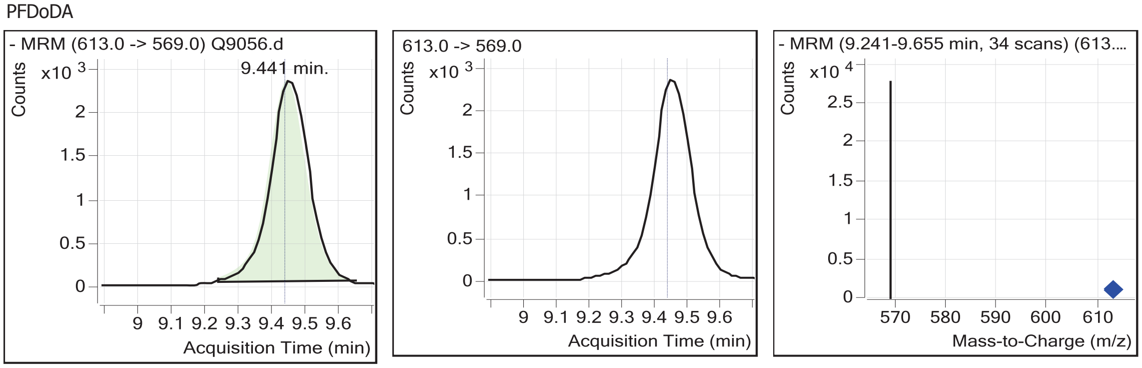
PFDS



PFUnDA

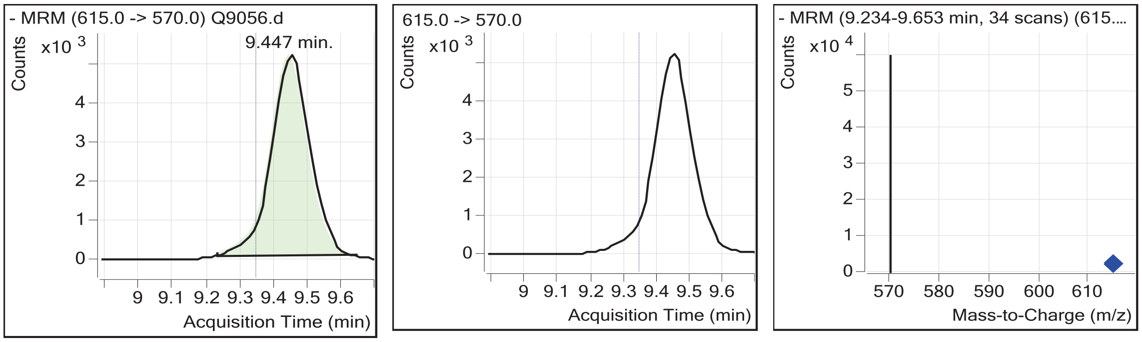


PFDoDA

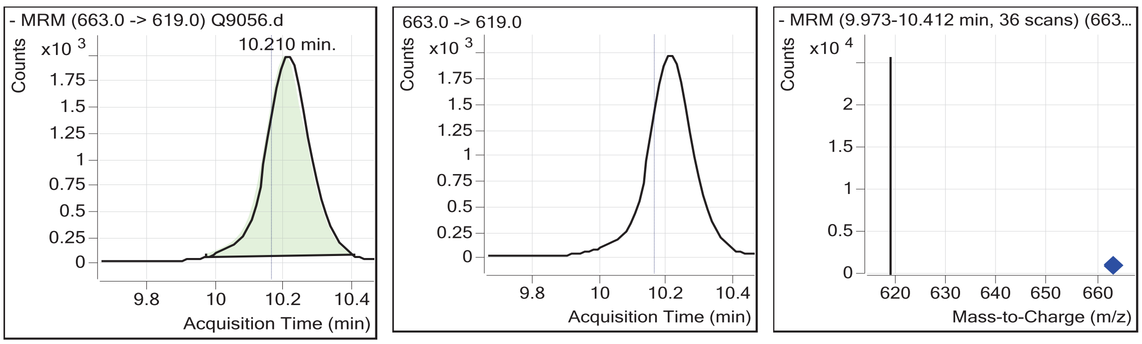


Perfluorinated Compounds by LC/MS/MS.

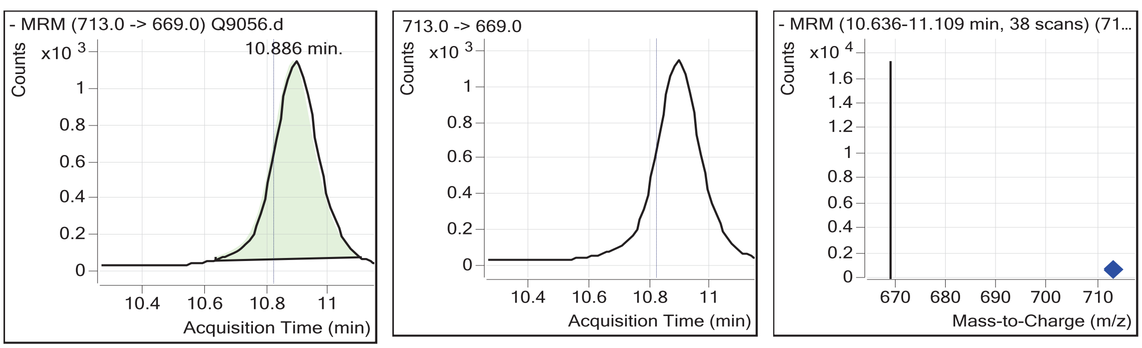
13C2-PFDoDA



PFTrDA



PFTeDA



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

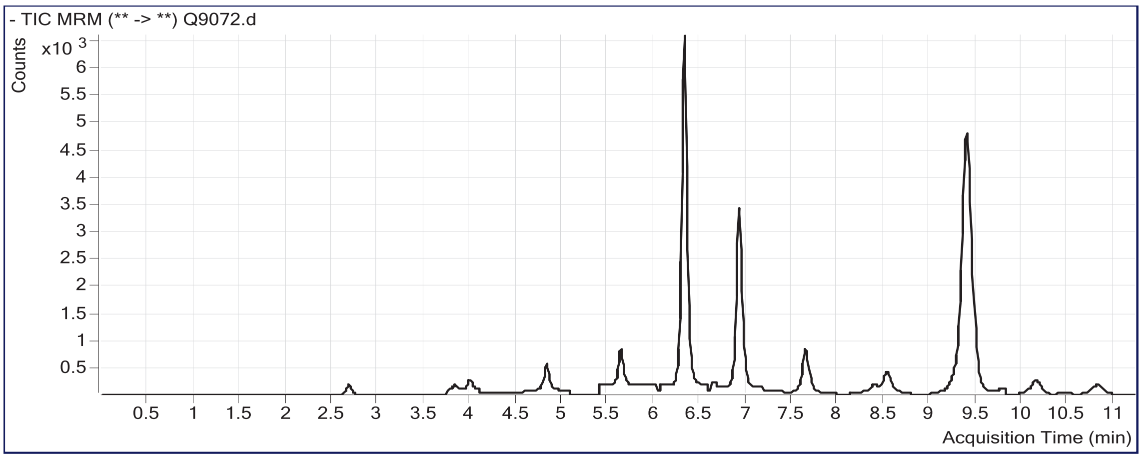
Data File	:	Q9072.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 14:27
Sample Name	:	IC290-2.5
Vial	:	Vial 2
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.321	415.0 -> 370.0	21757	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	11497	20.000	µg/L		0.000
13C2-PFDoDA	9.384	615.0 -> 570.0	35774	20.000	µg/L		0.013
System Monitoring Compounds							
13C2-PFHxA	4.816	315.0 -> 270.0	918	2.75	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 13.75%				
13C2-PFDA	7.633	515.0 -> 470.0	2055	2.86	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 14.29%				
Target Compounds							**Qvalue**
PFBA	2.677	213.0 -> 169.0	794	2.593	µg/L		100
PFPeA	3.836	263.0 -> 219.0	362	2.628	µg/L		100
PFBS	3.991	299.0 -> 80.0	540	2.763	µg/L		93
PFHxA	4.821	313.0 -> 269.0	964	2.771	µg/L		99
PFHpA	5.622	363.0 -> 319.0	992	2.915	µg/L		96
PFHxS	5.630	399.0 -> 80.0	822	2.836	µg/L		91
PFHpS	6.293	449.0 -> 80.0	1025	2.863	µg/L		100
PFOA	6.323	413.0 -> 369.0	3254	2.933	µg/L		81
PFOS	6.910	499.0 -> 80.0	1620	2.831	µg/L		88
PFNA	6.966	463.0 -> 419.0	1352	2.706	µg/L		100
PFDA	7.639	513.0 -> 469.0	1930	3.059	µg/L		100
PFDS	8.371	599.0 -> 80.0	774	2.847	µg/L		100
PFUnDA	8.515	563.0 -> 519.0	2505	2.865	µg/L		100
PFDoDA	9.378	613.0 -> 569.0	2303	2.863	µg/L		100
PFTrDA	10.122	663.0 -> 619.0	2313	3.060	µg/L		100
PFTeDA	10.798	713.0 -> 669.0	1636	3.219	µg/L	m	100

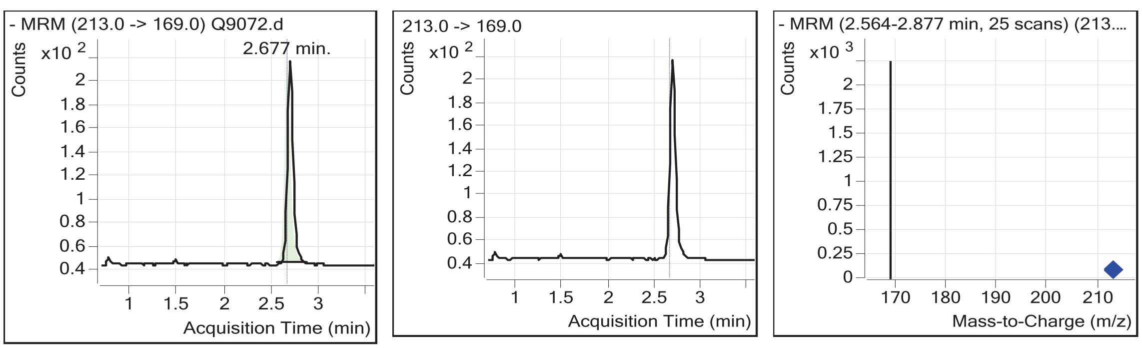
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

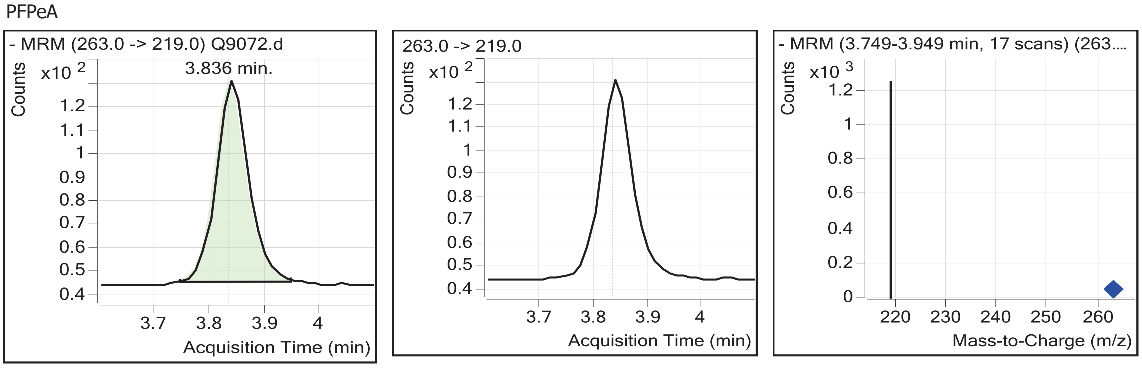
Data File	:	Q9072.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 14:27
Sample Name	:	IC290-2.5
Vial	:	Vial 2
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

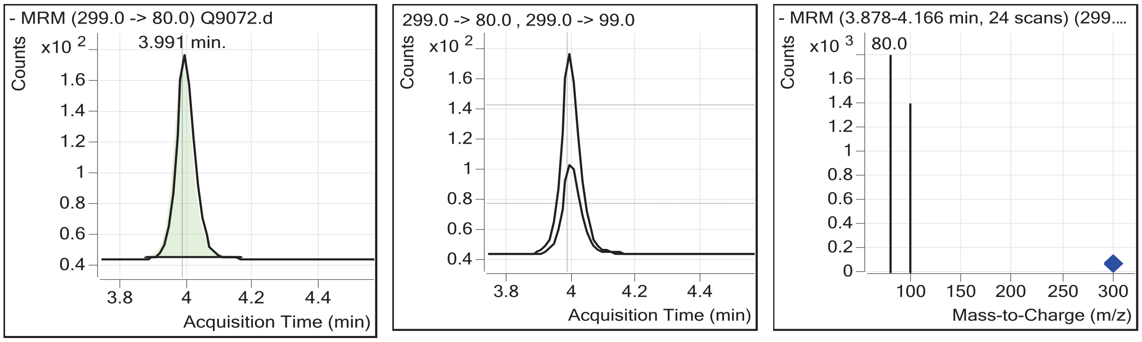


PFPeA

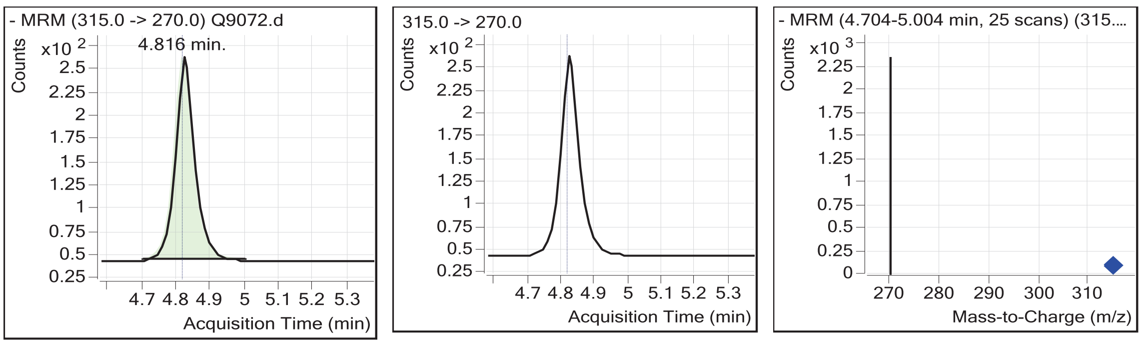


Perfluorinated Compounds by LC/MS/MS.

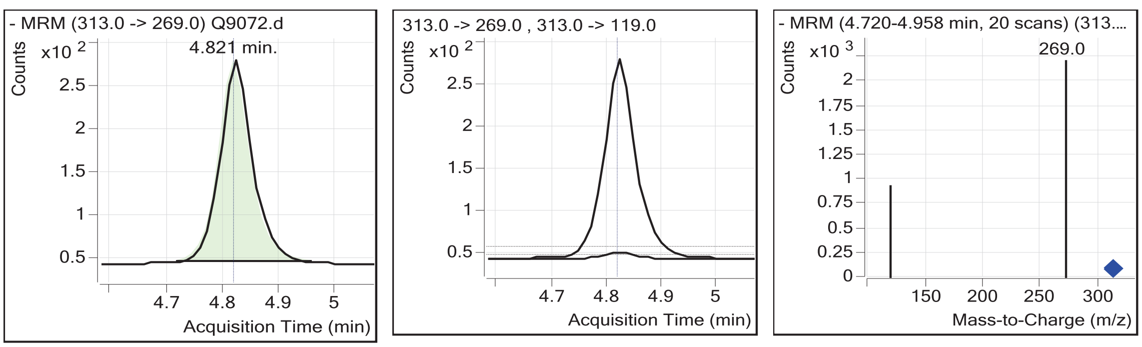
PFBS



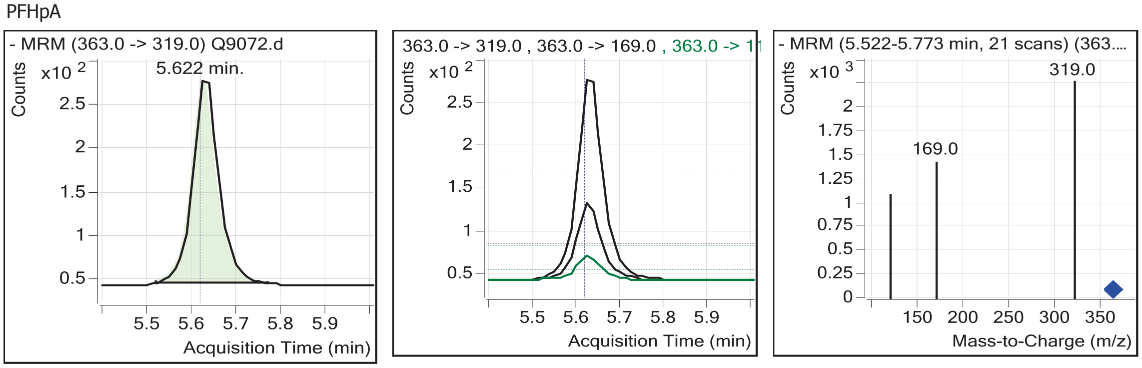
13C2-PFHxA



PFHxA

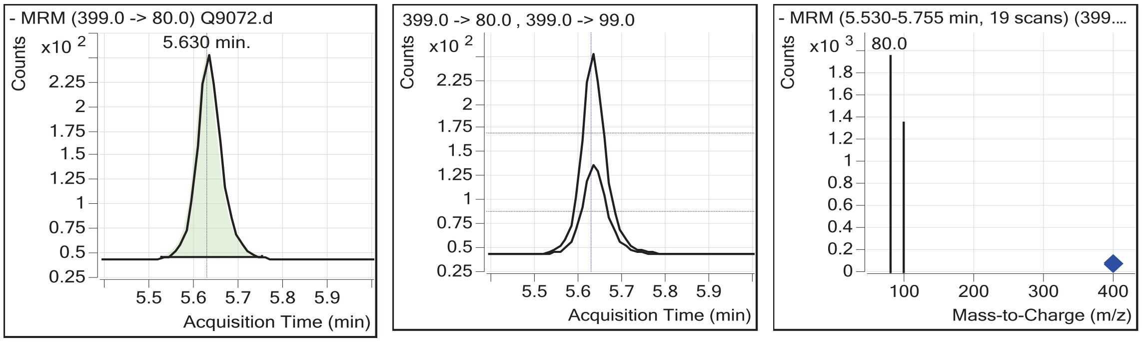


PFHpA

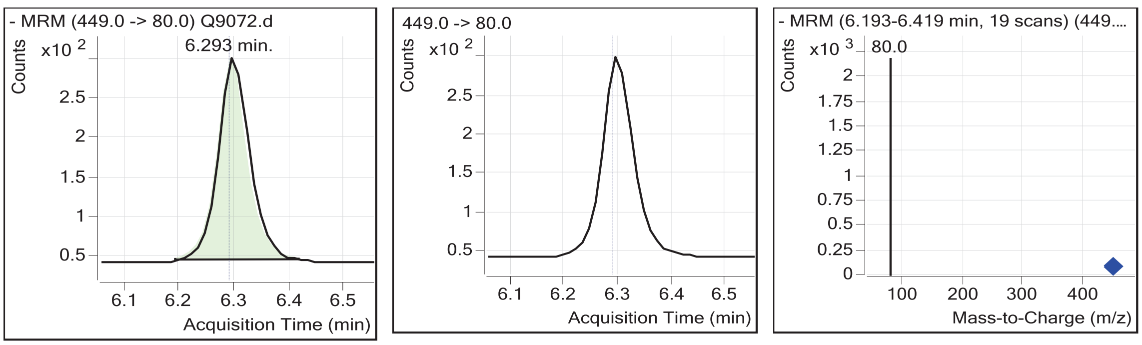


Perfluorinated Compounds by LC/MS/MS.

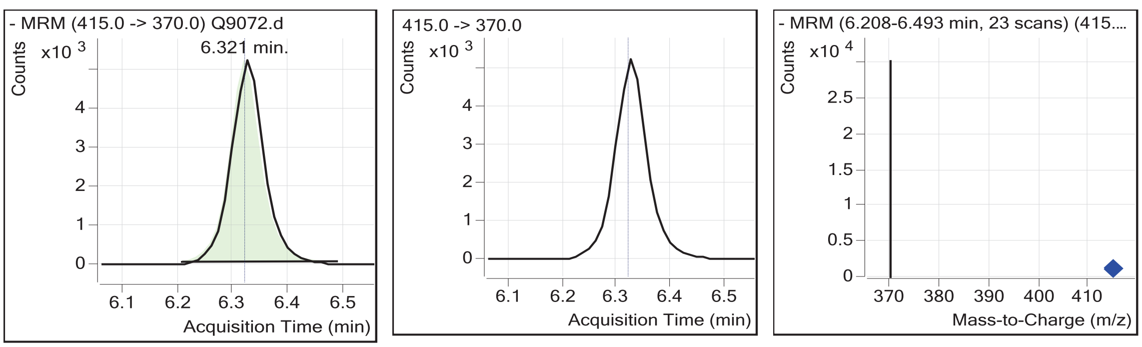
PFHxS



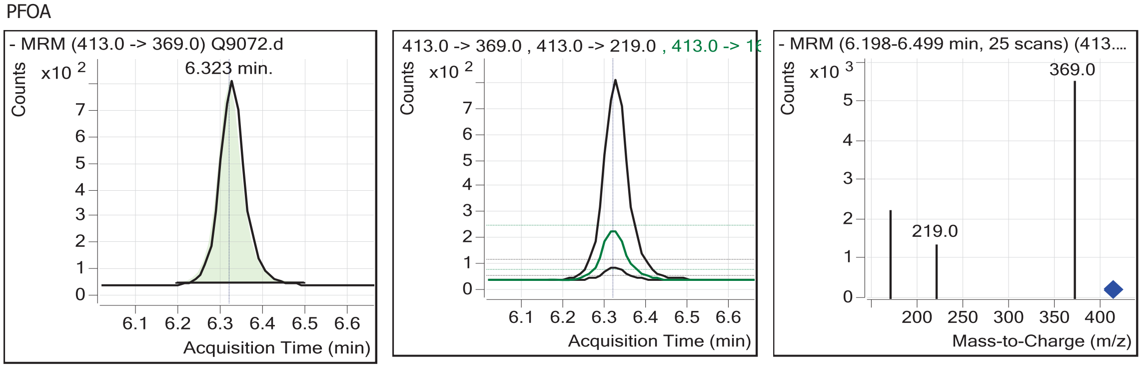
PFHpS



13C2-PFOA

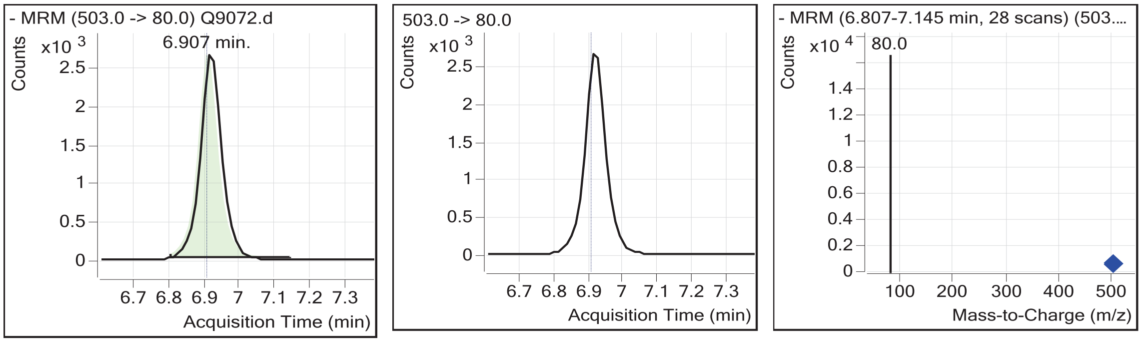


PFOA

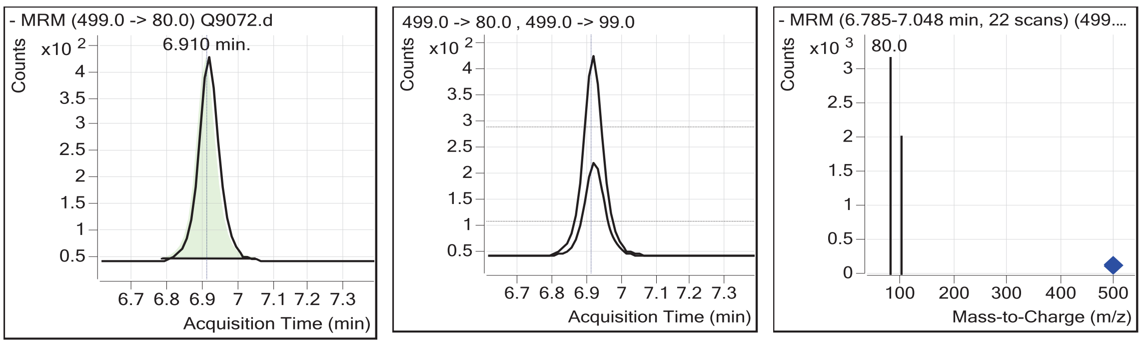


Perfluorinated Compounds by LC/MS/MS.

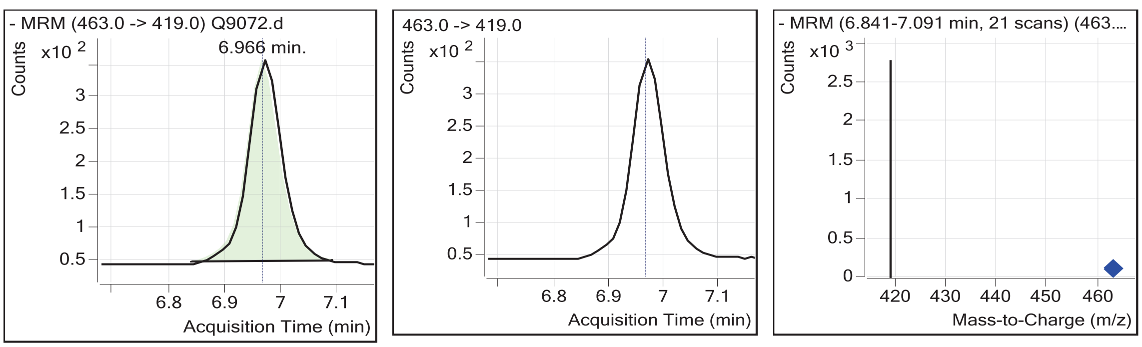
13C4-PFOS



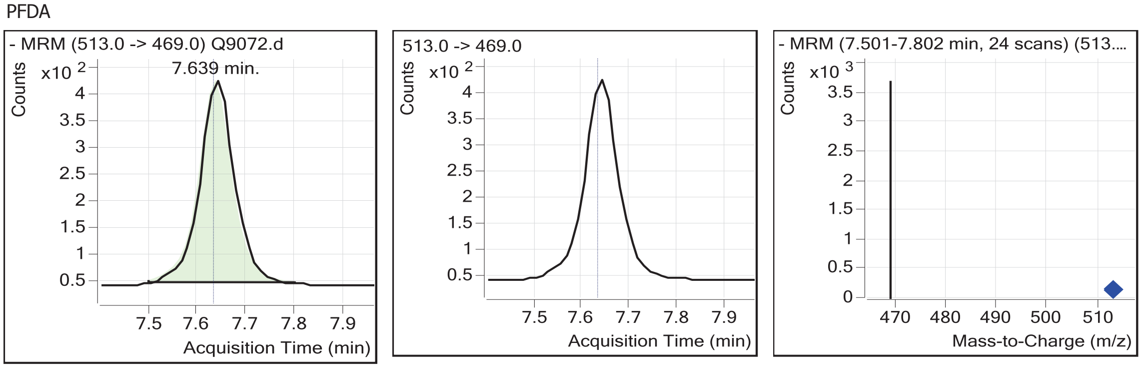
PFOS



PFNA

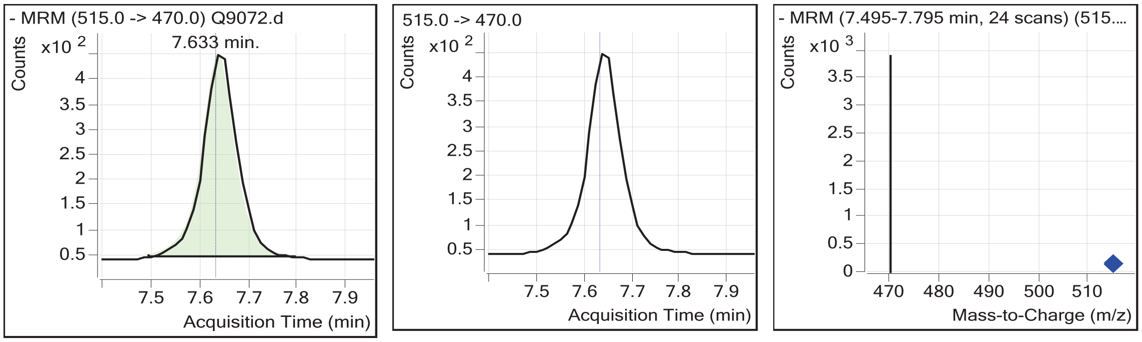


PFDA

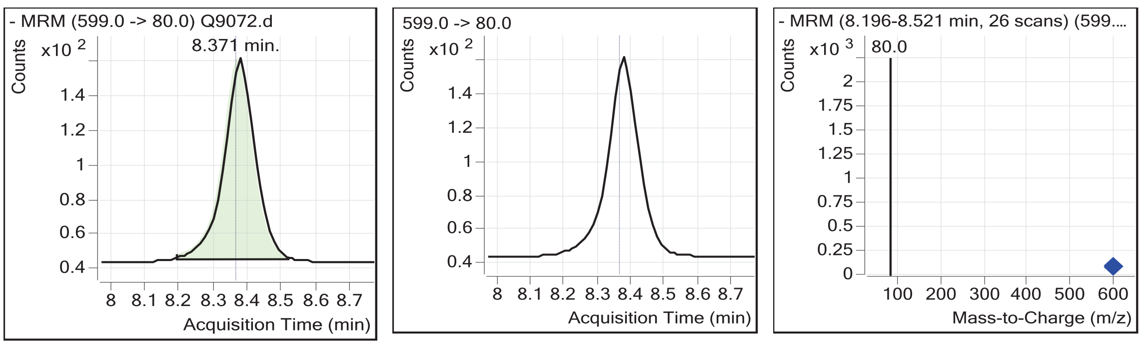


Perfluorinated Compounds by LC/MS/MS.

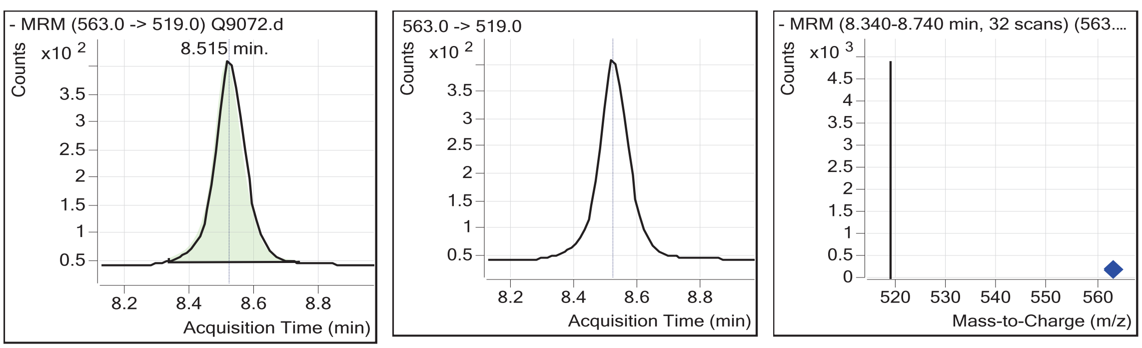
13C2-PFDA



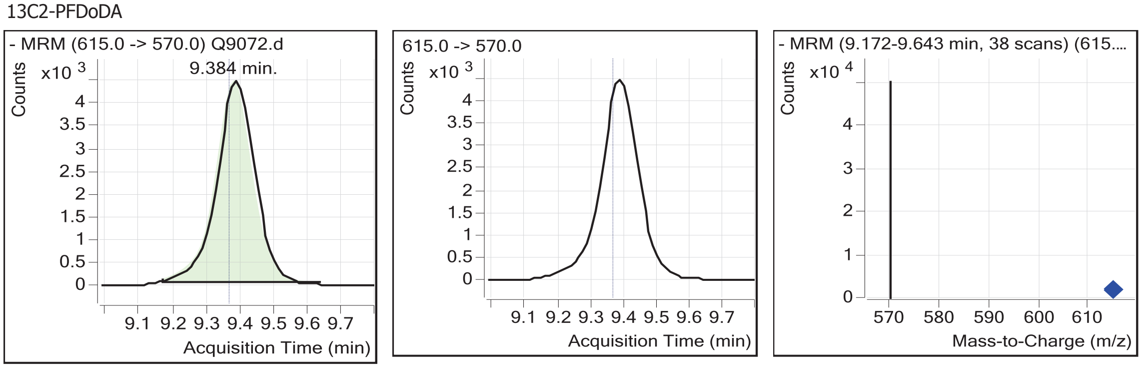
PFDS



PFUnDA

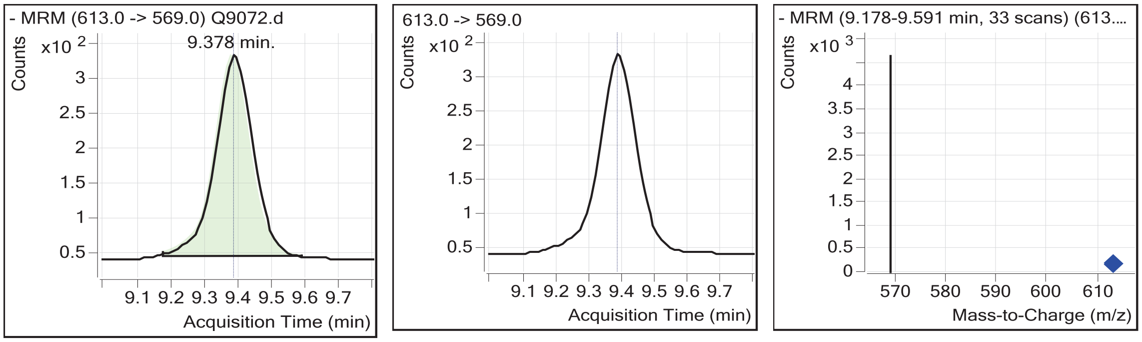


13C2-PFDoDA

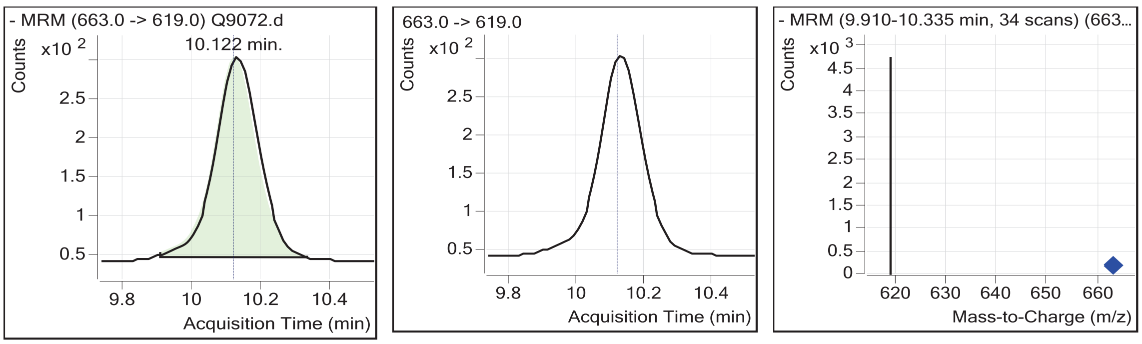


Perfluorinated Compounds by LC/MS/MS.

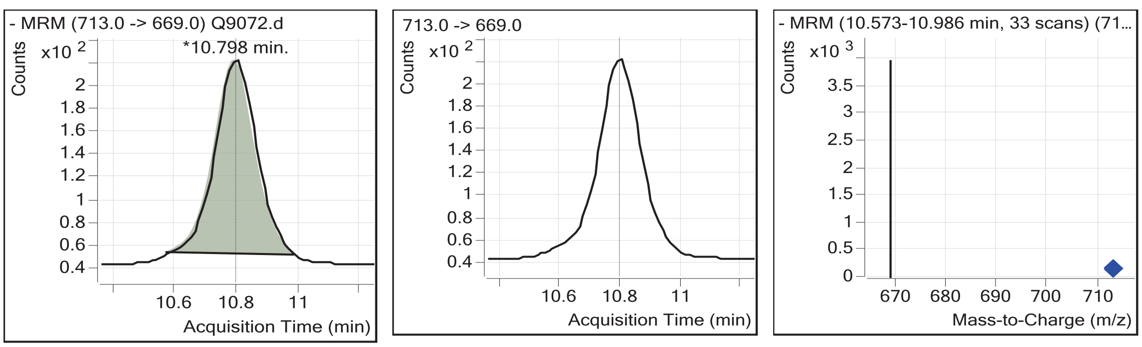
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	SQ290-IC290	**Method:**	EPA 537 MOD	
Lab FileID:	Q9072.D	**Analyst approved:**	12/22/14 10:19	Mike Eger
Injection Time:	12/19/14 14:27	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorotetradecanoic acid	376-06-7		10.80	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

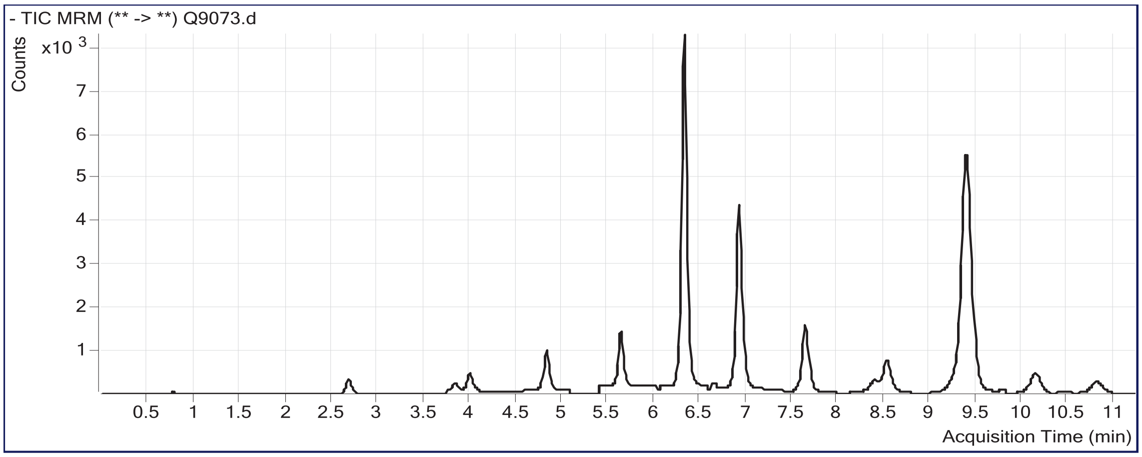
Data File	:	Q9073.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 14:47
Sample Name	:	IC290-5.0
Vial	:	Vial 3
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.321	415.0 -> 370.0	24425	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	13003	20.000	µg/L		0.000
13C2-PFDoDA	9.384	615.0 -> 570.0	40061	20.000	µg/L		0.013
System Monitoring Compounds							
13C2-PFHxA	4.816	315.0 -> 270.0	1804	4.82	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 24.09%				
13C2-PFDA	7.633	515.0 -> 470.0	3998	4.95	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 24.77%				
Target Compounds							**Qvalue**
PFBA	2.677	213.0 -> 169.0	1571	4.572	µg/L		100
PFPeA	3.836	263.0 -> 219.0	730	4.719	µg/L		100
PFBS	3.991	299.0 -> 80.0	1046	4.732	µg/L		99
PFHxA	4.821	313.0 -> 269.0	1896	4.854	µg/L		99
PFHpA	5.622	363.0 -> 319.0	1907	4.994	µg/L		98
PFHxS	5.630	399.0 -> 80.0	1591	4.853	µg/L		84
PFHpS	6.293	449.0 -> 80.0	2015	4.977	µg/L		100
PFOA	6.323	413.0 -> 369.0	6146	4.934	µg/L		80
PFOS	6.910	499.0 -> 80.0	3158	4.879	µg/L		87
PFNA	6.966	463.0 -> 419.0	2648	4.721	µg/L		100
PFDA	7.639	513.0 -> 469.0	3843	5.438	µg/L		100
PFDS	8.371	599.0 -> 80.0	1529	5.022	µg/L		100
PFUnDA	8.515	563.0 -> 519.0	4941	5.045	µg/L		100
PFDoDA	9.378	613.0 -> 569.0	4434	4.922	µg/L		100
PFTrDA	10.122	663.0 -> 619.0	4144	4.896	µg/L		100
PFTeDA	10.786	713.0 -> 669.0	2686	4.719	µg/L	m	100

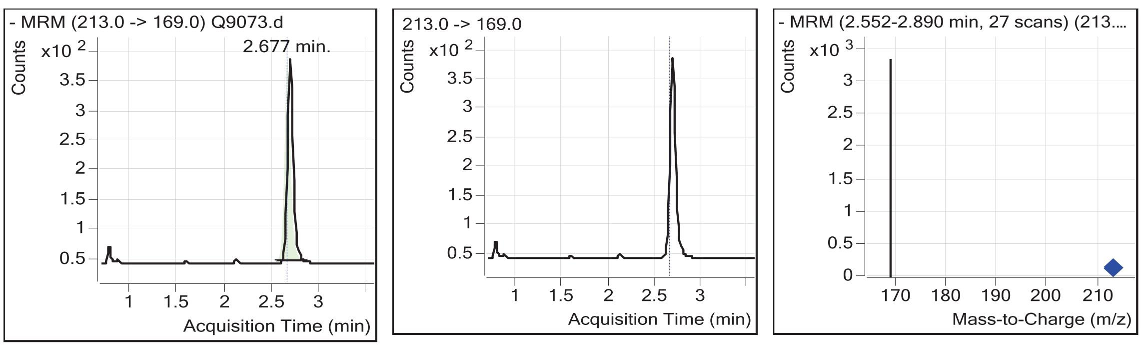
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

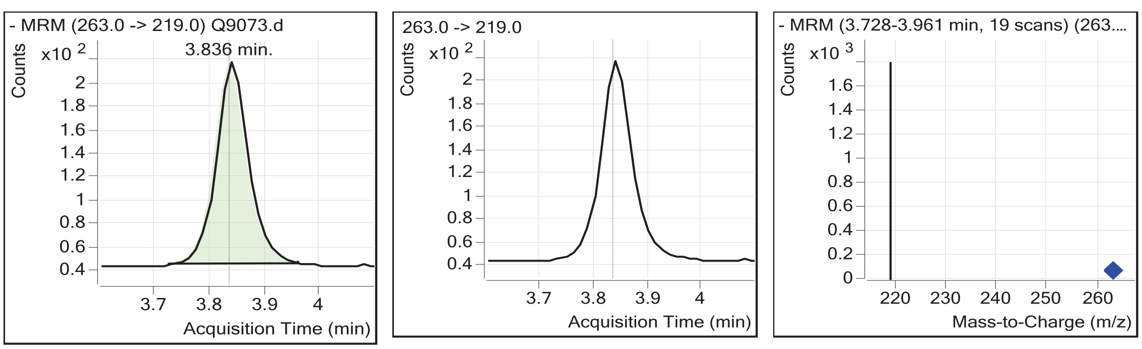
Data File	:	Q9073.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 14:47
Sample Name	:	IC290-5.0
Vial	:	Vial 3
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

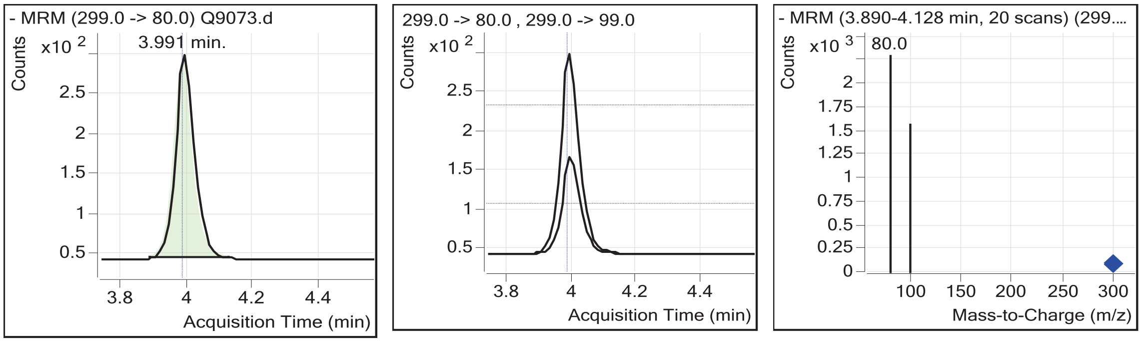


PFPeA

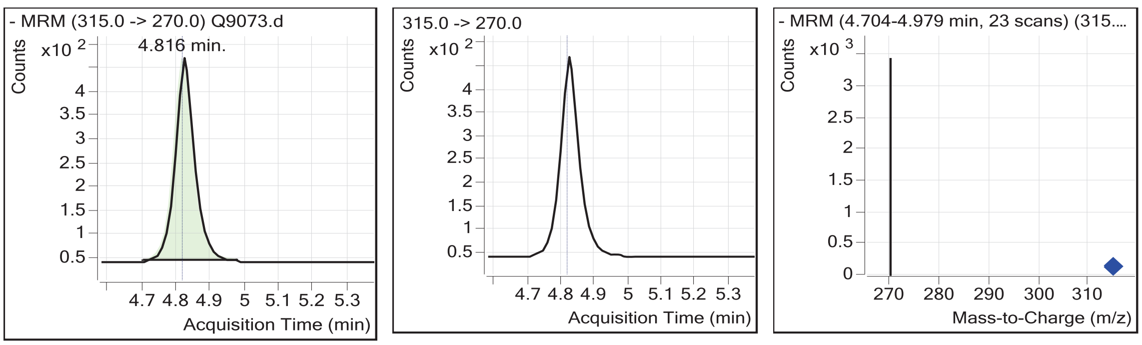


Perfluorinated Compounds by LC/MS/MS.

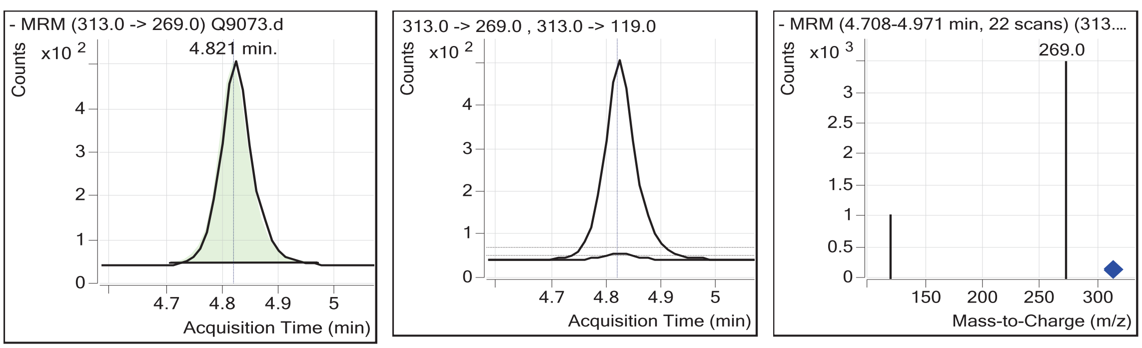
PFBS



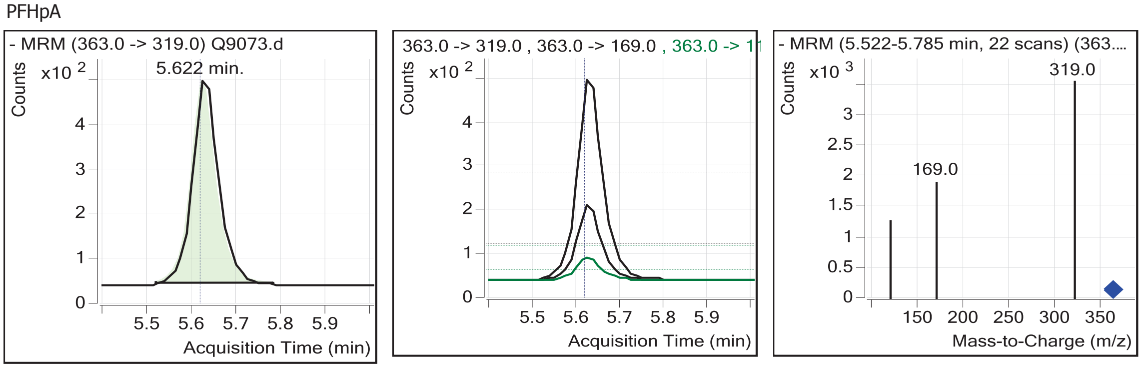
13C2-PFHxA



PFHxA

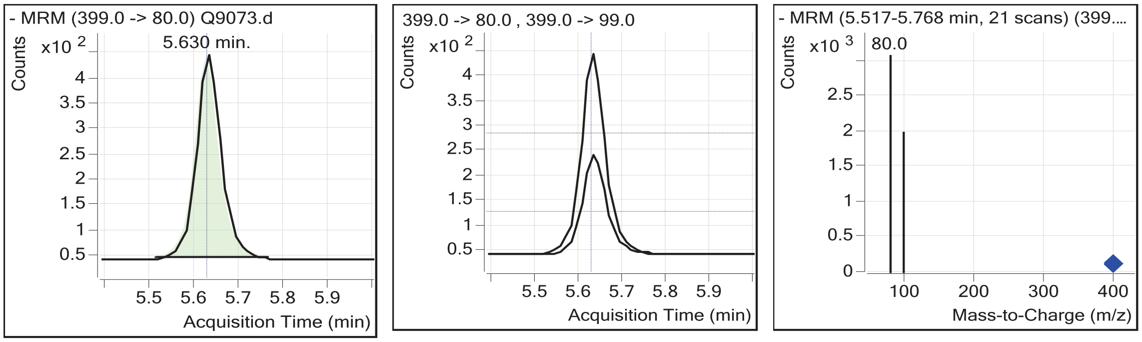


PFHpA

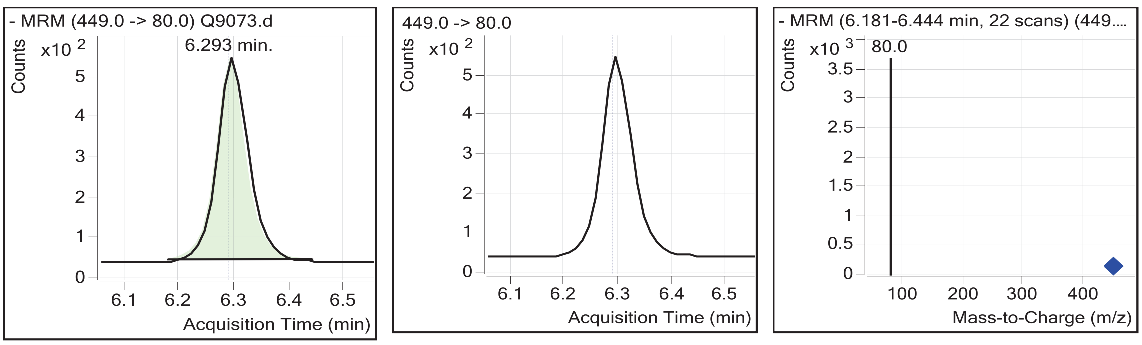


Perfluorinated Compounds by LC/MS/MS.

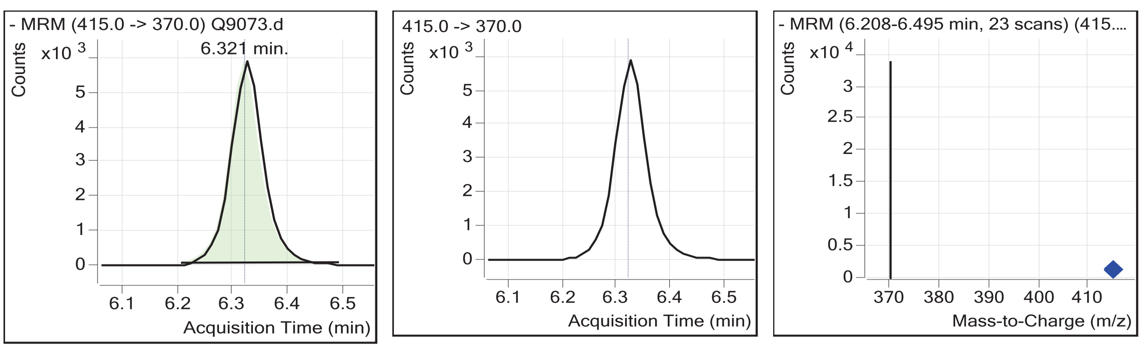
PFHxS



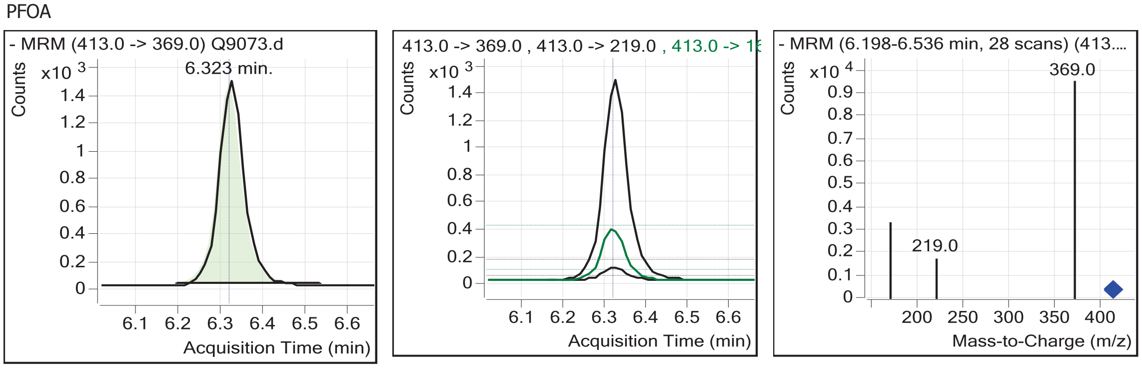
PFHpS



13C2-PFOA

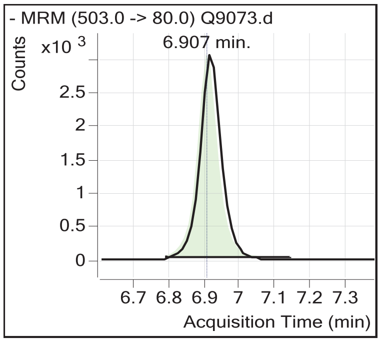


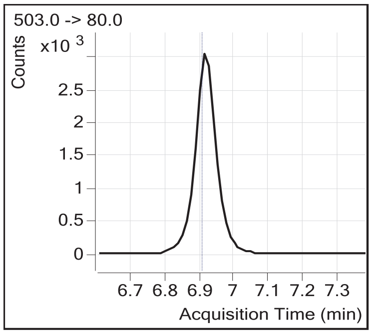
PFOA

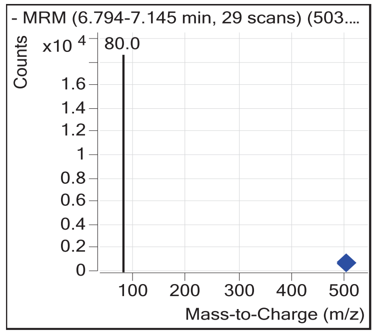


Perfluorinated Compounds by LC/MS/MS.

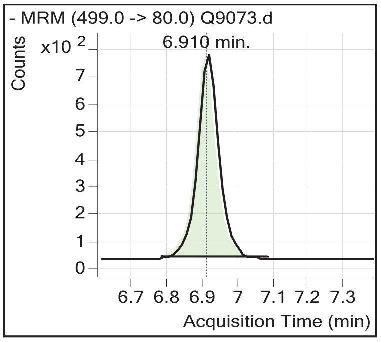
13C4-PFOS

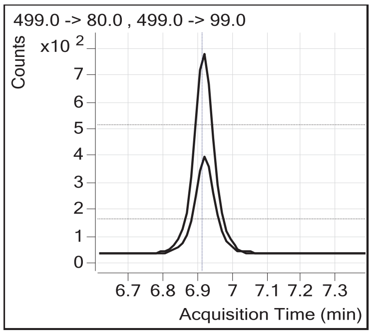


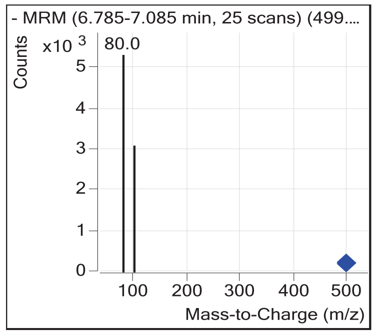




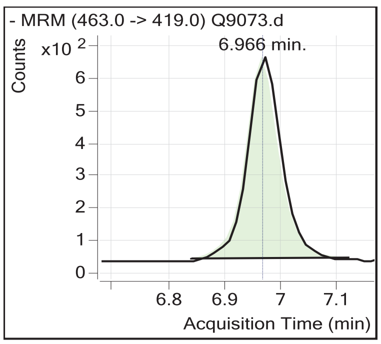
PFOS

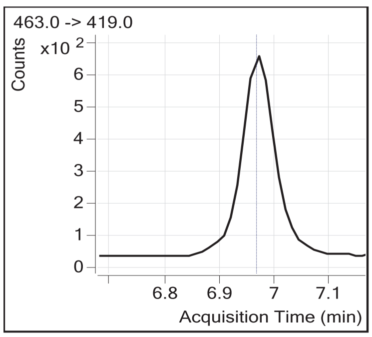


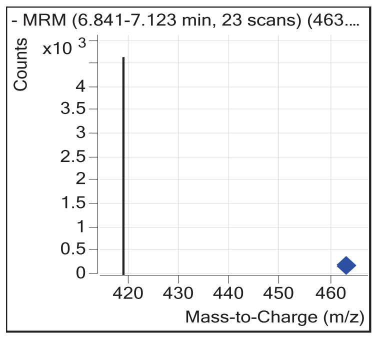




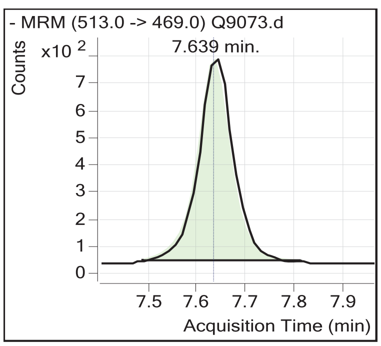
PFNA

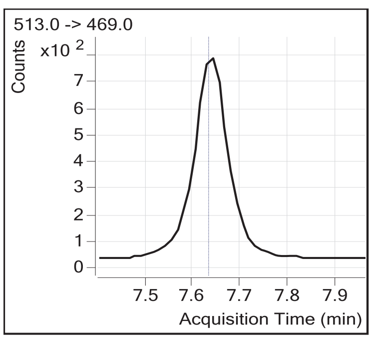


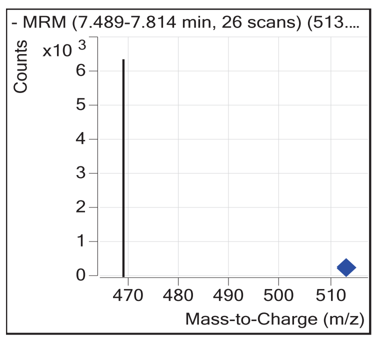




PFDA

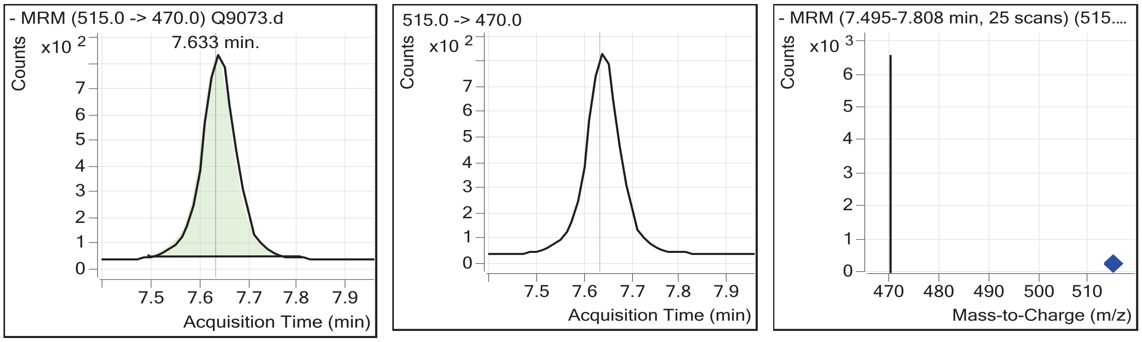




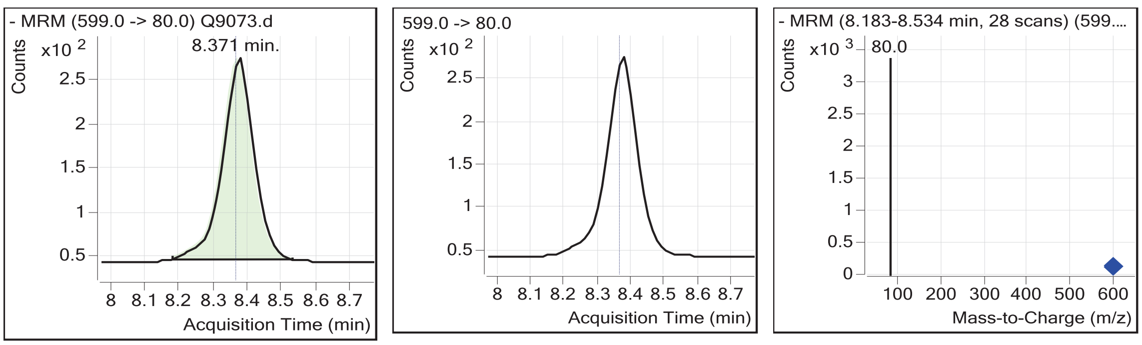


Perfluorinated Compounds by LC/MS/MS.

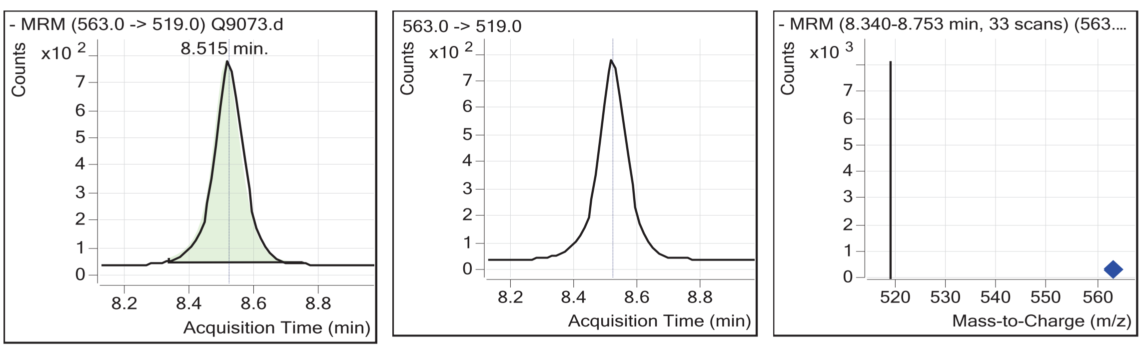
13C2-PFDA



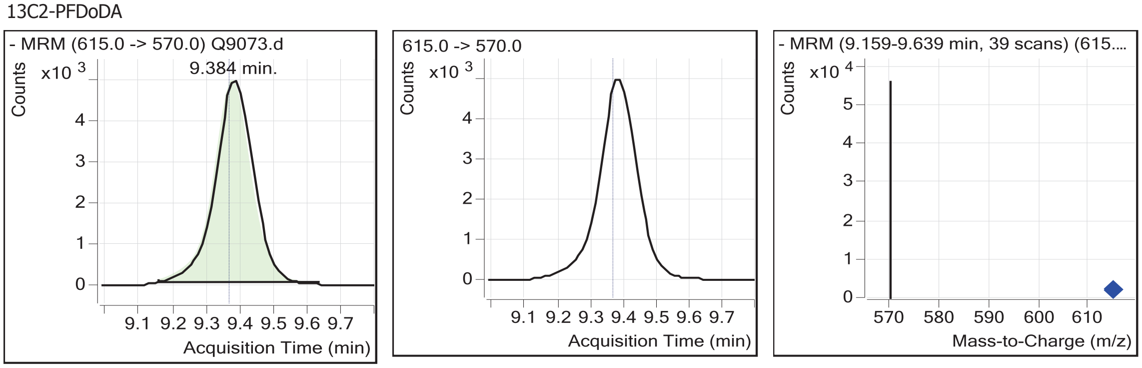
PFDS



PFUnDA

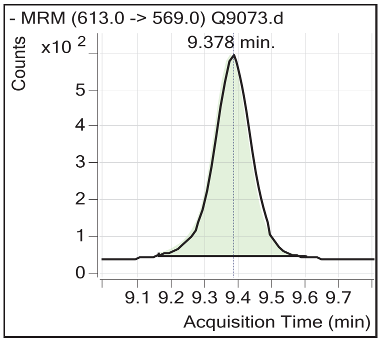


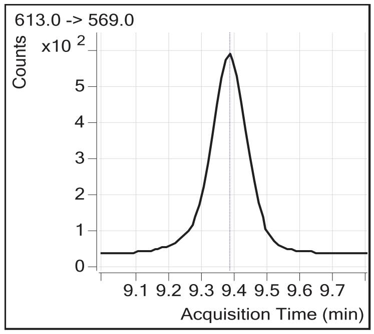
13C2-PFDoDA

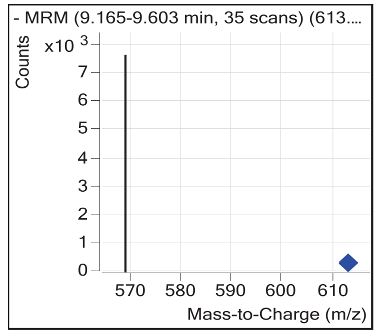


Perfluorinated Compounds by LC/MS/MS.

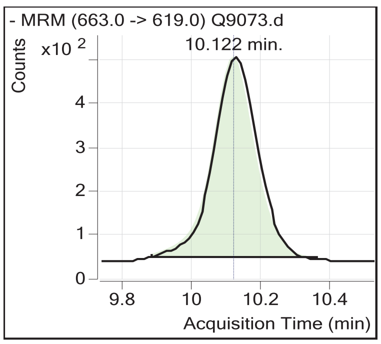
PFDoDA

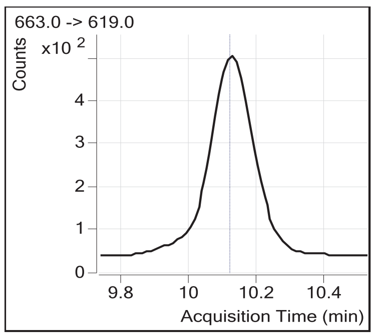


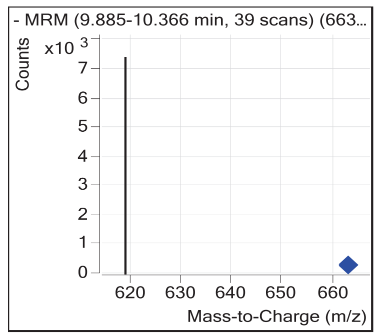




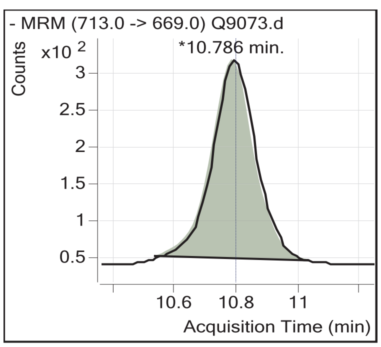
PFTrDA

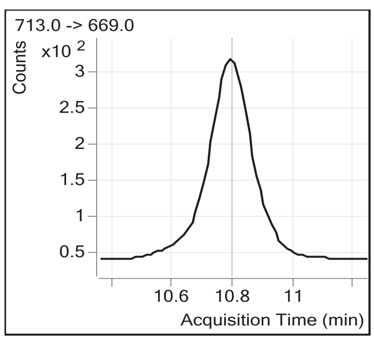


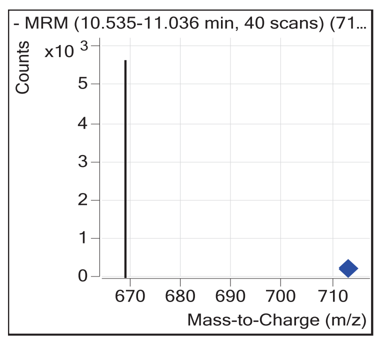




PFTeDA







Manual Integration Approval Summary

Sample Number:	SQ290-IC290	**Method:**	EPA 537 MOD	
Lab FileID:	Q9073.D	**Analyst approved:**	12/22/14 10:19	Mike Eger
Injection Time:	12/19/14 14:47	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorotetradecanoic acid	376-06-7		10.79	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

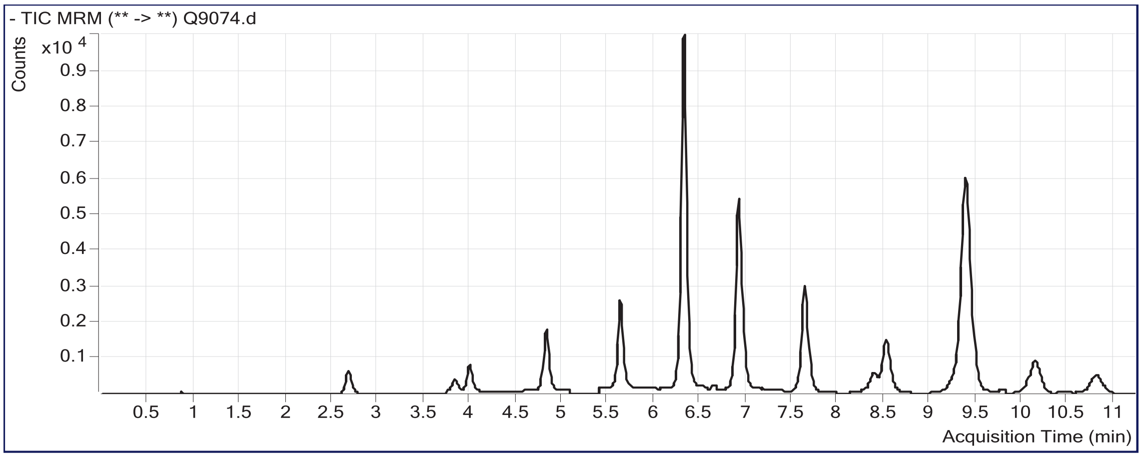
Data File	:	Q9074.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 15:06
Sample Name	:	IC290-10.0
Vial	:	Vial 4
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.321	415.0 -> 370.0	23511	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	12569	20.000	µg/L		0.000
13C2-PFDoDA	9.372	615.0 -> 570.0	39016	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.816	315.0 -> 270.0	3512	9.74	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 48.72%				
13C2-PFDA	7.633	515.0 -> 470.0	7822	10.07	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 50.35%				
Target Compounds							**Qvalue**
PFBA	2.677	213.0 -> 169.0	3013	9.108	µg/L		100
PFPeA	3.836	263.0 -> 219.0	1329	8.922	µg/L		100
PFBS	3.991	299.0 -> 80.0	2022	9.464	µg/L		98
PFHxA	4.821	313.0 -> 269.0	3545	9.431	µg/L		99
PFHpA	5.622	363.0 -> 319.0	3693	10.048	µg/L		97
PFHxS	5.630	399.0 -> 80.0	3179	10.030	µg/L		87
PFHpS	6.293	449.0 -> 80.0	3882	9.918	µg/L		100
PFOA	6.323	413.0 -> 369.0	11996	10.005	µg/L		81
PFOS	6.910	499.0 -> 80.0	6161	9.846	µg/L		87
PFNA	6.966	463.0 -> 419.0	5219	9.665	µg/L		100
PFDA	7.626	513.0 -> 469.0	7370	10.710	µg/L		100
PFDS	8.358	599.0 -> 80.0	2961	9.989	µg/L		100
PFUnDA	8.515	563.0 -> 519.0	9770	10.243	µg/L		100
PFDoDA	9.378	613.0 -> 569.0	8766	9.991	µg/L		100
PFTrDA	10.110	663.0 -> 619.0	8072	9.792	µg/L		100
PFTeDA	10.786	713.0 -> 669.0	5224	9.424	µg/L	m	100

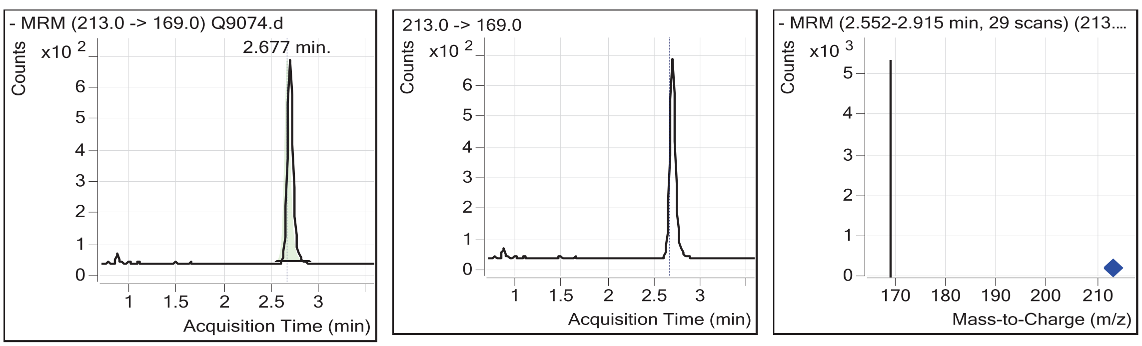
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

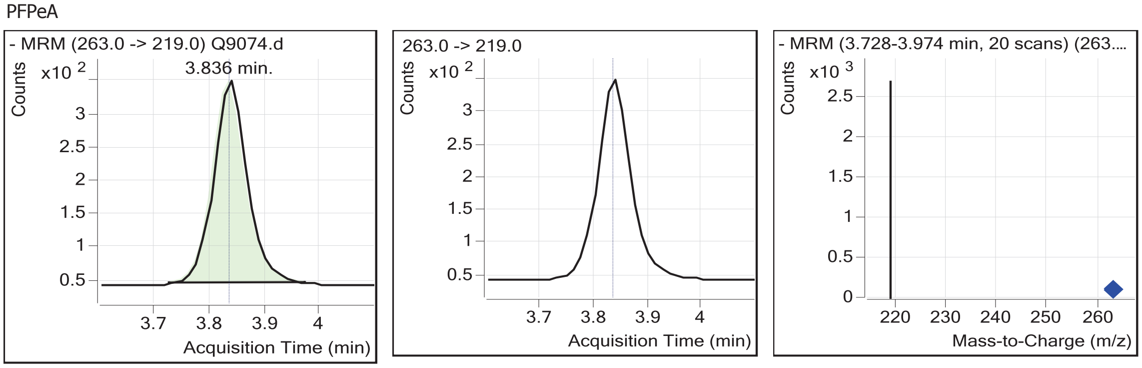
Data File	:	Q9074.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 15:06
Sample Name	:	IC290-10.0
Vial	:	Vial 4
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

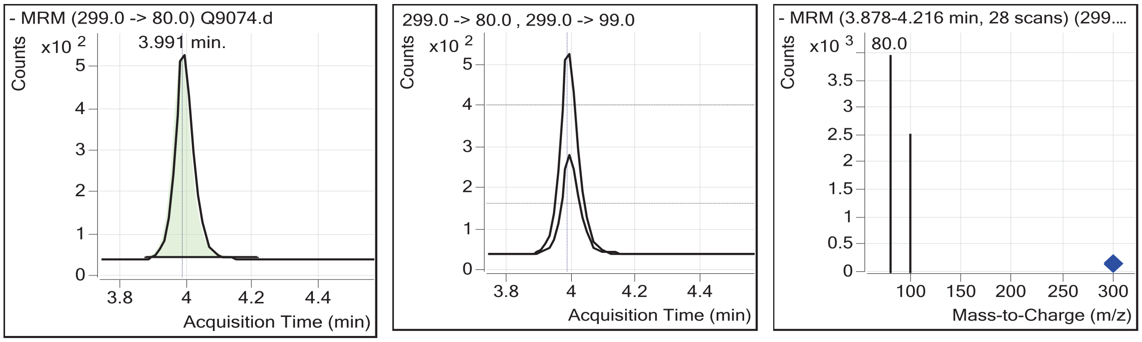


PFPeA

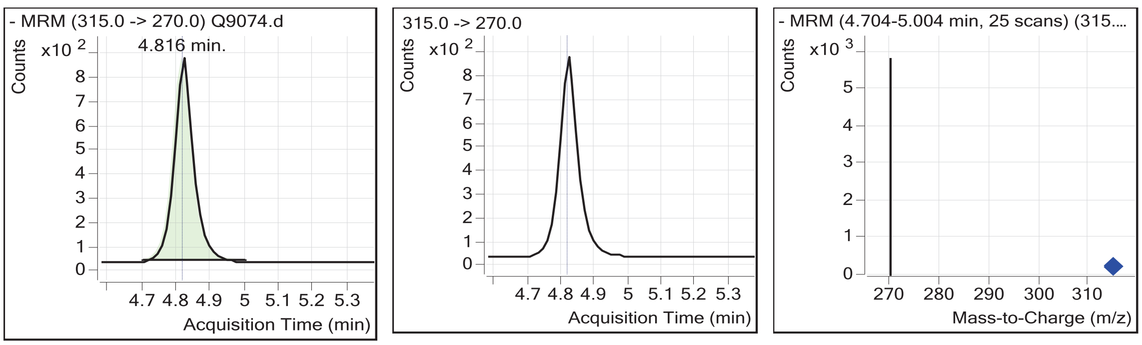


Perfluorinated Compounds by LC/MS/MS.

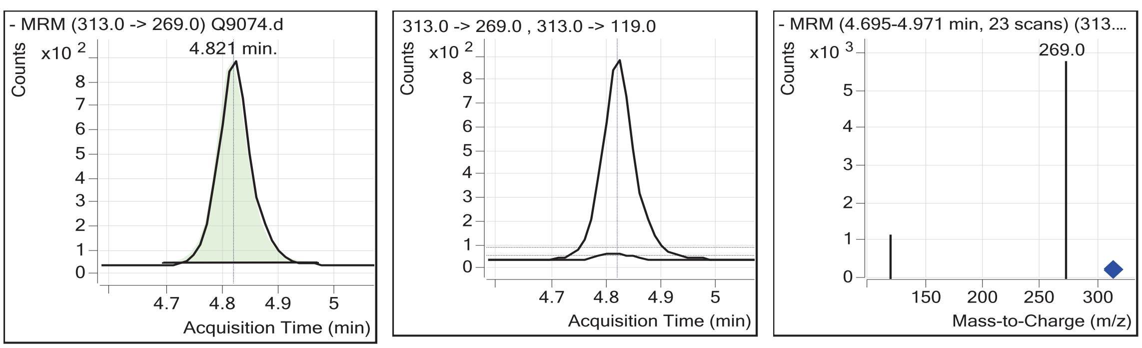
PFBS



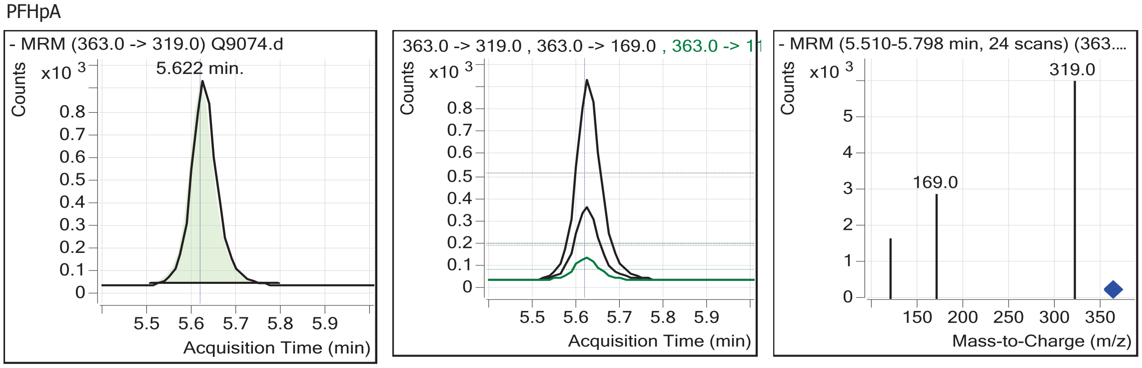
13C2-PFHxA



PFHxA

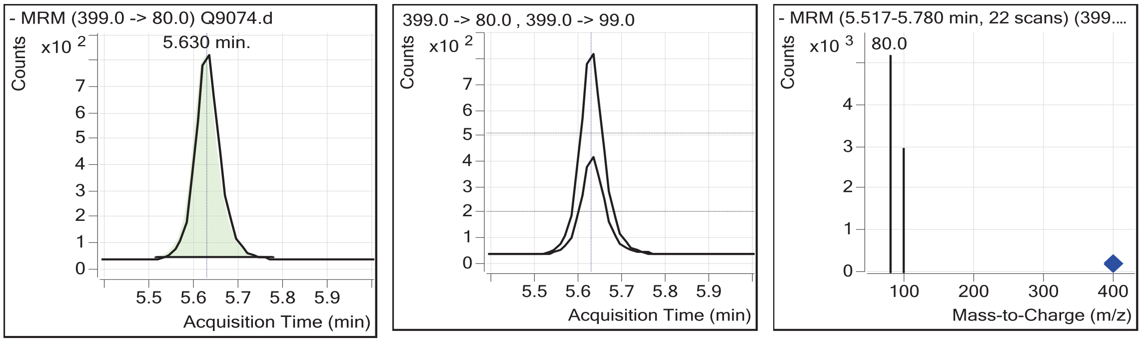


PFHpA

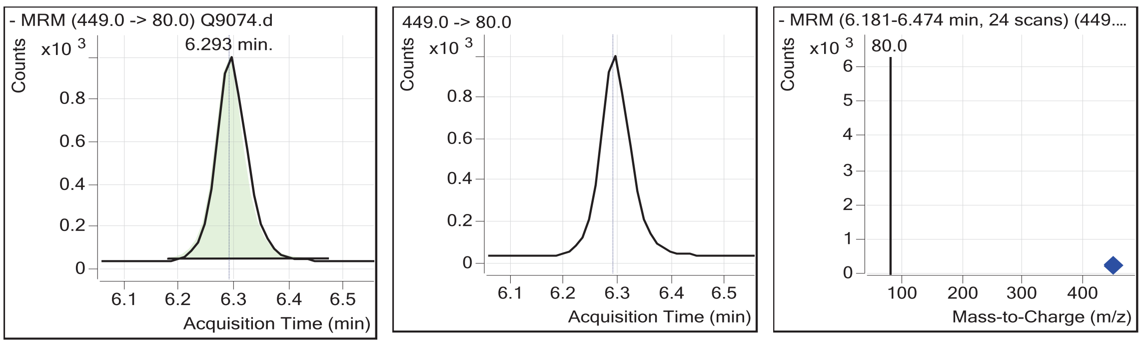


Perfluorinated Compounds by LC/MS/MS.

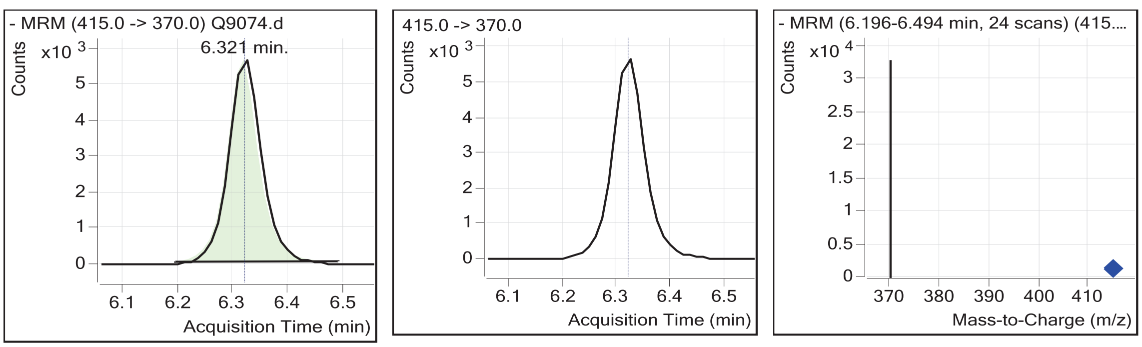
PFHxS



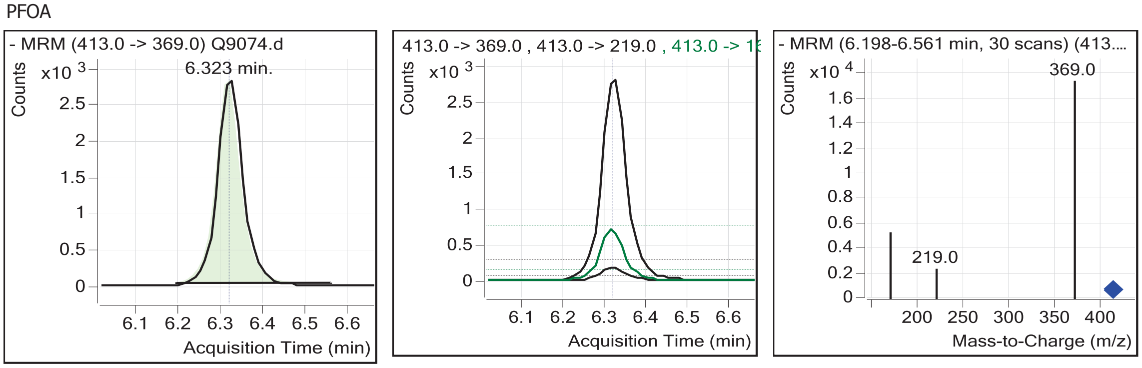
PFHpS



13C2-PFOA

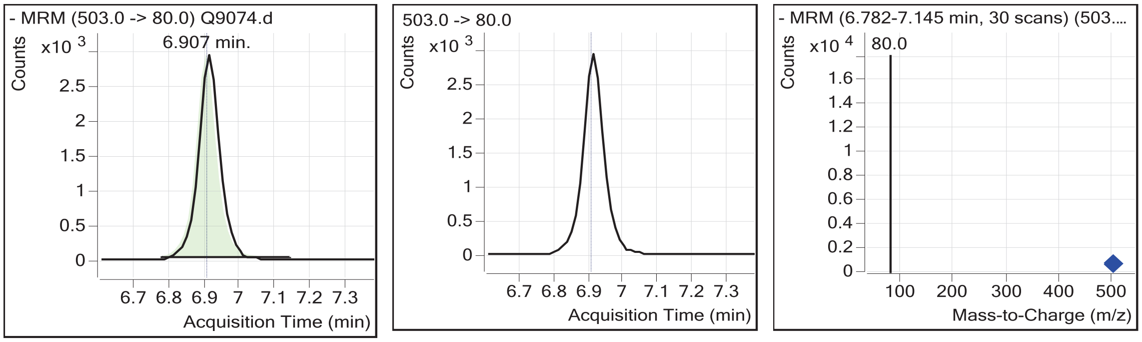


PFOA

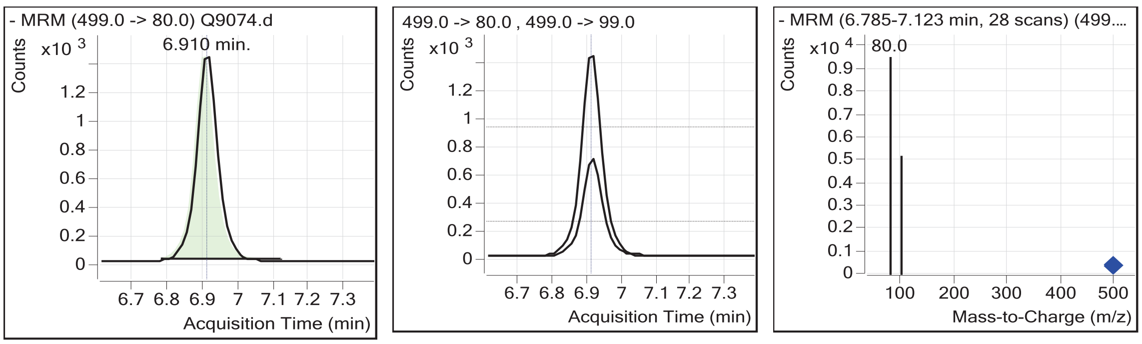


Perfluorinated Compounds by LC/MS/MS.

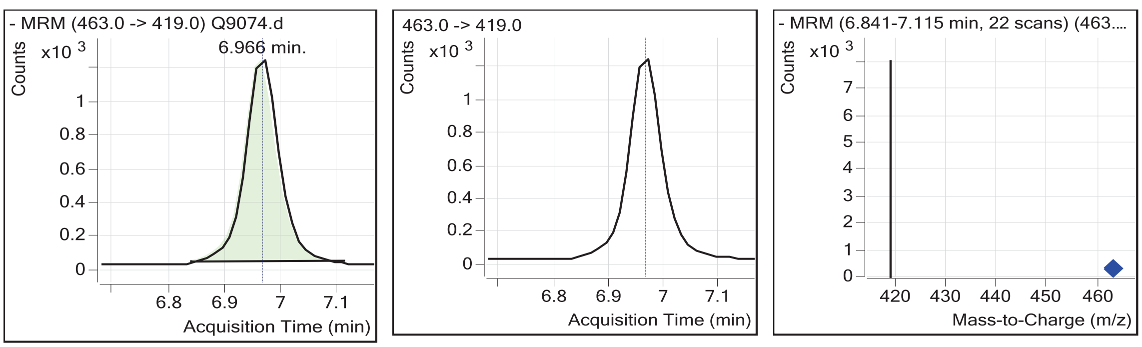
13C4-PFOS



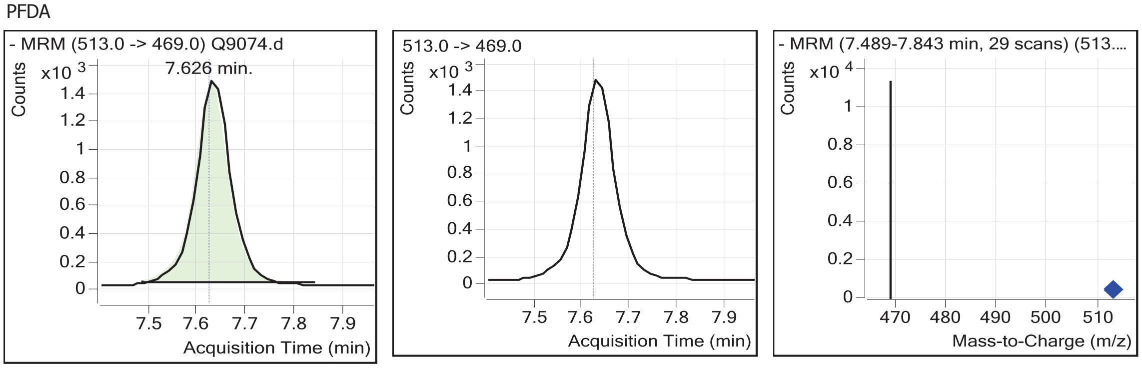
PFOS



PFNA

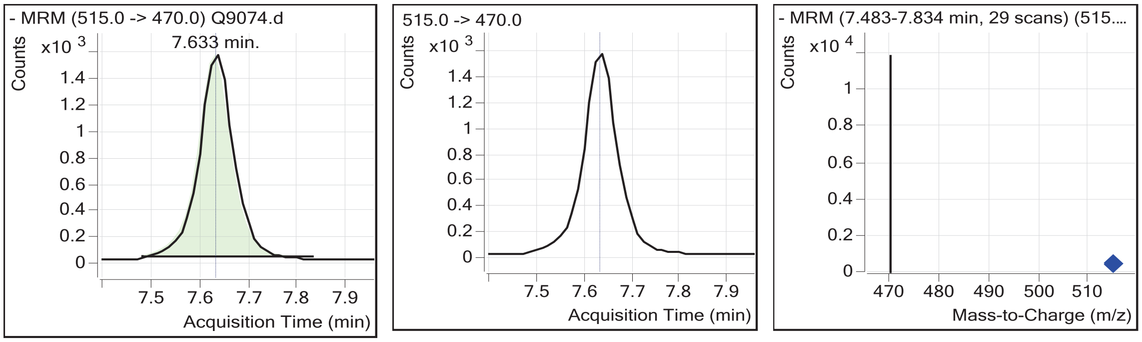


PFDA

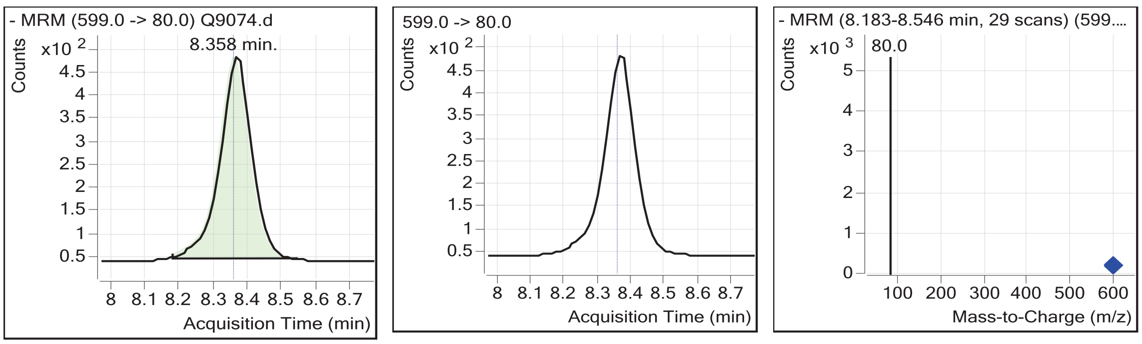


Perfluorinated Compounds by LC/MS/MS.

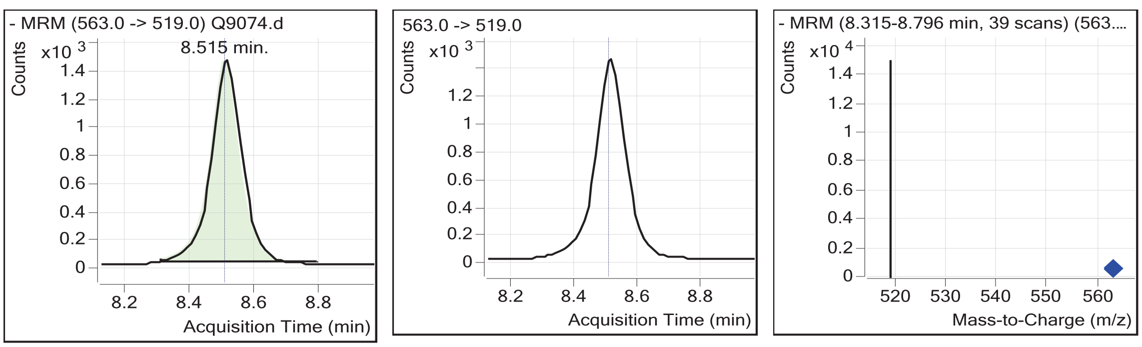
13C2-PFDA



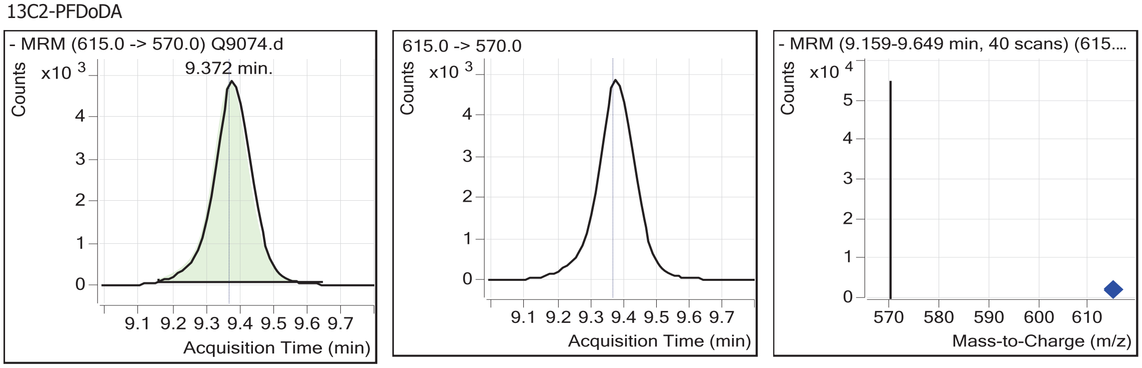
PFDS



PFUnDA

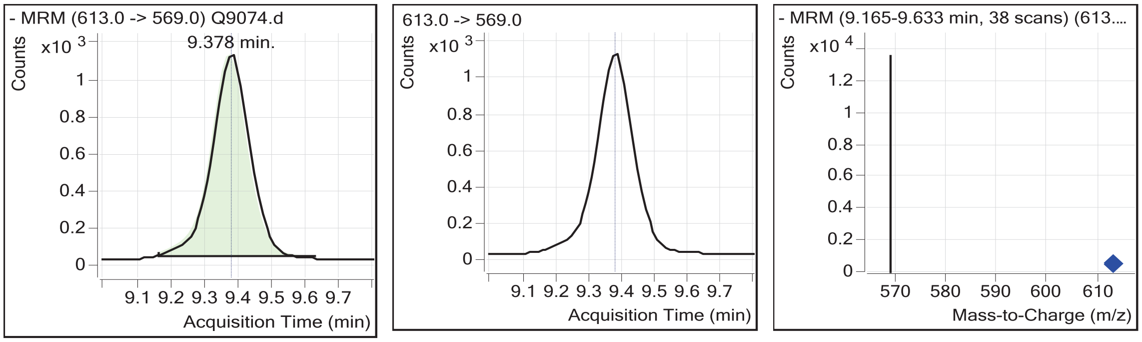


13C2-PFDoDA

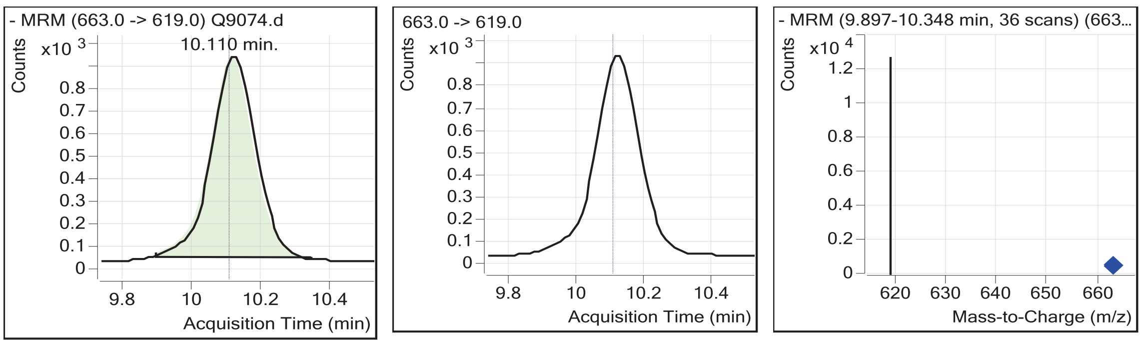


Perfluorinated Compounds by LC/MS/MS.

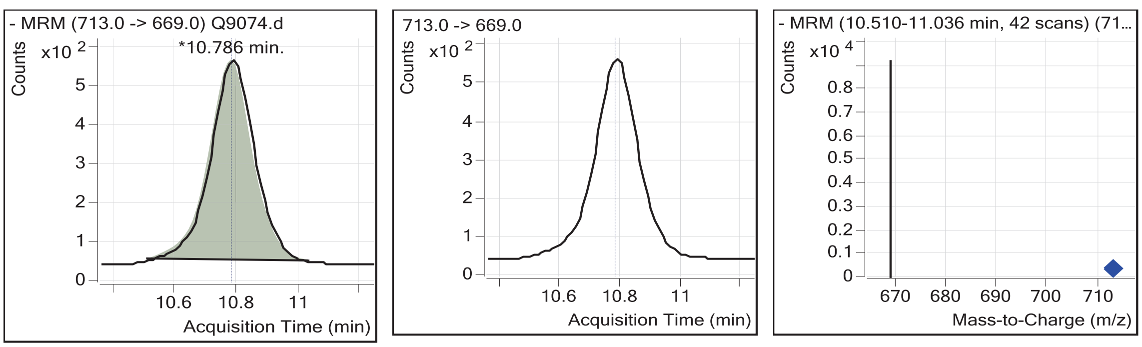
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number: SQ290-IC290 **Method:** EPA 537 MOD
Lab FileID: Q9074.D **Analyst approved:** 12/22/14 10:19 Mike Eger
Injection Time: 12/19/14 15:06 **Supervisor approved:** 12/22/14 13:28 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorotetradecanoic acid	376-06-7		10.79	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

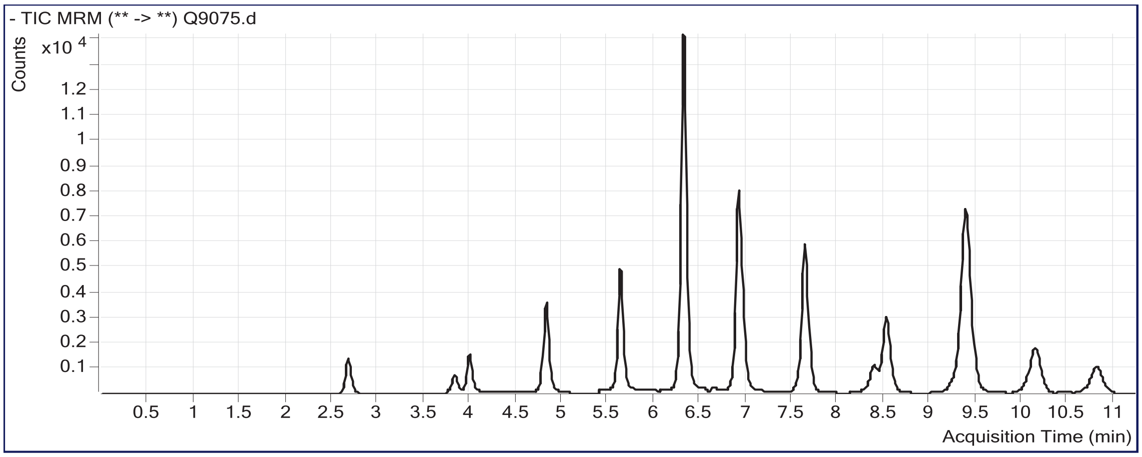
Data File	:	Q9075.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 15:26
Sample Name	:	ICC290-20
Vial	:	Vial 5
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.321	415.0 -> 370.0	24087	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	13164	20.000	µg/L		0.000
13C2-PFDoDA	9.372	615.0 -> 570.0	40675	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.816	315.0 -> 270.0	7150	19.36	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 96.80%				
13C2-PFDA	7.633	515.0 -> 470.0	15607	19.61	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 98.07%				
Target Compounds							**Qvalue**
PFBA	2.664	213.0 -> 169.0	6434	18.989	µg/L		100
PFPeA	3.836	263.0 -> 219.0	2815	18.447	µg/L		100
PFBS	3.991	299.0 -> 80.0	4200	18.768	µg/L		98
PFHxA	4.821	313.0 -> 269.0	7535	19.565	µg/L		99
PFHpA	5.622	363.0 -> 319.0	7321	19.442	µg/L		97
PFHxS	5.630	399.0 -> 80.0	6465	19.472	µg/L		89
PFHpS	6.293	449.0 -> 80.0	7866	19.188	µg/L		100
PFOA	6.323	413.0 -> 369.0	23695	19.289	µg/L		81
PFOS	6.910	499.0 -> 80.0	12660	19.318	µg/L		87
PFNA	6.966	463.0 -> 419.0	10404	18.805	µg/L		100
PFDA	7.626	513.0 -> 469.0	14783	20.605	µg/L		100
PFDS	8.371	599.0 -> 80.0	6082	19.680	µg/L		100
PFUnDA	8.515	563.0 -> 519.0	19708	19.819	µg/L		100
PFDoDA	9.378	613.0 -> 569.0	17701	19.350	µg/L		100
PFTrDA	10.122	663.0 -> 619.0	16490	19.188	µg/L		100
PFTeDA	10.786	713.0 -> 669.0	10913	18.884	µg/L	m	100

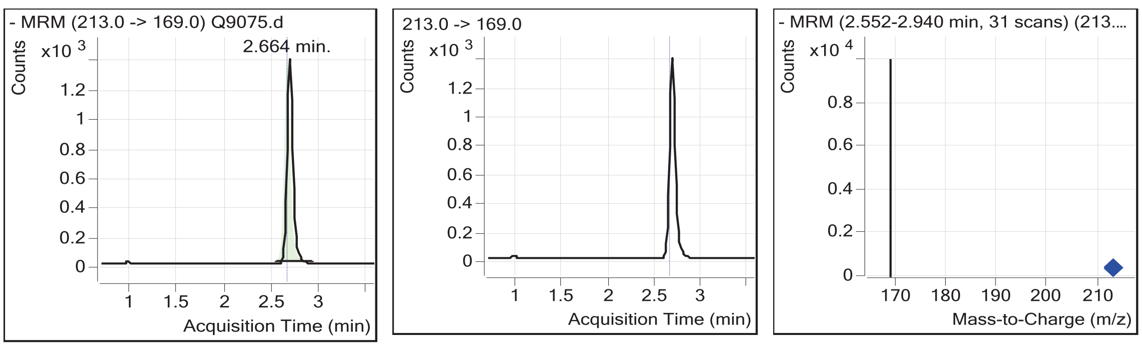
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

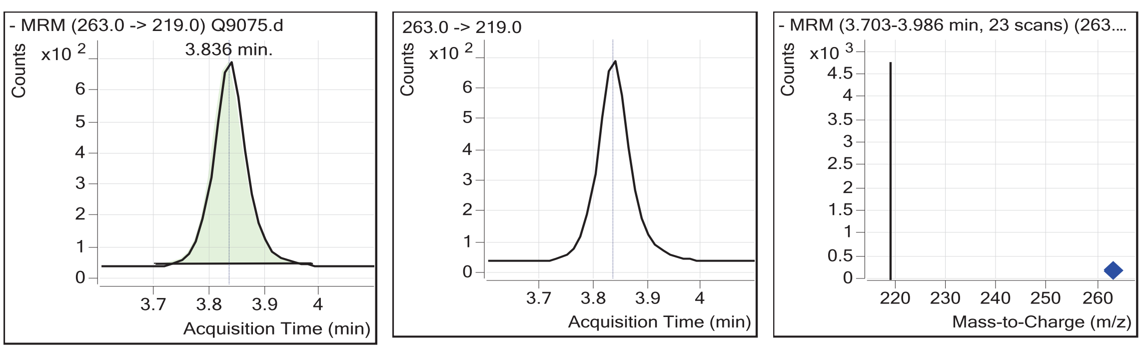
Data File	:	Q9075.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 15:26
Sample Name	:	ICC290-20
Vial	:	Vial 5
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

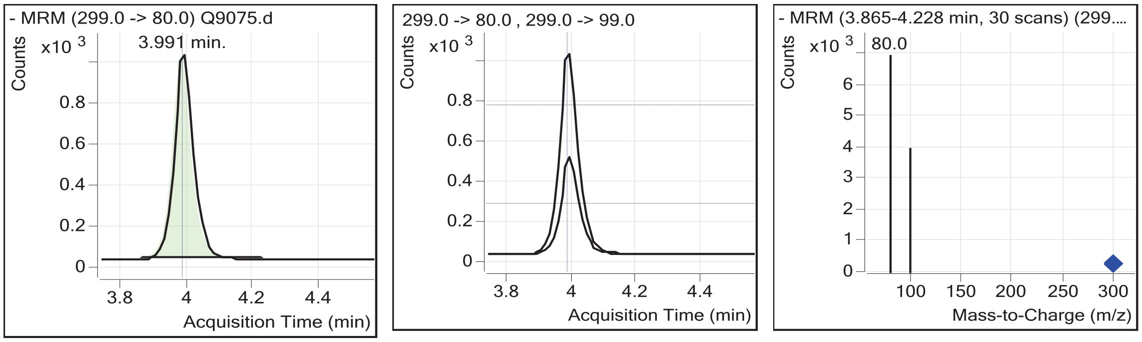


PFPeA

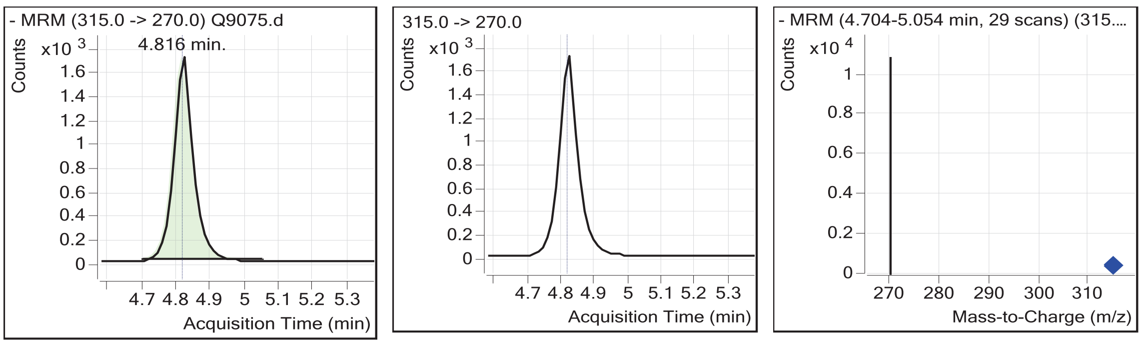


Perfluorinated Compounds by LC/MS/MS.

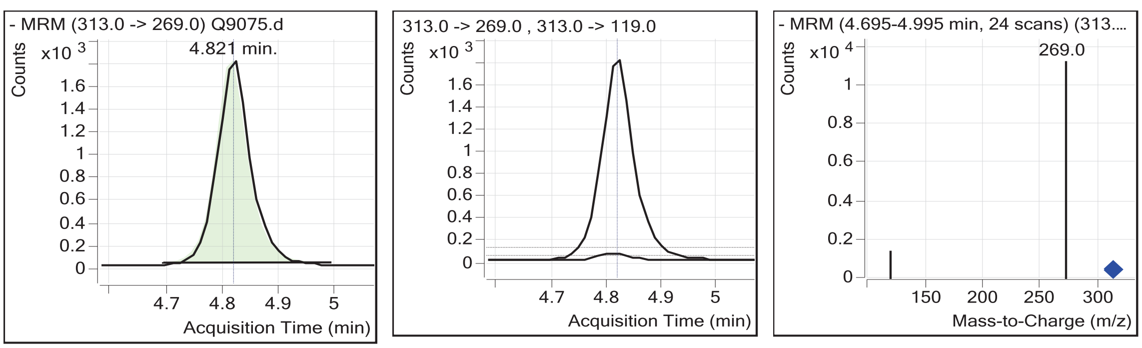
PFBS



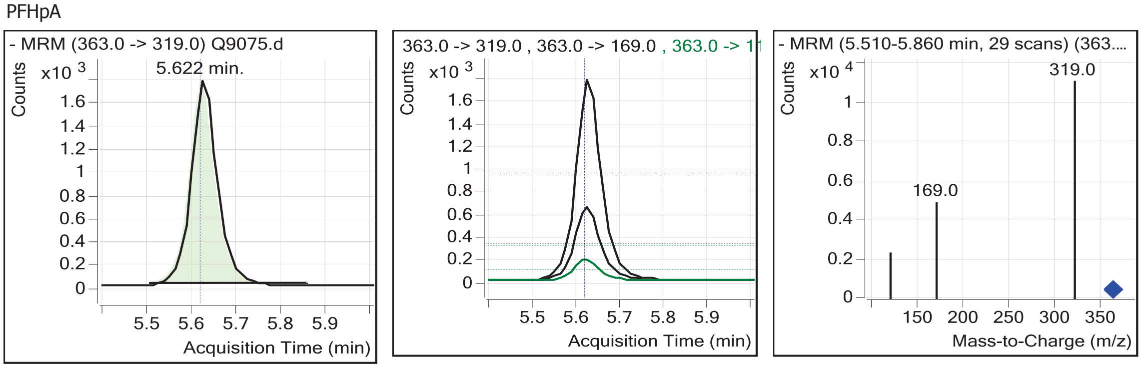
13C2-PFHxA



PFHxA

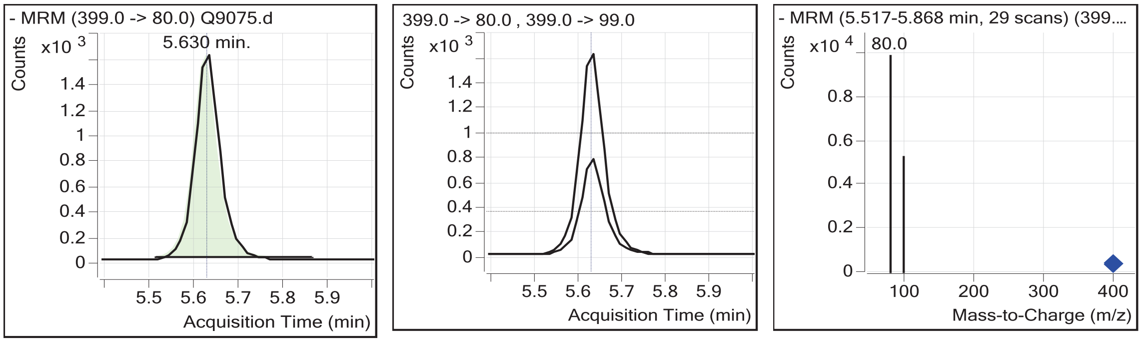


PFHpA

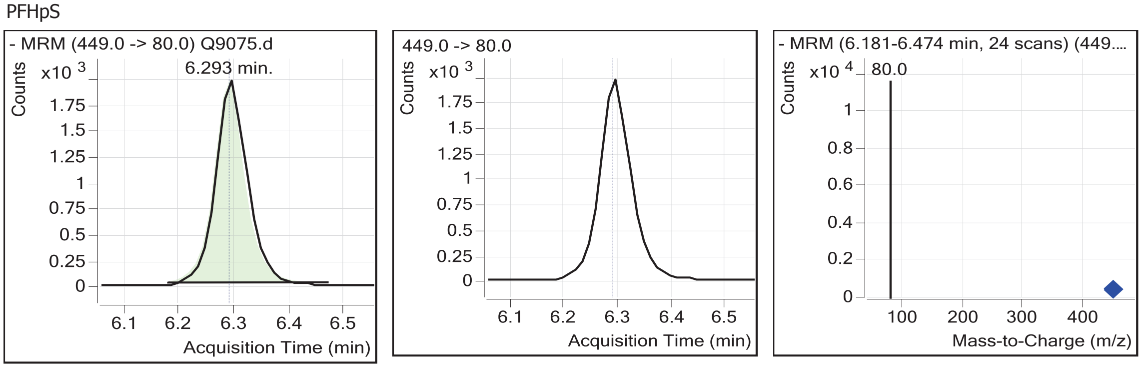


Perfluorinated Compounds by LC/MS/MS.

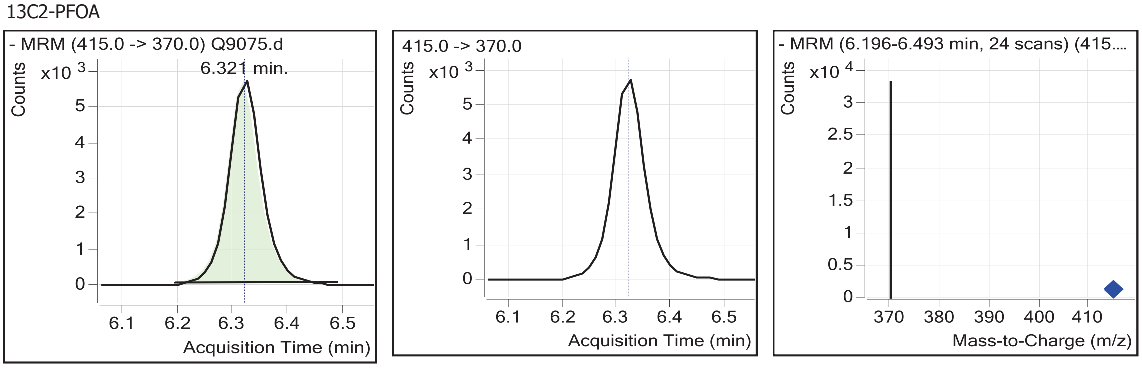
PFHxS



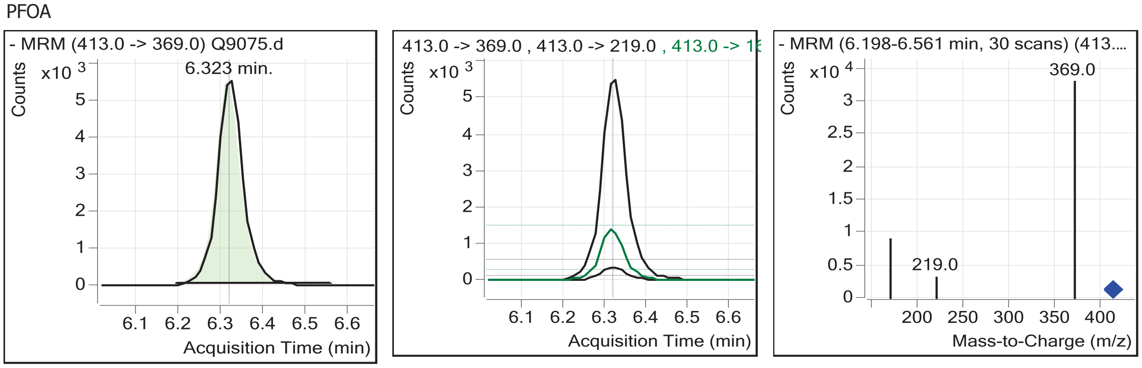
PFHpS



13C2-PFOA



PFOA

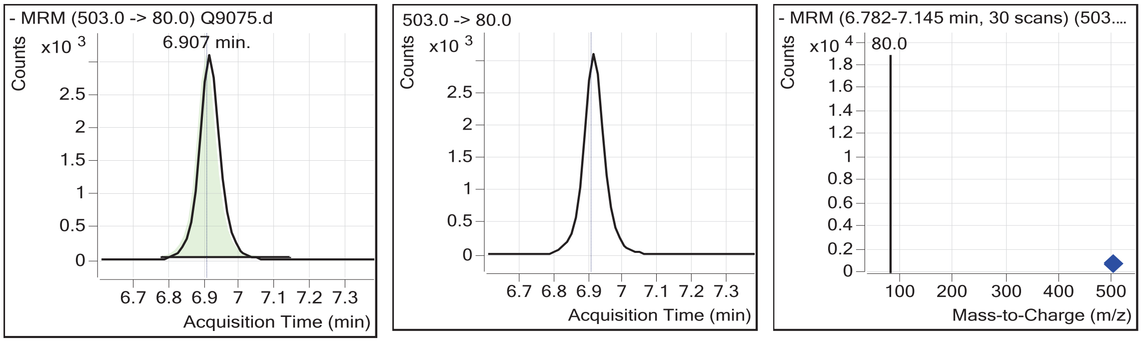


7.5.16

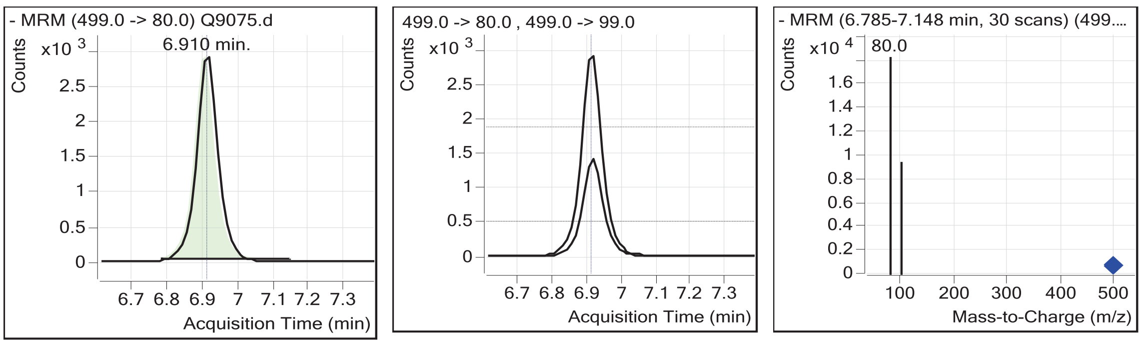
7

Perfluorinated Compounds by LC/MS/MS.

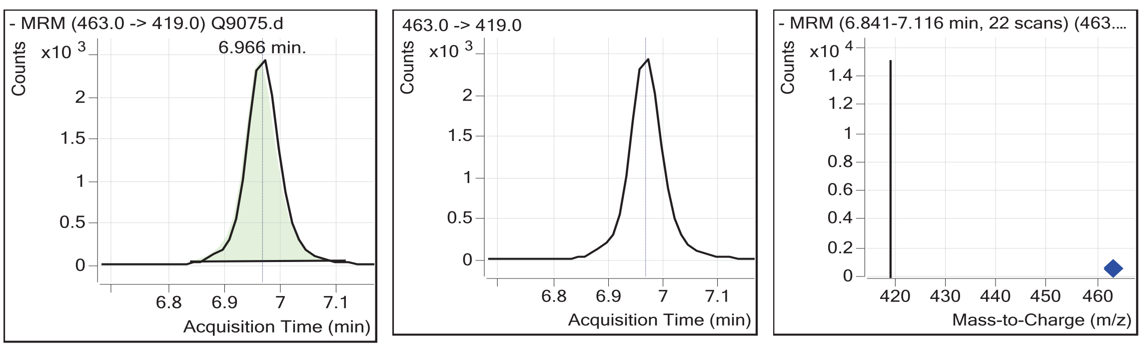
13C4-PFOS



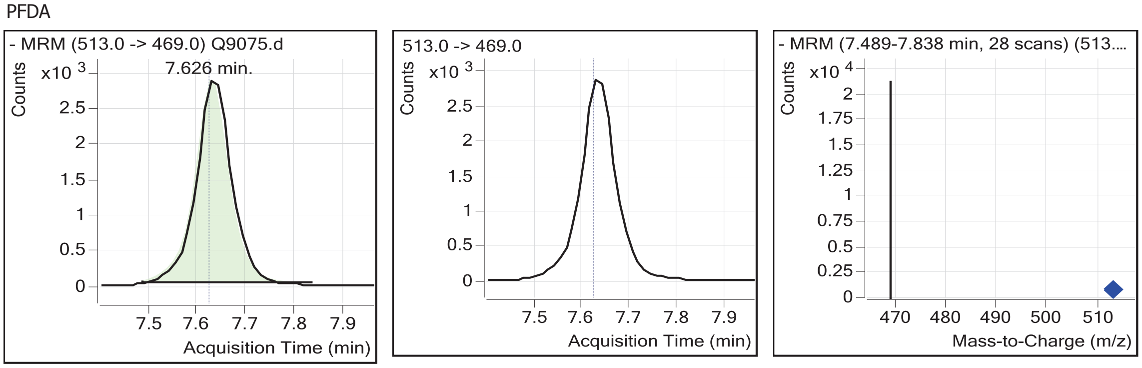
PFOS



PFNA

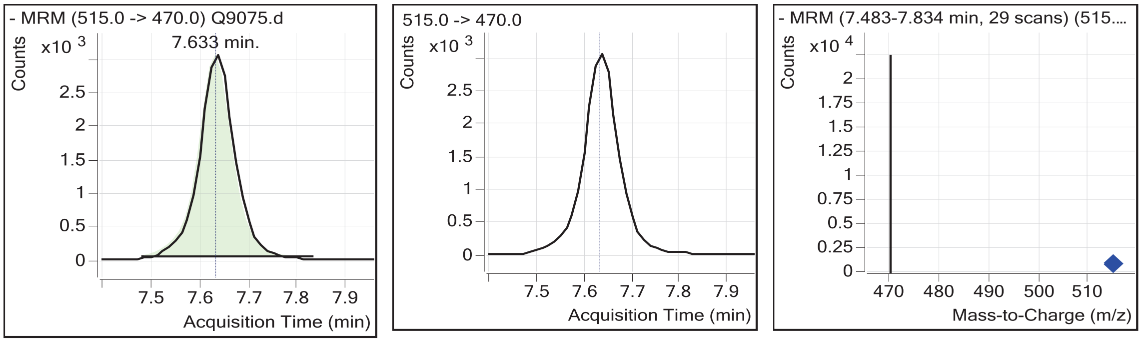


PFDA

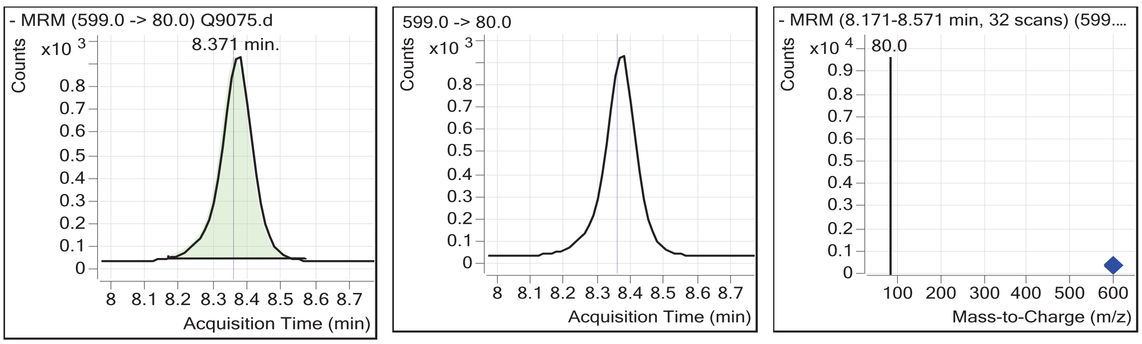


Perfluorinated Compounds by LC/MS/MS.

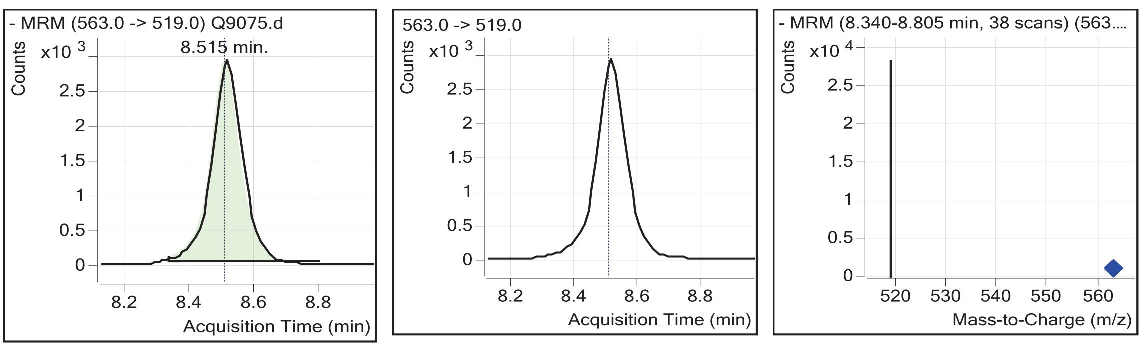
13C2-PFDA



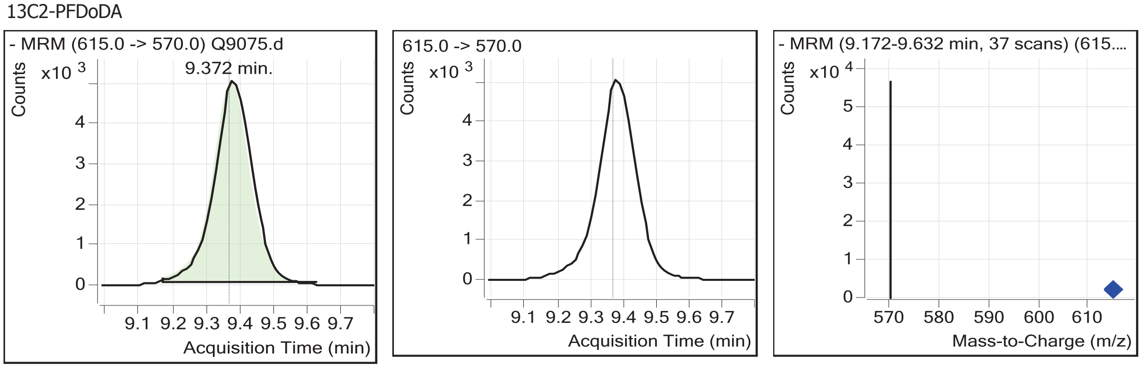
PFDS



PFUnDA



13C2-PFDoDA

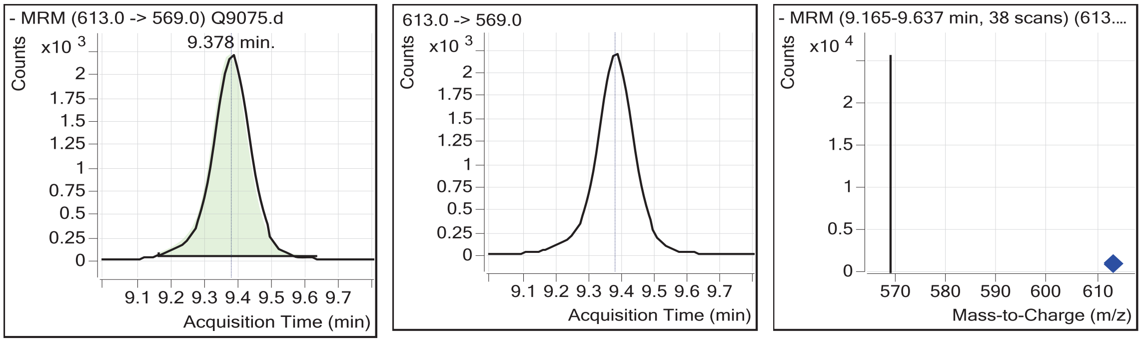


7.5.16

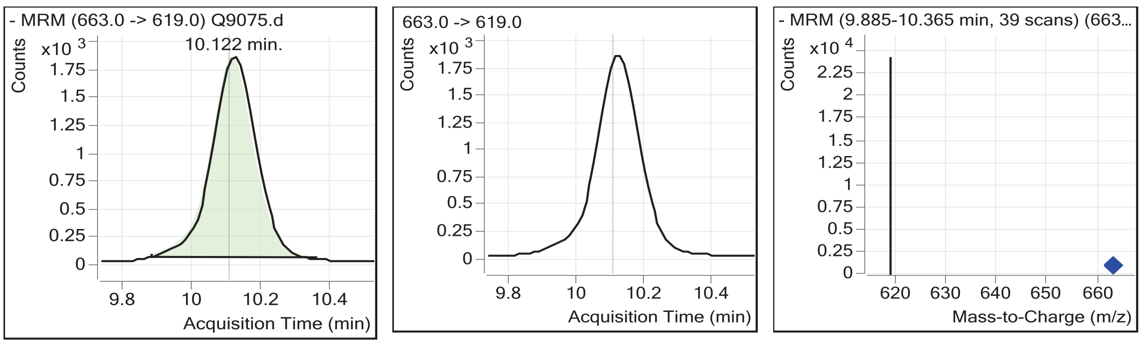
7

Perfluorinated Compounds by LC/MS/MS.

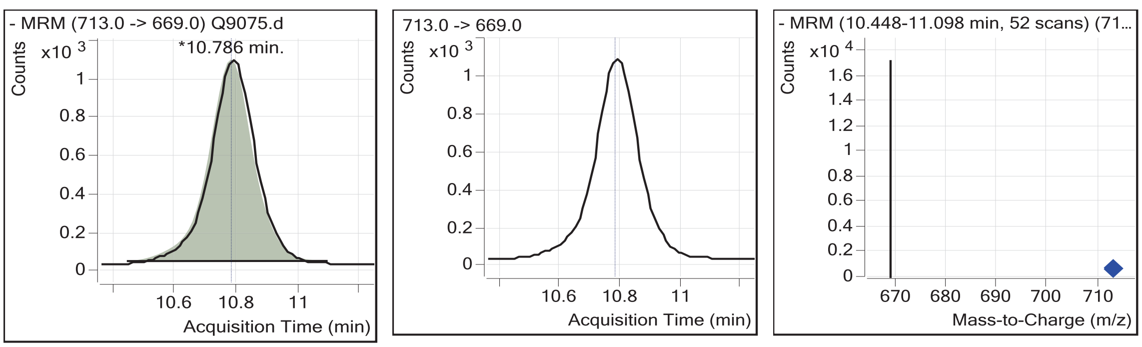
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	SQ290-ICC290	**Method:**	EPA 537 MOD	
Lab FileID:	Q9075.D	**Analyst approved:**	12/22/14 10:19	Mike Eger
Injection Time:	12/19/14 15:26	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorotetradecanoic acid	376-06-7		10.79	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

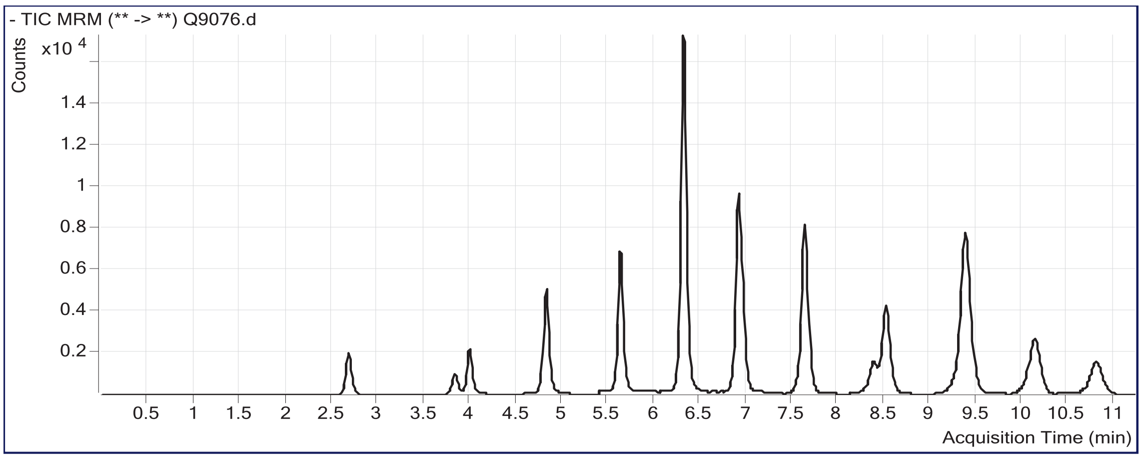
Data File	:	Q9076.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 15:46
Sample Name	:	IC290-30
Vial	:	Vial 6
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.321	415.0 -> 370.0	20535	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	11230	20.000	µg/L		0.000
13C2-PFDoDA	9.372	615.0 -> 570.0	36290	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.816	315.0 -> 270.0	10250	32.56	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 162.78%				
13C2-PFDA	7.633	515.0 -> 470.0	22113	32.60	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 162.98%				
Target Compounds							**Qvalue**
PFBA	2.677	213.0 -> 169.0	9185	31.794	µg/L		100
PFPeA	3.836	263.0 -> 219.0	4170	32.048	µg/L		100
PFBS	3.991	299.0 -> 80.0	6158	32.255	µg/L		96
PFHxA	4.821	313.0 -> 269.0	10644	32.416	µg/L		99
PFHpA	5.622	363.0 -> 319.0	10395	32.382	µg/L		98
PFHxS	5.630	399.0 -> 80.0	9156	32.329	µg/L		88
PFHpS	6.293	449.0 -> 80.0	11525	32.955	µg/L		100
PFOA	6.323	413.0 -> 369.0	34033	32.497	µg/L		81
PFOS	6.910	499.0 -> 80.0	18224	32.596	µg/L		88
PFNA	6.966	463.0 -> 419.0	15335	32.514	µg/L		100
PFDA	7.626	513.0 -> 469.0	20878	32.617	µg/L		100
PFDS	8.358	599.0 -> 80.0	8840	32.060	µg/L		100
PFUnDA	8.502	563.0 -> 519.0	28450	32.067	µg/L		100
PFDoDA	9.378	613.0 -> 569.0	26133	32.020	µg/L		100
PFTrDA	10.110	663.0 -> 619.0	24254	31.633	µg/L		100
PFTeDA	10.786	713.0 -> 669.0	15858	30.756	µg/L	m	100

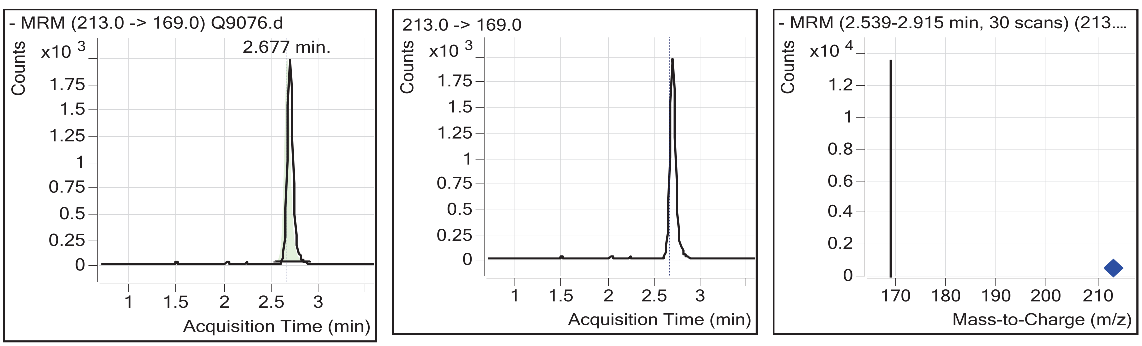
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

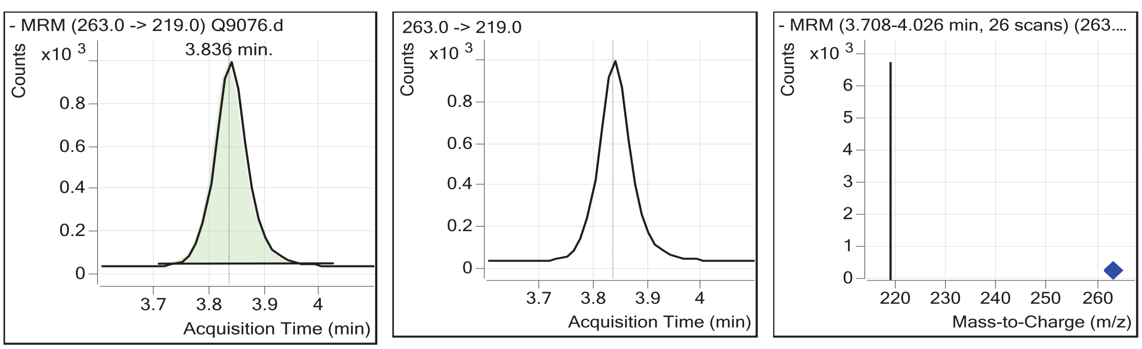
Data File	:	Q9076.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 15:46
Sample Name	:	IC290-30
Vial	:	Vial 6
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

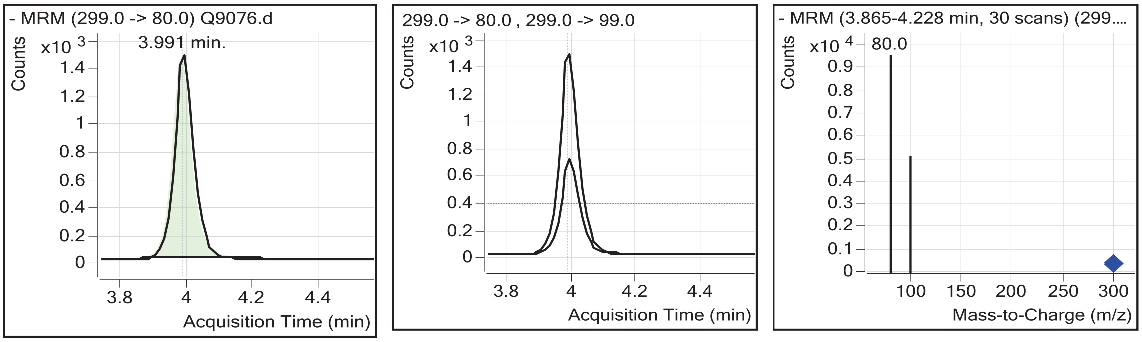


PFPeA

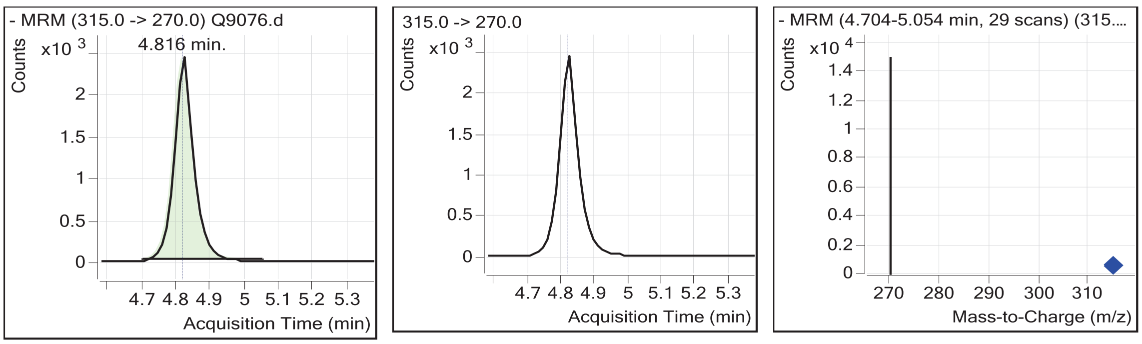


Perfluorinated Compounds by LC/MS/MS.

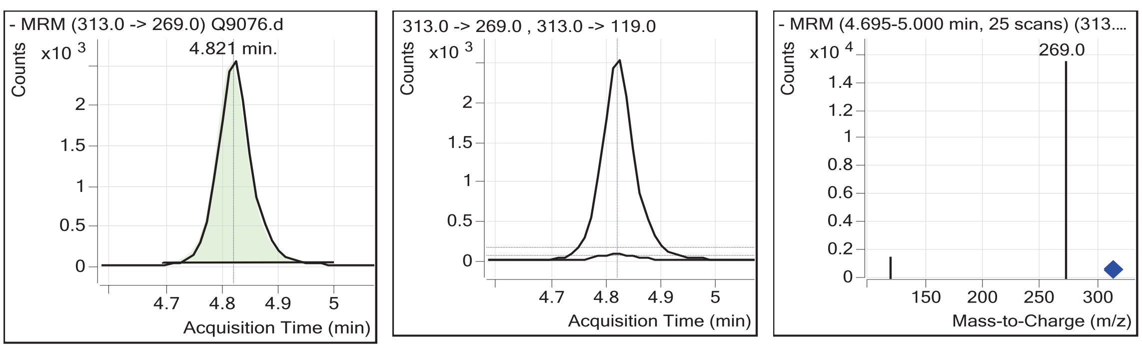
PFBS



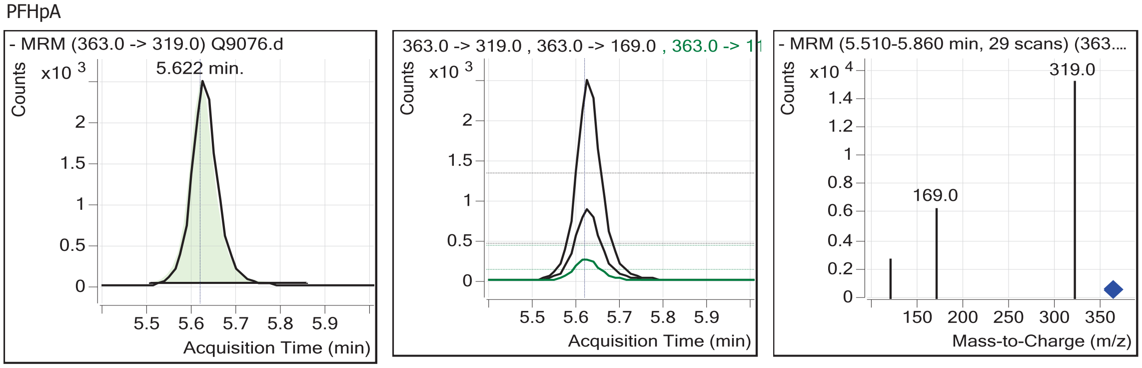
13C2-PFHxA



PFHxA



PFHpA

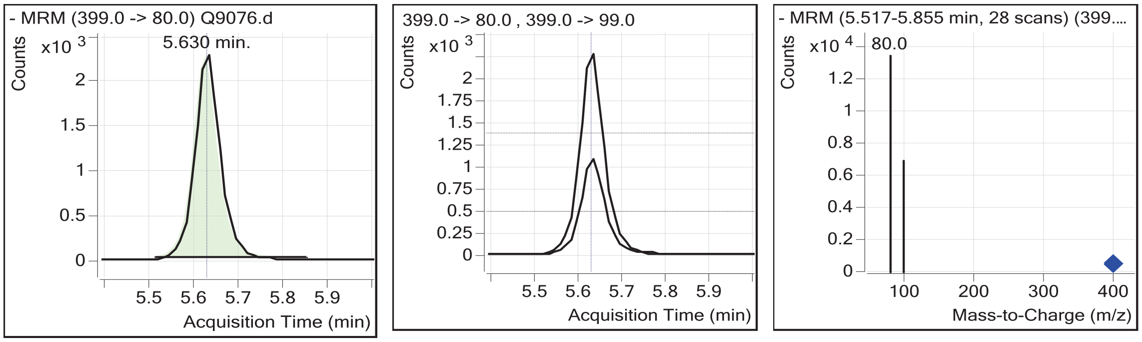


7.5.17

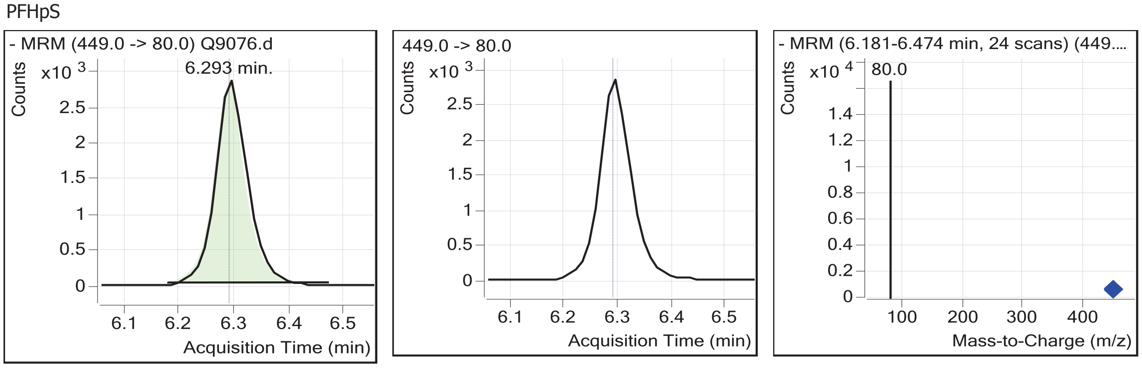
7

Perfluorinated Compounds by LC/MS/MS.

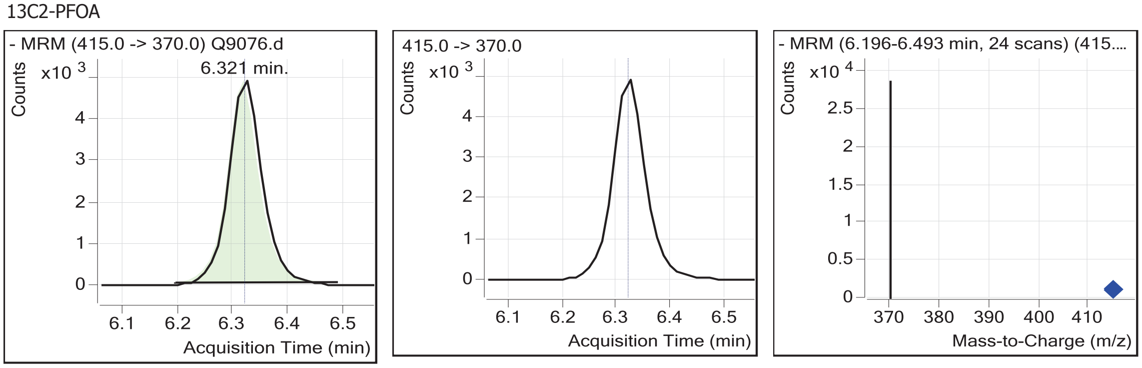
PFHxS



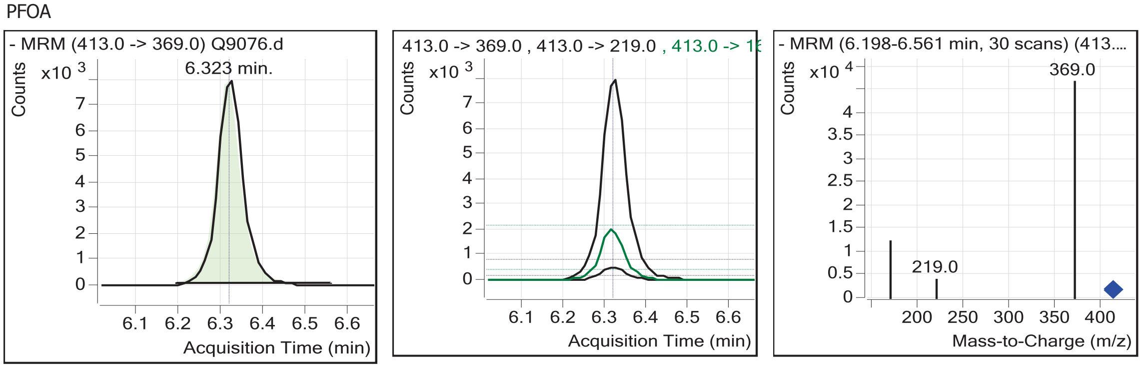
PFHpS



13C2-PFOA

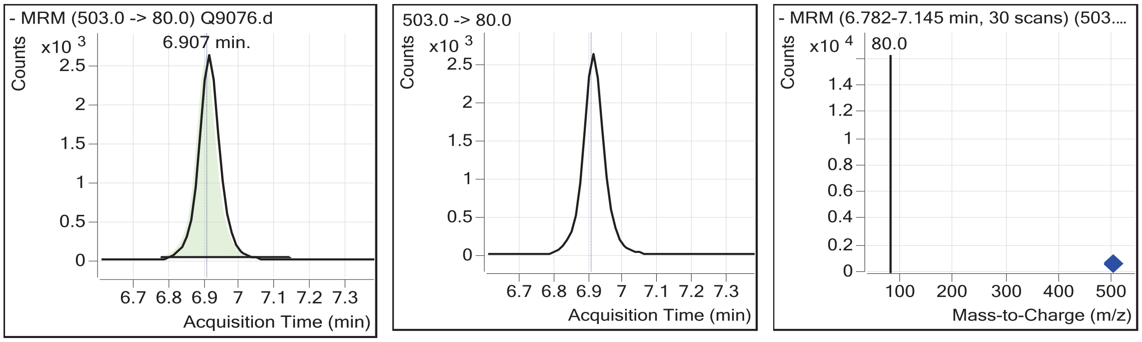


PFOA

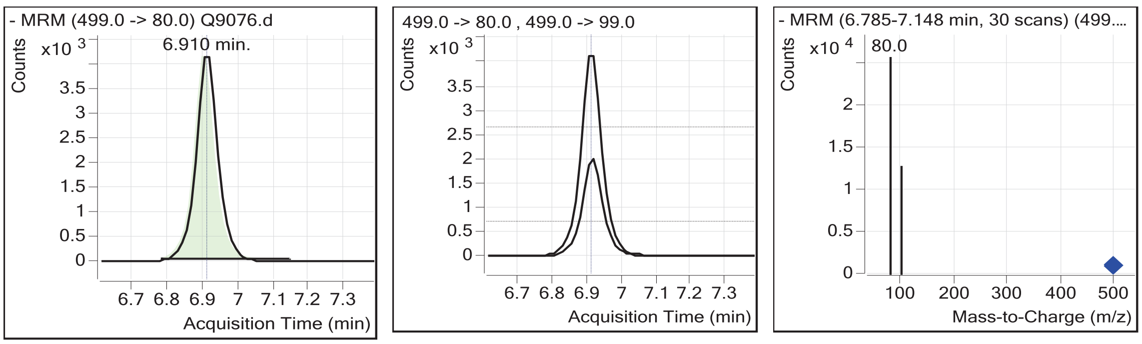


Perfluorinated Compounds by LC/MS/MS.

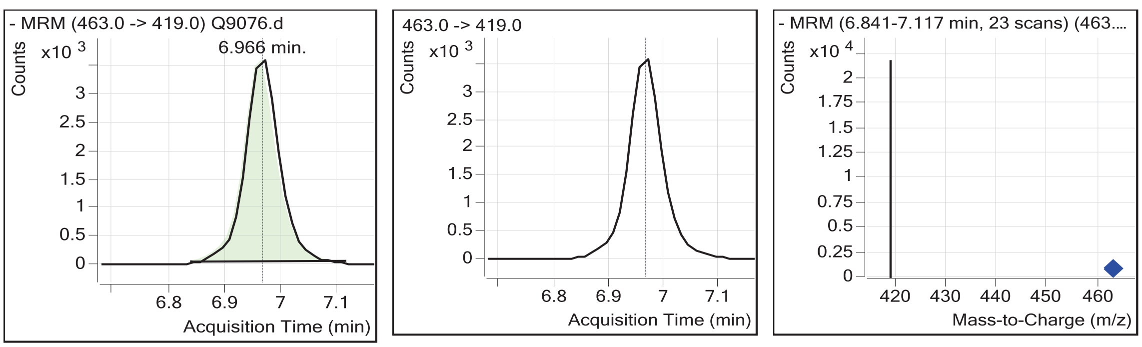
13C4-PFOS



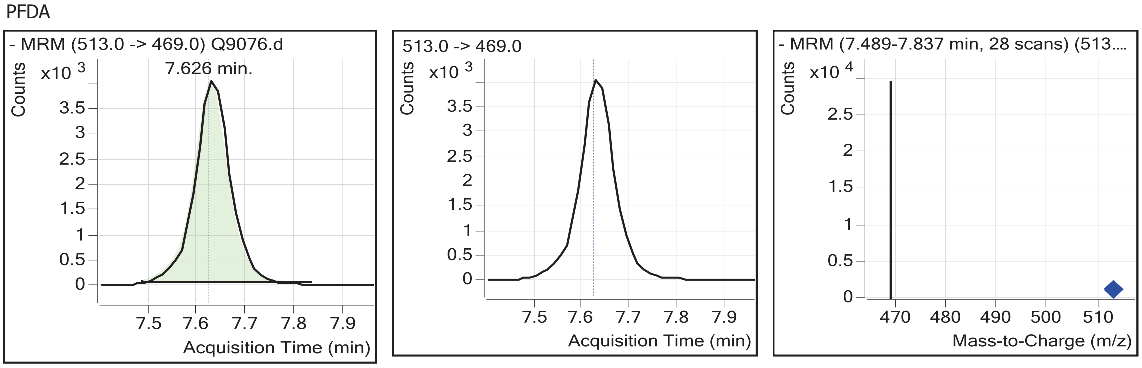
PFOS



PFNA

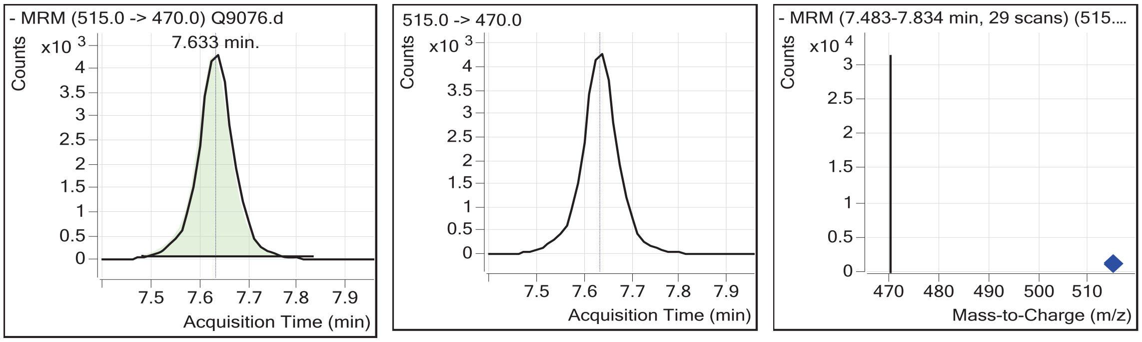


PFDA

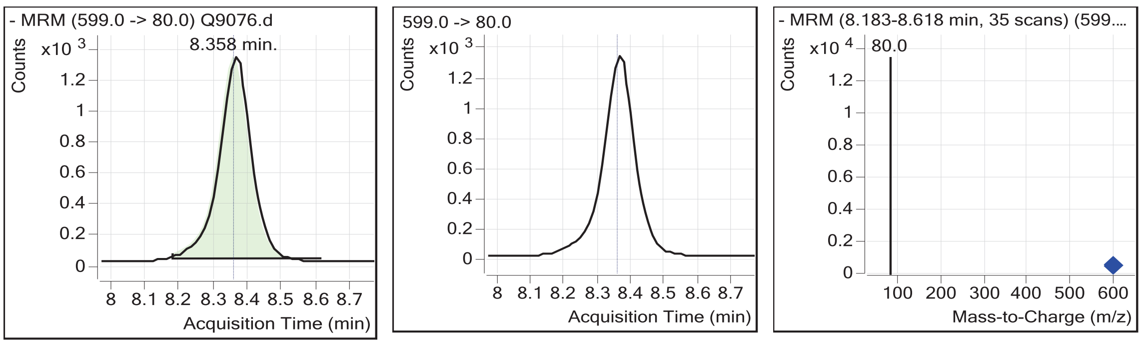


Perfluorinated Compounds by LC/MS/MS.

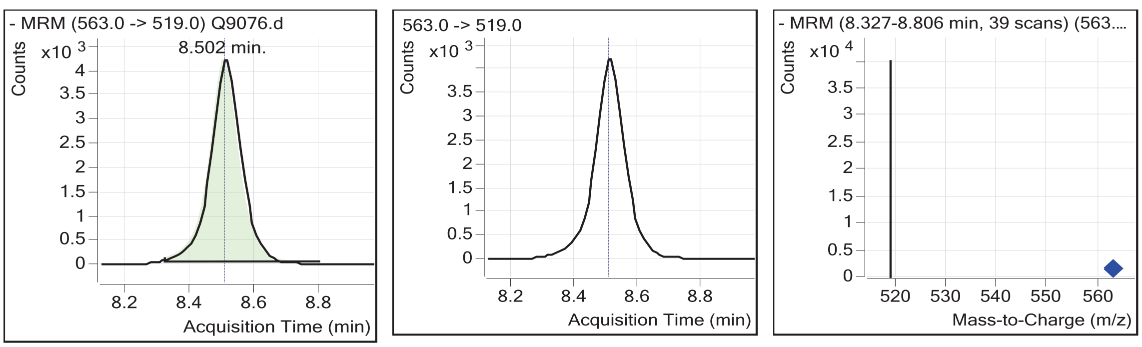
13C2-PFDA



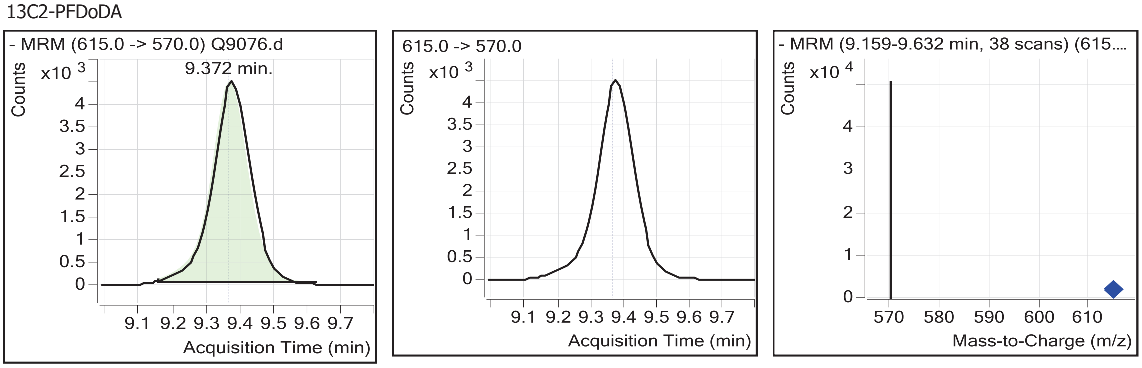
PFDS



PFUnDA

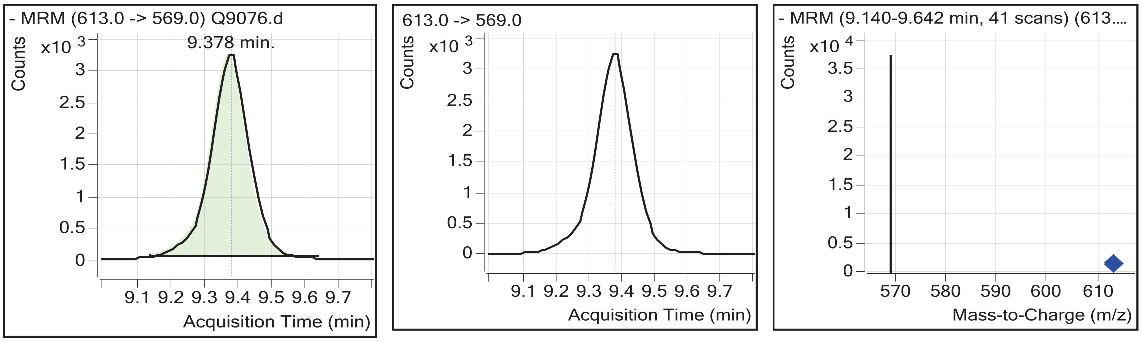


13C2-PFDoDA

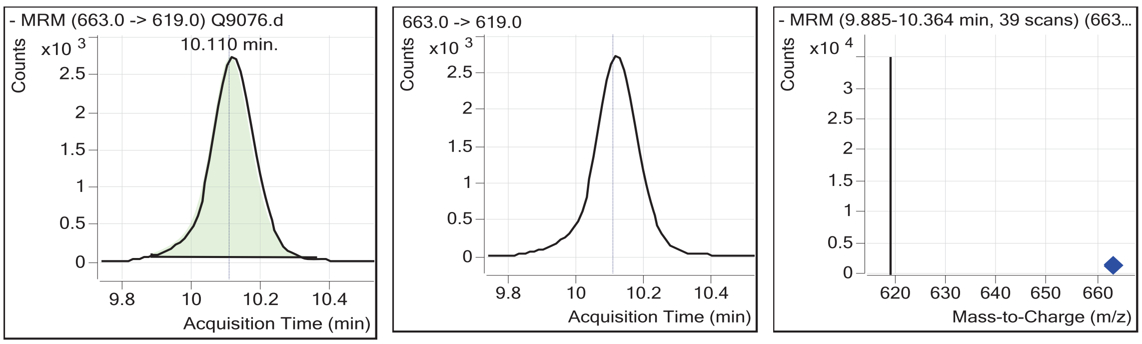


Perfluorinated Compounds by LC/MS/MS.

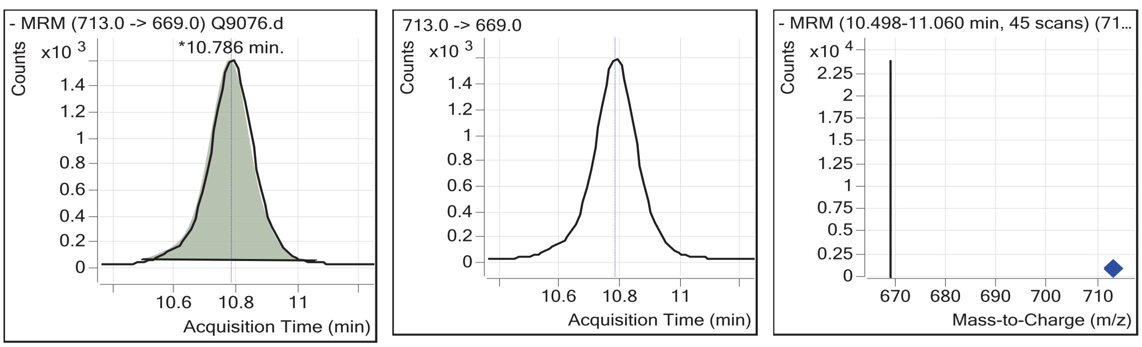
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	SQ290-IC290	**Method:**	EPA 537 MOD	
Lab FileID:	Q9076.D	**Analyst approved:**	12/22/14 10:19	Mike Eger
Injection Time:	12/19/14 15:46	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorotetradecanoic acid	376-06-7		10.79	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q9077.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 16:06
Sample Name	:	IC290-40
Vial	:	Vial 7
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.321	415.0 -> 370.0	22230	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	12304	20.000	µg/L		0.000
13C2-PFDoDA	9.372	615.0 -> 570.0	39378	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.816	315.0 -> 270.0	13485	39.56	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 197.81%				
13C2-PFDA	7.633	515.0 -> 470.0	29141	39.68	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 198.39%				
Target Compounds							**Qvalue**
PFBA	2.664	213.0 -> 169.0	12655	40.467	µg/L		100
PFPeA	3.836	263.0 -> 219.0	5548	39.390	µg/L		100
PFBS	3.978	299.0 -> 80.0	8119	38.813	µg/L		98
PFHxA	4.808	313.0 -> 269.0	14253	40.095	µg/L		99
PFHpA	5.622	363.0 -> 319.0	13847	39.845	µg/L		98
PFHxS	5.630	399.0 -> 80.0	12090	38.960	µg/L		86
PFHpS	6.293	449.0 -> 80.0	14995	39.132	µg/L		100
PFOA	6.311	413.0 -> 369.0	44605	39.343	µg/L		81
PFOS	6.897	499.0 -> 80.0	23964	39.121	µg/L		88
PFNA	6.966	463.0 -> 419.0	20262	39.682	µg/L		100
PFDA	7.626	513.0 -> 469.0	27737	39.935	µg/L		100
PFDS	8.358	599.0 -> 80.0	11859	39.637	µg/L		100
PFUnDA	8.502	563.0 -> 519.0	38228	39.710	µg/L		100
PFDoDA	9.366	613.0 -> 569.0	35280	39.838	µg/L		100
PFTrDA	10.110	663.0 -> 619.0	33033	39.704	µg/L		100
PFTeDA	10.786	713.0 -> 669.0	22232	39.738	µg/L	m	100

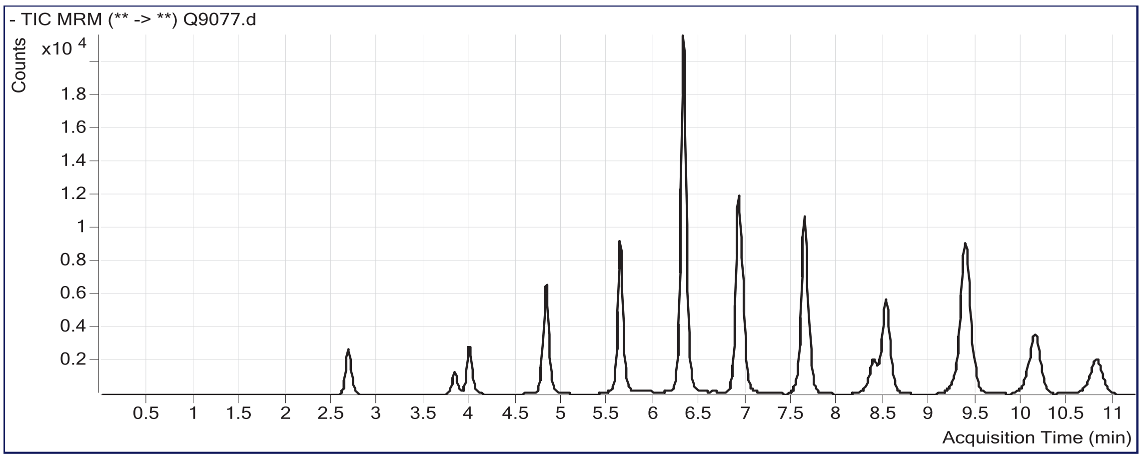
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.18

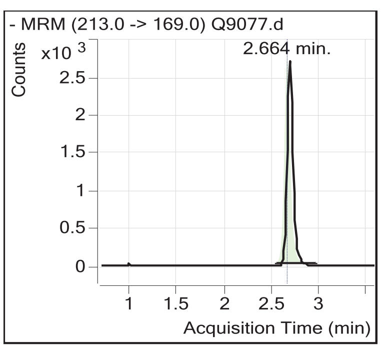
7

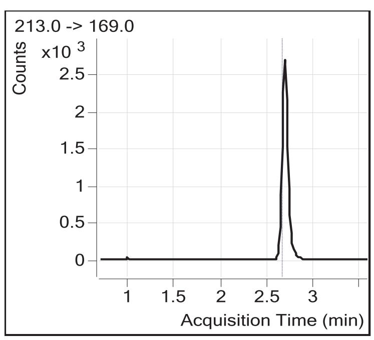
Perfluorinated Compounds by LC/MS/MS.

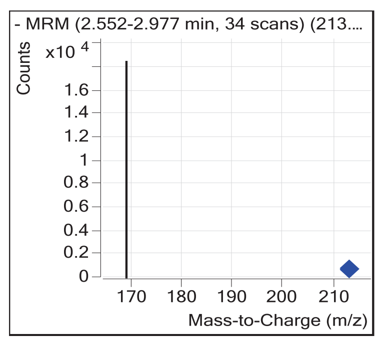
Data File	:	Q9077.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 16:06
Sample Name	:	IC290-40
Vial	:	Vial 7
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



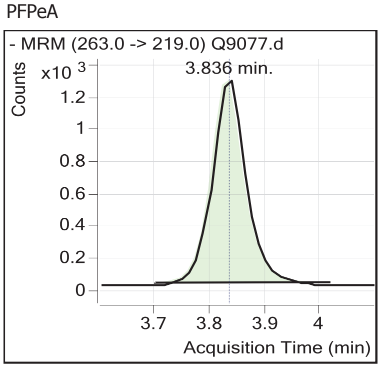
PFBA

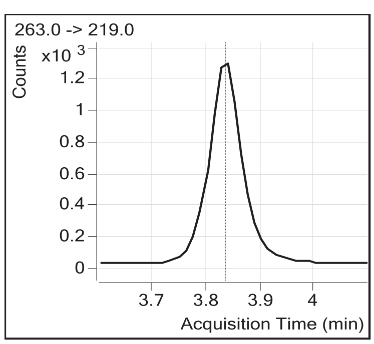


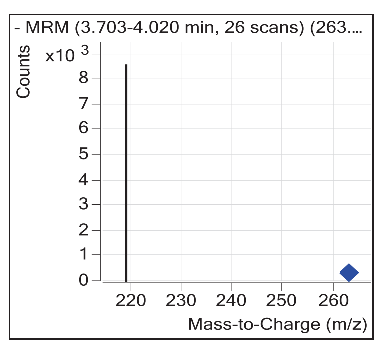




PFPeA

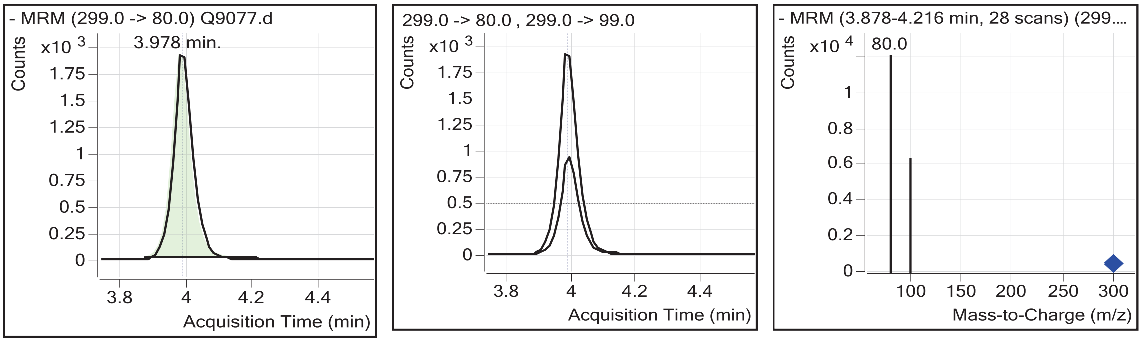




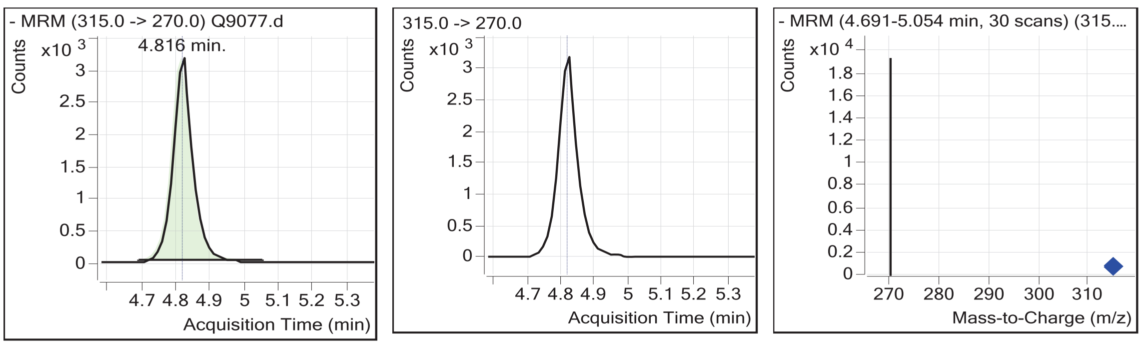


Perfluorinated Compounds by LC/MS/MS.

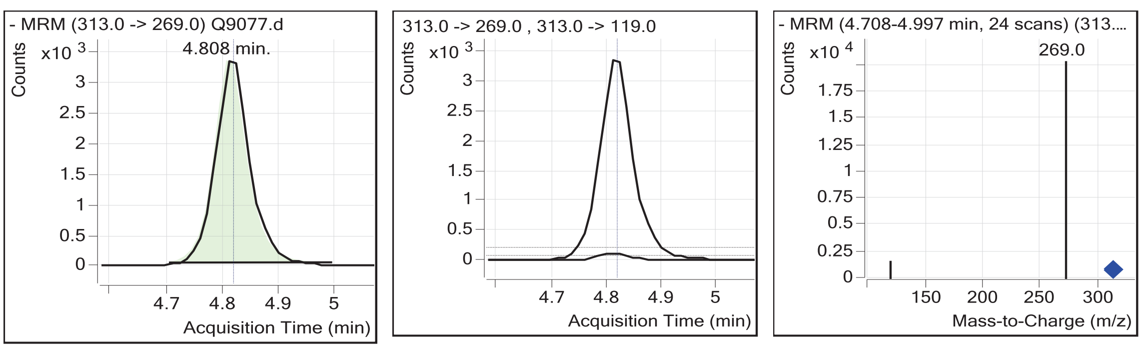
PFBS



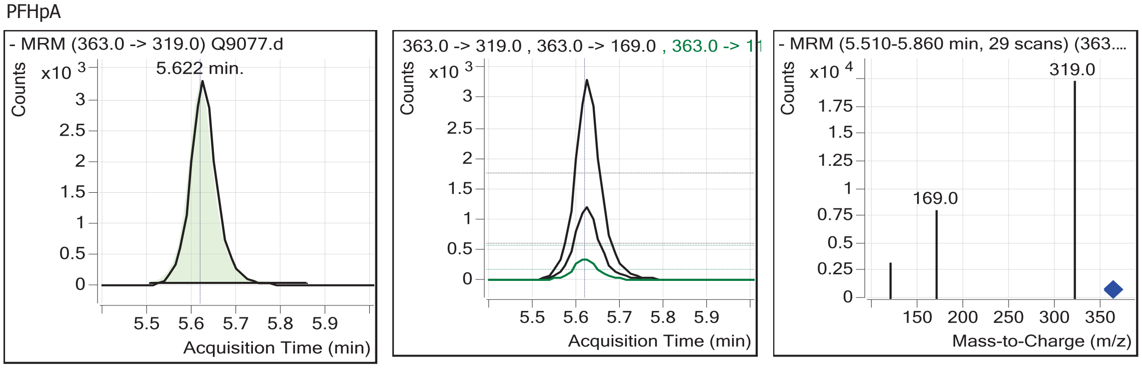
13C2-PFHxA



PFHxA

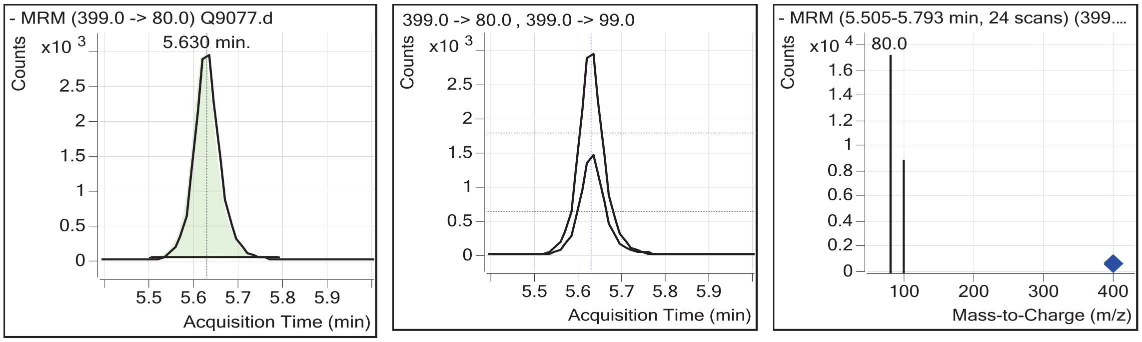


PFHpA

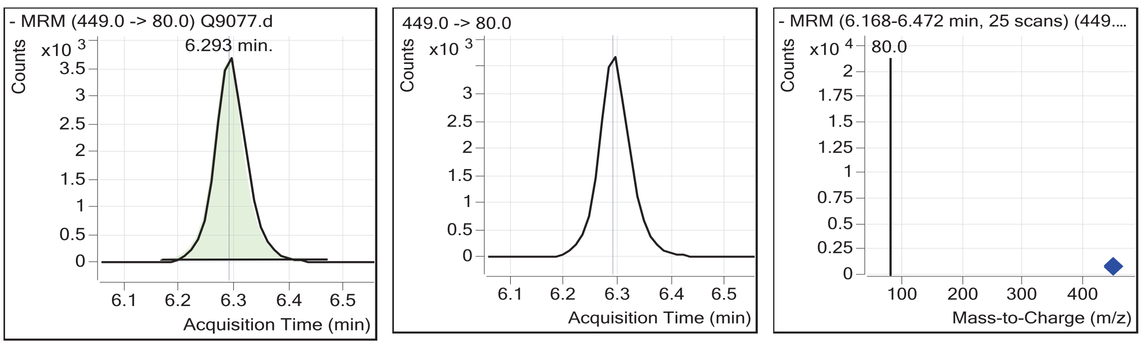


Perfluorinated Compounds by LC/MS/MS.

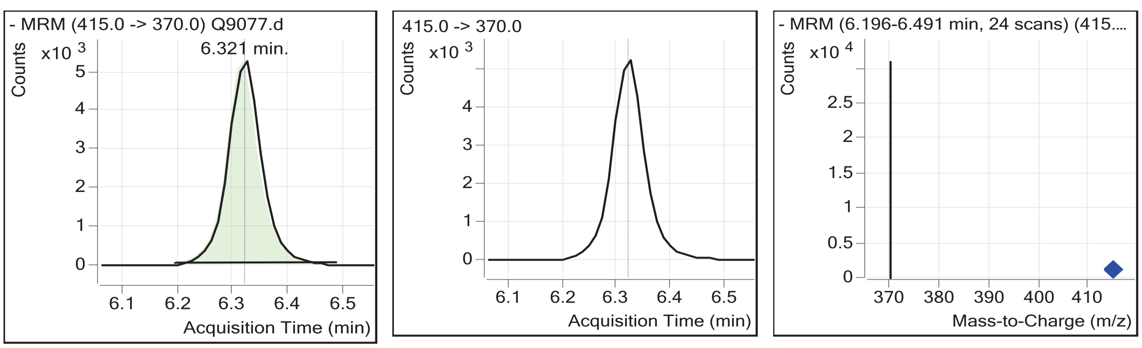
PFHxS



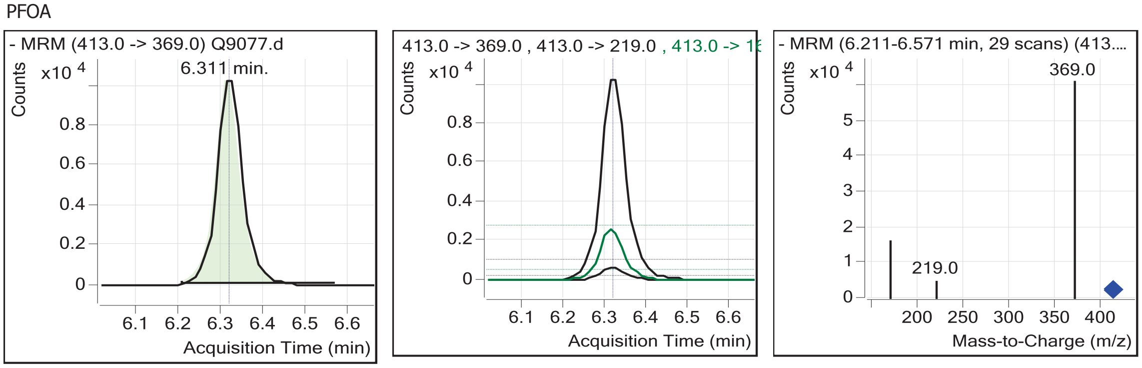
PFHpS



13C2-PFOA



PFOA



7.5.18

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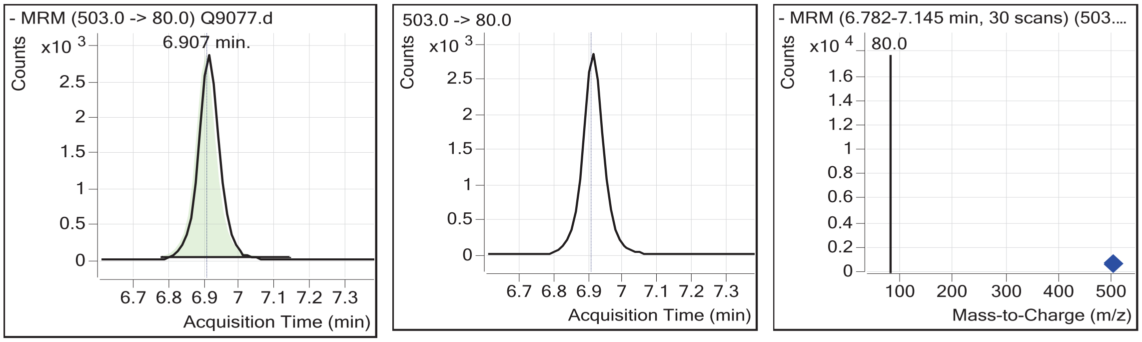
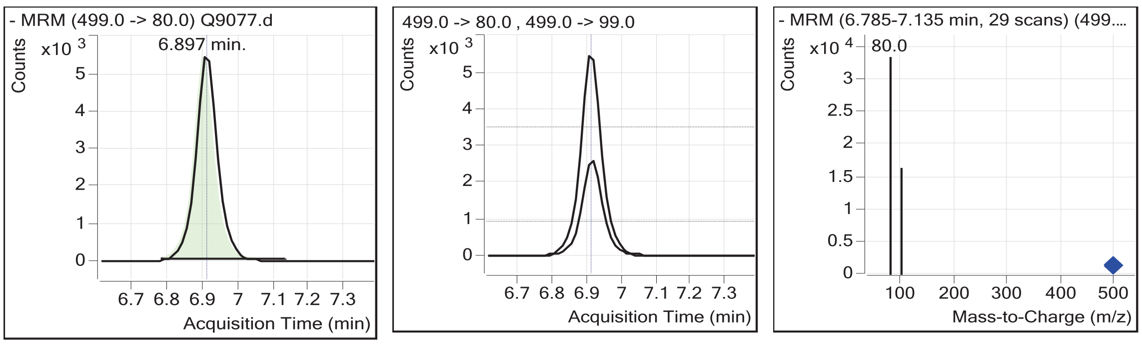
Perfluorinated Compounds by LC/MS/MS.

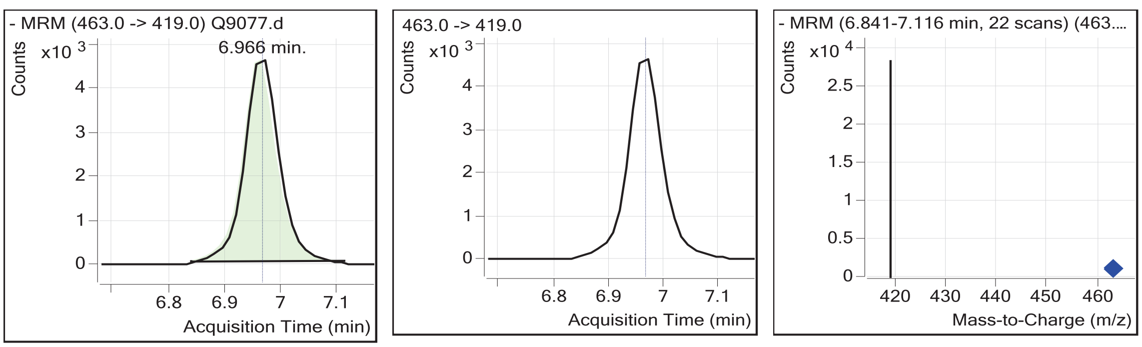
13C4-PFOS



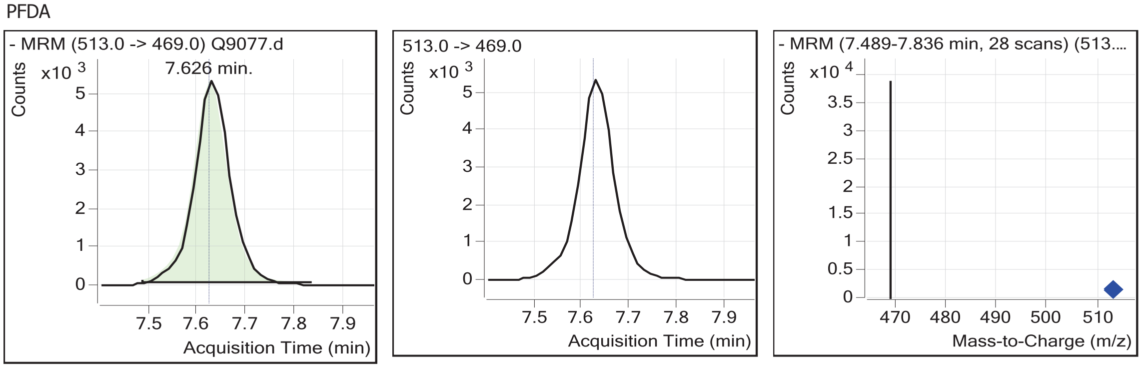
PFOS



PFNA

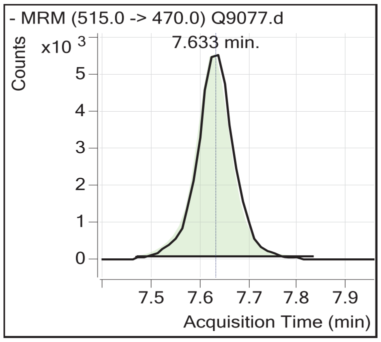


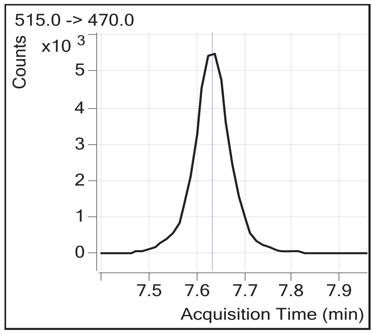
PFDA

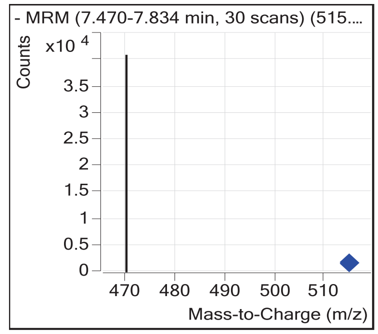


Perfluorinated Compounds by LC/MS/MS.

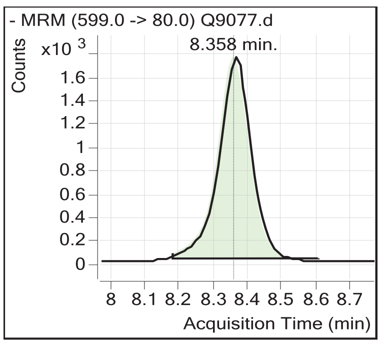
13C2-PFDA

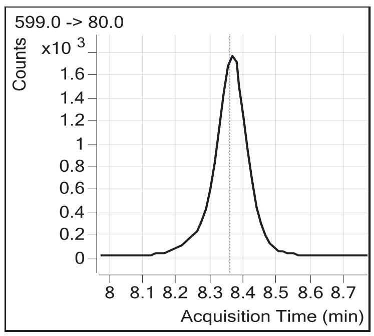


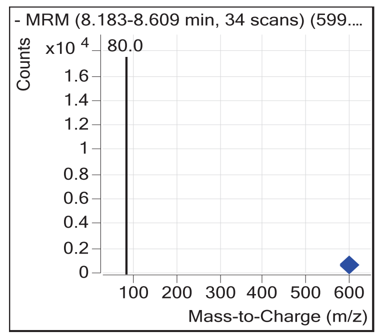




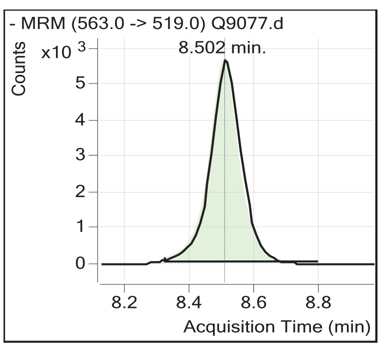
PFDS

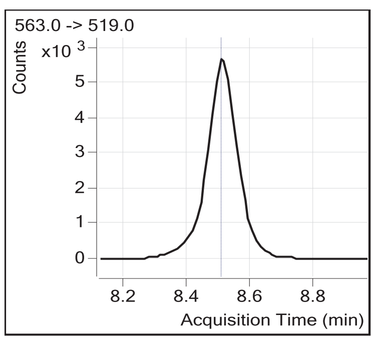


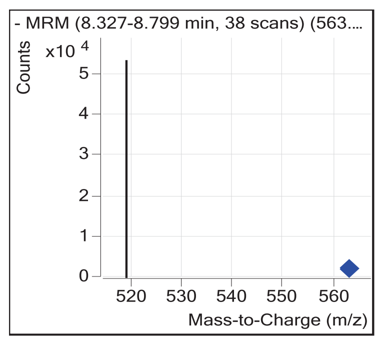




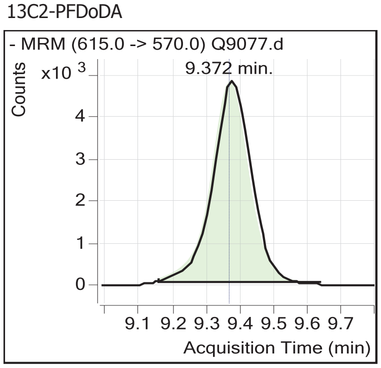
PFUnDA

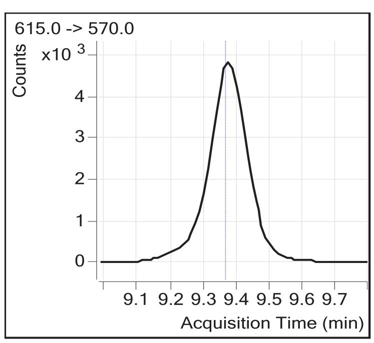


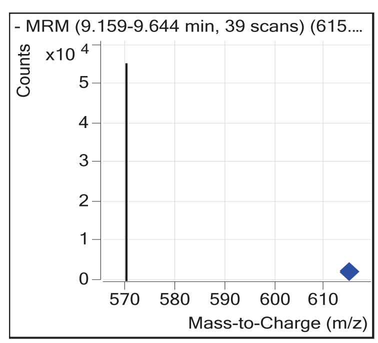




13C2-PFDoDA

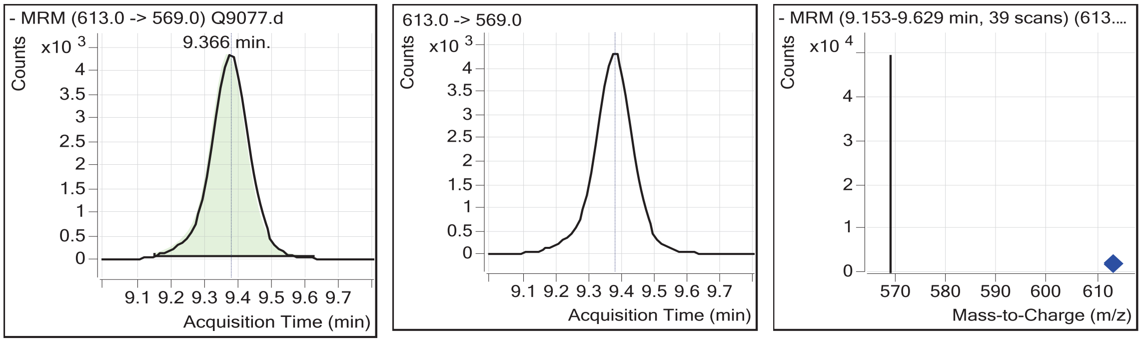




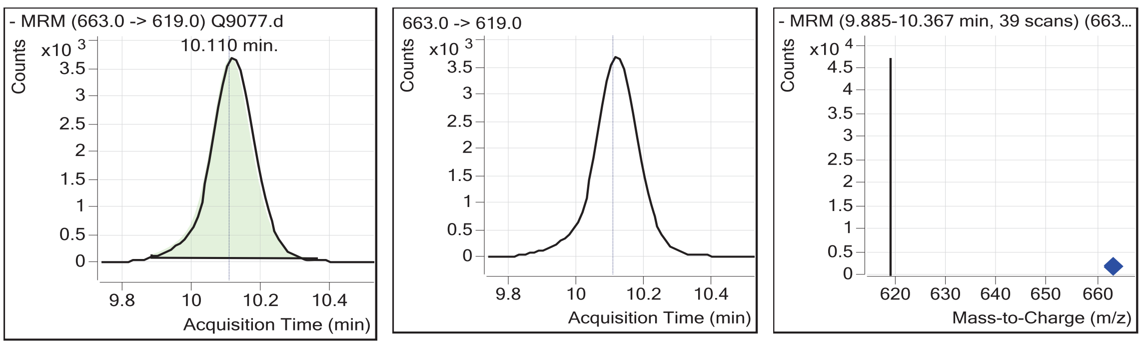


Perfluorinated Compounds by LC/MS/MS.

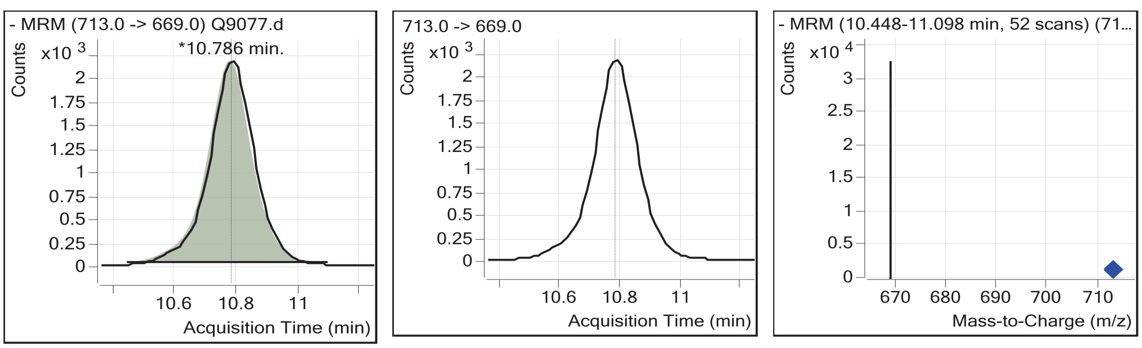
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number: SQ290-IC290
Lab FileID: Q9077.D
Injection Time: 12/19/14 16:06

Method: EPA 537 MOD
Analyst approved: 12/22/14 10:19 Mike Eger
Supervisor approved: 12/22/14 13:28 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorotetradecanoic acid	376-06-7		10.79	Poor instrument integration

Perfluorinated Compounds by LC/MS/MS.

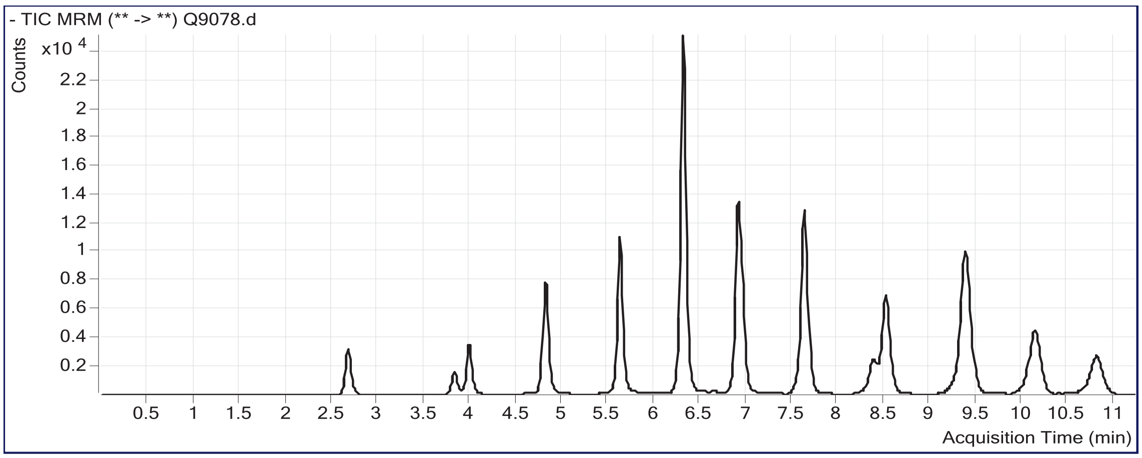
Data File	:	Q9078.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 16:26
Sample Name	:	IC290-50
Vial	:	Vial 8
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.321	415.0 -> 370.0	21590	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	11669	20.000	µg/L		0.000
13C2-PFDoDA	9.372	615.0 -> 570.0	38936	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.816	315.0 -> 270.0	16264	49.13	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 245.65%				
13C2-PFDA	7.620	515.0 -> 470.0	34827	48.83	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 244.13%				
Target Compounds							**Qvalue**
PFBA	2.664	213.0 -> 169.0	14935	49.171	µg/L		100
PFPeA	3.824	263.0 -> 219.0	6856	50.118	µg/L		100
PFBS	3.978	299.0 -> 80.0	9961	50.210	µg/L		96
PFHxA	4.808	313.0 -> 269.0	16835	48.764	µg/L		99
PFHxS	5.617	399.0 -> 80.0	14608	49.638	µg/L		88
PFHpA	5.622	363.0 -> 319.0	16501	48.888	µg/L		98
PFHpS	6.281	449.0 -> 80.0	17896	49.247	µg/L		100
PFOA	6.311	413.0 -> 369.0	54279	49.295	µg/L		82
PFOS	6.897	499.0 -> 80.0	28725	49.445	µg/L		87
PFNA	6.954	463.0 -> 419.0	24453	49.309	µg/L		100
PFDA	7.626	513.0 -> 469.0	32983	48.026	µg/L		100
PFDS	8.358	599.0 -> 80.0	14544	49.165	µg/L		100
PFUnDA	8.502	563.0 -> 519.0	46635	48.993	µg/L		100
PFDoDA	9.366	613.0 -> 569.0	43055	49.169	µg/L		100
PFTrDA	10.110	663.0 -> 619.0	40808	49.606	µg/L		100
PFTeDA	10.786	713.0 -> 669.0	27831	50.310	µg/L	m	100

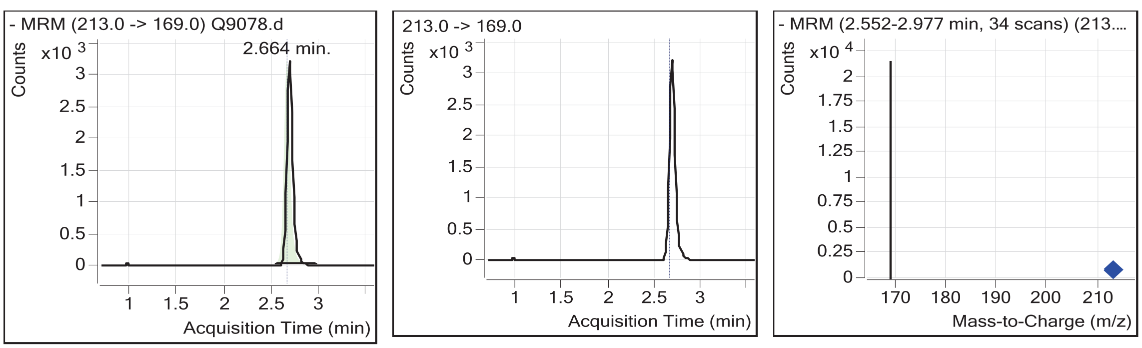
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

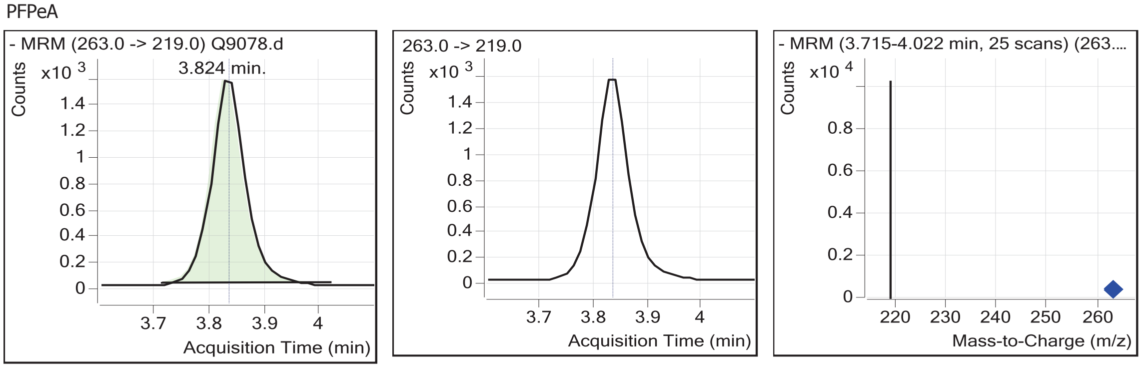
Data File	:	Q9078.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 16:26
Sample Name	:	IC290-50
Vial	:	Vial 8
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

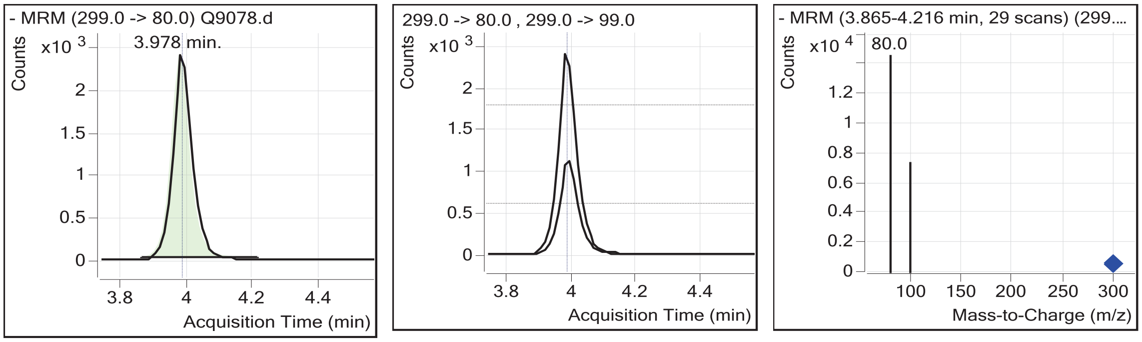


PFPeA

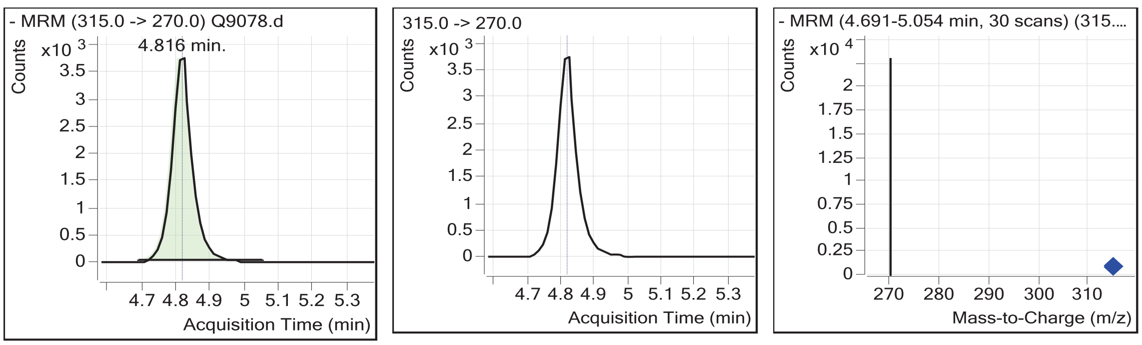


Perfluorinated Compounds by LC/MS/MS.

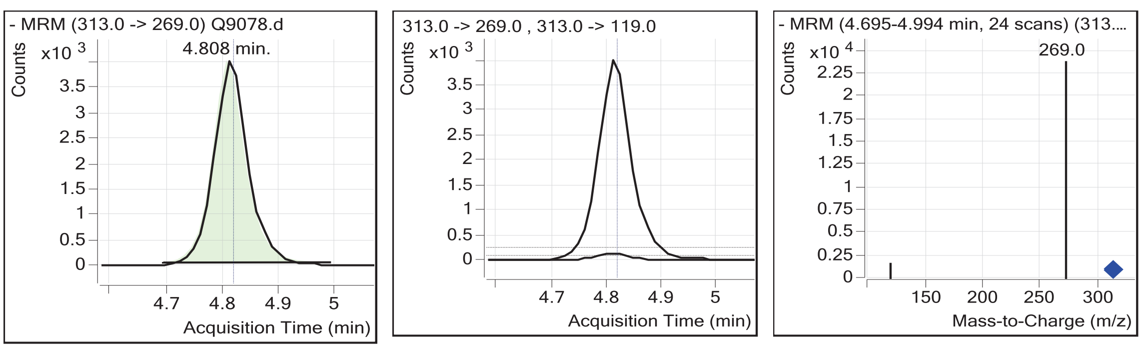
PFBS



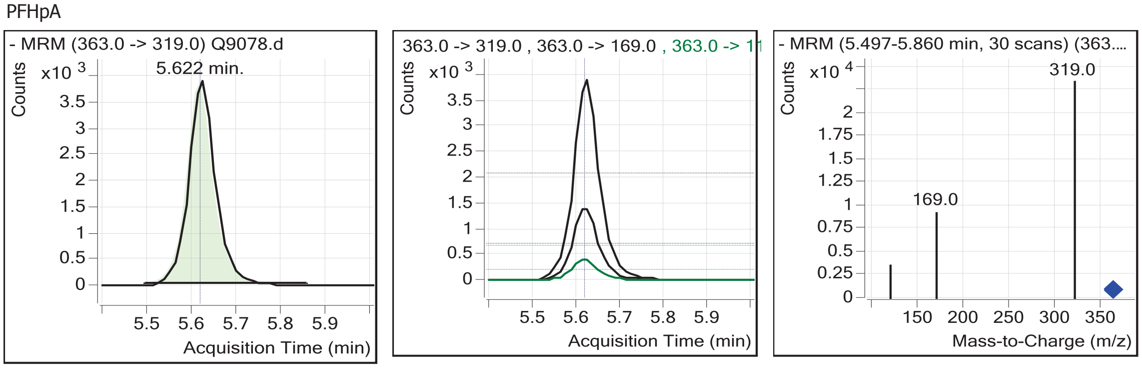
13C2-PFHxA



PFHxA

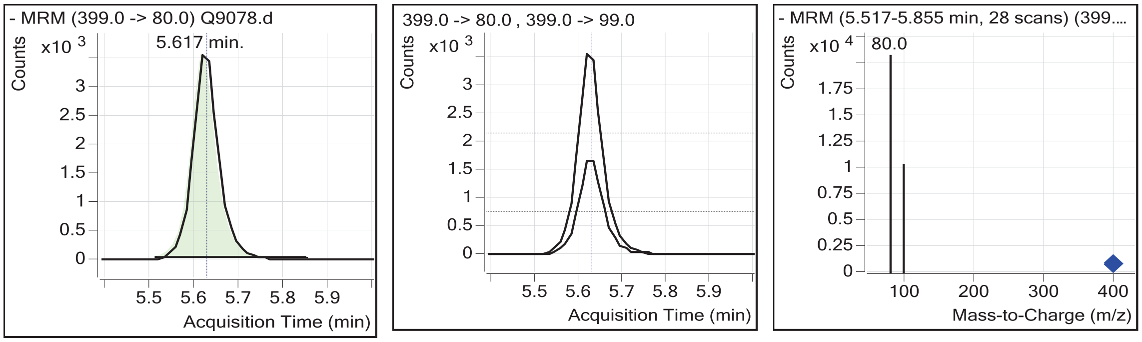


PFHpA

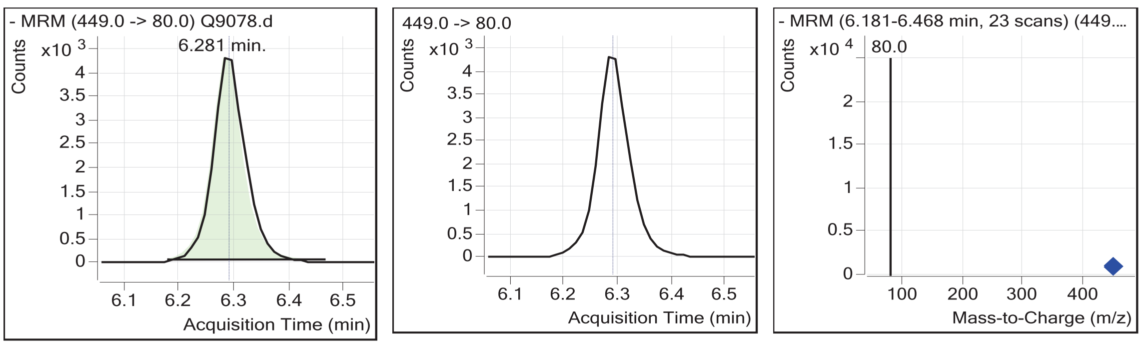


Perfluorinated Compounds by LC/MS/MS.

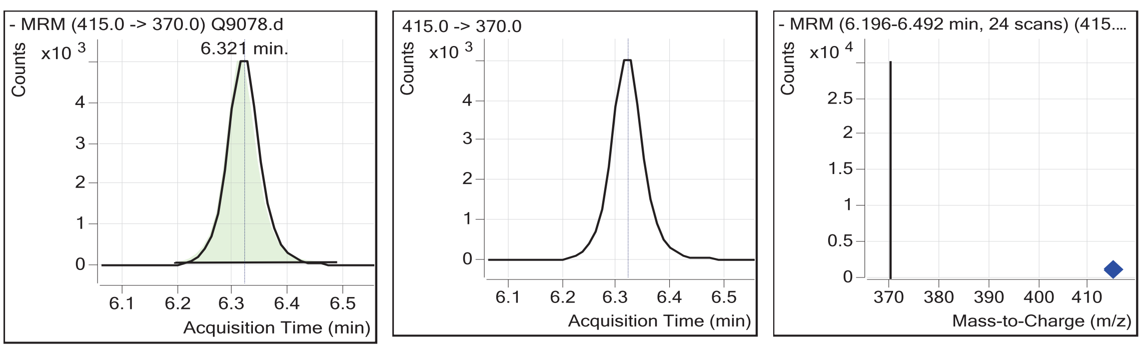
PFHxS



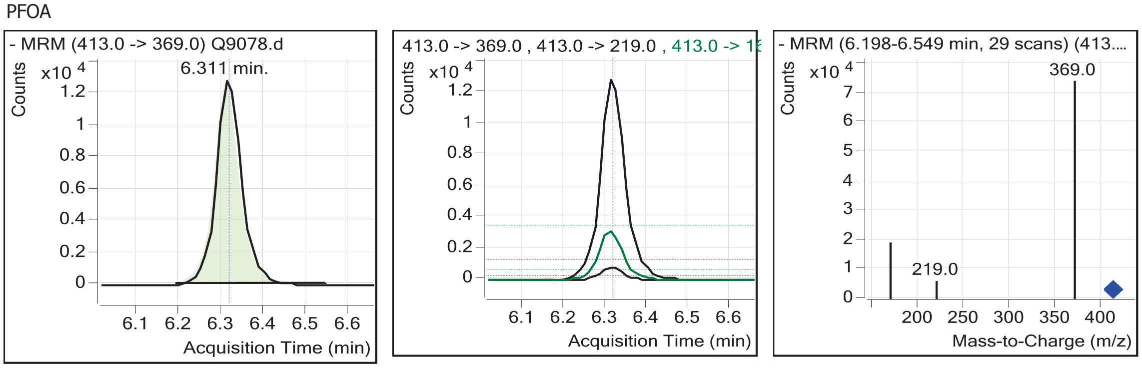
PFHpS



13C2-PFOA

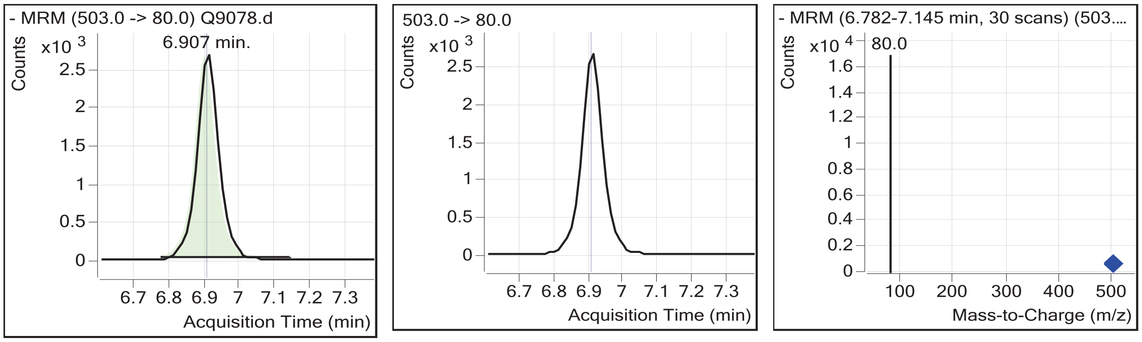


PFOA

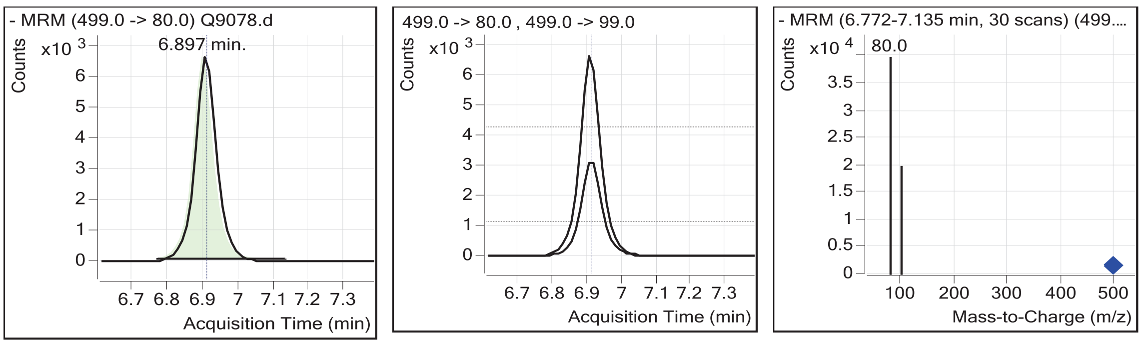


Perfluorinated Compounds by LC/MS/MS.

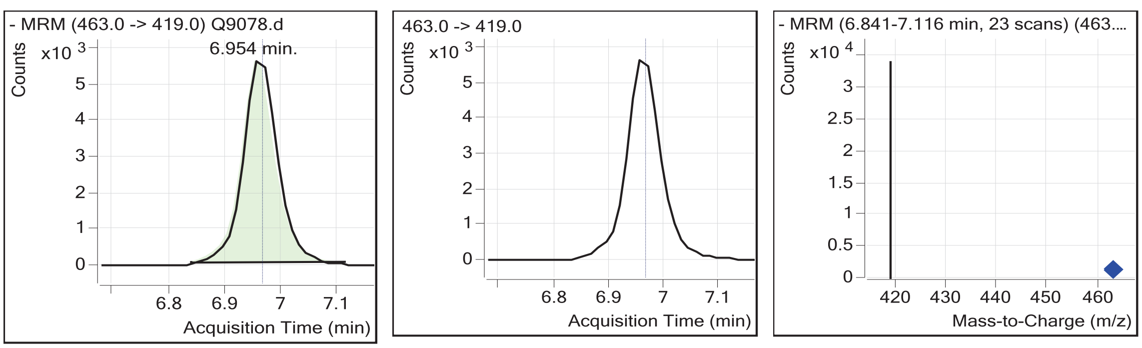
13C4-PFOS



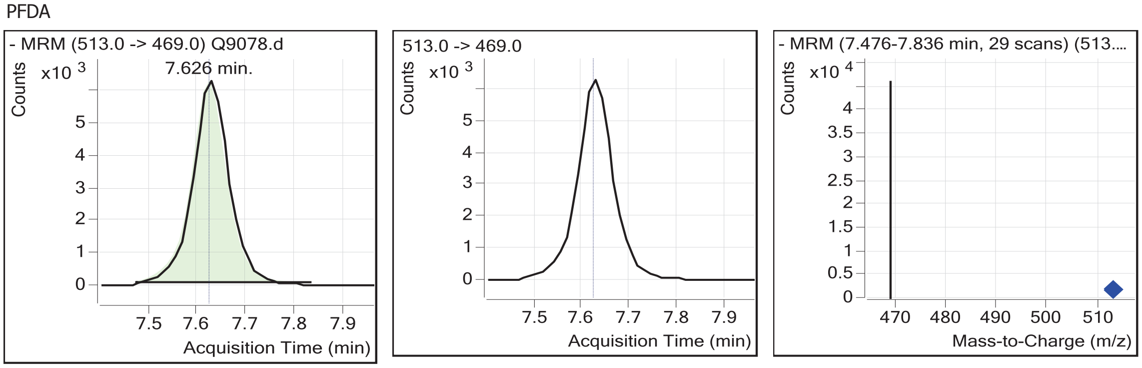
PFOS



PFNA



PFDA

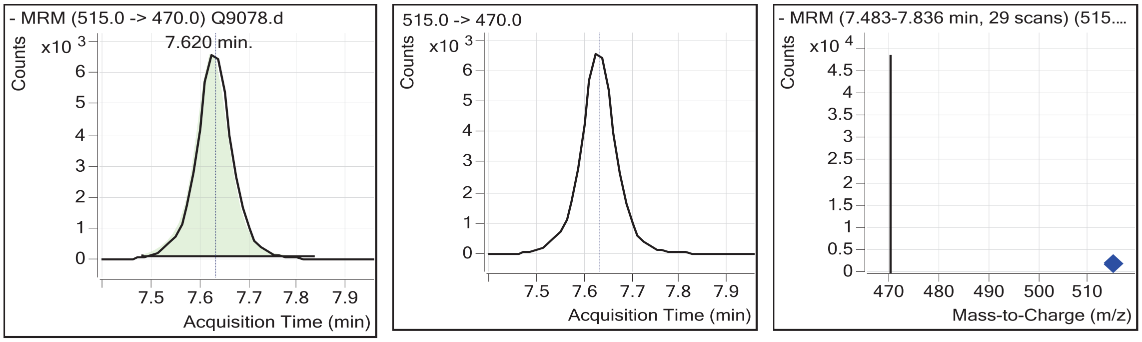


7.5.19

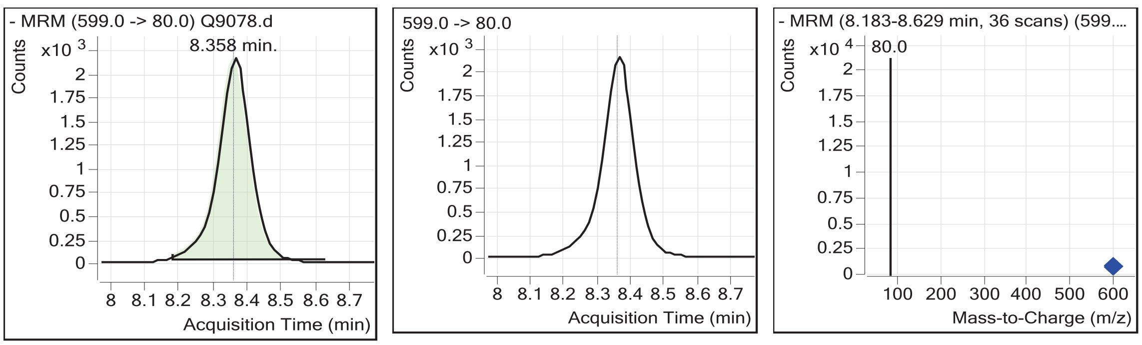
7

Perfluorinated Compounds by LC/MS/MS.

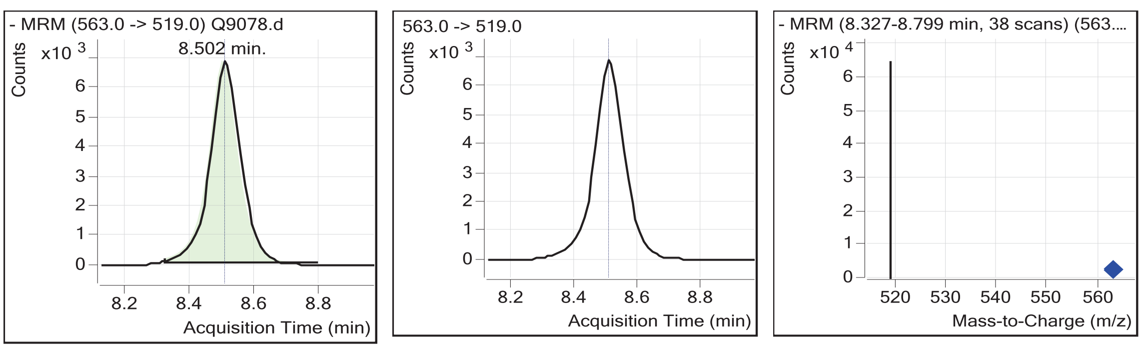
13C2-PFDA



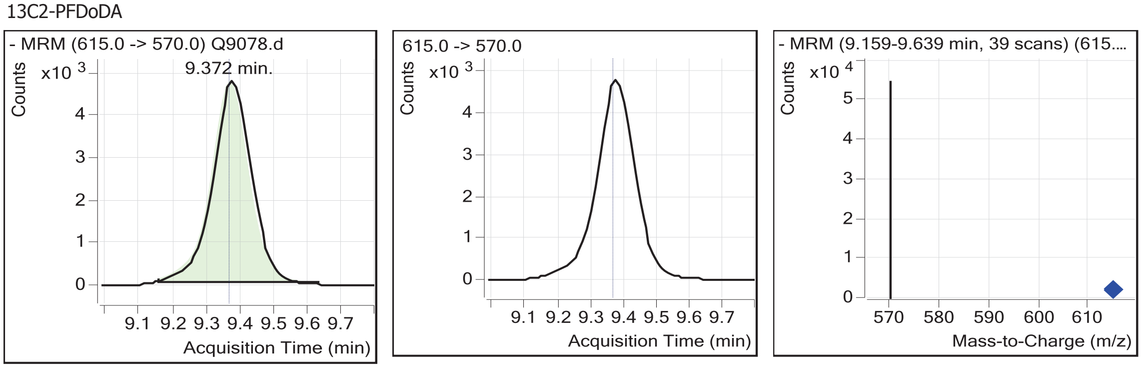
PFDS



PFUnDA

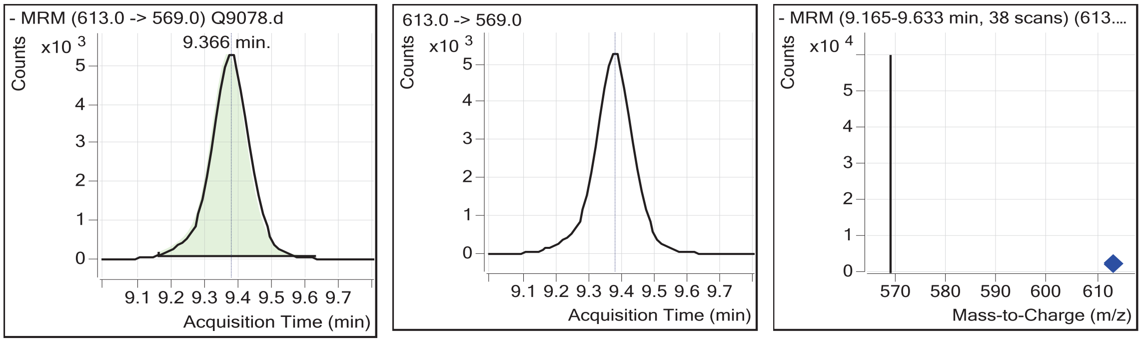


13C2-PFDoDA

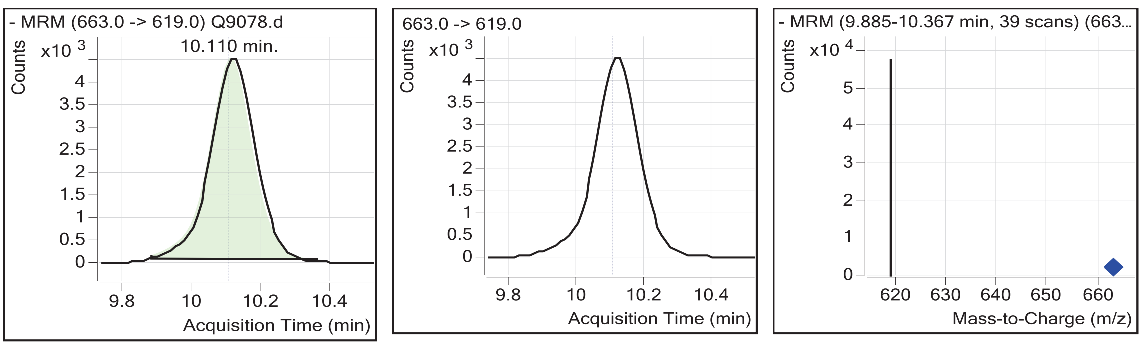


Perfluorinated Compounds by LC/MS/MS.

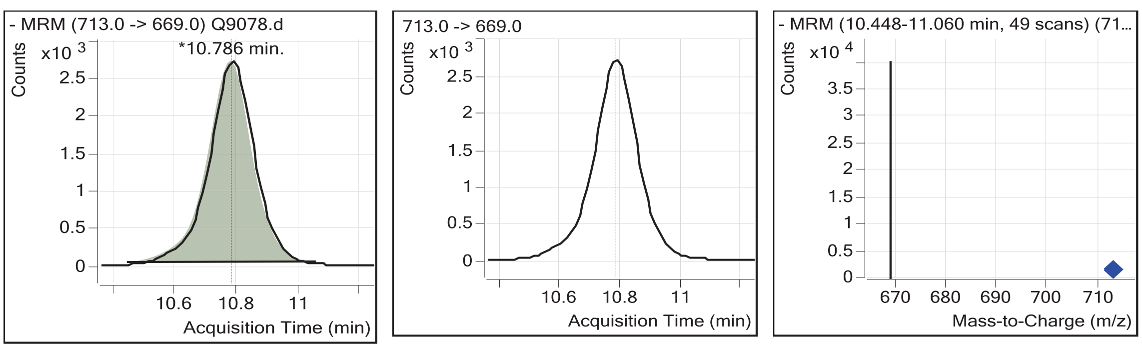
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	SQ290-IC290	**Method:**	EPA 537 MOD	
Lab FileID:	Q9078.D	**Analyst approved:**	12/22/14 10:19	Mike Eger
Injection Time:	12/19/14 16:26	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorotetradecanoic acid	376-06-7		10.79	Poor instrument integration

Perfluorinated Compounds by LC/MS/MS.

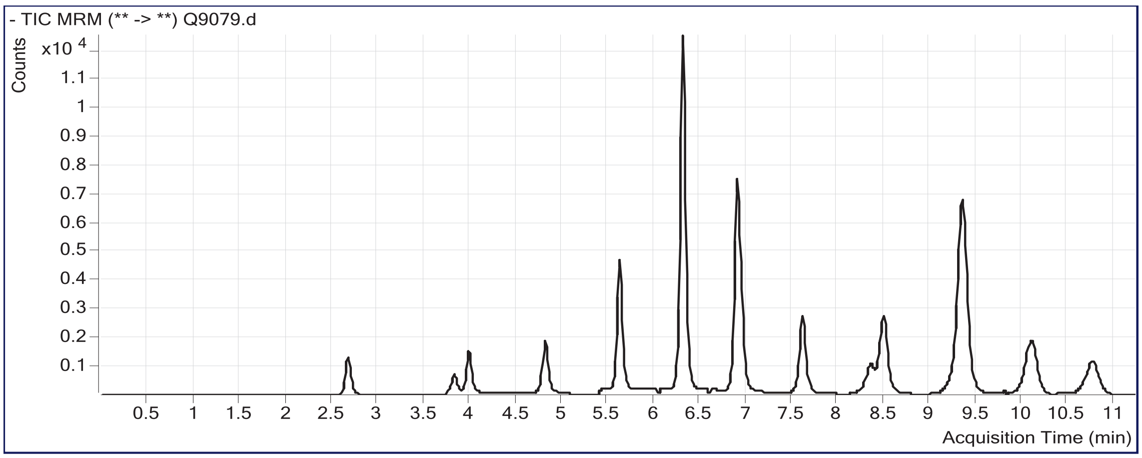
Data File	:	Q9079.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 16:46
Sample Name	:	ICV290-20
Vial	:	Vial 9
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.308	415.0 -> 370.0	22808	20.000	µg/L	-0.013
13C4-PFOS	6.894	503.0 -> 80.0	12194	20.000	µg/L	-0.013
13C2-PFDoDA	9.334	615.0 -> 570.0	36777	20.000	µg/L	-0.038
System Monitoring Compounds						
Target Compounds						**Qvalue**
PFBA	2.664	213.0 -> 169.0	5985	18.654	µg/L	100
PFPeA	3.824	263.0 -> 219.0	2729	18.884	µg/L	100
PFBS	3.978	299.0 -> 80.0	3988	19.239	µg/L	98
PFHxA	4.808	313.0 -> 269.0	7082	19.418	µg/L	99
PFHpA	5.610	363.0 -> 319.0	6971	19.551	µg/L	99
PFHxS	5.617	399.0 -> 80.0	6043	19.648	µg/L	88
PFOA	6.311	413.0 -> 369.0	22828	19.625	µg/L	81
PFOS	6.885	499.0 -> 80.0	11937	19.663	µg/L	87
PFNA	6.941	463.0 -> 419.0	9938	18.969	µg/L	100
PFDA	7.614	513.0 -> 469.0	13804	21.280	µg/L	100
PFDS	8.333	599.0 -> 80.0	5889	21.077	µg/L	100
PFUnDA	8.490	563.0 -> 519.0	18826	20.938	µg/L	100
PFDoDA	9.341	613.0 -> 569.0	17373	21.005	µg/L	100
PFTrDA	10.072	663.0 -> 619.0	17006	21.885	µg/L	100
PFTeDA	10.736	713.0 -> 669.0	11966	22.900	µg/L	100

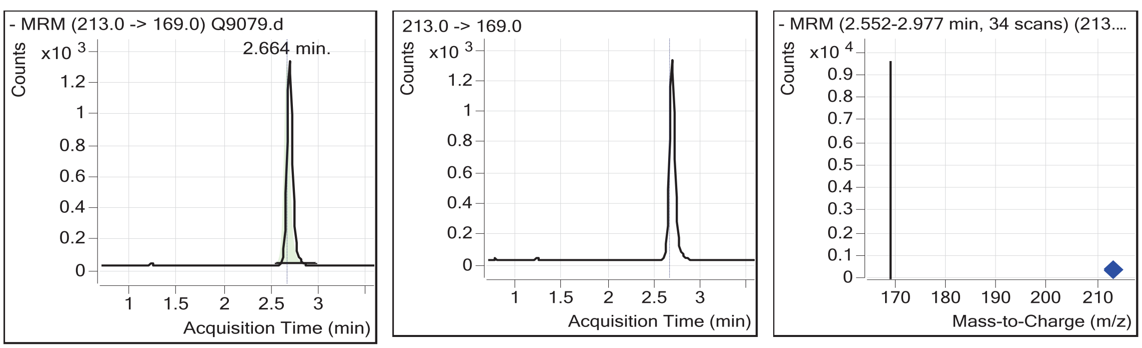
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

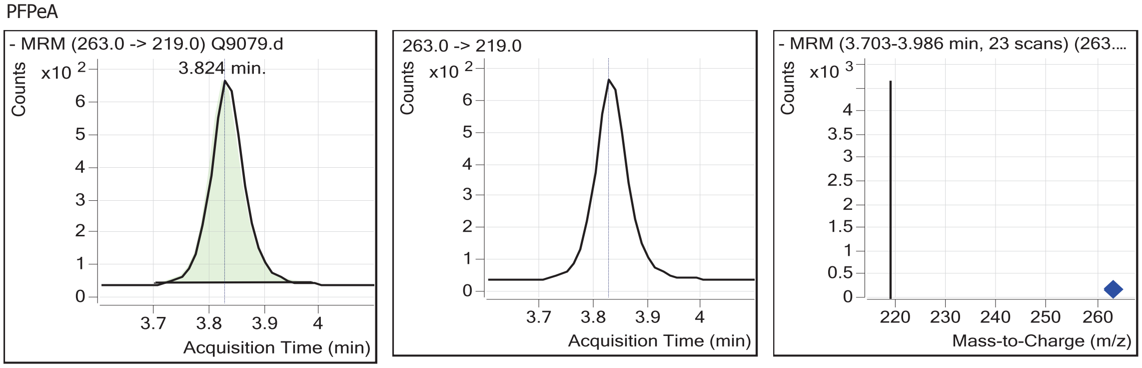
Data File	:	Q9079.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 16:46
Sample Name	:	ICV290-20
Vial	:	Vial 9
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

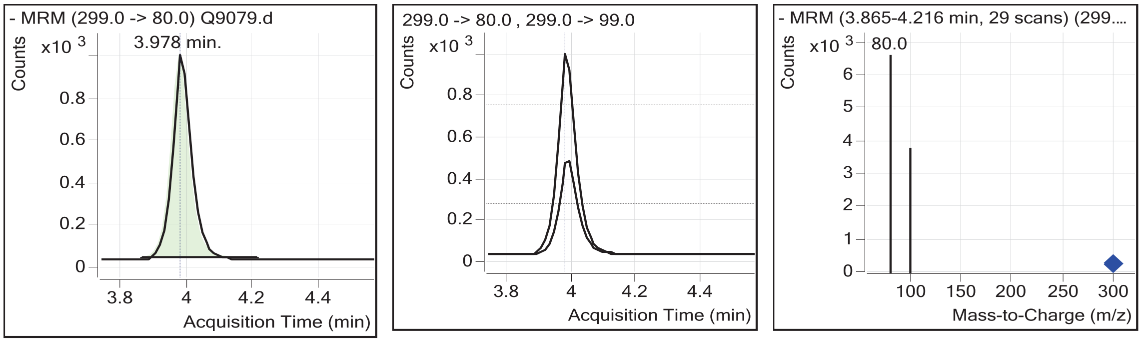


PFPeA

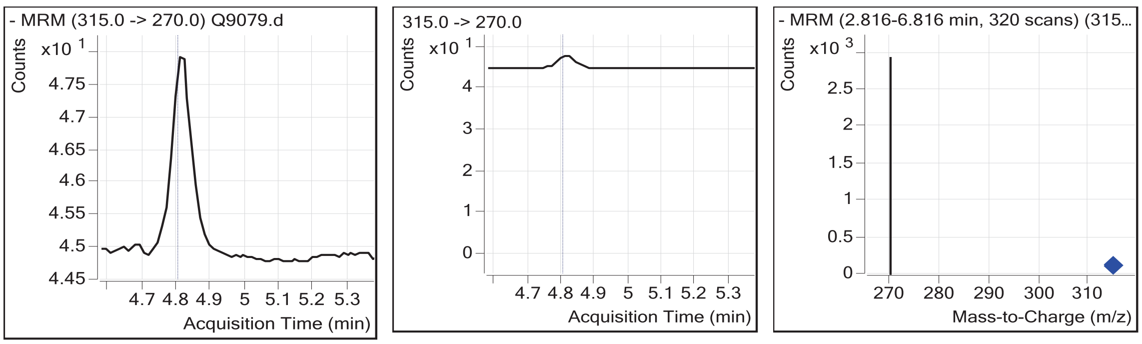


Perfluorinated Compounds by LC/MS/MS.

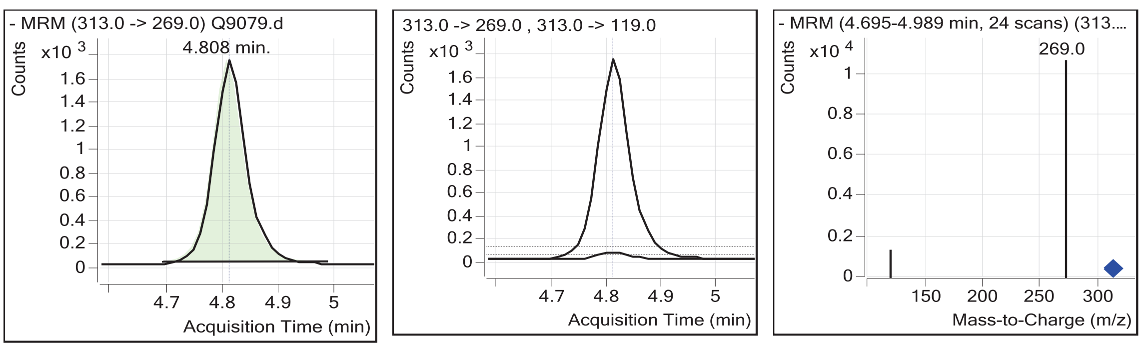
PFBS



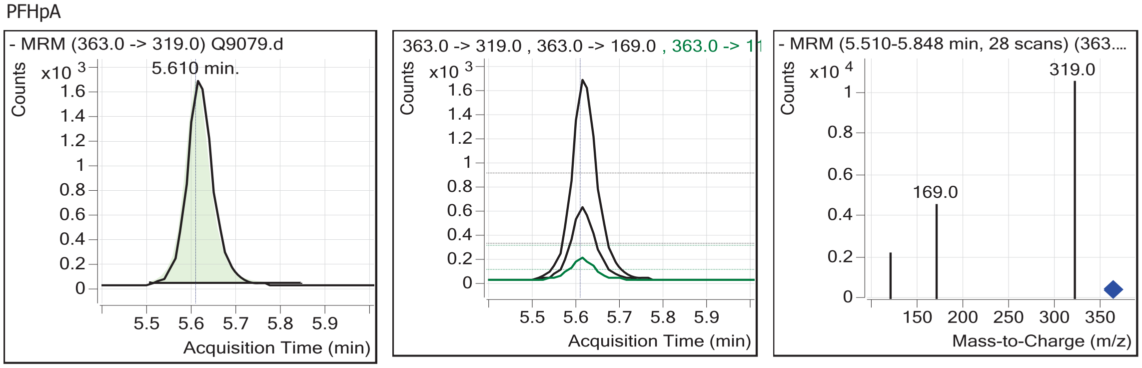
13C2-PFHxA



PFHxA

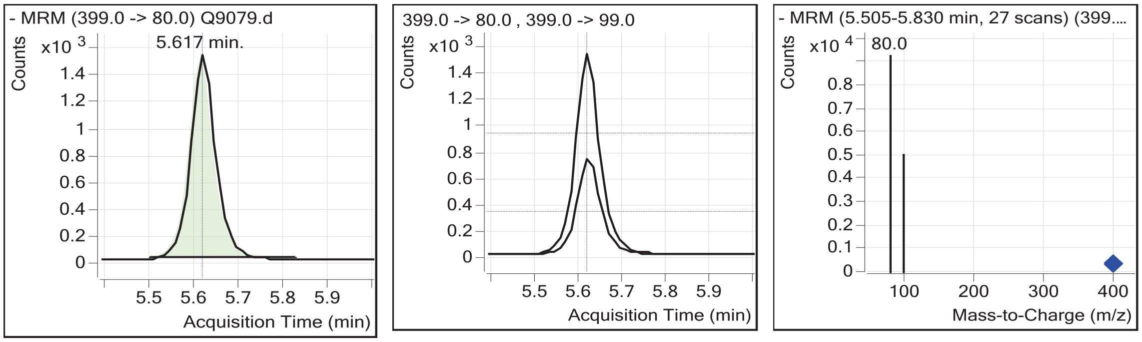


PFHpA

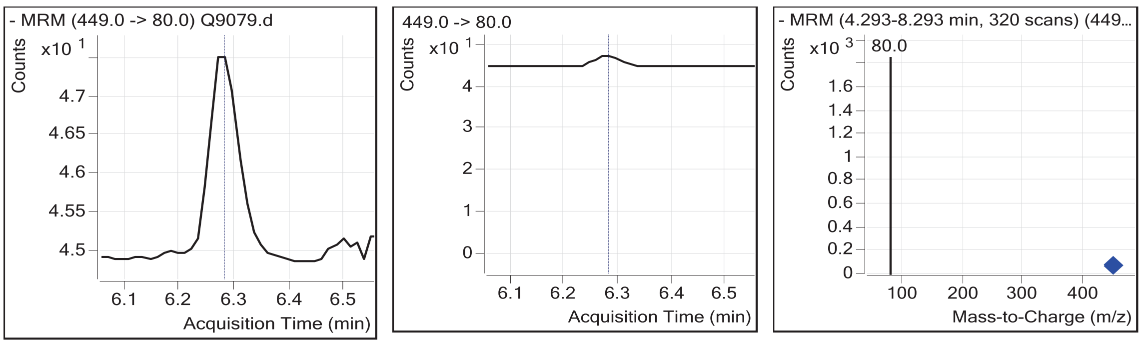


Perfluorinated Compounds by LC/MS/MS.

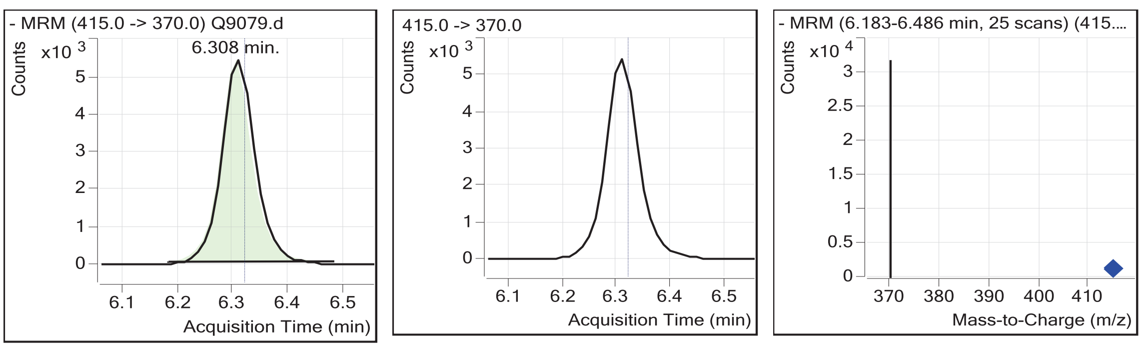
PFHxS



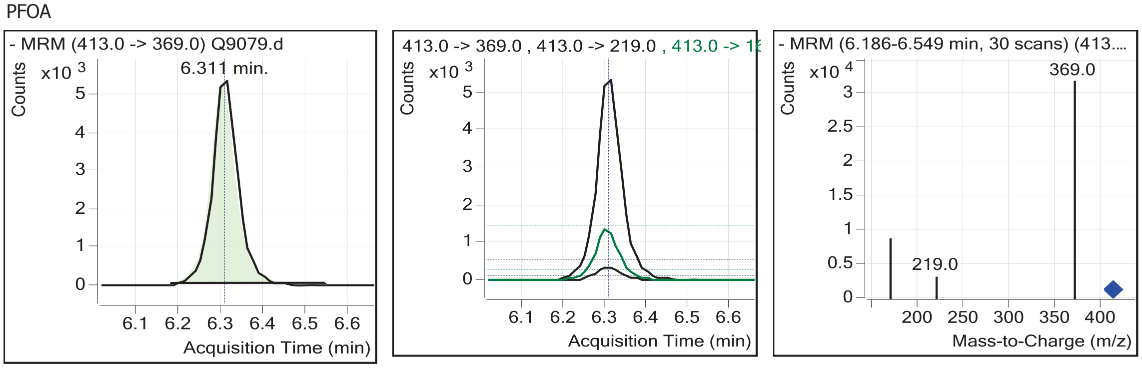
PFHpS



13C2-PFOA

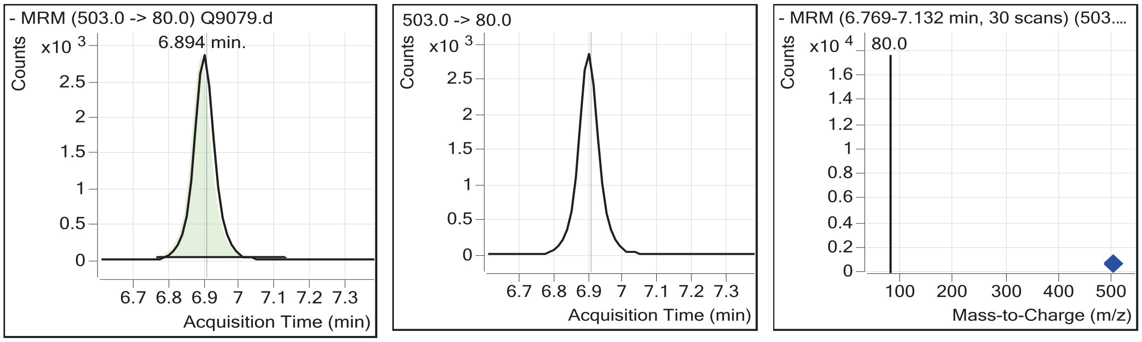


PFOA

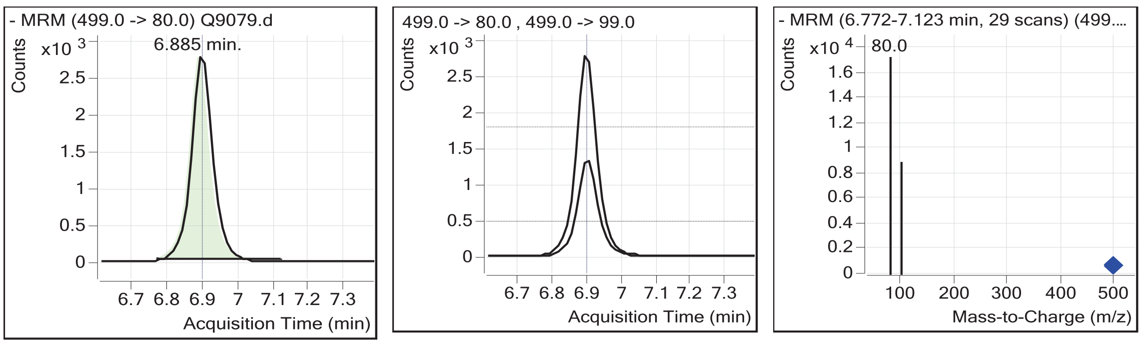


Perfluorinated Compounds by LC/MS/MS.

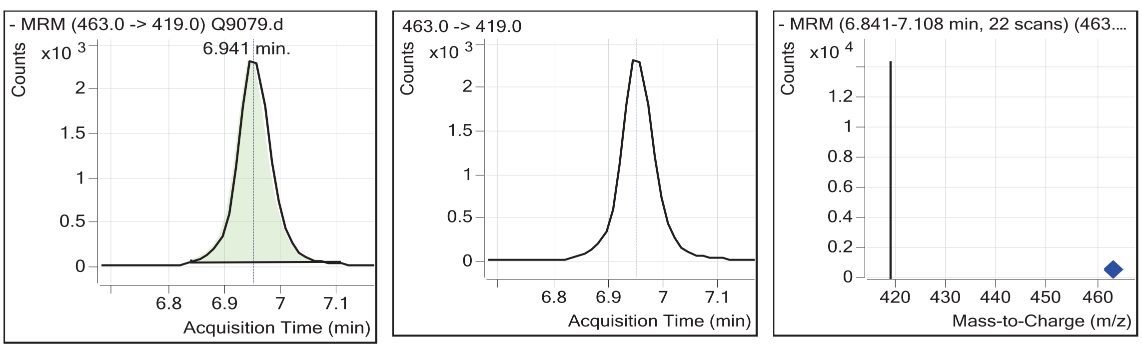
13C4-PFOS



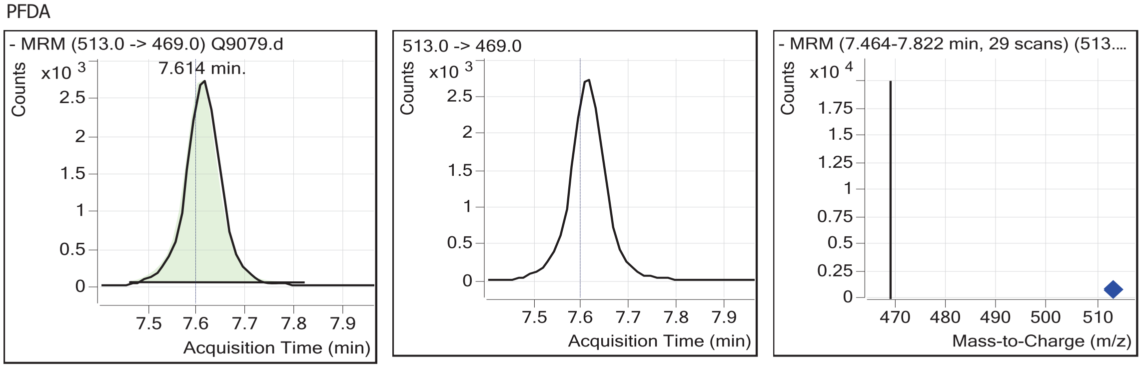
PFOS



PFNA

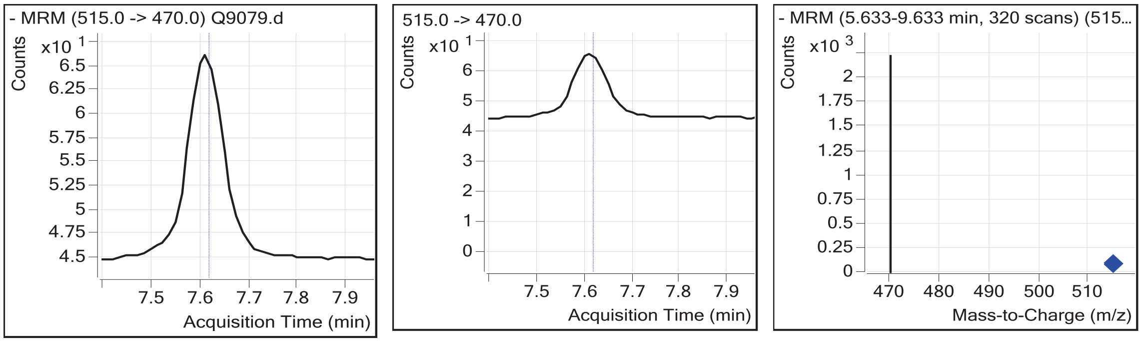


PFDA

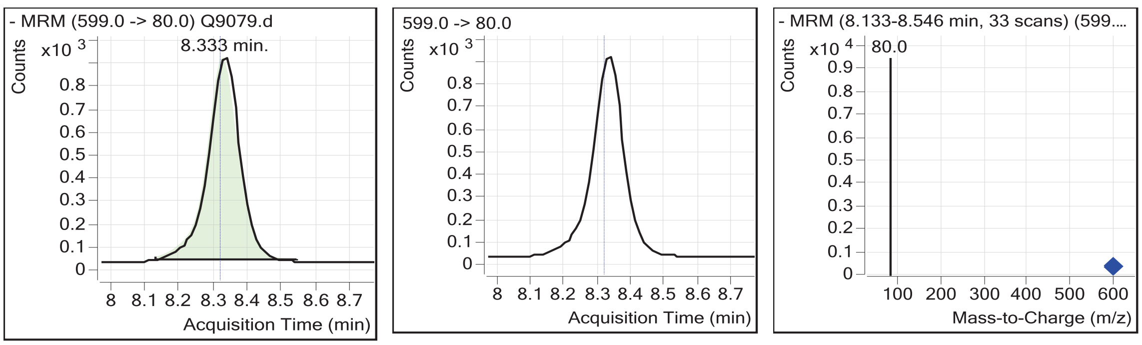


Perfluorinated Compounds by LC/MS/MS.

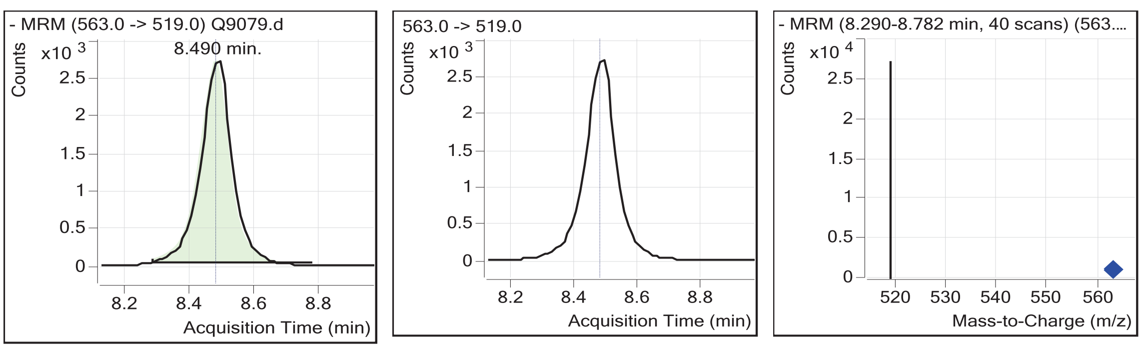
13C2-PFDA



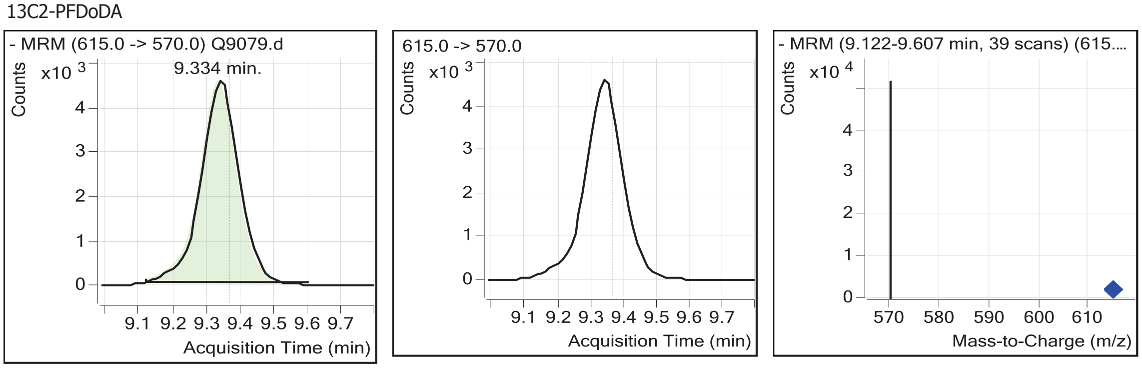
PFDS



PFUnDA

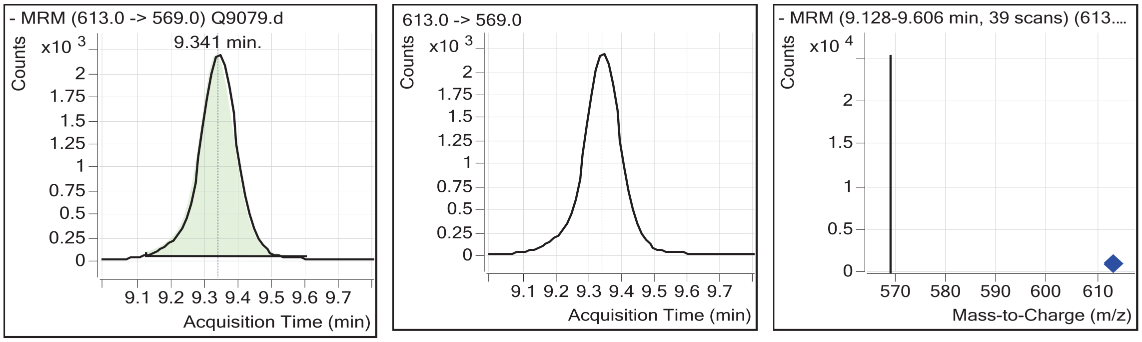


13C2-PFDoDA

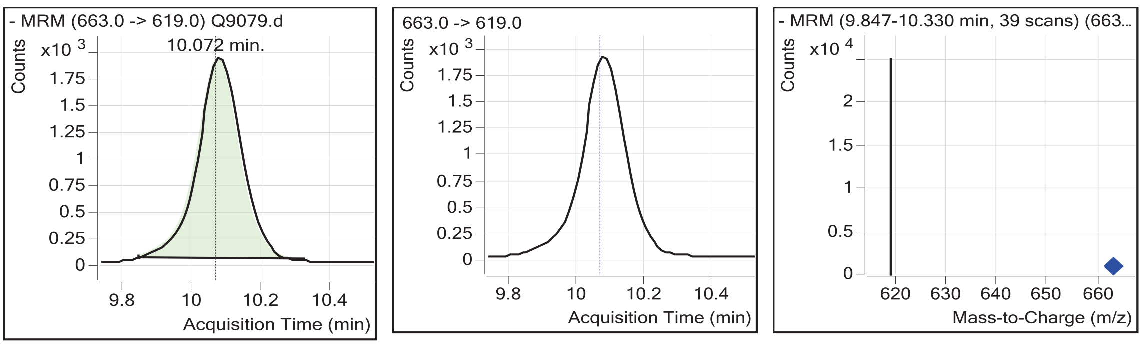


Perfluorinated Compounds by LC/MS/MS.

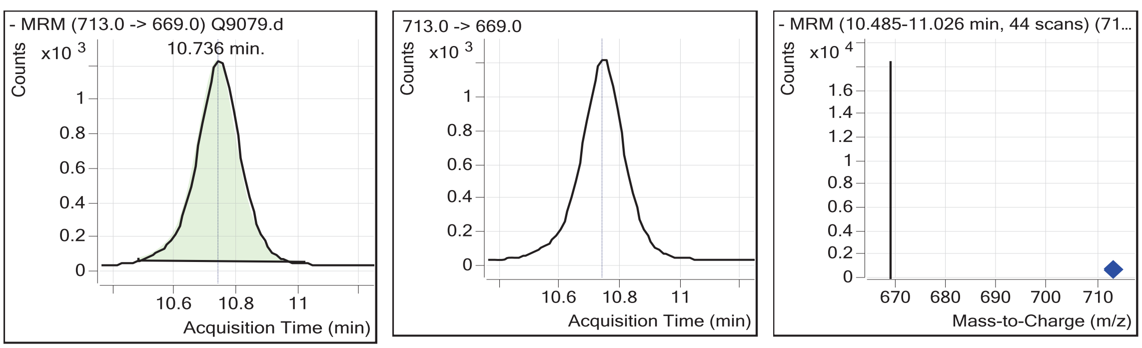
PFDoDA



PFTrDA



PFTeDA



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
12/22/14 13:28

Perfluorinated Compounds by LC/MS/MS.

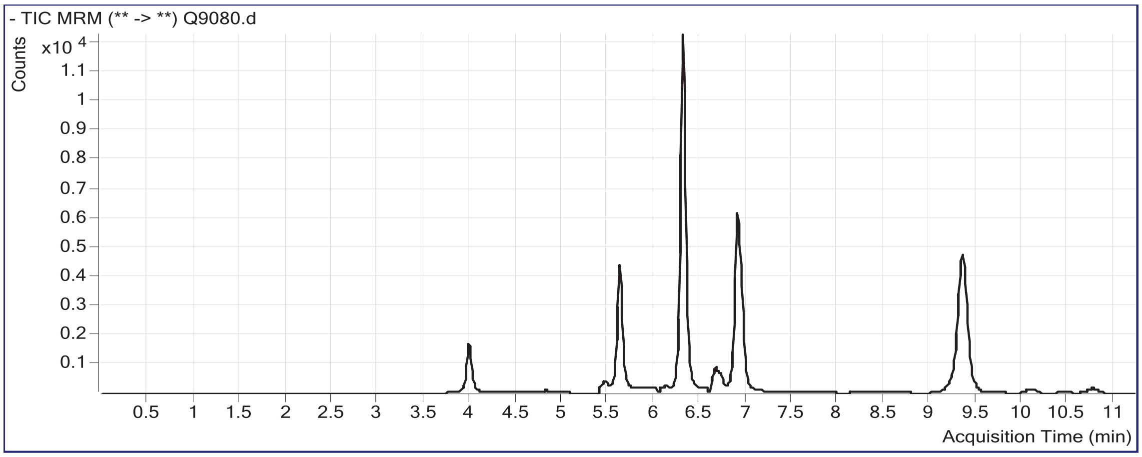
Data File	:	Q9080.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 17:06
Sample Name	:	ICV290-20
Vial	:	Vial 10
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.308	415.0 -> 370.0	22624	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	11980	20.000	µg/L		-0.013
13C2-PFDoDA	9.334	615.0 -> 570.0	36711	20.000	µg/L		-0.038
System Monitoring Compounds							
Target Compounds							**Qvalue**
PFBS	3.978	299.0 -> 80.0	4488	22.037	µg/L		98
PFHpA	5.610	363.0 -> 319.0	6302	17.819	µg/L		97
PFHxS	5.617	399.0 -> 80.0	6526	21.599	µg/L	m	93
PFOA	6.311	413.0 -> 369.0	21576	18.700	µg/L		81
PFOS	6.897	499.0 -> 80.0	11365	19.055	µg/L	m	97
PFNA	6.954	463.0 -> 419.0	10290	19.803	µg/L		100
PFDoDA	9.341	613.0 -> 569.0	0	0.000	µg/L	m	1
PFTrDA	10.085	663.0 -> 619.0	0	0.000	µg/L	m	1
PFTeDA	10.748	713.0 -> 669.0	0	0.000	µg/L	m	1

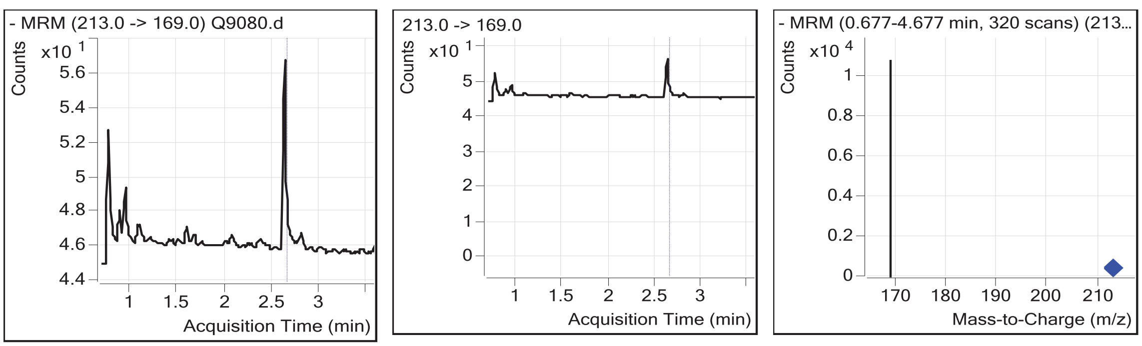
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

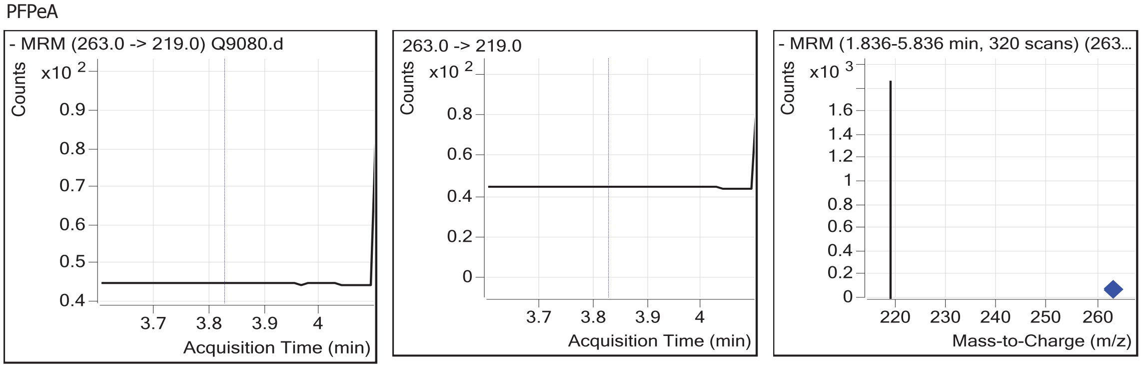
Data File	:	Q9080.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 17:06
Sample Name	:	ICV290-20
Vial	:	Vial 10
Sample Info	:	OP54254,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

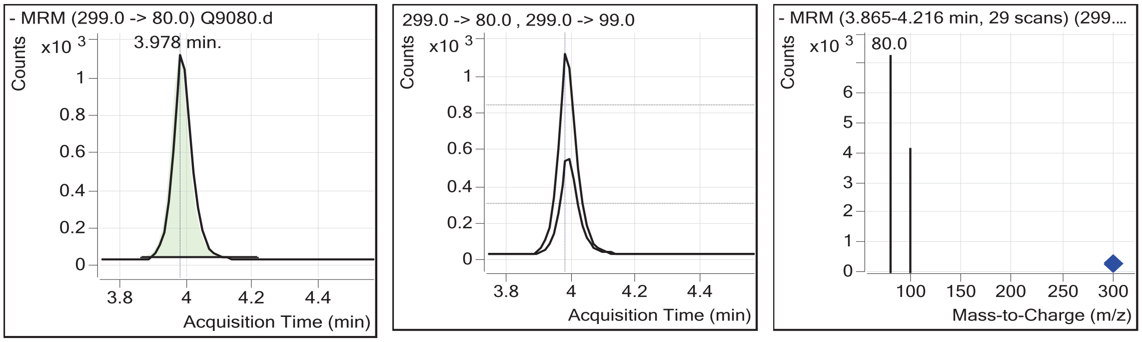


PFPeA

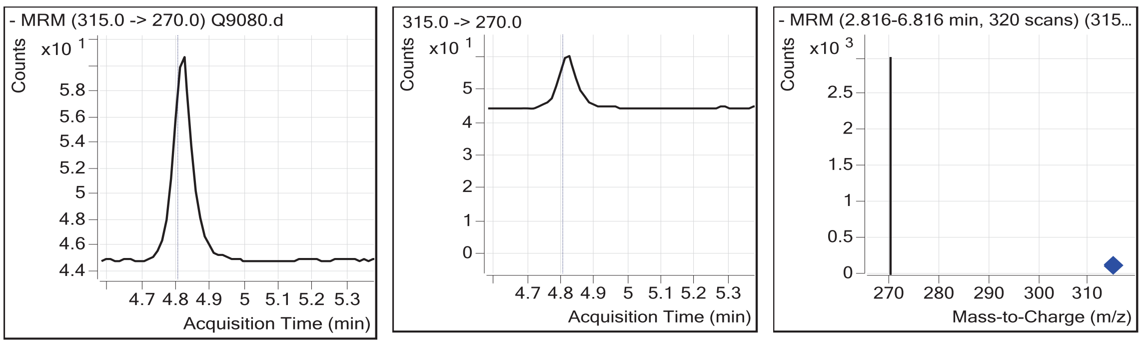


Perfluorinated Compounds by LC/MS/MS.

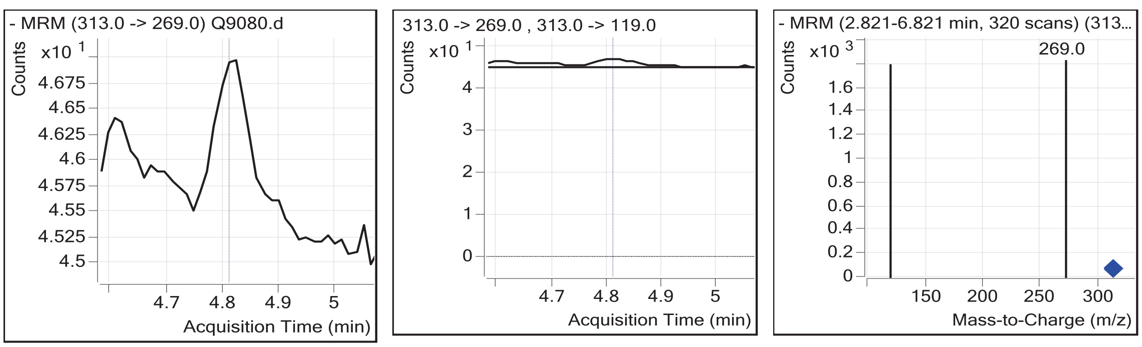
PFBS



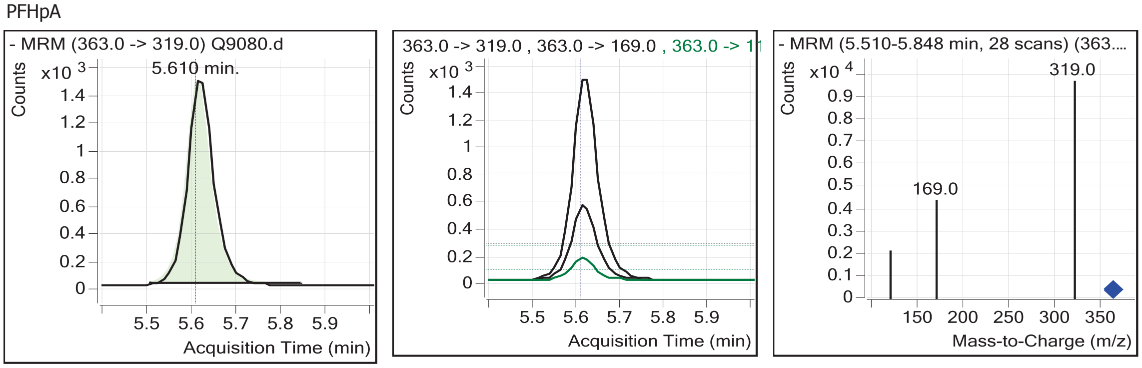
13C2-PFHxA



PFHxA

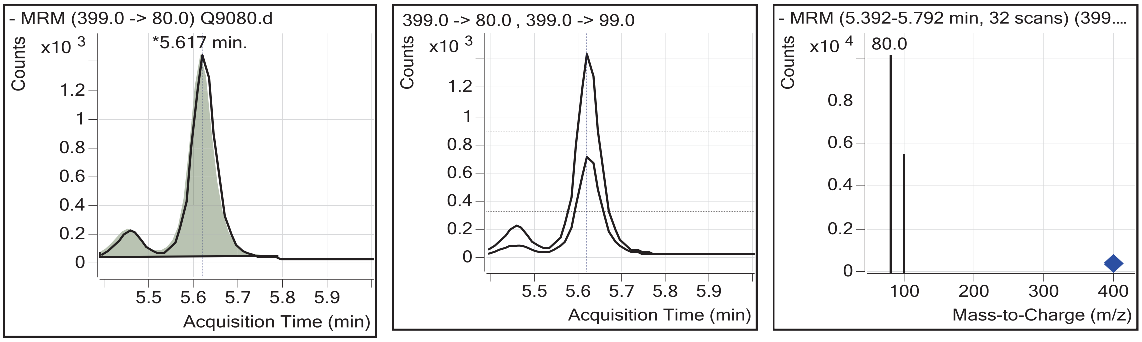


PFHpA

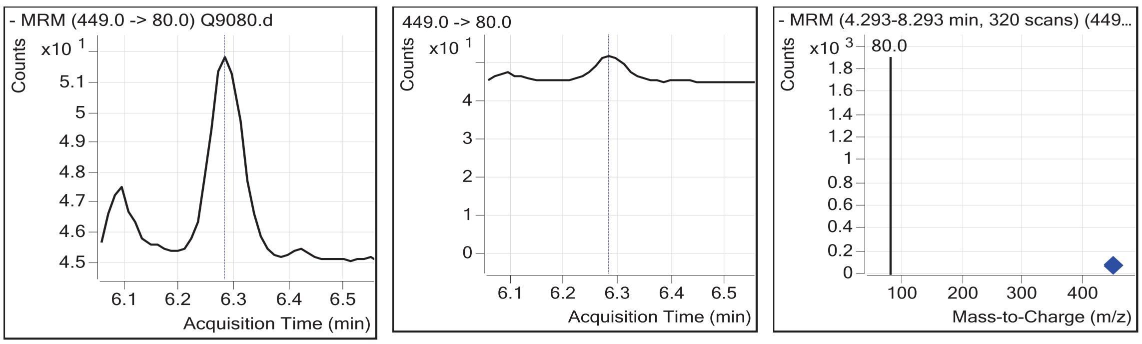


Perfluorinated Compounds by LC/MS/MS.

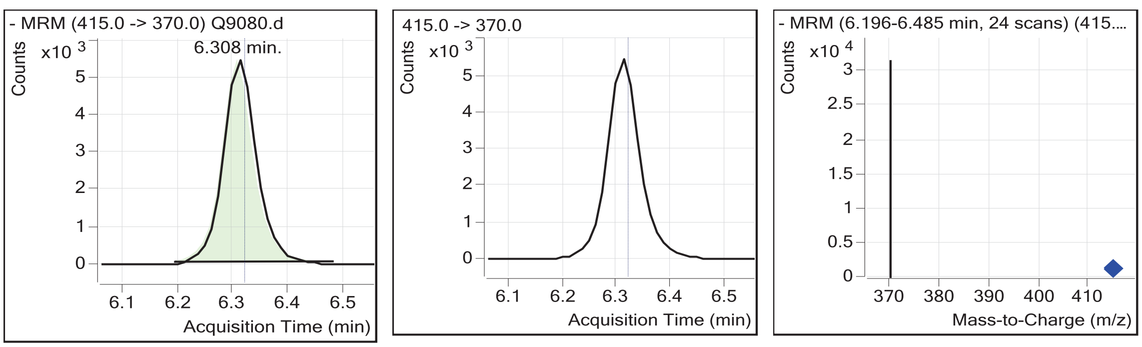
PFHxS



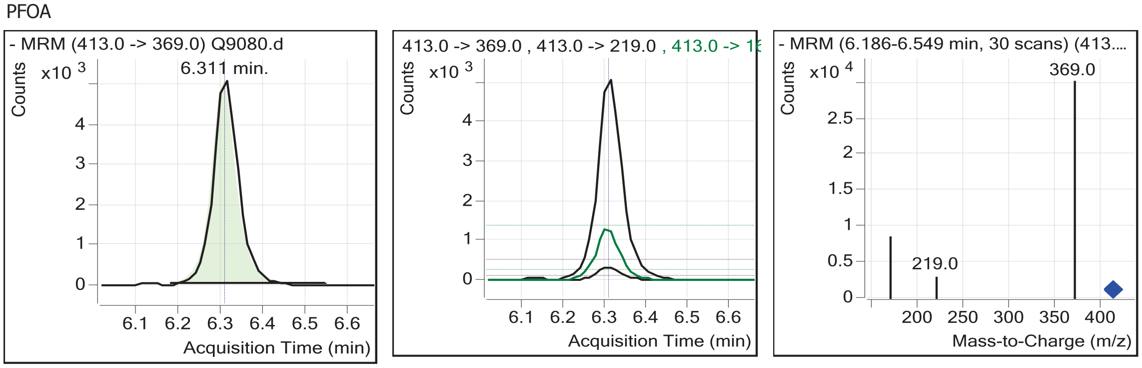
PFHpS



13C2-PFOA

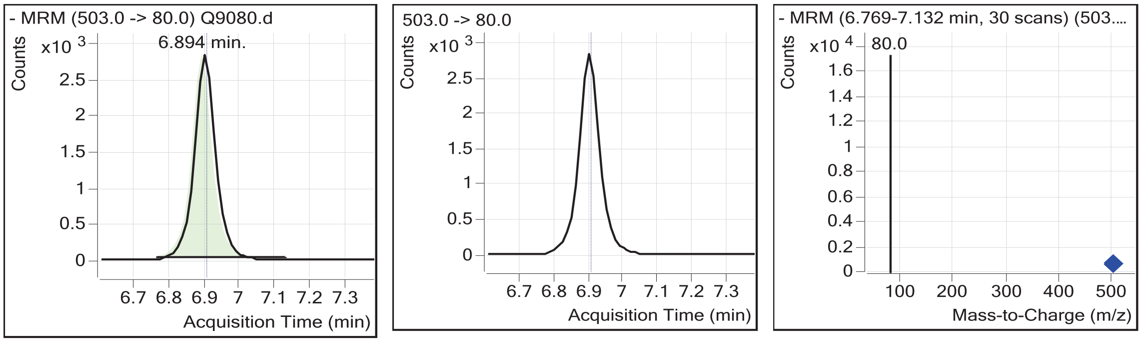


PFOA

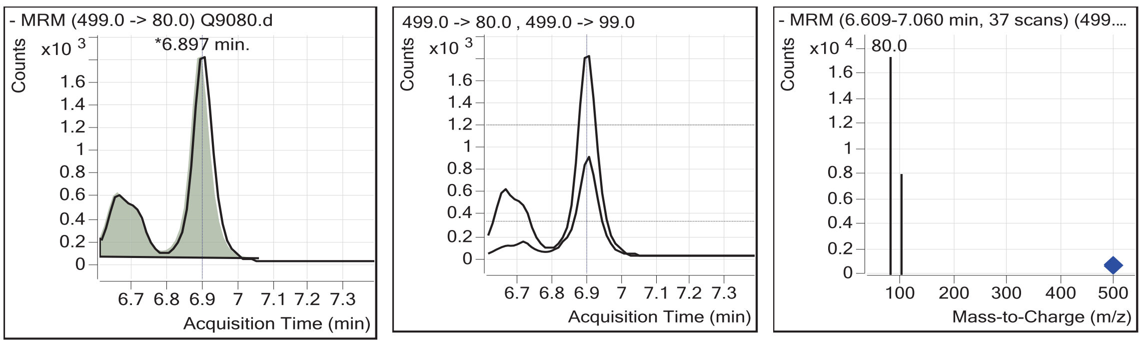


Perfluorinated Compounds by LC/MS/MS.

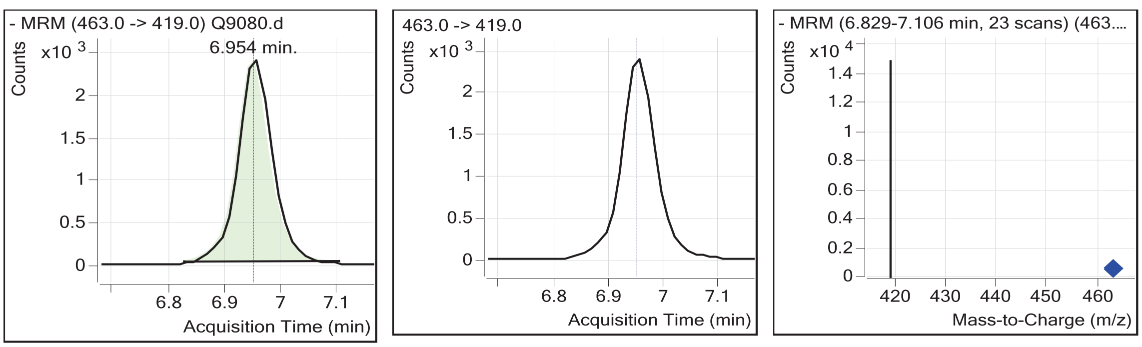
13C4-PFOS



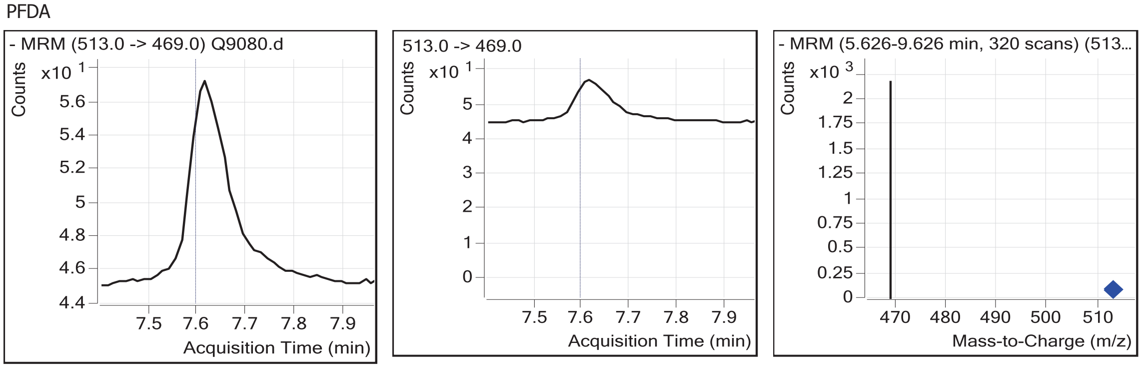
PFOS



PFNA

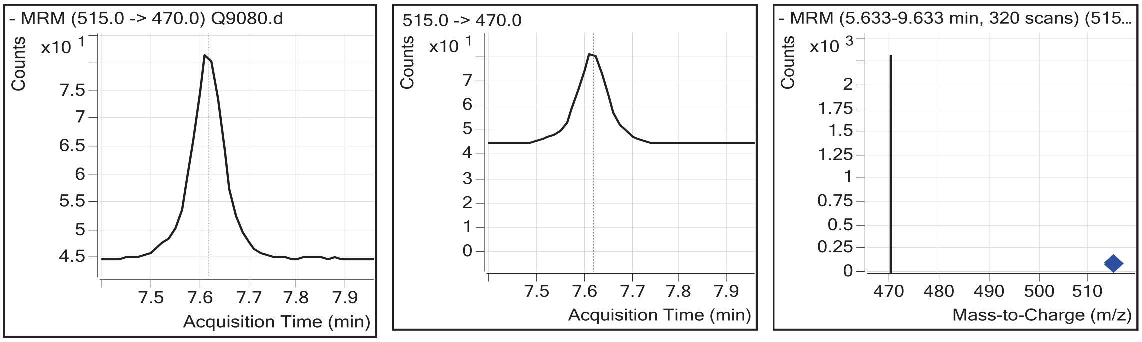


PFDA

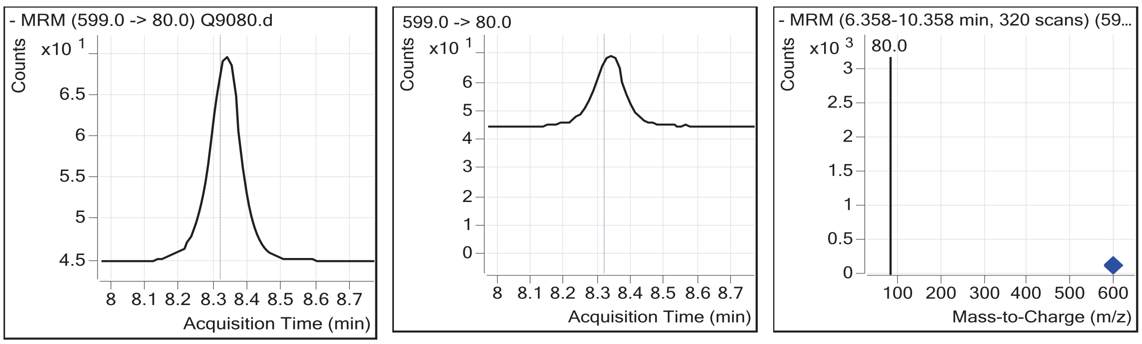


Perfluorinated Compounds by LC/MS/MS.

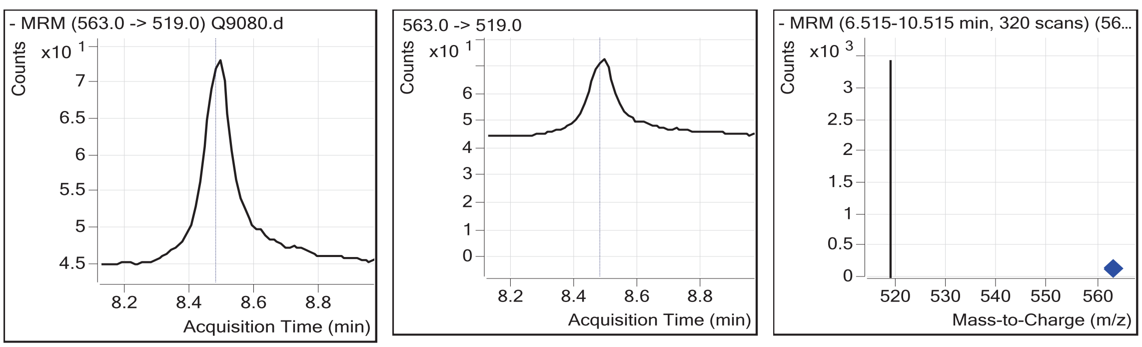
13C2-PFDA



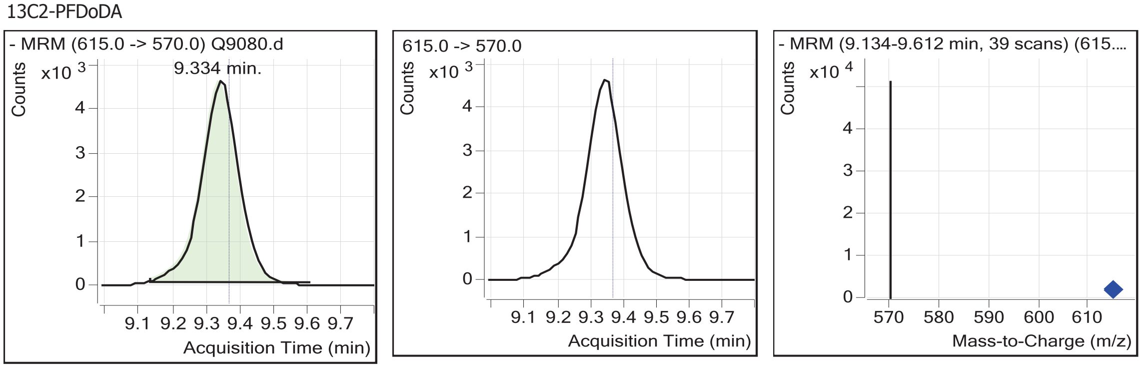
PFDS



PFUnDA

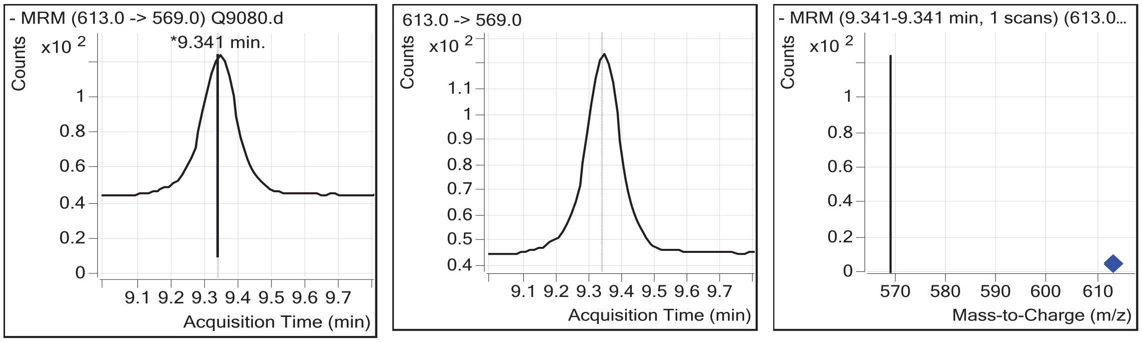


13C2-PFDoDA

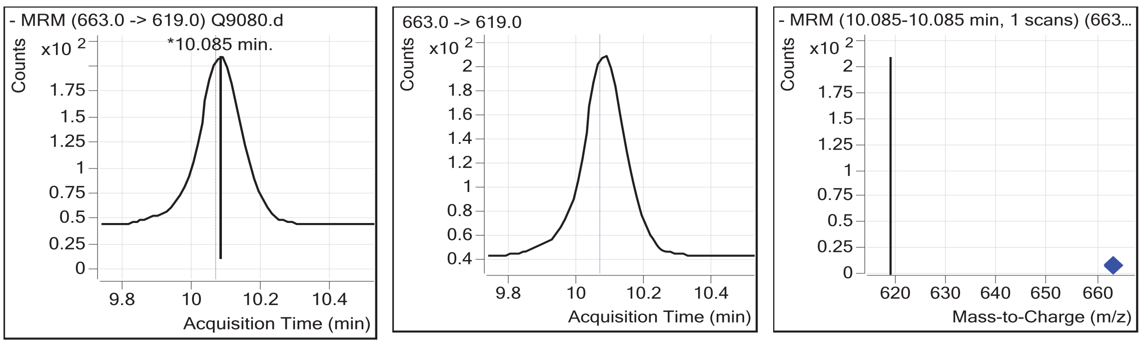


Perfluorinated Compounds by LC/MS/MS.

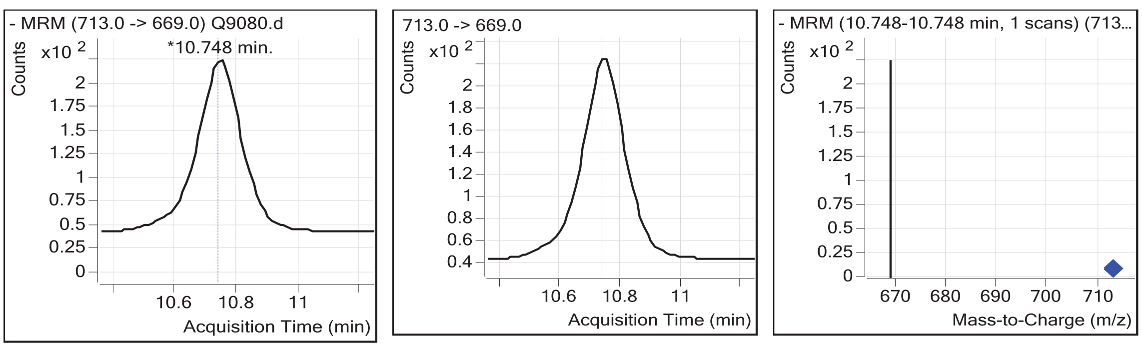
PFDoDA



PFTrDA



PFTeDA



Manual Integration Approval Summary

Sample Number:	SQ290-ICV290	**Method:**	EPA 537 MOD	
Lab FileID:	Q9080.D	**Analyst approved:**	12/22/14 10:19	Mike Eger
Injection Time:	12/19/14 17:06	**Supervisor approved:**	12/22/14 13:28	Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.62	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		6.90	Poor instrument integration
Perfluorododecanoic acid	307-55-1		9.34	Poor instrument integration
Perfluorotridecanoic acid	72629-94-8		10.09	Poor instrument integration
Perfluorotetradecanoic acid	376-06-7		10.75	Poor instrument integration

Perfluorinated Compounds by LC/MS/MS.

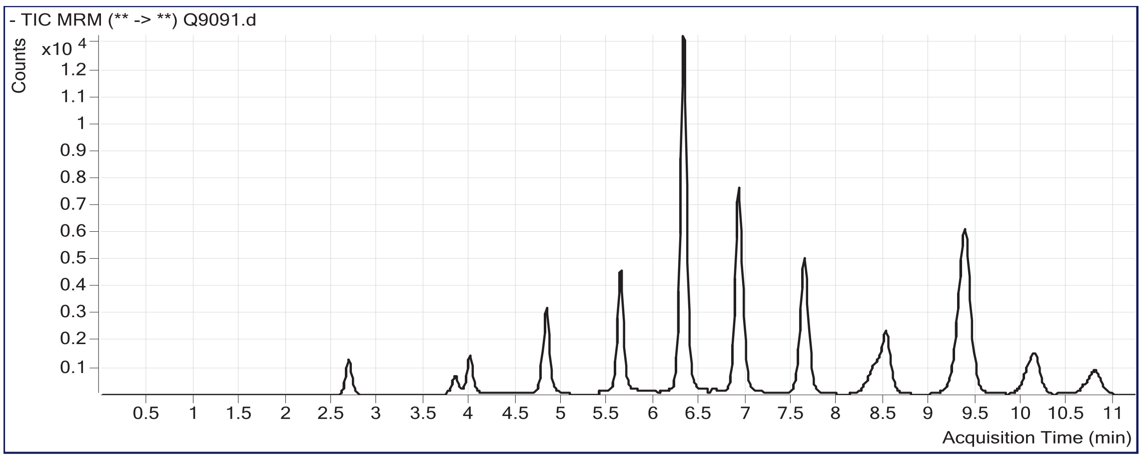
Data File	:	Q9091.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 20:43
Sample Name	:	CC290-20
Vial	:	Vial 5
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.321	415.0 -> 370.0	25363	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	13813	20.000	µg/L	0.000
13C2-PFDoDA	9.359	615.0 -> 570.0	40517	20.000	µg/L	-0.013
System Monitoring Compounds						
13C2-PFHxA	4.816	315.0 -> 270.0	7310	18.80	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 93.99%			
13C2-PFDA	7.633	515.0 -> 470.0	15972	19.06	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 95.31%			
Target Compounds						**Qvalue**
PFBA	2.677	213.0 -> 169.0	6598	18.492	µg/L	100
PFPeA	3.836	263.0 -> 219.0	2976	18.518	µg/L	100
PFBS	3.991	299.0 -> 80.0	4365	18.588	µg/L	97
PFHxA	4.821	313.0 -> 269.0	7635	18.826	µg/L	100
PFHpA	5.622	363.0 -> 319.0	7771	19.600	µg/L	97
PFHxS	5.630	399.0 -> 80.0	6843	19.643	µg/L	87
PFHpS	6.293	449.0 -> 80.0	8383	19.487	µg/L	100
PFOA	6.323	413.0 -> 369.0	25133	19.431	µg/L	80
PFOS	6.897	499.0 -> 80.0	13506	19.640	µg/L	88
PFNA	6.966	463.0 -> 419.0	10968	18.827	µg/L	100
PFDA	7.626	513.0 -> 469.0	15133	21.175	µg/L	100
PFDS	8.358	599.0 -> 80.0	6439	20.916	µg/L	100
PFUnDA	8.502	563.0 -> 519.0	19403	19.588	µg/L	100
PFDoDA	9.366	613.0 -> 569.0	17767	19.498	µg/L	100
PFTrDA	10.110	663.0 -> 619.0	16086	18.790	µg/L	100
PFTeDA	10.761	713.0 -> 669.0	10113	17.567	µg/L	100

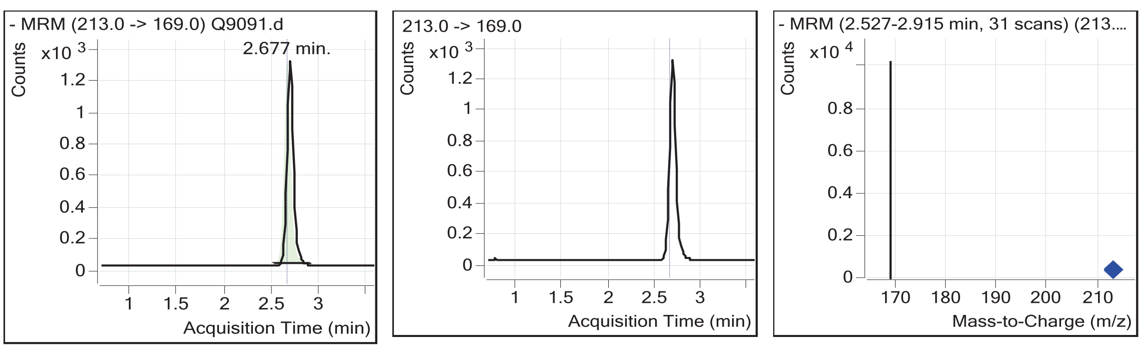
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

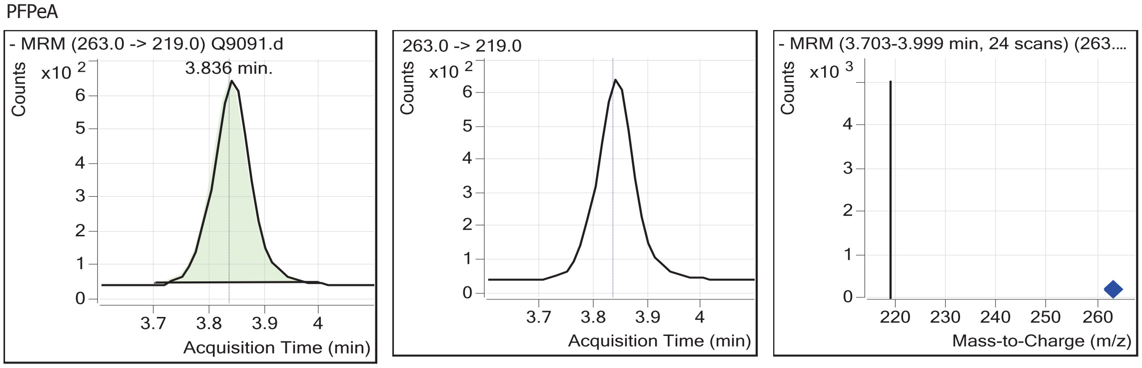
Data File	:	Q9091.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-19 20:43
Sample Name	:	CC290-20
Vial	:	Vial 5
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



PFBA

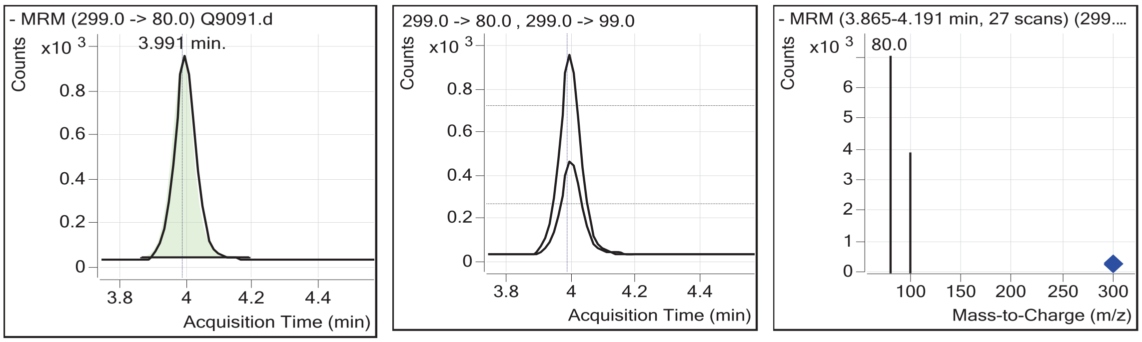


PFPeA

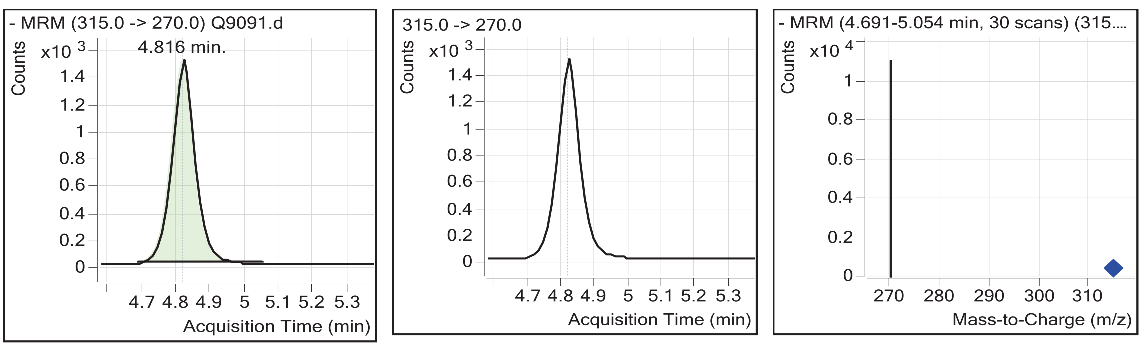


Perfluorinated Compounds by LC/MS/MS.

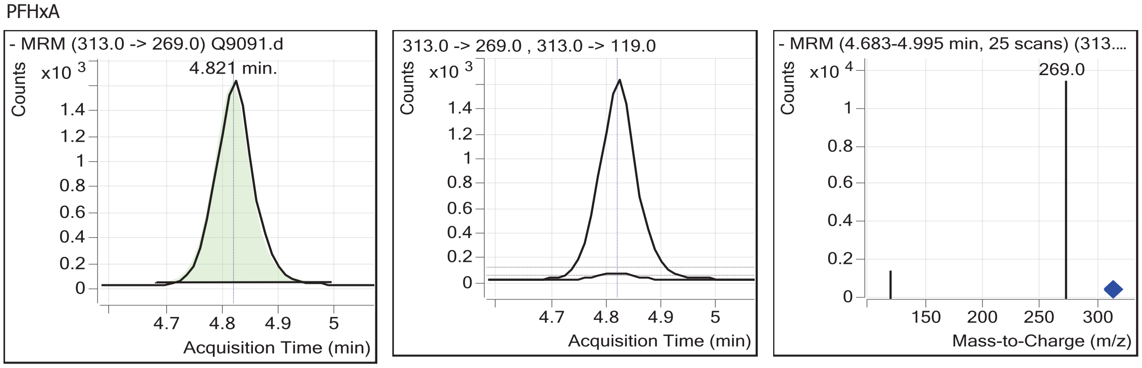
PFBS



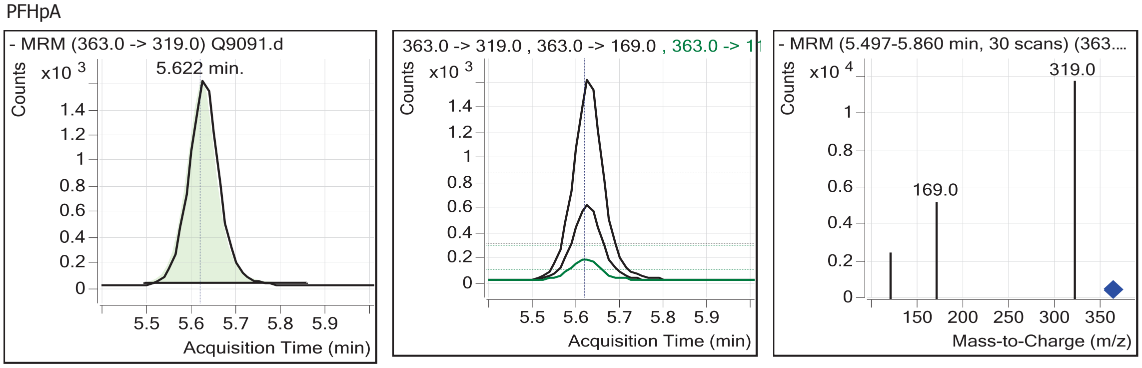
13C2-PFHxA



PFHxA

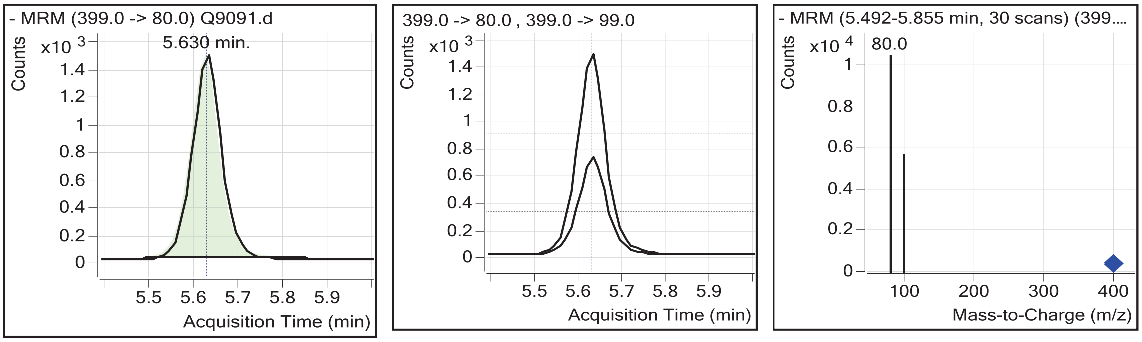


PFHpA

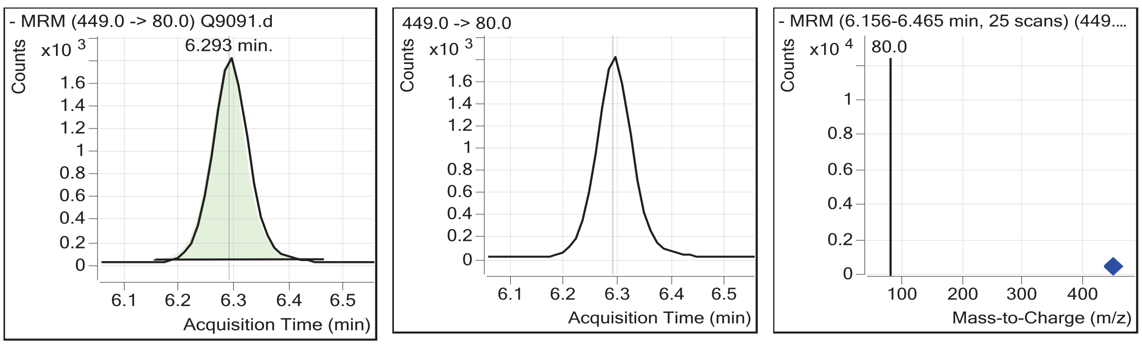


Perfluorinated Compounds by LC/MS/MS.

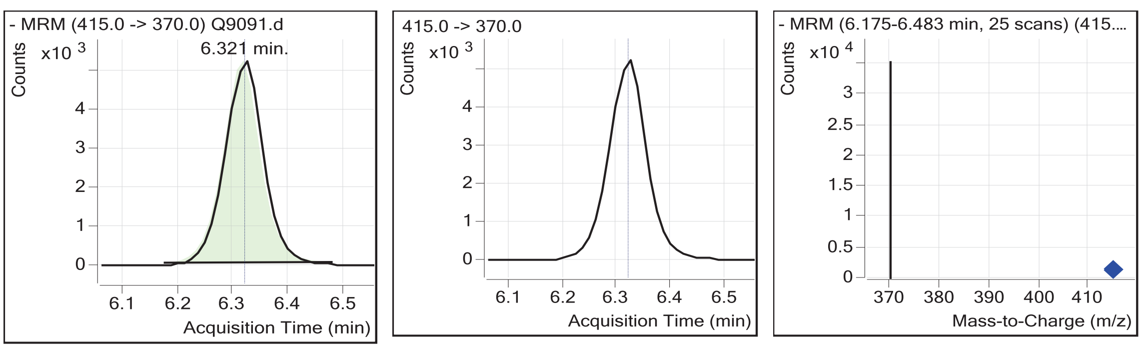
PFHxS



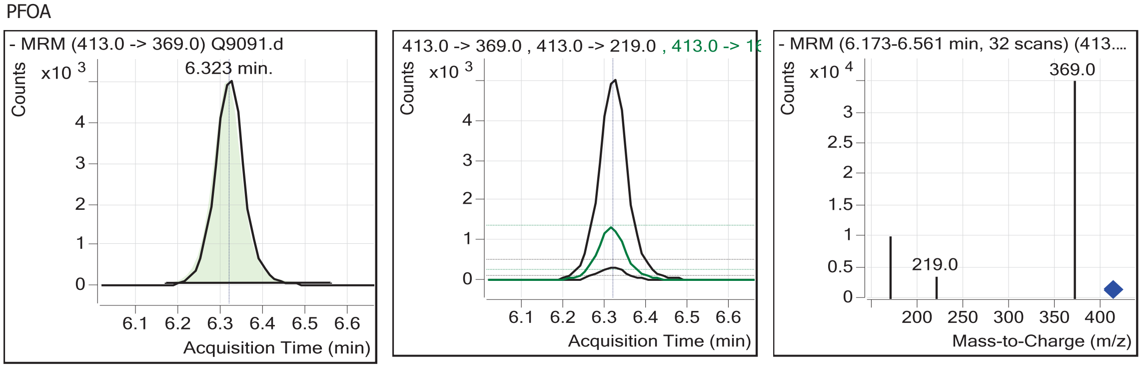
PFHpS



13C2-PFOA

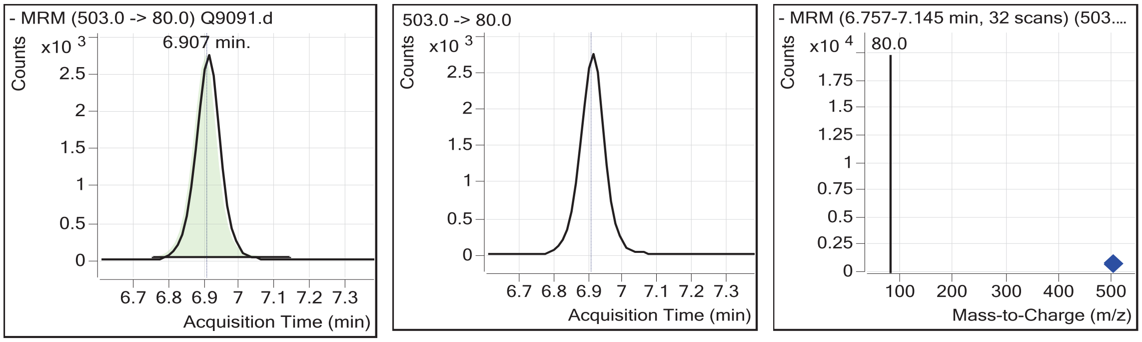


PFOA

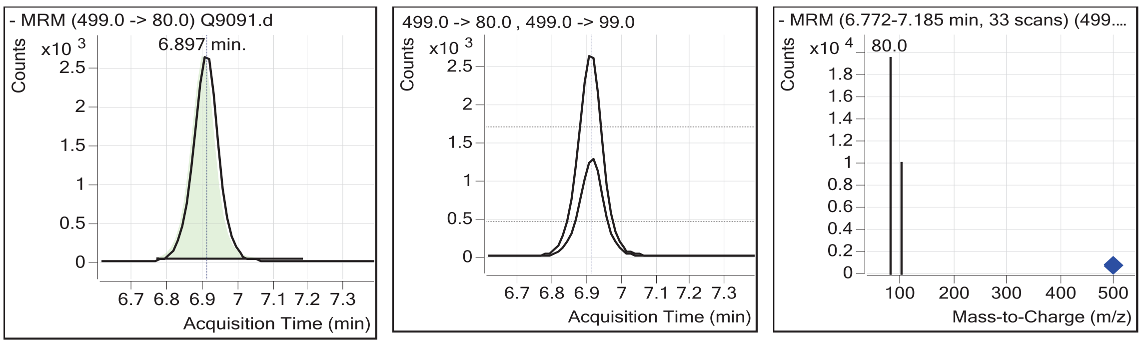


Perfluorinated Compounds by LC/MS/MS.

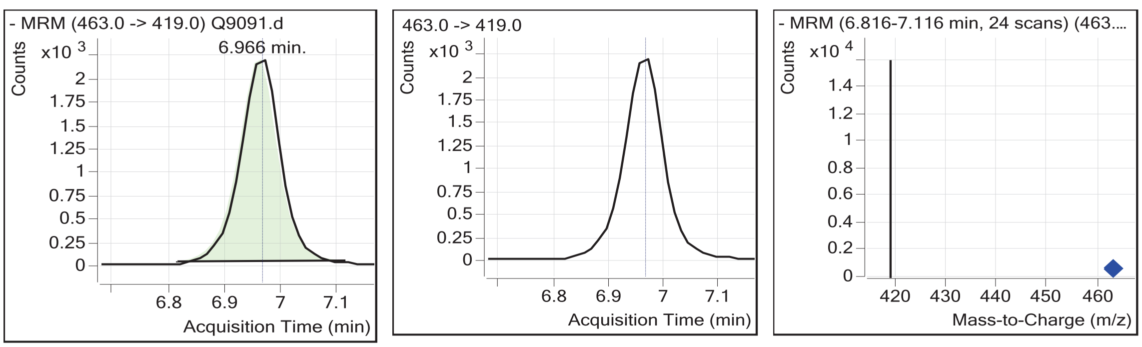
13C4-PFOS



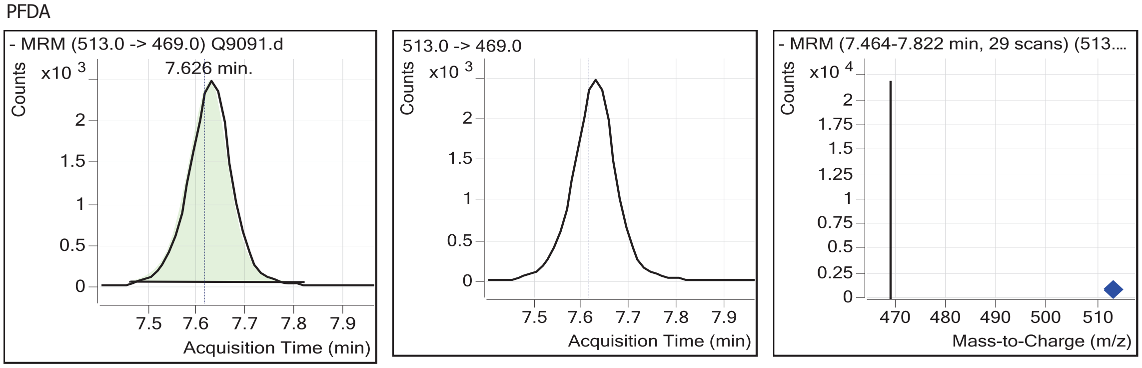
PFOS



PFNA

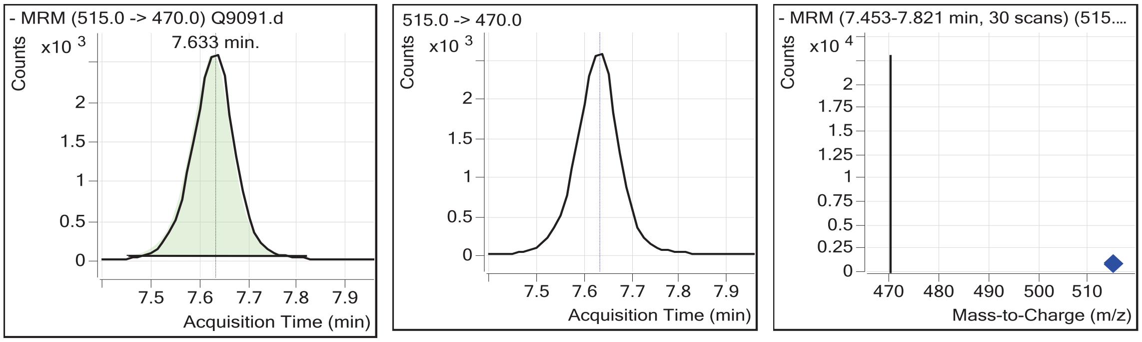


PFDA

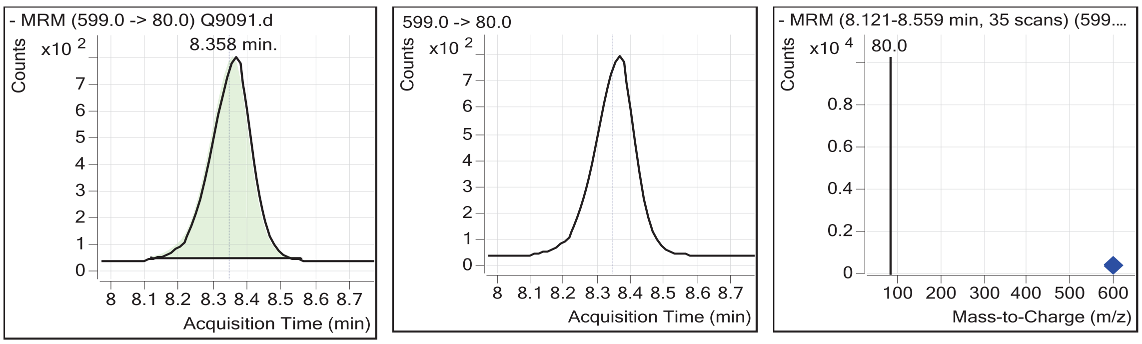


Perfluorinated Compounds by LC/MS/MS.

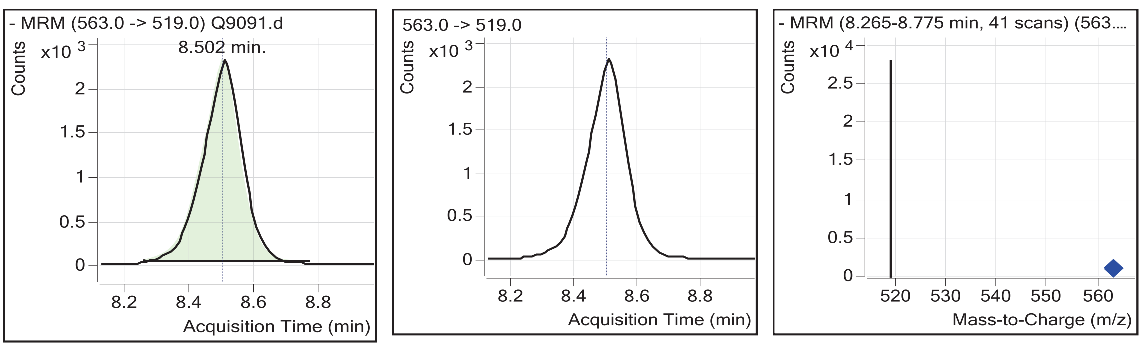
13C2-PFDA



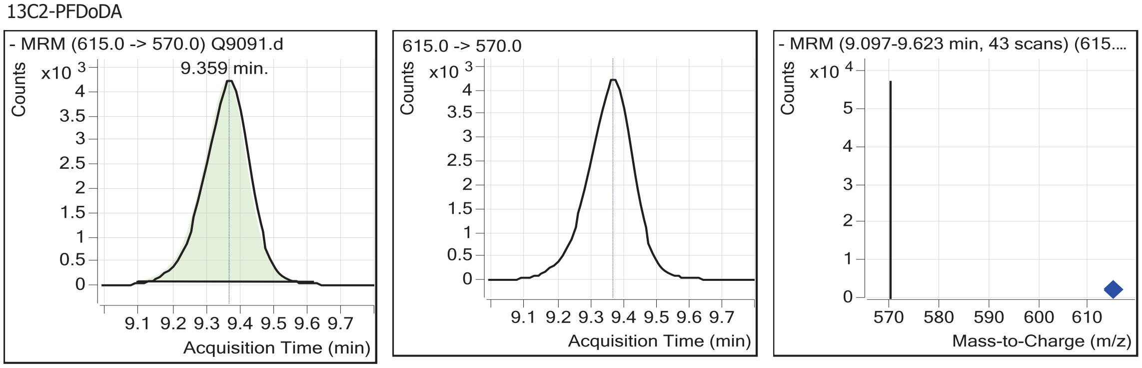
PFDS



PFUnDA



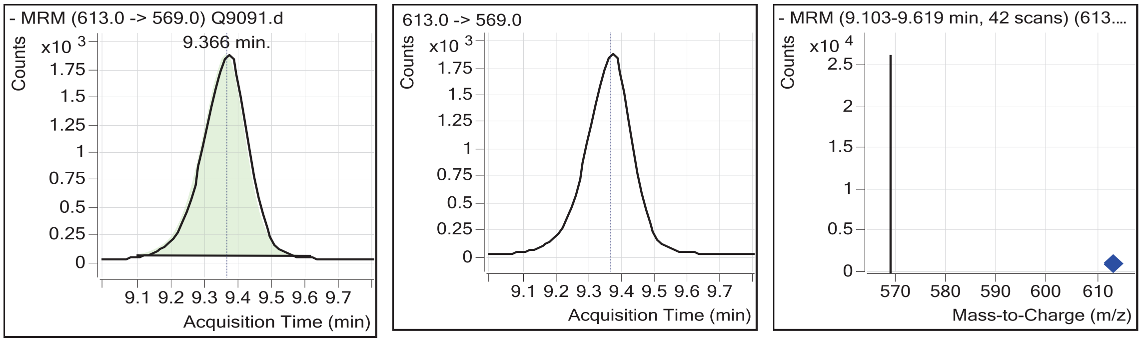
13C2-PFDoDA



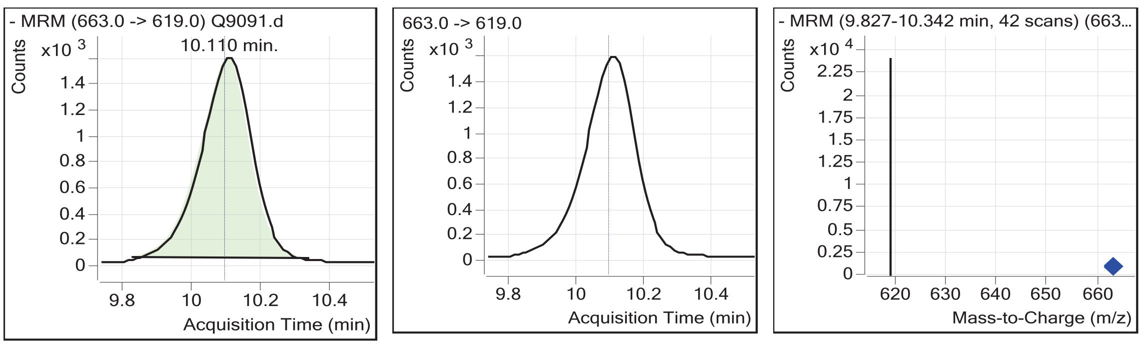
7.5.22
7

Perfluorinated Compounds by LC/MS/MS.

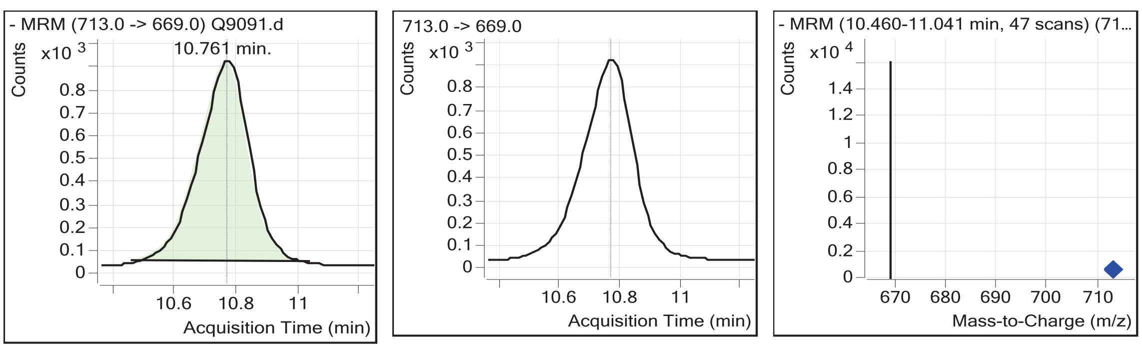
PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

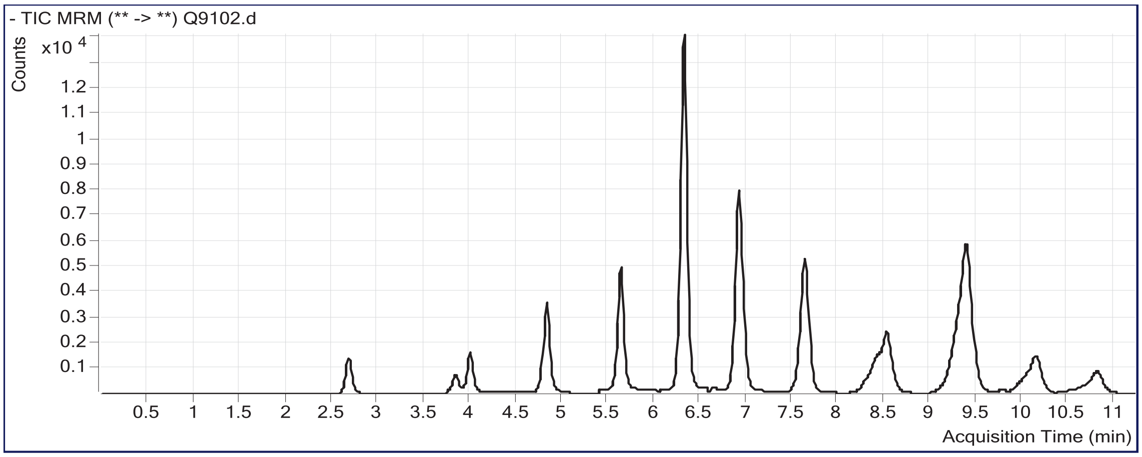
Data File	:	Q9102.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-20 00:20
Sample Name	:	CC290-20
Vial	:	Vial 5
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.321	415.0 -> 370.0	27150	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	14721	20.000	µg/L	0.000
13C2-PFDoDA	9.384	615.0 -> 570.0	43657	20.000	µg/L	0.013
System Monitoring Compounds						
13C2-PFHxA	4.816	315.0 -> 270.0	8026	19.28	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 96.40%			
13C2-PFDA	7.633	515.0 -> 470.0	17352	19.35	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 96.73%			
Target Compounds						**Qvalue**
PFBA	2.677	213.0 -> 169.0	7217	18.894	µg/L	100
PFPeA	3.836	263.0 -> 219.0	3243	18.851	µg/L	100
PFBS	3.991	299.0 -> 80.0	4824	19.273	µg/L	97
PFHxA	4.821	313.0 -> 269.0	8309	19.138	µg/L	99
PFHxS	5.630	399.0 -> 80.0	7315	19.702	µg/L	90
PFHpA	5.635	363.0 -> 319.0	8298	19.551	µg/L	98
PFHpS	6.293	449.0 -> 80.0	8773	19.136	µg/L	100
PFOA	6.323	413.0 -> 369.0	26792	19.349	µg/L	81
PFOS	6.910	499.0 -> 80.0	14291	19.499	µg/L	88
PFNA	6.966	463.0 -> 419.0	11949	19.161	µg/L	100
PFDA	7.626	513.0 -> 469.0	16384	21.277	µg/L	100
PFDS	8.371	599.0 -> 80.0	6970	21.013	µg/L	100
PFUnDA	8.515	563.0 -> 519.0	22470	21.053	µg/L	100
PFDoDA	9.378	613.0 -> 569.0	19271	19.627	µg/L	100
PFTrDA	10.122	663.0 -> 619.0	16350	17.726	µg/L	100
PFTeDA	10.786	713.0 -> 669.0	10246	16.518	µg/L	100

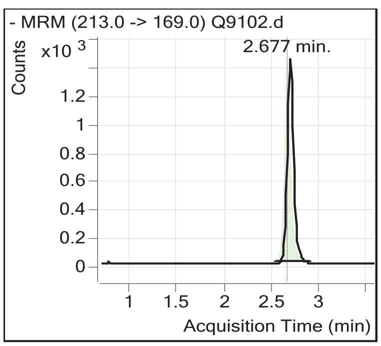
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

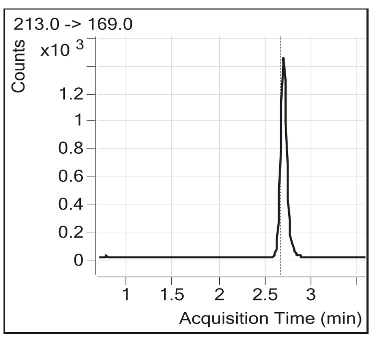
Perfluorinated Compounds by LC/MS/MS.

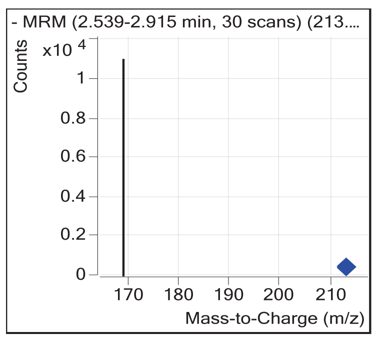
Data File	:	Q9102.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-20 00:20
Sample Name	:	CC290-20
Vial	:	Vial 5
Sample Info	:	OP54279,SQ290,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ290.batch.bin
Last Calib Update	:	2014-12-21 10:06



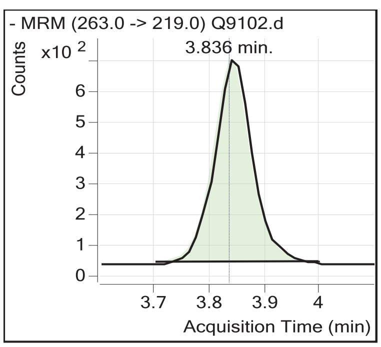
PFBA

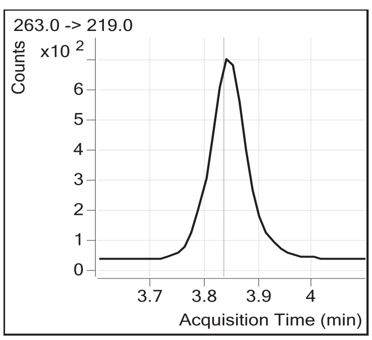


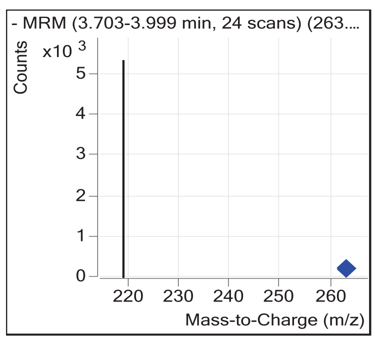




PFPeA

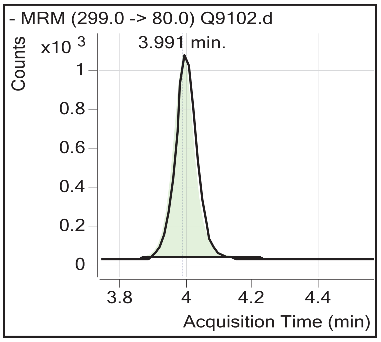


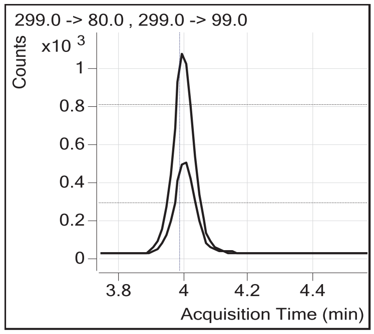


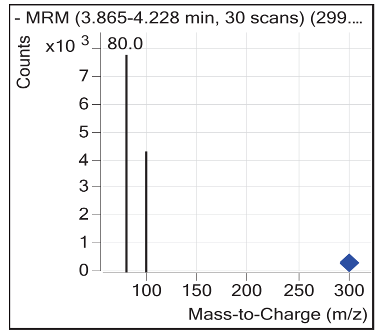


Perfluorinated Compounds by LC/MS/MS.

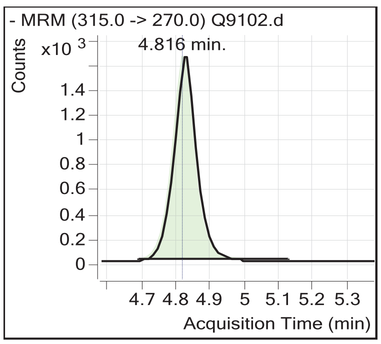
PFBS

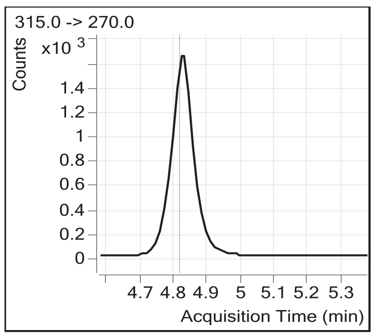


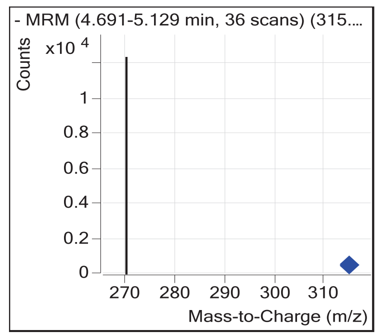




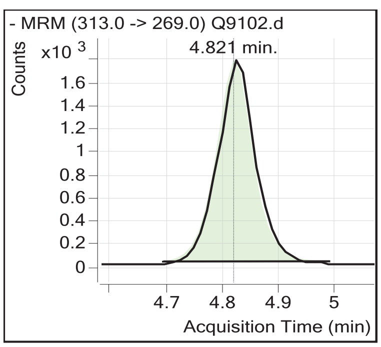
13C2-PFHxA

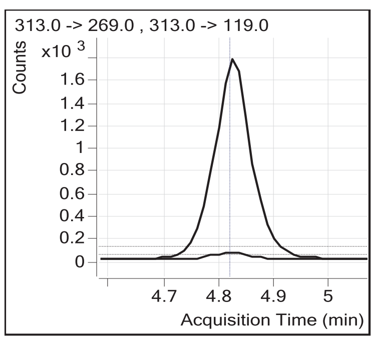


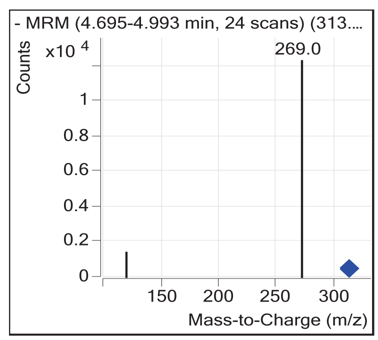




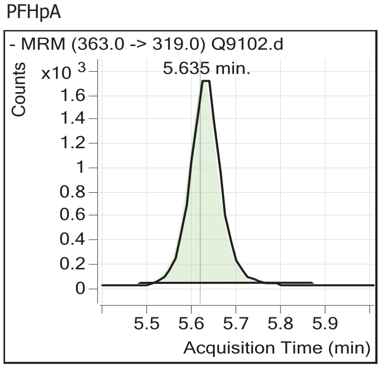
PFHxA

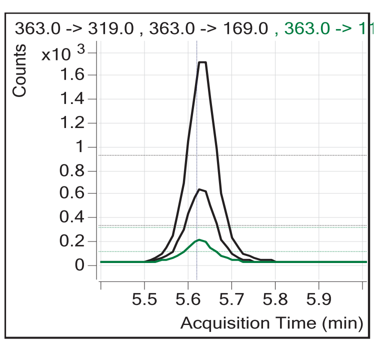


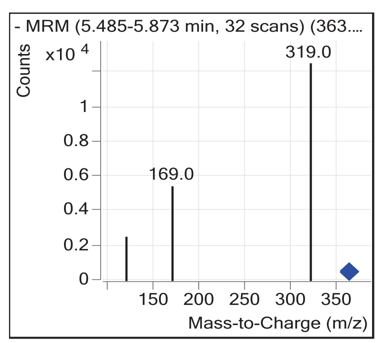




PFHpA







7.5.23

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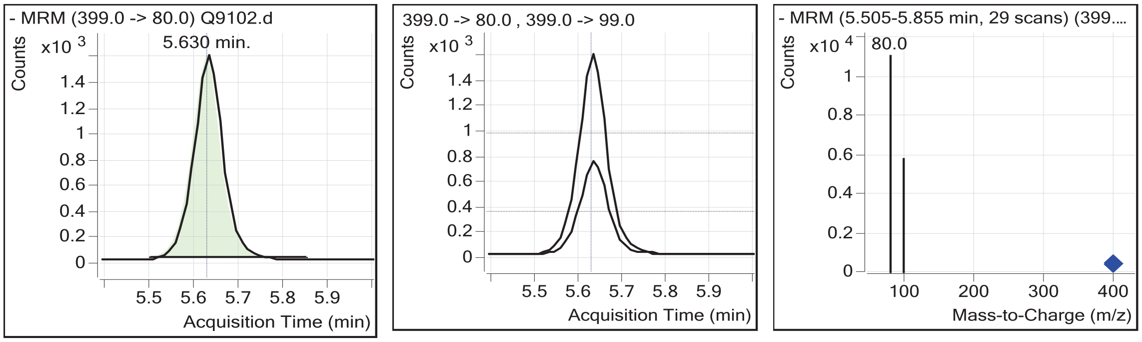
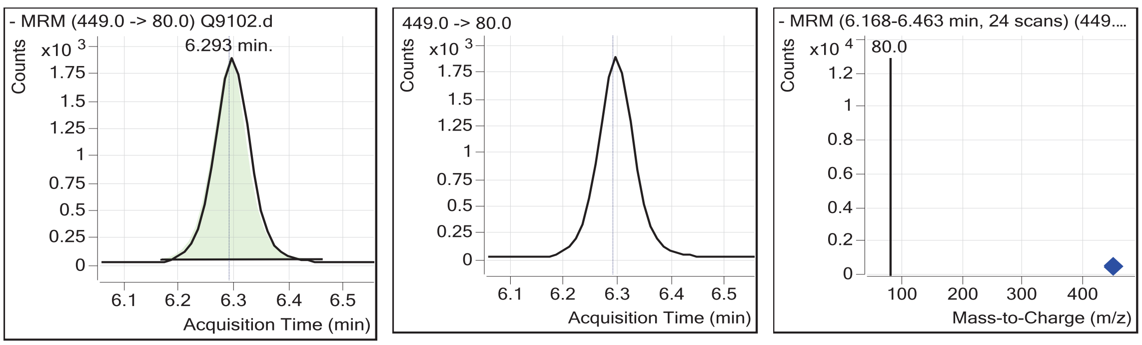
Perfluorinated Compounds by LC/MS/MS.

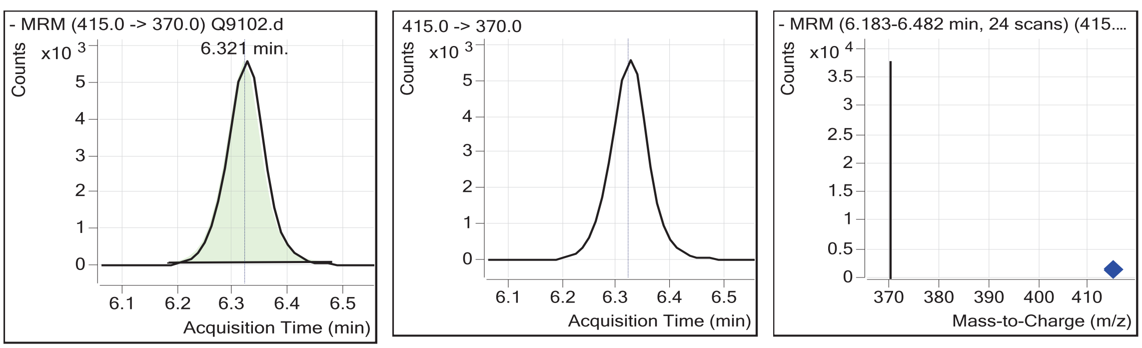
PFHxS



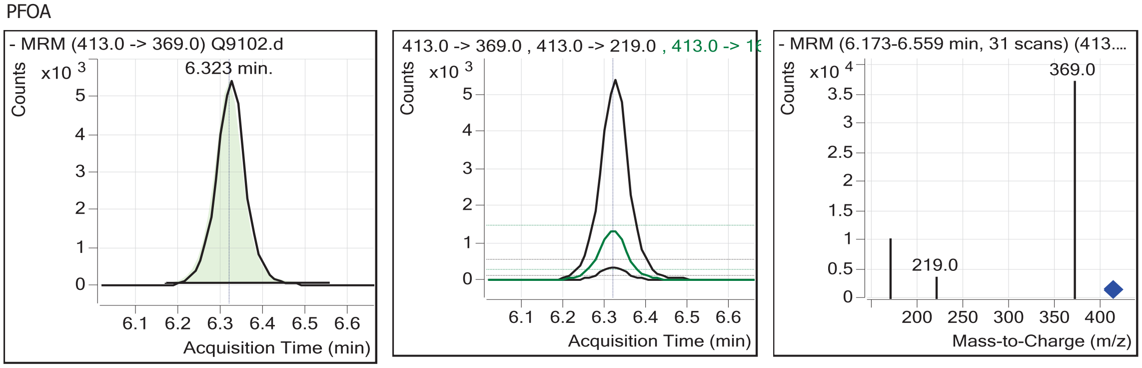
PFHpS



13C2-PFOA

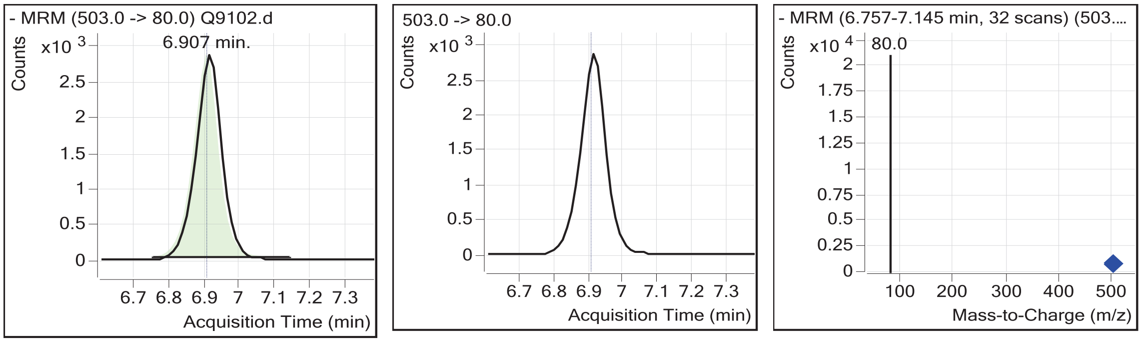


PFOA

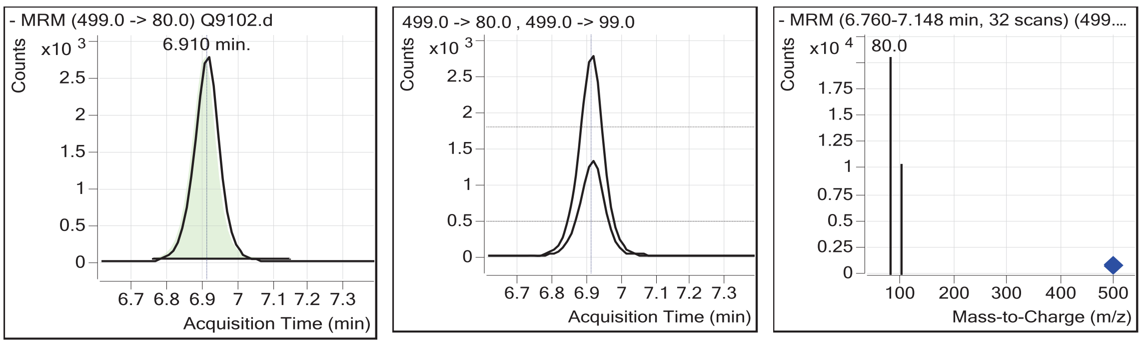


Perfluorinated Compounds by LC/MS/MS.

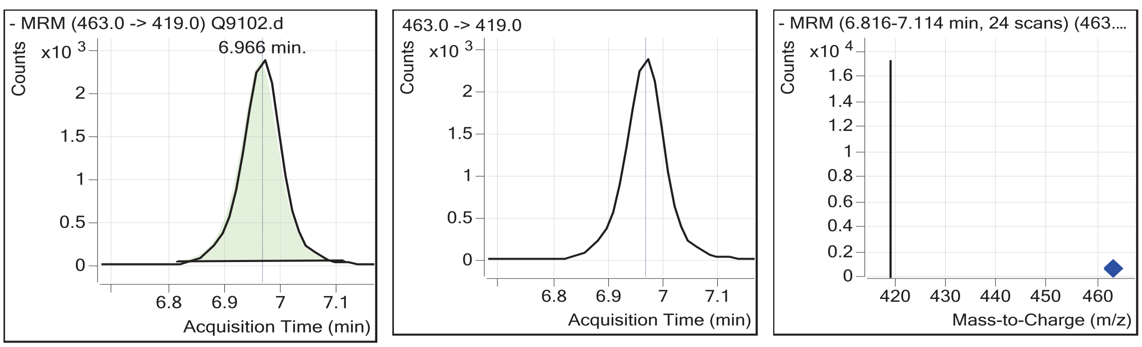
13C4-PFOS



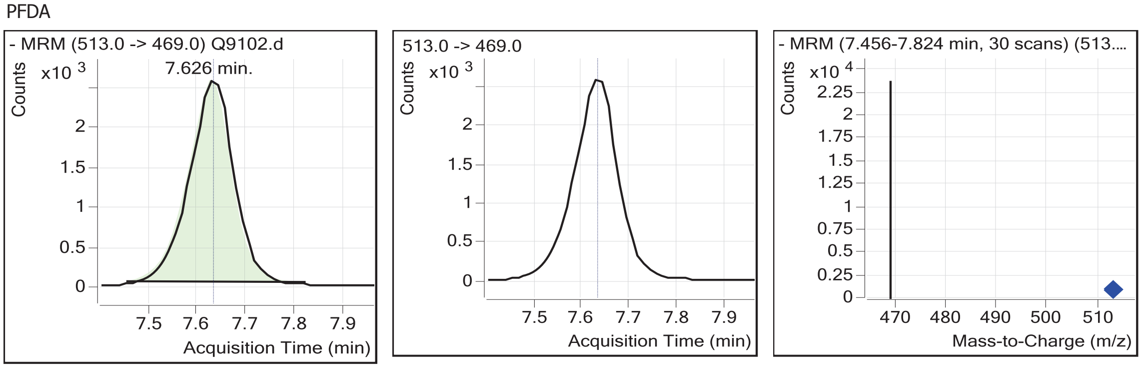
PFOS



PFNA

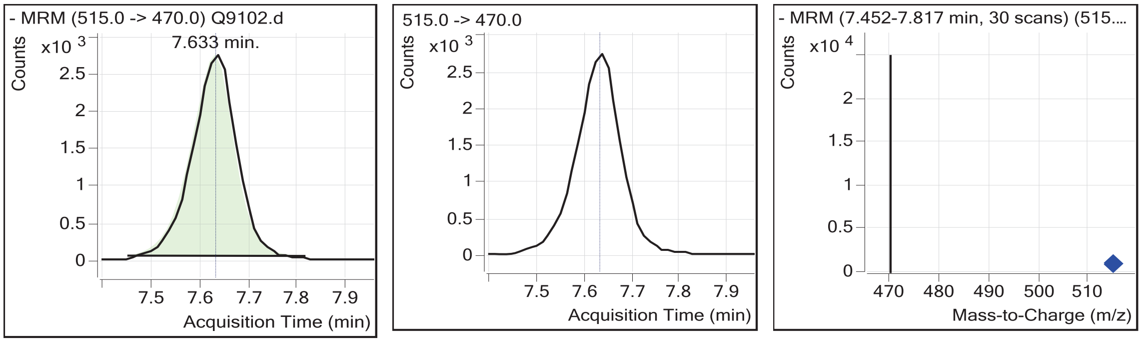


PFDA

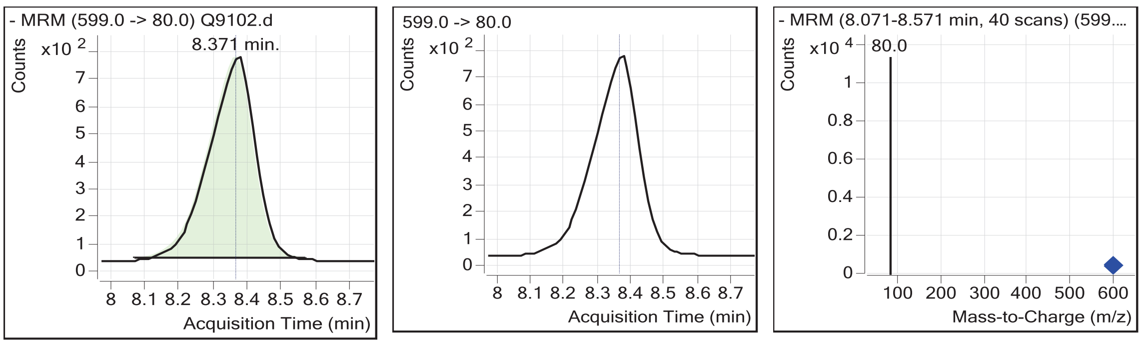


Perfluorinated Compounds by LC/MS/MS.

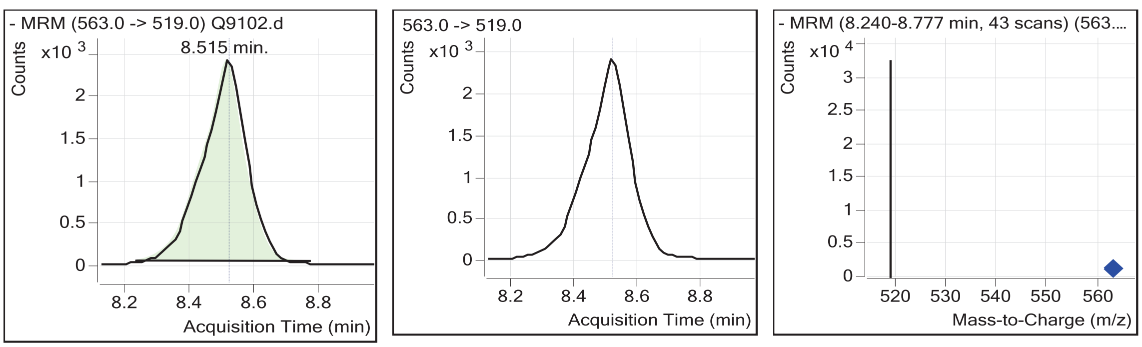
13C2-PFDA



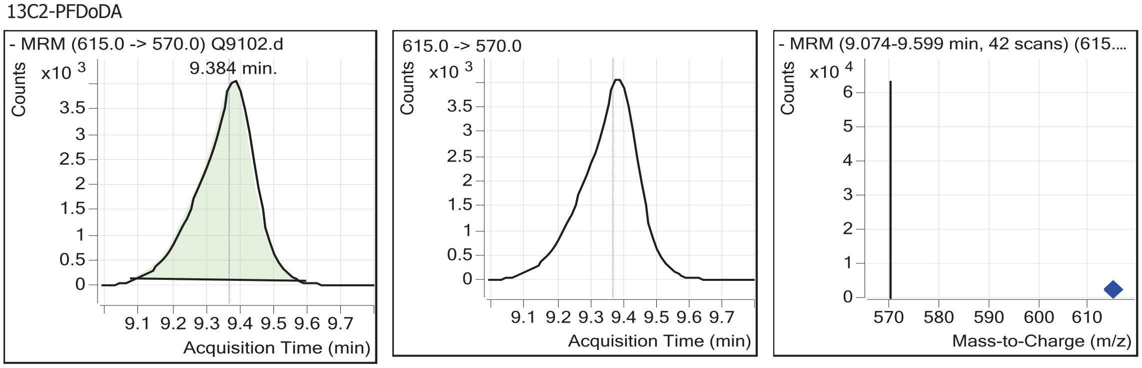
PFDS



PFUnDA

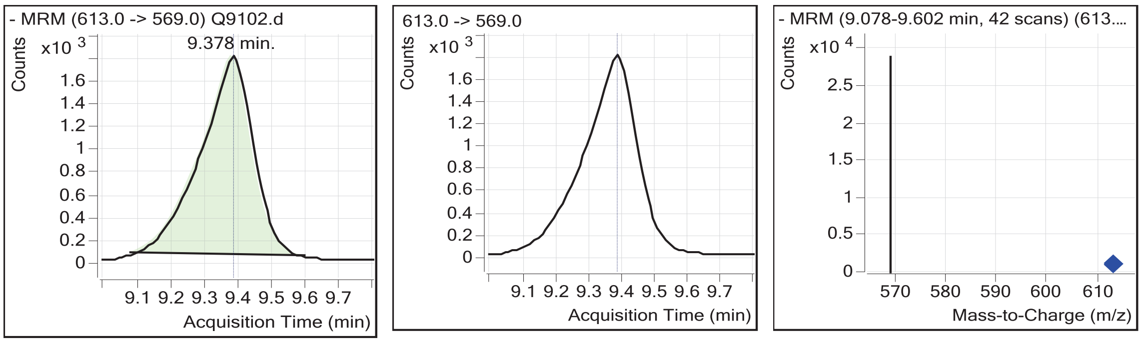


13C2-PFDoDA

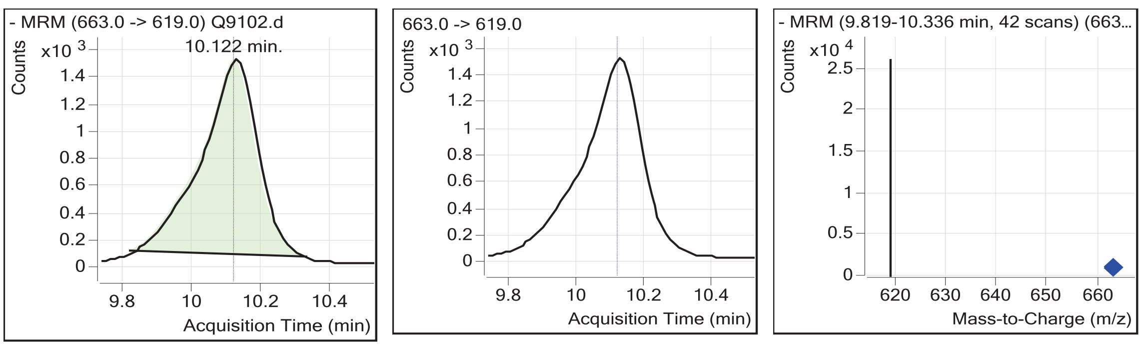


Perfluorinated Compounds by LC/MS/MS.

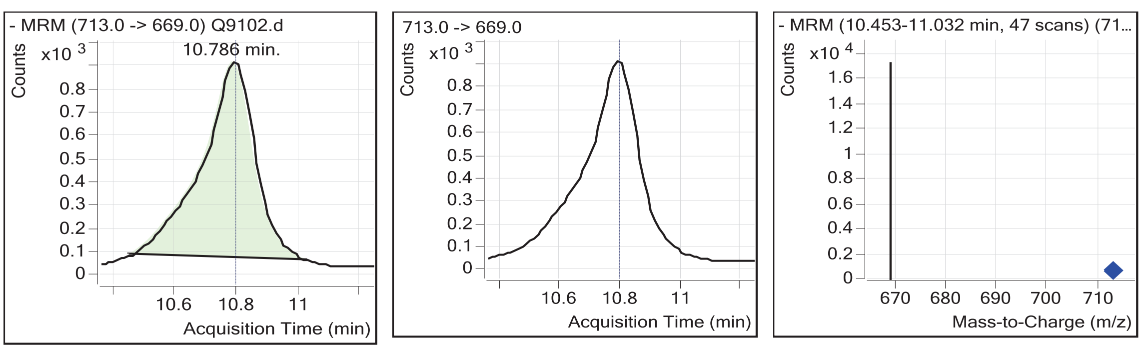
PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

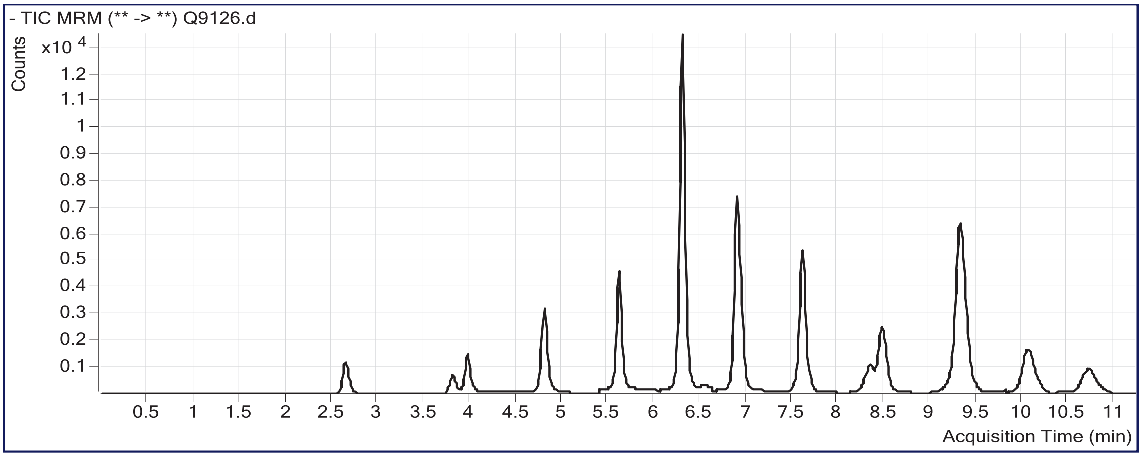
Data File	:	Q9126.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-21 11:14
Sample Name	:	CC290-20
Vial	:	Vial 2
Sample Info	:	OP54279,SQ291,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ291.batch.bin
Last Calib Update	:	2014-12-19 16:57

Compound	**R.T.**	**QIon**	**Response**	**Conc**	**Units**	**Dev(Min)**
Internal Standards						
13C2-PFOA	6.296	415.0 -> 370.0	21354	20.000	µg/L	-0.025
13C4-PFOS	6.894	503.0 -> 80.0	11925	20.000	µg/L	-0.012
13C2-PFDoDA	9.309	615.0 -> 570.0	36256	20.000	µg/L	-0.063
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	6369	19.45	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 97.27%			
13C2-PFDA	7.608	515.0 -> 470.0	13999	19.84	µg/L	-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.22%			
Target Compounds						**Qvalue**
PFBA	2.639	213.0 -> 169.0	5878	19.568	µg/L	100
PFPeA	3.811	263.0 -> 219.0	2724	20.131	µg/L	100
PFBS	3.966	299.0 -> 80.0	3972	19.589	µg/L	96
PFHxA	4.796	313.0 -> 269.0	6596	19.317	µg/L	99
PFHxS	5.605	399.0 -> 80.0	6016	20.003	µg/L	89
PFHpA	5.610	363.0 -> 319.0	6395	19.156	µg/L	96
PFHpS	6.268	449.0 -> 80.0	7409	19.951	µg/L	100
PFOA	6.298	413.0 -> 369.0	21843	20.058	µg/L	81
PFOS	6.885	499.0 -> 80.0	11981	20.180	µg/L	87
PFNA	6.941	463.0 -> 419.0	9889	20.163	µg/L	100
PFDA	7.601	513.0 -> 469.0	13267	20.746	µg/L	100
PFDS	8.321	599.0 -> 80.0	5979	21.707	µg/L	100
PFUnDA	8.465	563.0 -> 519.0	17113	19.307	µg/L	100
PFDoDA	9.316	613.0 -> 569.0	16695	20.475	µg/L	100
PFTrDA	10.047	663.0 -> 619.0	15516	20.255	µg/L	100
PFTeDA	10.698	713.0 -> 669.0	10085	19.578	µg/L	100

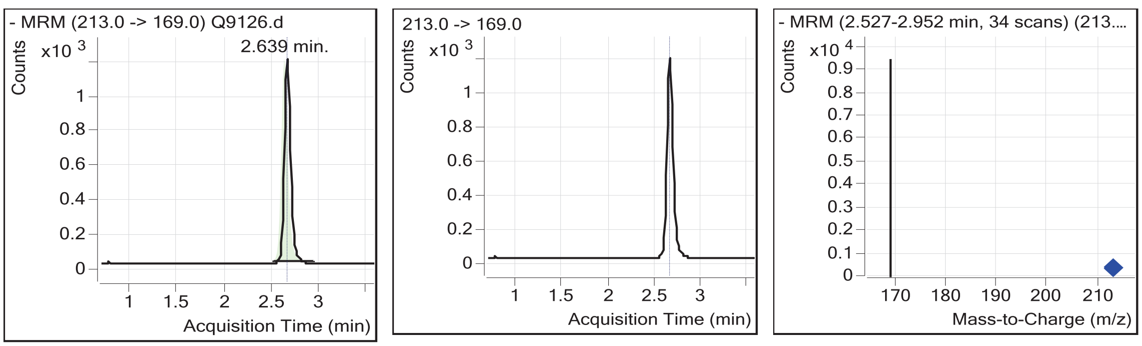
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

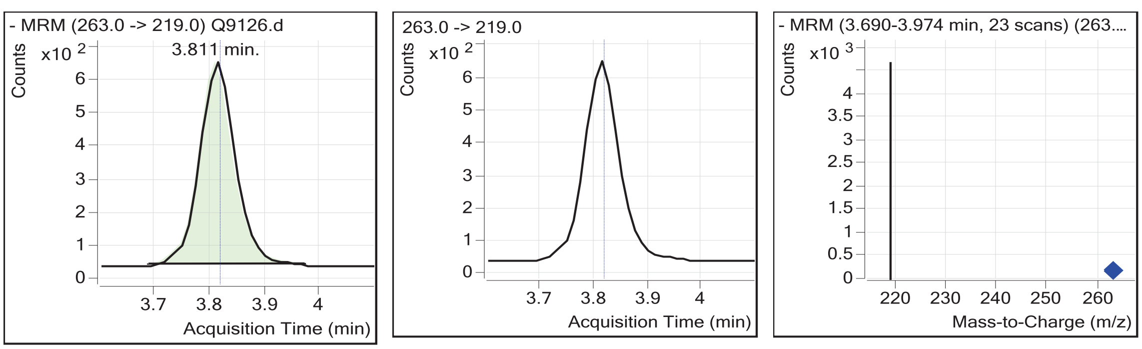
Data File	:	Q9126.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-21 11:14
Sample Name	:	CC290-20
Vial	:	Vial 2
Sample Info	:	OP54279,SQ291,125,,,1,1,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ291.batch.bin
Last Calib Update	:	2014-12-19 16:57



PFBA

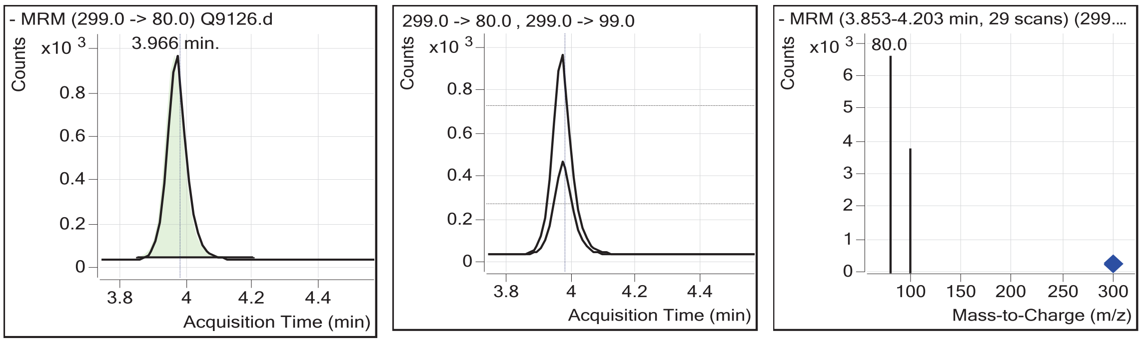


PFPeA

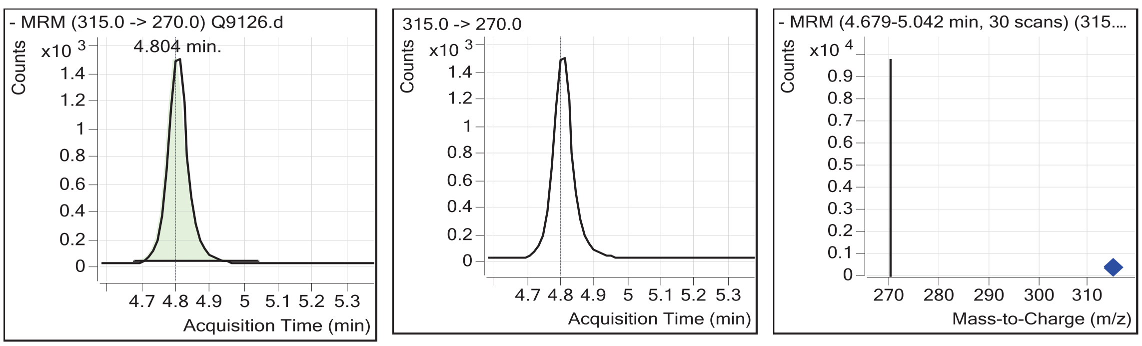


Perfluorinated Compounds by LC/MS/MS.

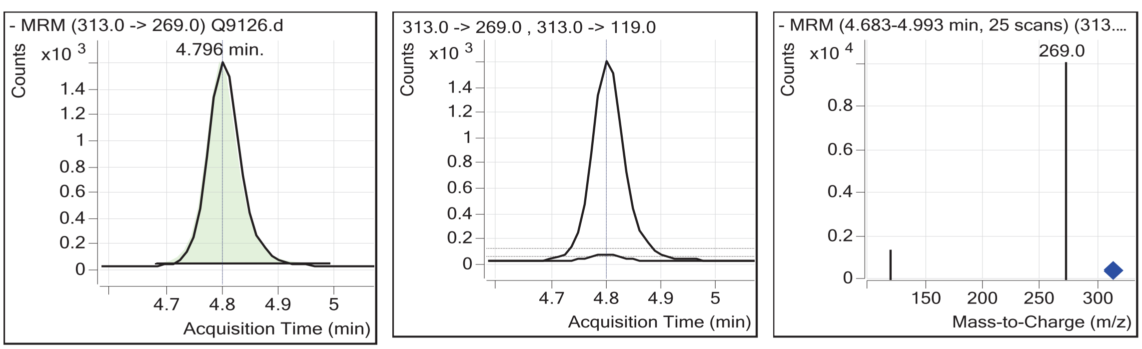
PFBS



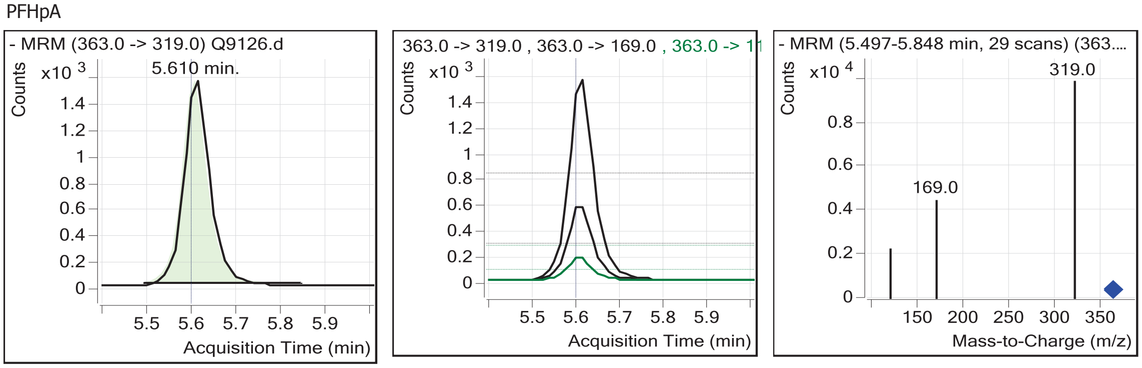
13C2-PFHxA



PFHxA

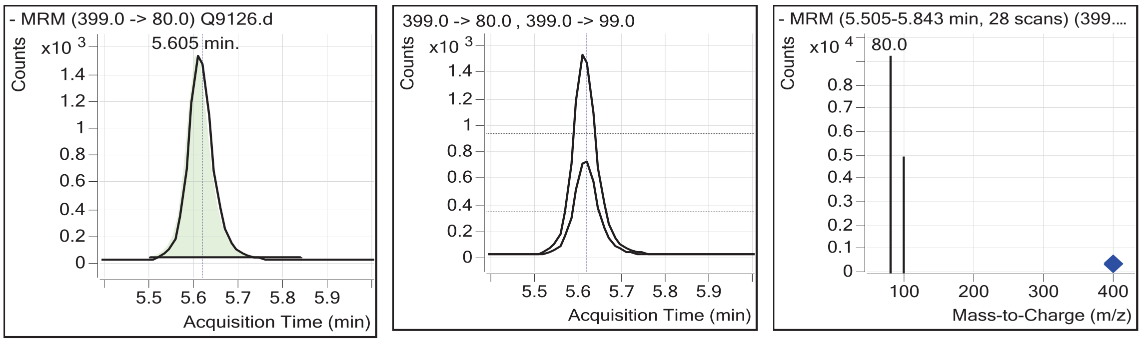


PFHpA

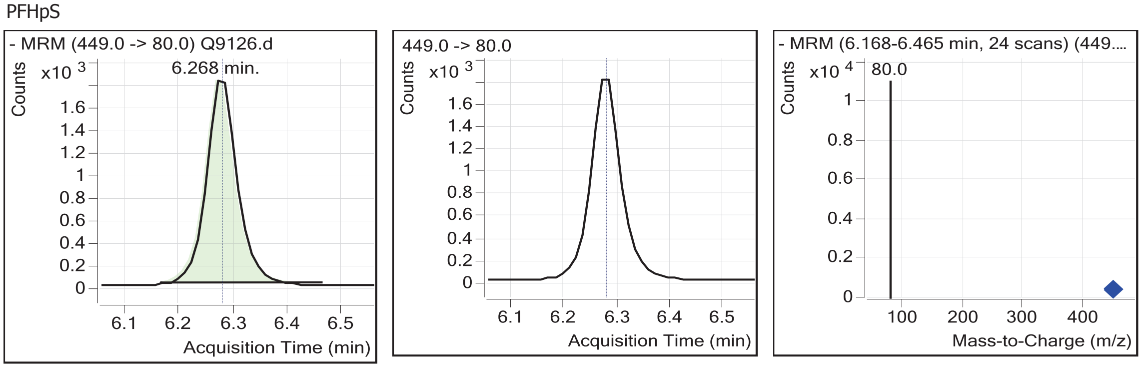


Perfluorinated Compounds by LC/MS/MS.

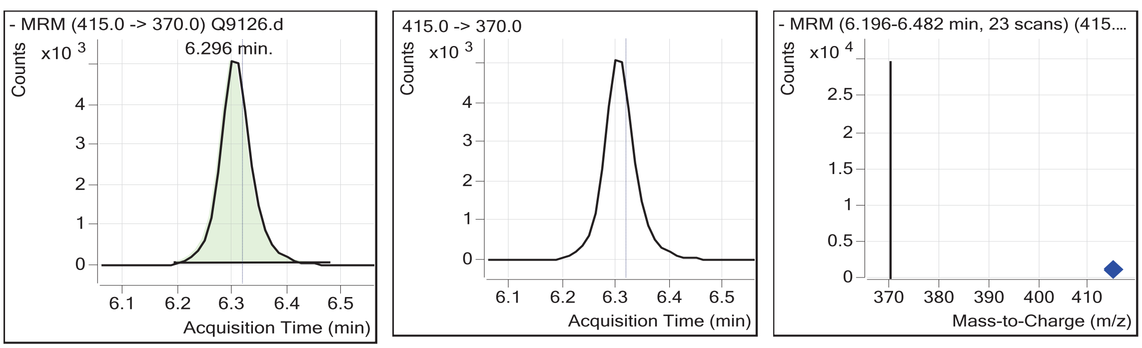
PFHxS



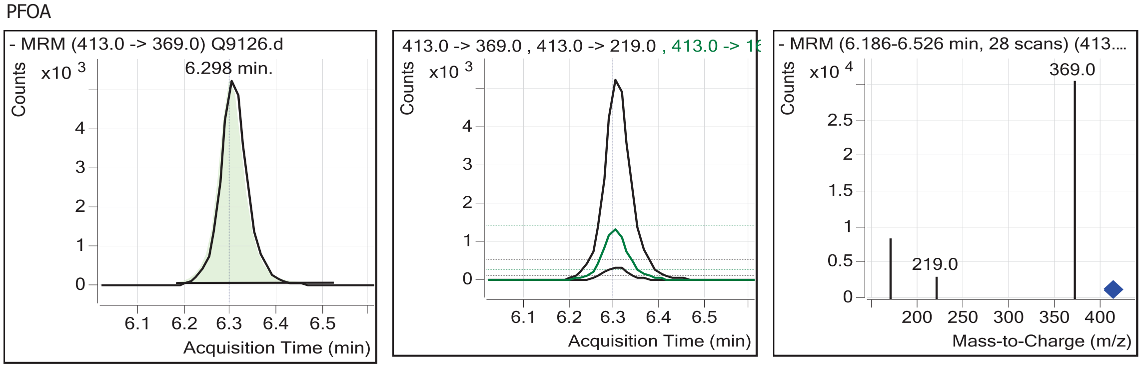
PFHpS



13C2-PFOA

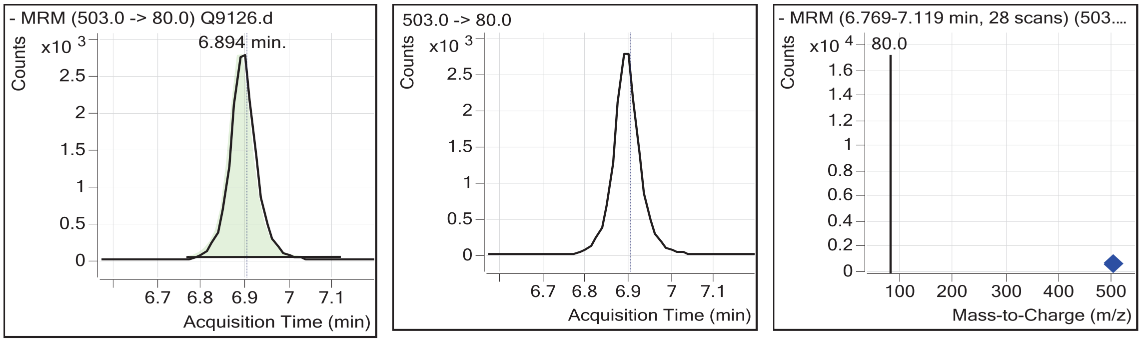


PFOA

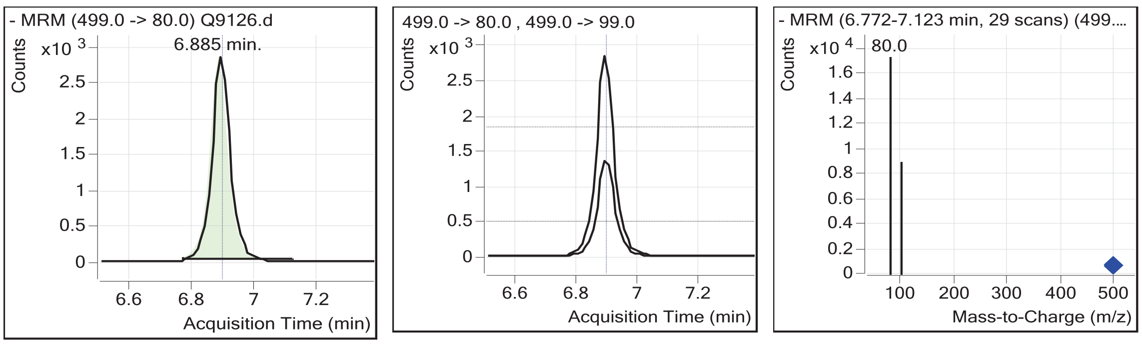


Perfluorinated Compounds by LC/MS/MS.

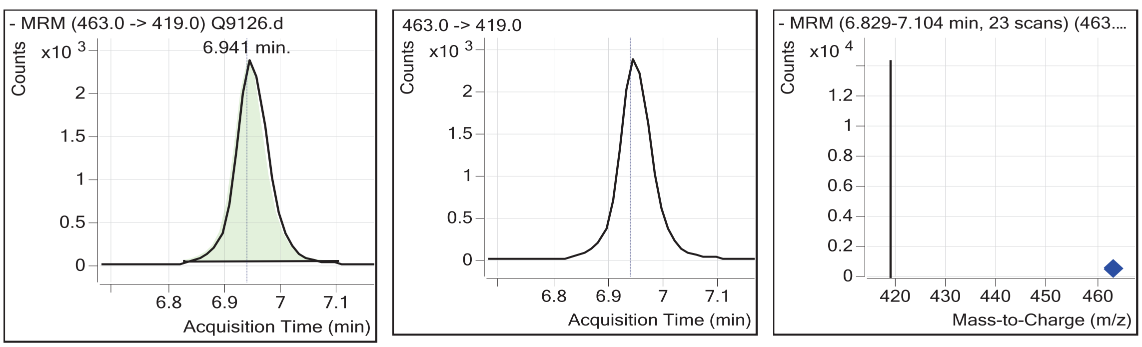
13C4-PFOS



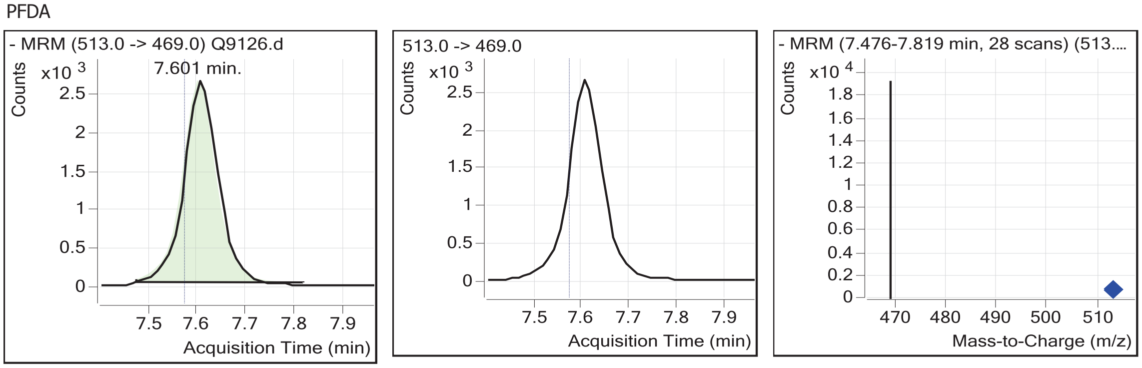
PFOS



PFNA

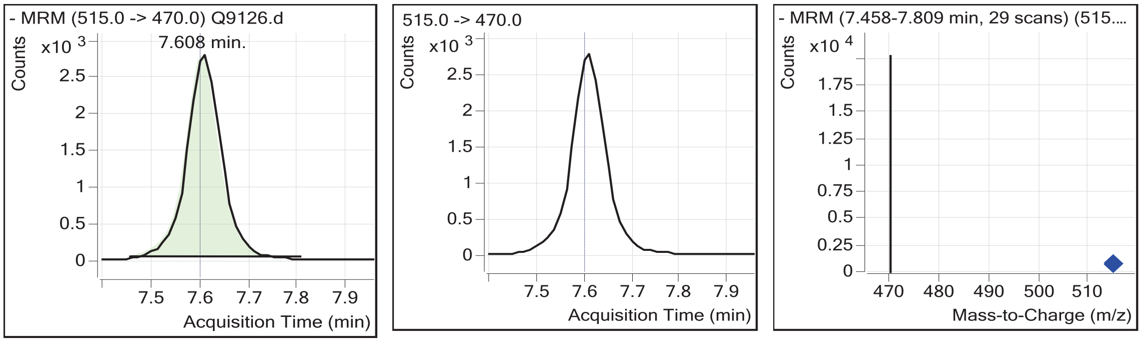


PFDA

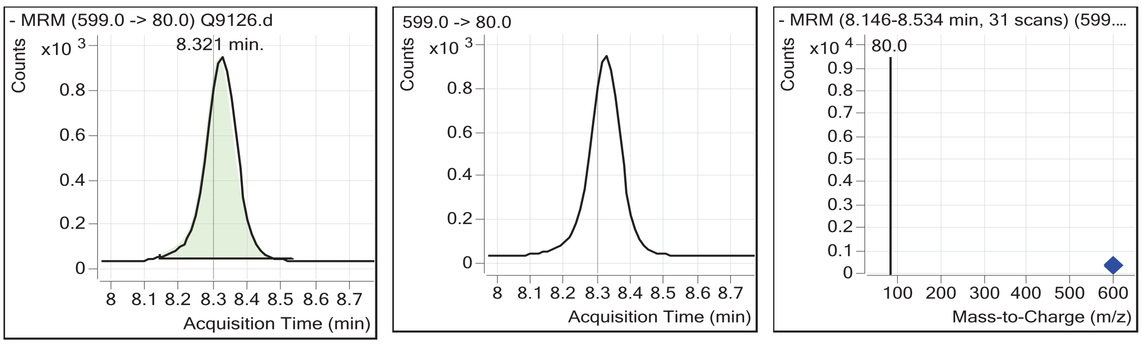


Perfluorinated Compounds by LC/MS/MS.

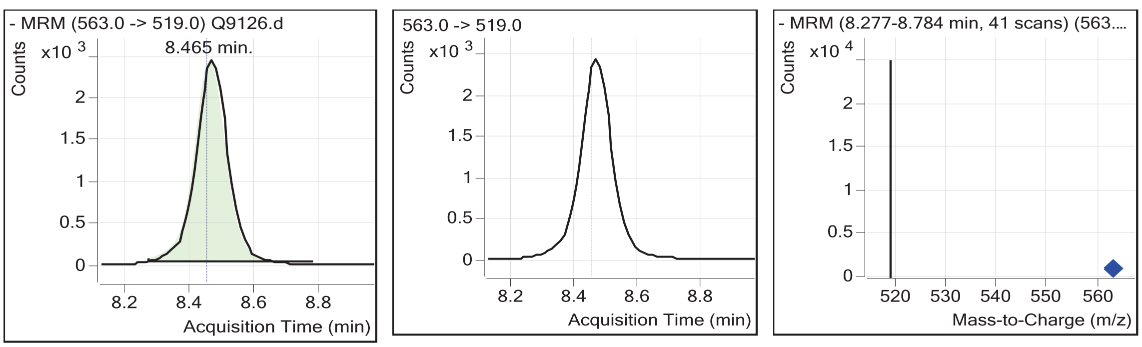
13C2-PFDA



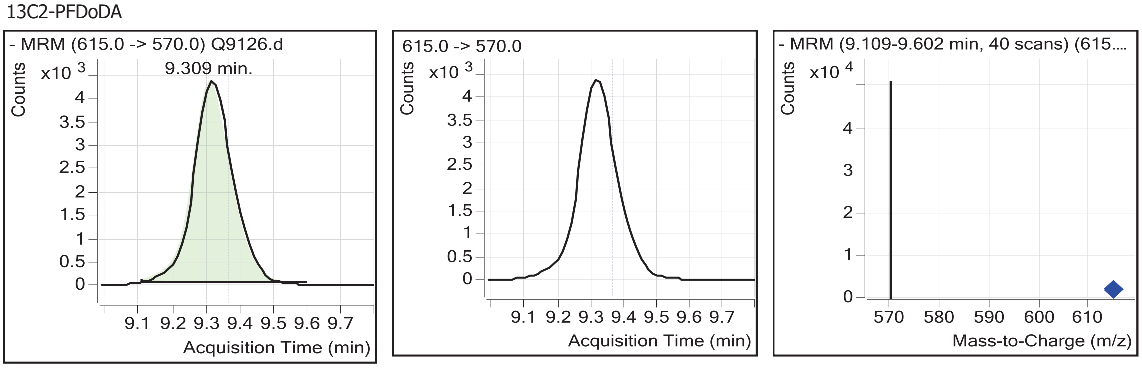
PFDS



PFUnDA

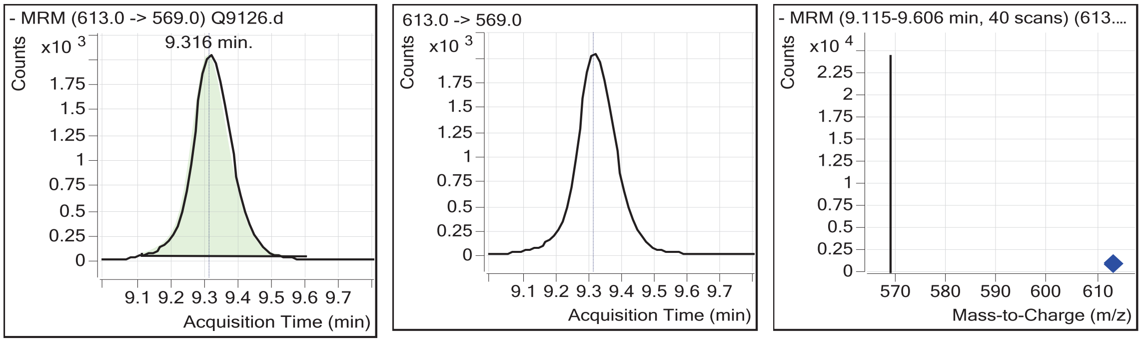


13C2-PFDoDA

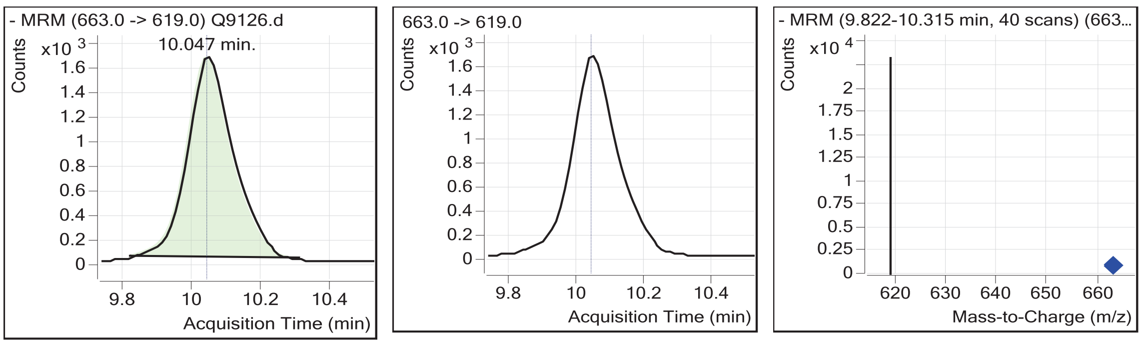


Perfluorinated Compounds by LC/MS/MS.

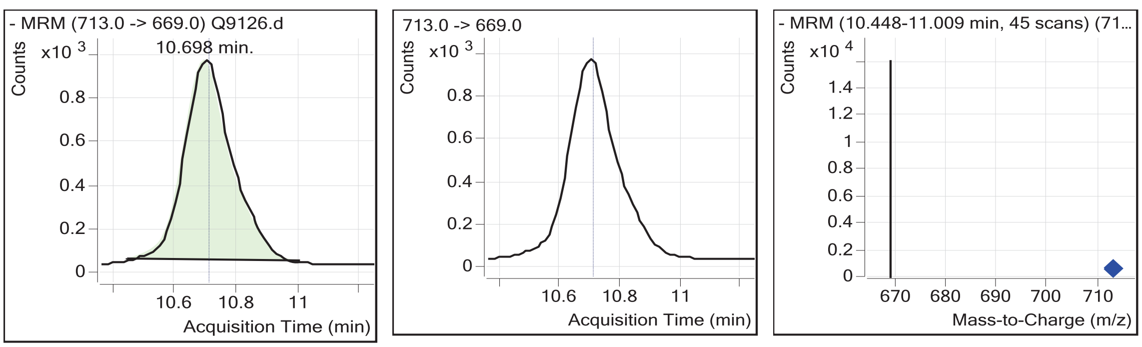
PFDoDA



PFTrDA



PFTeDA



Perfluorinated Compounds by LC/MS/MS.

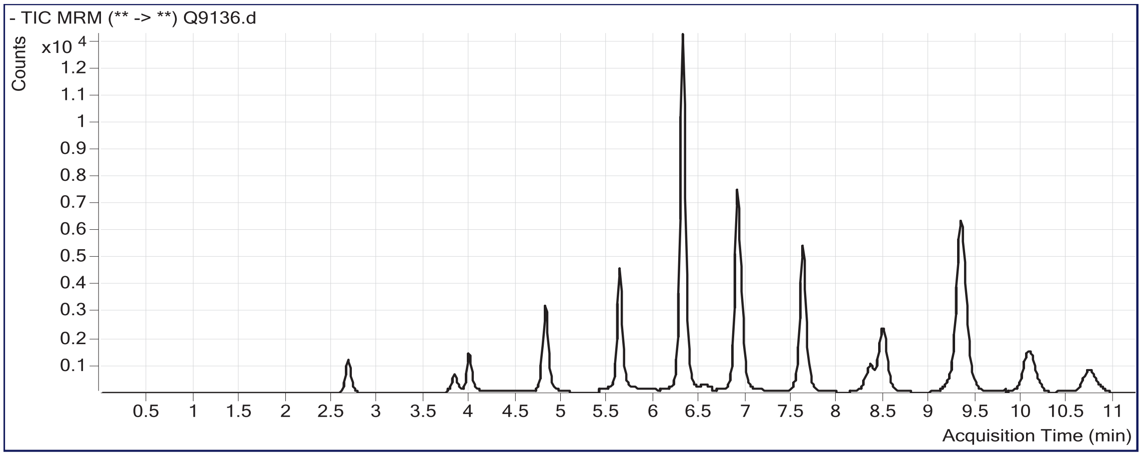
Data File	:	Q9136.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-21 14:32
Sample Name	:	ECC290-20
Vial	:	Vial 2
Sample Info	:	OP54279,SQ291,125,,,1,5,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ291.batch.bin
Last Calib Update	:	2014-12-19 16:57

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.308	415.0 -> 370.0	21642	20.000	µg/L	-0.013
13C4-PFOS	6.894	503.0 -> 80.0	11943	20.000	µg/L	-0.012
13C2-PFDoDA	9.322	615.0 -> 570.0	35845	20.000	µg/L	-0.050
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	6303	19.00	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 94.98%			
13C2-PFDA	7.608	515.0 -> 470.0	14090	19.71	µg/L	-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 98.53%			
Target Compounds						**Qvalue**
PFBA	2.664	213.0 -> 169.0	5542	18.202	µg/L	100
PFPeA	3.836	263.0 -> 219.0	2565	18.705	µg/L	100
PFBS	3.978	299.0 -> 80.0	3801	18.722	µg/L	96
PFHxA	4.808	313.0 -> 269.0	6630	19.160	µg/L	99
PFHpA	5.610	363.0 -> 319.0	6607	19.527	µg/L	99
PFHxS	5.617	399.0 -> 80.0	6000	19.920	µg/L	88
PFHpS	6.281	449.0 -> 80.0	7506	20.181	µg/L	100
PFOA	6.311	413.0 -> 369.0	21730	19.688	µg/L	80
PFOS	6.885	499.0 -> 80.0	11973	20.138	µg/L	88
PFNA	6.954	463.0 -> 419.0	10079	20.276	µg/L	100
PFDA	7.614	513.0 -> 469.0	13343	21.104	µg/L	100
PFDS	8.321	599.0 -> 80.0	5710	20.968	µg/L	100
PFUnDA	8.477	563.0 -> 519.0	16785	19.154	µg/L	100
PFDoDA	9.328	613.0 -> 569.0	15957	19.794	µg/L	100
PFTrDA	10.060	663.0 -> 619.0	14321	18.910	µg/L	100
PFTeDA	10.710	713.0 -> 669.0	9069	17.807	µg/L	100

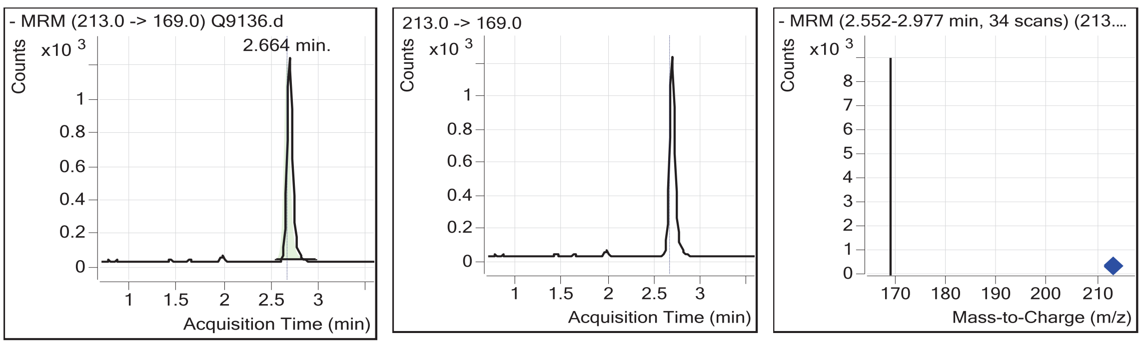
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

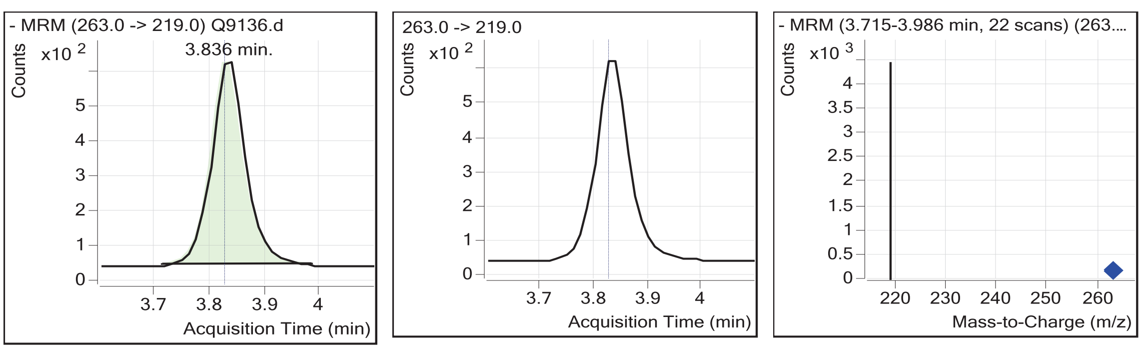
Data File	:	Q9136.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-21 14:32
Sample Name	:	ECC290-20
Vial	:	Vial 2
Sample Info	:	OP54279,SQ291,125,,,1,5,WATER
Quant Method	:	PFC_1219_SQ290.quantmethod.xml
Quant Batch Name	:	SQ291.batch.bin
Last Calib Update	:	2014-12-19 16:57



PFBA

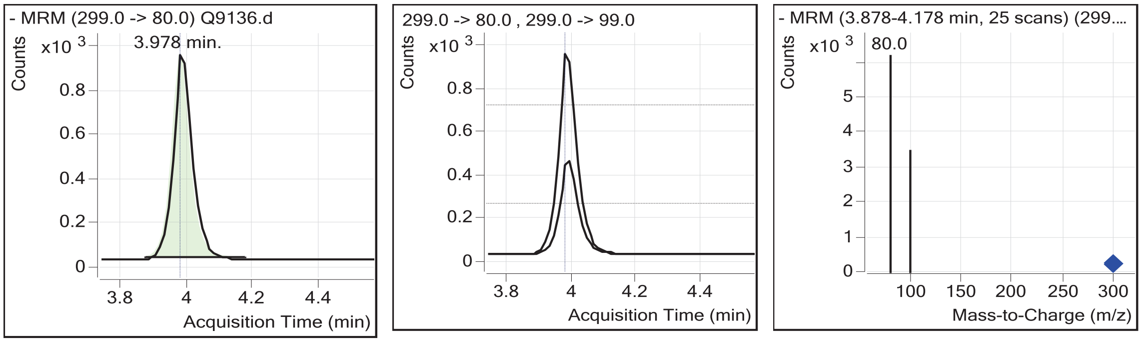


PFPeA

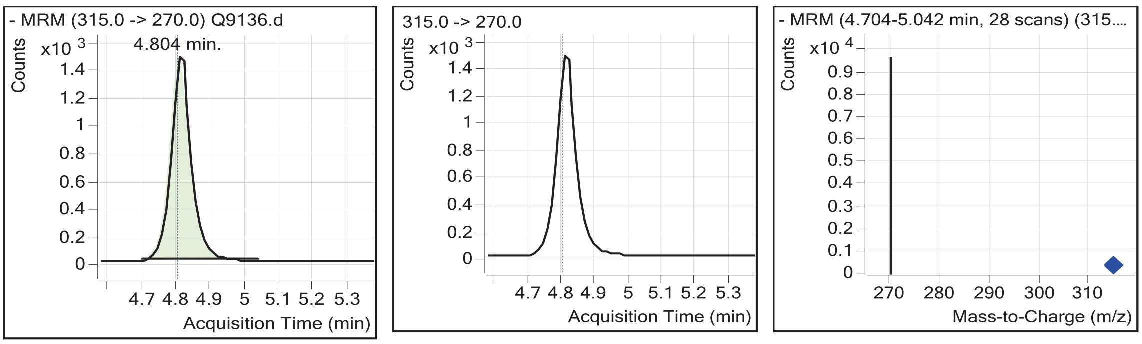


Perfluorinated Compounds by LC/MS/MS.

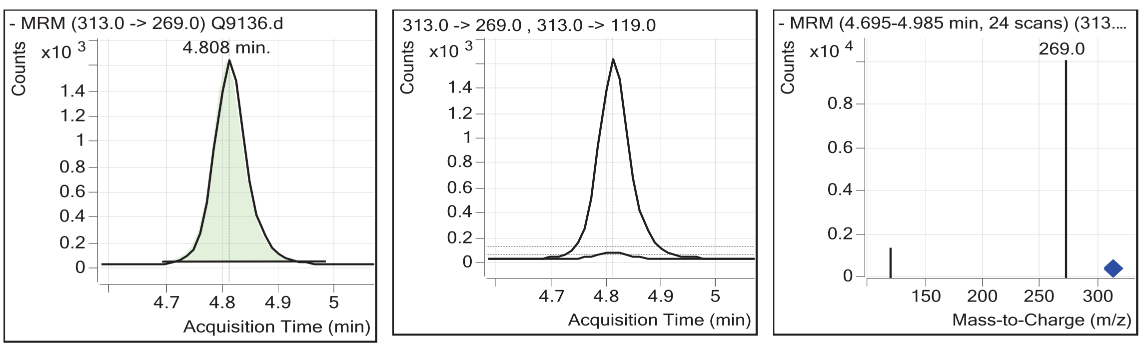
PFBS



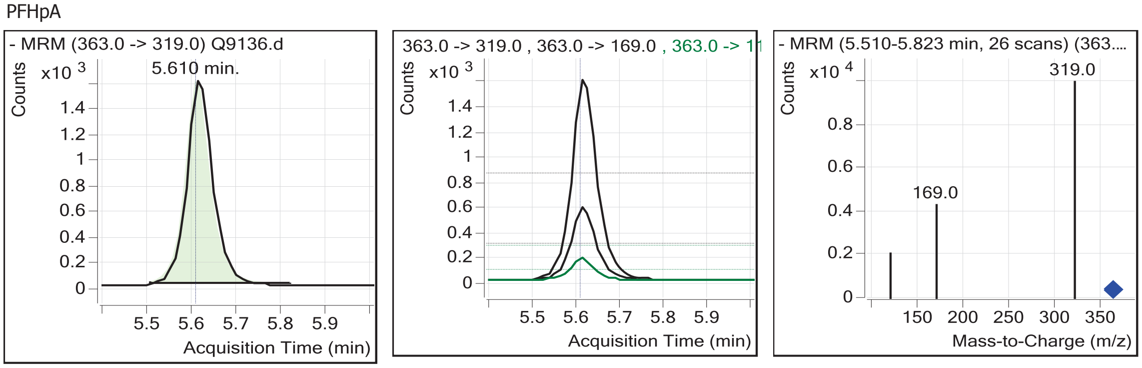
13C2-PFHxA



PFHxA

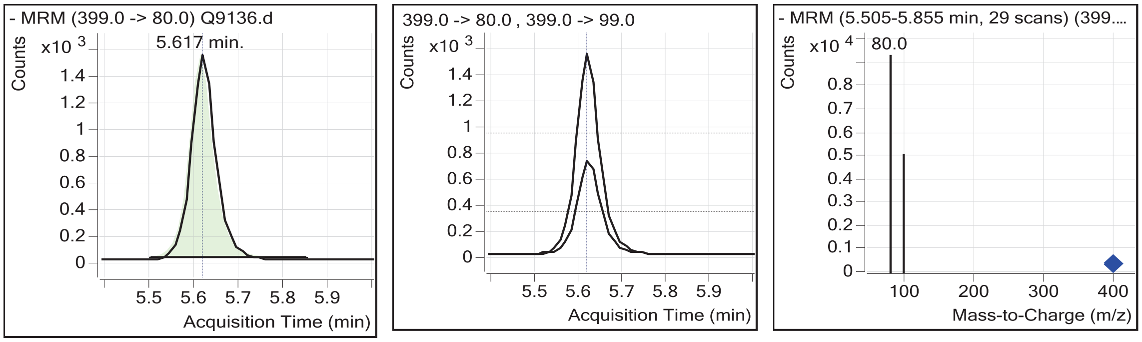


PFHpA

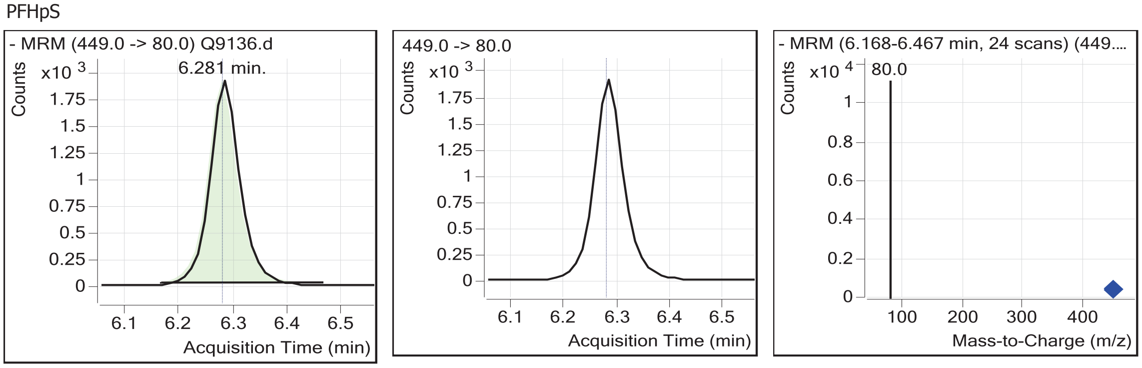


Perfluorinated Compounds by LC/MS/MS.

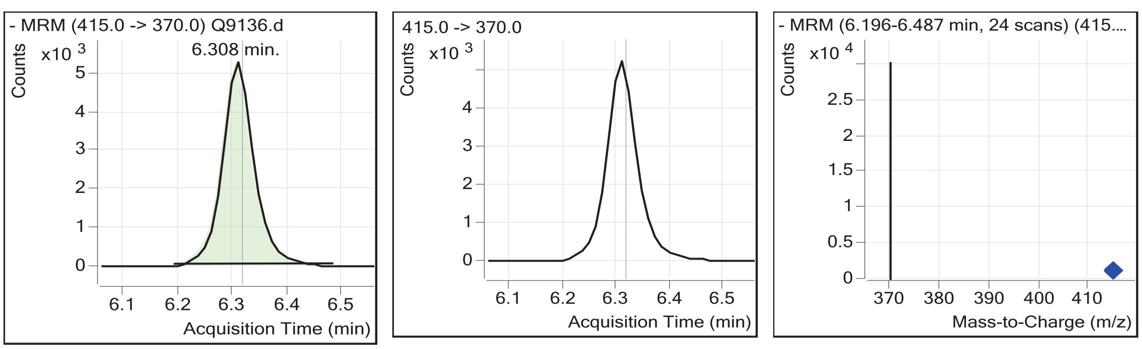
PFHxS



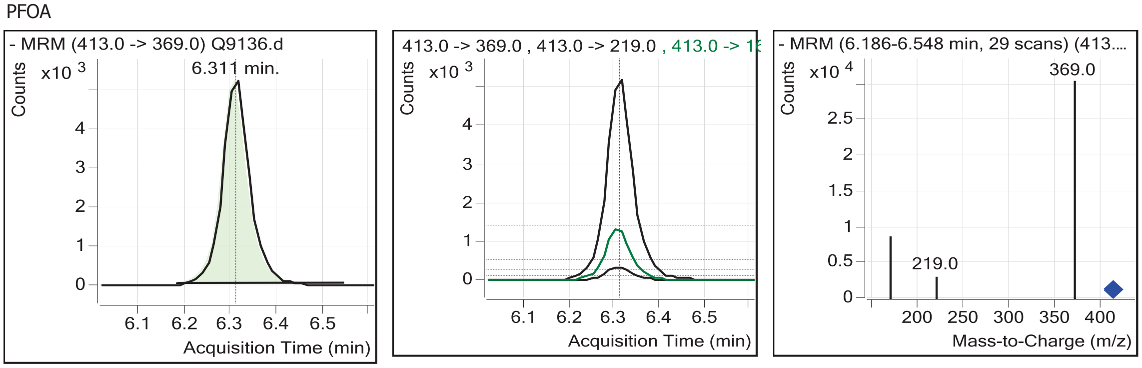
PFHpS



13C2-PFOA

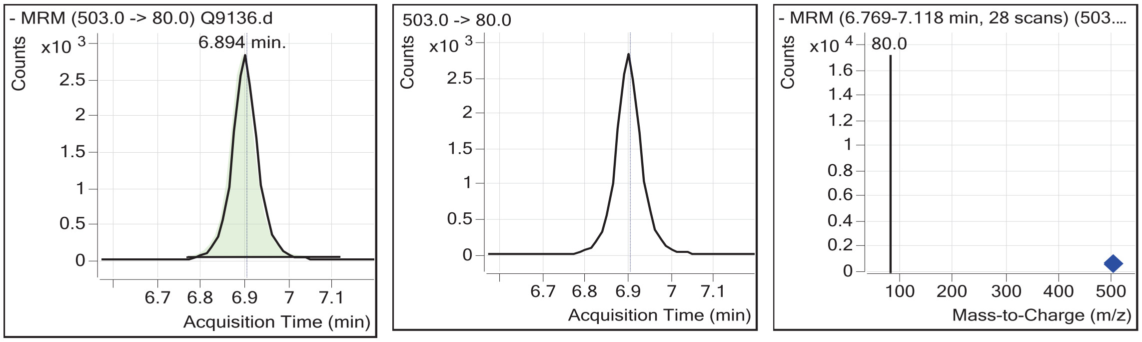


PFOA

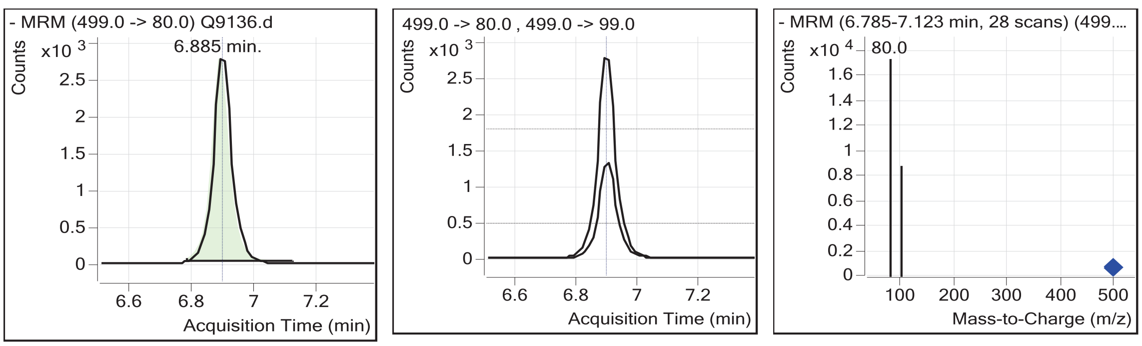


Perfluorinated Compounds by LC/MS/MS.

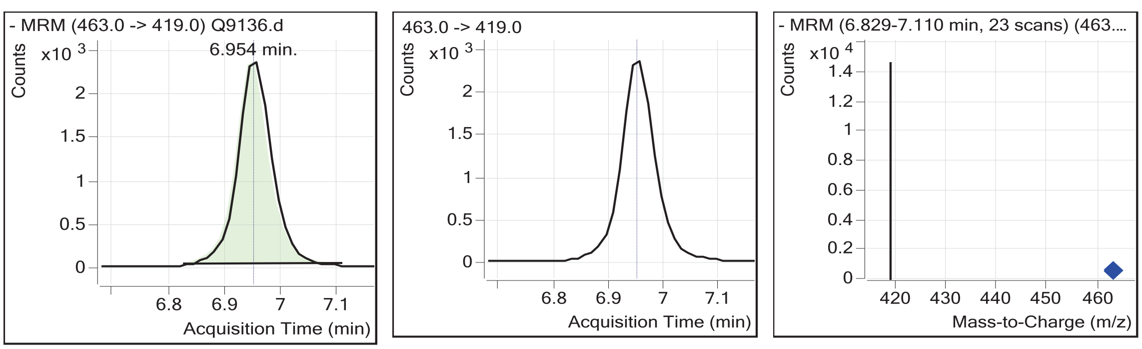
13C4-PFOS



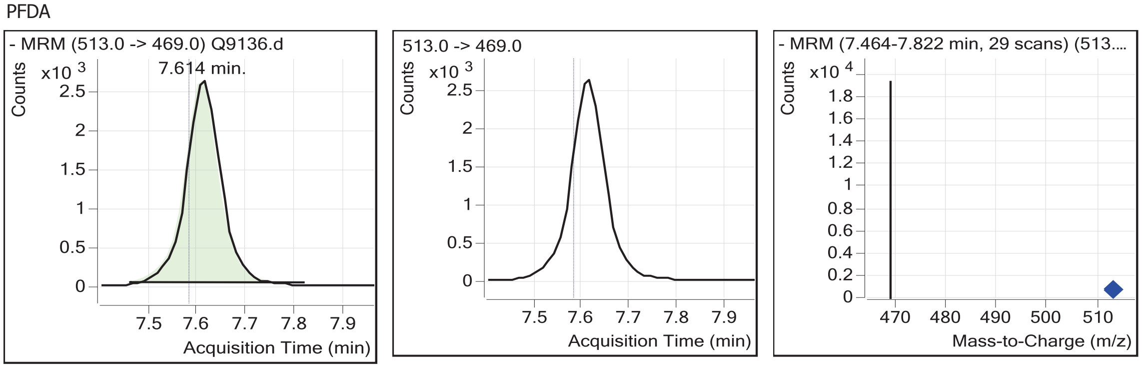
PFOS



PFNA

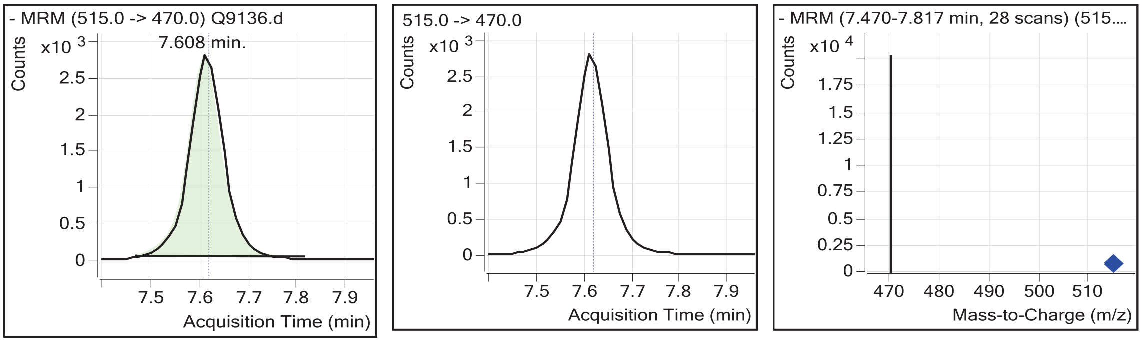


PFDA

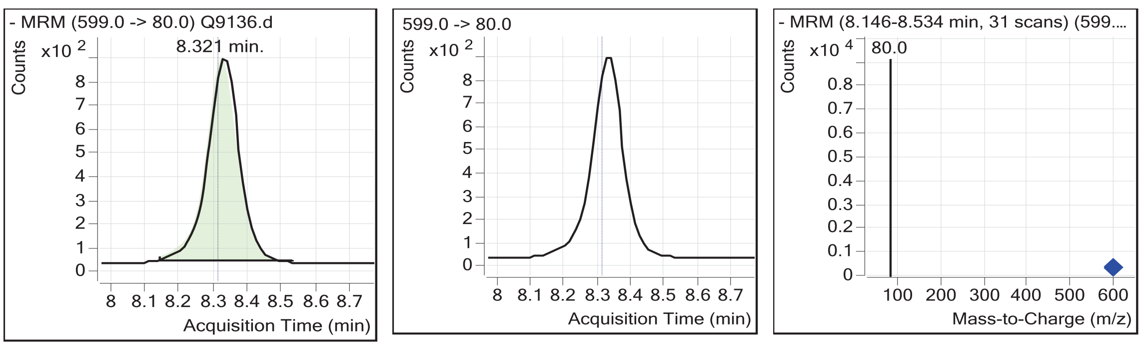


Perfluorinated Compounds by LC/MS/MS.

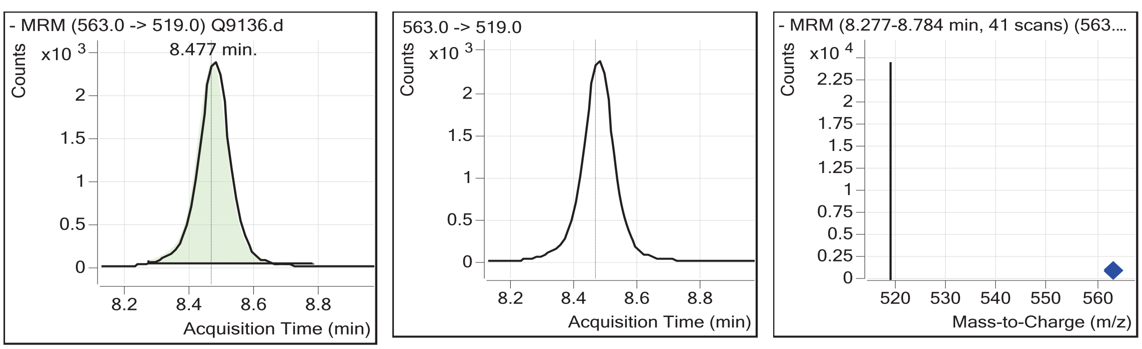
13C2-PFDA



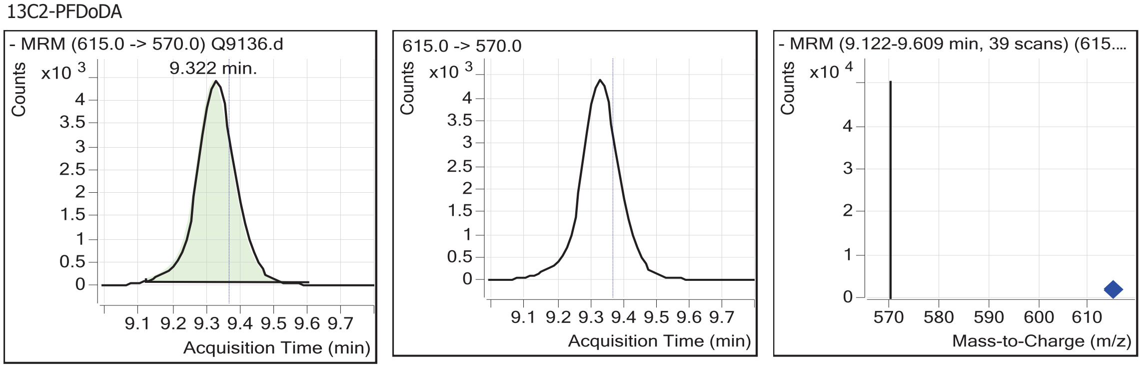
PFDS



PFUnDA

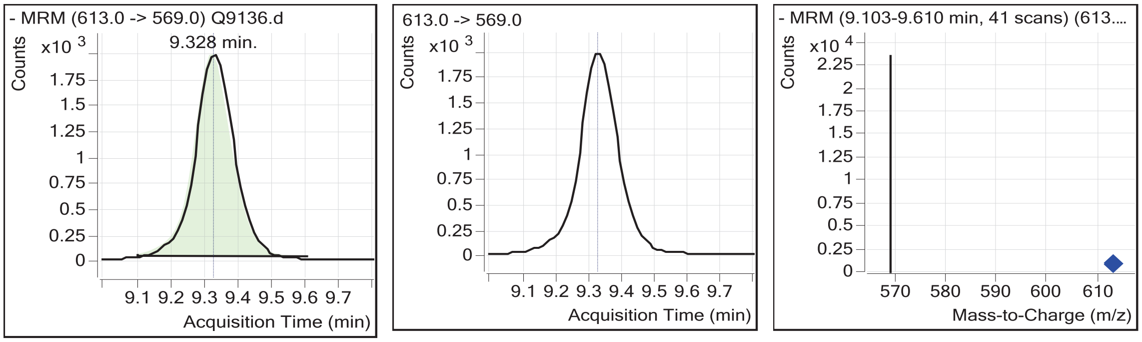


13C2-PFDoDA

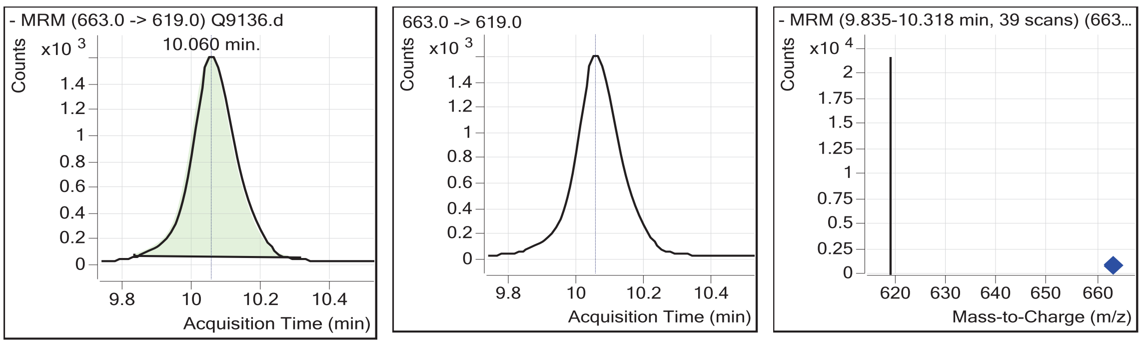


Perfluorinated Compounds by LC/MS/MS.

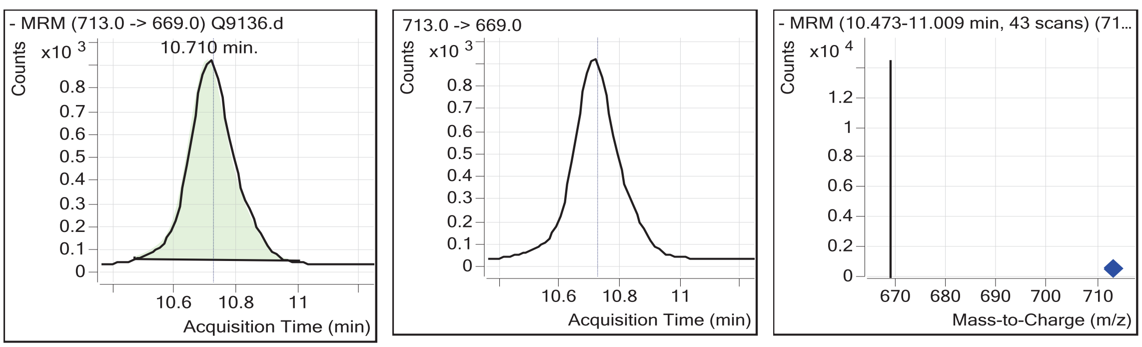
PFDoDA



PFTrDA



PFTeDA



ACCUTEST LABORATORIES SE

DATE:	12/8/14
COLUMN TYPE:	Poroshell EC-C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	414

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA, PFOS
ACQ. METHOD:	dMRM_PFOA_PFOS
PROC. METHOD:	PFC-120B, ~~SQ279~~ SQ280
CALIB. DATE:	~~12/2/14~~ 12/8/14
RUN BATCH:	SQ 280

ANALYST:	MNJ - FWPS 066640
SOLVENT A LOT #:	95/5 084023 ~~[illegible]~~
SOLVENT B LOT #:	081052
WATER LOT #:	684032
ISTD Lot #:	LC 488

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 8628	1	CCB	PFC	—					—
Q 29	1	CCB		—					—
Q 30	2	rt check		—					—
Q 31	2	CC276-20		LC487	200/500				Low (high ISTD)
Q 32	3	CC276-20							Low
Q 33	1	CCB							
Q 34	2	ICC280-2.5		LC487	25/500				✓
Q 35	3	-5.0			50/500				✓
Q 36	4	-10			100/500				✓
Q 37	5	ICC280-20			200/500				✓
Q 38	6	ICC280-30			300/500				✓
Q 39	7	-40			400/500				✓
Q 40	8	-50			1				✓ pass
Q 41	9	ICV280-20		7047	5/500				✓ pass C13, C14 high
Q 42	10	ICV280-20		LC485	40/500			SP	✓ pass
Q 43	11	OP54108-TBS		54105	1			SP	✓ LAST 4 low RR
Q 44	12	FA20136-1			5/500			SP	✓ RR
Q 45	13	FA20172-26		54086	250/500			SP	—
Q 46	14	FA20172-27		54098	50/500			SP	—
Q 47	15	-28			100/500			SP	—

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature: [signature]

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ACCUTEST LABORATORIES SE

LCMS1-Q ANALYSIS LOG

DATE:	12/8/14
COLUMN TYPE:	Poroshell EC-C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	414

METHODS:	PFOA - PFOS
ACQ. METHOD:	dMRM-PFOA_PFOS
PROC. METHOD:	PFC-1208.5 PFOS
CALIB. DATE:	12/8/14
RUN BATCH: SQ	280

ANALYST:	[illegible] / PFAS
SOLVENT A LOT #:	95/5 084023/066640
SOLVENT B LOT #:	080052
WATER LOT #:	084023
ISTD Lot #:	LC458

	DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q	8648	16	FA20172-29	PFC	54098	100/500			SP	
Q	49	17	.30							
Q	50	18	-31			250/500				
Q	51	19	FA20173-1			50/500				
Q	52	20	-2			1				
Q	53	5	CC280.20		LC487	200/500				
Q	54	1	CCB		—	—				PFAS
Q	55	21	op54121-BS		54121	1			SP	
Q	56	22	-MB							✓
Q	57	23	C37320-1							BDL
Q	58	24	op54121-MS						SP	✓
Q	59	25	-MSD						SP	✓
Q	6060	26	C37320-2						SP	✓
Q	61	27	-3							BDL
Q	62	28	-5							BDL
Q	63	29	C37352-1							BDL
Q	64	30	op54121-MS2		54121	1			SP	✓
Q	65	5	CC280.20		LC487	200/500			SP	✓
Q	66	1	CCB		—	—				PFAS ND
Q	67	31	op54121-MSD2		54121	1			SP	✓ High RPD

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
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LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature: [signature]

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ACCUTEST LABORATORIES SE

DATE:	12/8/14
COLUMN TYPE:	Poroshell EC-C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	414

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA . PFOS
ACQ. METHOD:	dMRM_PFOA-PFOS
PROC. METHOD:	PFC-1208-SQ280
CALIB. DATE:	12/8/14
RUN BATCH:	SQ 280

ANALYST:	MAS
SOLVENT A LOT #:	084023 / 066640
SOLVENT B LOT #:	~~080083~~ 081052
WATER LOT #:	084032
ISTD Lot #:	LC488

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 8668	32	C37352-2	PFC	54121	1		•	SP	✓
Q 69	33	-3							✓
Q 70	34	-4							✓
Q 71	35	-5							BDL
Q 72	36	-6							
Q 73	37	-8							
Q 74	38	-9							
Q 75	39	FA20272-1						SD	✓
Q 76	40	-2						SP	✓
Q 77	5	CC280-20		LC487	200/400				PASS
Q 78	1	CCB		—	—				BDL
Q 79	41	FA20328-2		54121	1				BDL
Q 80	43	C37304-8		54058					LAS ISTD out, wD
Q 81	42	ECC280-20		LC487	200/400				PASS PFDA↑
Q									
Q									
Q									
Q									
Q									
Q									

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

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Analyst's Signature: MAS

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ACCUTEST LABORATORIES SE

LCMS1-Q ANALYSIS LOG

DATE:	12-18-14
COLUMN TYPE:	Poroshell ECC18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

MRE 12/19/14

METHODS:	PFOA PFOS
ACQ. METHOD:	d MAM PFOA PFOS
PROC. METHOD:	1218 PFC 1200 >2400
CALIB. DATE:	12-08-14
RUN BATCH:	SQ 289

ANALYST:	MRE NAS
SOLVENT A LOT #:	95/5 084623 / 066640
SOLVENT B LOT #:	081422
WATER LOT #:	084623
ISTD Lot #:	LC4488

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9030	1	ccb	PFC						IS low
Q 31	2	ccb							
Q 32	1	ccb							
Q 33	1	ccb							
Q 34	1	ccb							✓
Q 35	1	ccb							✓
Q 36	1	ccb							✓
Q 37	2	CC280-20		LC4487	200/100				P(33) low PFNA, high PFOS, low 13C2-PFOA
Q 38	3	OP54254-bs		OP54254	1x			SP	✓ IS low PFDoA
Q 39	4	-mb							ND
Q 40	5	FA20443-1			70/100 10x			SP	✓ Run 1x
Q 41	6	-2			270/100 4x				✓ Run 1x
Q 42	7	-3			1x				✓
Q 43	8	OP54254-ms							✓
Q 44	9	-msd							✓
Q 45	10	FA20443-4			100/150 5x				✓ Run 1x
Q 46	2	CC280-4		LC4487	200/100				P(33) PFOA, PFOS high
Q 47	1	ccb							✓
Q 48	11	FA20501-6		OP54254	1x				ND
Q 49	12	-7							ND

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
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LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature: [signature]

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ACCUTEST LABORATORIES SE

DATE:	12-14-14
COLUMN TYPE:	Poroshell EC C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT: LCMS1-Q	
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA PFOS
ACQ. METHOD:	d mAm PFOA PFOS
PROC. METHOD:	PFC 1204 SQ240
CALIB. DATE:	12-08-14
RUN BATCH: SQ	289

ANALYST:	MAE MS
SOLVENT A LOT #:	84623/068840
SOLVENT B LOT #:	091422
WATER LOT #:	084623
ISTD Lot #:	LC488

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9050	13	FA20443-1	PFC	OP54854	1x			SP	✓ Report w/ 10x
Q 51	14	-2							✓ Report w/ 2x
Q 52	15	-4							✓ Report w/ 5x
Q 53	16	FA20654-12							✓
Q 54	17	-13							✓ ~~SST~~ mis/MSD
Q 55	18	-13			10 to 20 10x				✓ Run 20X (PFBA)
Q 56	2	FCC240-20		LC487	20/50				Pass PFOA, PFOS ↑
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q							NAS	12-14-14	
Q									
Q									
Q									
Q									

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

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Analyst's Signature: [signature]

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ACCUTEST LABORATORIES SE

DATE:	12-19-14
COLUMN TYPE:	Acquity BEH C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	406

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA PFOS
ACQ. METHOD:	1 MRM PFOA PFOS
PROC. METHOD:	PFC 1208 SQ290
CALIB. DATE:	12-08-14
RUN BATCH:	SQ 290

ANALYST:	MLE AMS
SOLVENT A LOT #:	9T/584623 / 066640
SOLVENT B LOT #:	~~GT~~ 091422
WATER LOT #:	044623
ISTD Lot #:	LC448

	DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q	9057	1	ccb	PFC	—					ND
Q	58	1	ccb		—					✓
Q	59	1	ccb		—					✓
Q	60	2	rt check		LC487					✓
Q	61	1	ccb		—					✓
Q	62	1	ccb		—					✓
Q	63	2	CC240-20		LC487	200/500				~~ST~~ IS ↓ Review
Q	64	1	ccb		—					ND
Q	65	2	IC240-2.5		LC487	25/500				✓ RT off
Q	66	3	-5.0			50/500				✓
Q	67	4	-10.0			100/500				✓
Q	68	5	ICC240-20			200/500				✓
Q	69	6	IC240-30			300/500				✓
Q	70	7	-40			400/500				✓ Fix R.T. AA
Q	71	1	ccb		—					ND
Q	72	2	IC240-2.5		LC487	25/500				✓
Q	73	3	-5.0			50/500				✓
Q	74	4	-10.0			100/500				✓
Q	75	5	ICC240-20			200/500				✓
Q	76	6	IC240-30			300/500				✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls NF rev. 10/12

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Analyst's Signature: [signature]

ACCUTEST LABORATORIES SE

DATE:	12-19-14
COLUMN TYPE:	Poroshell EC C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	406

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA PFOS
ACQ. METHOD:	A MRM PFOA PFOS
PROC. METHOD:	PFC 1208 SR240
CALIB. DATE:	12-08-14
RUN BATCH:	SQ 290

ANALYST:	MPE NAS
SOLVENT A LOT #:	9515 44123/044640
SOLVENT B LOT #:	091422
WATER LOT #:	044623
ISTD Lot #:	LC4045

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9077	7	ICL240-40	PFC	LC4497	400/500				✓
Q 78	8	-50		↓	1x				✓
Q 79	9	ICV240-20		7047	5/500				Pass
Q 80	10	ECV240-20		LC4466	40/500				Pass
Q 81	11	FA20659-13		OP54254	20x 25/500			SP	✓
Q 82	12	FA20443-3			1x			SP	✓
Q 83	13	OP54274-RS		OP54279				SP	✓
Q 84	14	-MB							ND
Q 85	15	FA20500-1						SP	✓ Am 5x
Q 86	16	-2						SP	✓ 5x
Q 87	17	-3						SP	✓ 5x
Q 88	18	-4						SP	✓ 5x
Q 89	19	-5						SP	✓ 5x
Q 90	20	-6						SP	✓
Q 91	5	CC240-20		LC4487	200/500				Pass
Q 92	1	ccb							ND
Q 93	21	FA20500-7		OP54279	1x			SP	✓ 2x
Q 94	22	FA20501-1						SP	✓ RR 1.07
Q 95	23	-2						SP	✓
Q 96	24	-3						SP	✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

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Analyst's Signature: MM

ACCUTEST LABORATORIES SE

DATE:	12-19-14
COLUMN TYPE:	Poroshell FC C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	406

LCMS1-Q ANALYSIS LOG

METHODS:	PFC14 P #05
ACQ. METHOD:	d mem PFC14 PFC0Y
PROC. METHOD:	PFC 1218 SQ-290
CALIB. DATE:	12-08-14
RUN BATCH:	SQ 290

ANALYST:	MAE NHS
SOLVENT A LOT #:	951T 64623 / 166040
SOLVENT B LOT #:	091422
WATER LOT #:	044623
ISTD Lot #:	LC 488

	DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q	9097	25	OP54279-ms	PFC	OP54279	1x			SP	✓
Q	98	26	-msd							✓
Q	99	27	FA20501-4							✓
Q	9100	28	-5							✓
Q	01	29	-8							✓
Q	02	5	CC290-20		LC487	200/50				Pass
Q	03	1	ccb		—					ND
Q	04	30	OP54245-bs		OP54245	1x			SP	✓
Q	05	31	-mb							ND
Q	06	32	LC495-surr		LC495	TOX 10/50				✓
Q	07	33	FA20659-1		OP54295	1x			Sp	✓
Q	08	34	-2							✓
Q	09	35	-3							✓
Q	10	36	-4							✓
Q	11	37	OP54245-ms							✓
Q	12	38	-msd							✓
Q	13	5	CC290-20		LC487	200/50				Pass
Q	14	1	ccb		—					ND
Q	15	39	FA20659-T		OP54245	1x				✓
Q	16	40	-6							✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
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LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature: [signature]

ACCUTEST LABORATORIES SE

LCMS1-Q ANALYSIS LOG

DATE:	12-19-14
COLUMN TYPE:	Phenomenex ECC14
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	4606

METHODS:	PFOA PFUS
ACQ. METHOD:	dmcm PF14 PFUS
PROC. METHOD:	PFC 1208 SQ290
CALIB. DATE:	12-08-14
RUN BATCH:	SQ 290

ANALYST:	MRE NAS
SOLVENT A LOT #:	9515 44623/056640
SOLVENT B LOT #:	091422
WATER LOT #:	084623
ISTD Lot #:	LC488

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 91 17	41	FA20659-7	PFC	OP54295	1X	✓		SP	✓
Q 18	42	-8							✓ SS TRR
Q 19	43	-9							✓
Q 20	44	-10							✓
Q 21	45	-11							✓
Q 22	5	ECC 290-20		LC487	200/500				P(U)
Q 23	1	CCB							ND
Q									
Q									
Q									
Q									
Q									
Q									
Q						NAS	12-22-14		
Q									
Q									
Q									
Q									
Q									
Q									

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
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LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature: [signature]

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ACCUTEST LABORATORIES SE

LCMS1-Q ANALYSIS LOG

DATE:	12-21-14
COLUMN TYPE:	Poroshell ECL18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	~~410~~ 413

METHODS:	PFOA PFOS
ACQ. METHOD:	d mrm PFOA PFOS
PROC. METHOD:	PFC 1204 SQ 280
CALIB. DATE:	12-04-14
RUN BATCH:	SQ ~~290~~ 291

ANALYST:	mre MAS
SOLVENT A LOT #:	9515 94623 / 066640
SOLVENT B LOT #:	091422
WATER LOT #:	094623
ISTD Lot #:	LC448

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9124	1	ccb	PFC	—					✓
Q 25	1	ccb		—					✓
Q 26	2	CC290-20		LC487	200/200				Pass
Q 27	1	ccb		—					NO
Q 28	3	FA20659-8		OP54245	1x			SP	✓ ss T TzyLx
Q 29	4	FA20501-1		OP54279	1			SP	✓
Q 30	5	FA20500-7			.2x 250/500			SP	✓
Q 31	6	FA20500-1			1x 140/500			SP	✓
Q 32	7	-2			100/500				✓
Q 33	8	-3							✓
Q 34	9	-4							✓
Q 35	10	-5							✓
Q 36	2	ECC290-20		LC487	200/200				Pass
Q									
Q									
Q									
Q							12-22-14		
Q						MAS			
Q									
Q									

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
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LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature: [signature]

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SPE LIQUID SAMPLE PREP REPORT

Date/Time Started: 12/16/14 1000 {mm/dd/yy 24:00}

Date/Time Finished: 12/16/14 1600 {mm/dd/yy 24:00}

Batch#: OP 54254

Prep Method: 3535A or Method (circle)

Analytical Method: LC 537

Ext. By: MB   Vialed By: MB

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54254 MB	X	125	6	N/A	20 ul		1 ml	
OP 54254 BS		125				80 ul		
FA 20501-6	1	125						
-7	1	125						
FA 20659-12	1	1000						1L amber Glass
-13	1	1000						
FA 20443-1	1	125						
-2	1	125						
-3	1	120						
-4	1	125						
FA 20443-3 MS	3	~~60~~ 120	6	N/A	20 ul	80 ul	1 ml	
-3 MSD	5	~~60~~ 125						
DUP								

MB 12/16/14

MB 12/16/14

Comments:

Surr. ID: LC 486 Conc: 1 ppm Exp. Date: 05/19/15 Inj. By: MB Ver. By MB

Spk.1 ID: LC 485 Conc: 250 ppb Exp. Date: 05/17/15 Inj. By: MB Ver. By MB

Spk.2 ID: — Conc: — Exp. Date: — Inj. By: — Ver. By —

CH2CL2 Lot #: —   Hexane Lot #: —   Na2SO4 Lot#: —

Acetonitrile Lot #: —   Methanol Lot #: 081052   Water Lot#: OP 54108 DI H2O

Syringe Filter Lot#: —   SPE Lot #: S300-192   Reagent #: —

Relinquished By: [signature]   Date: 12/16/14

Accepted By: [signature]   Date: 12/17/14

NF rev. 09/14/12   extwater_spe 091412.xls

ACCUTEST LABORATORIES SE

SPE LIQUID SAMPLE PREP REPORT

Date/Time: 12/17/14 1100
Started {mm/dd/yy 24:00}

Date/Time: 12/17/14 1530
Finished {mm/dd/yy 24:00}

Batch#: OP54279

Prep Method: 3535A or Method (circle)

Analytical Method: LC537

Ext. By: MB

Vialed By: MB

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP54279 MB	X	125	6	N/A	20ul	~~80~~	1ml	
OP54279 BS		125				80ul		
FA20500-1	1	125						
-2	1	125						
-3	1	120						
-4	1	120						
-5	1	125						
-6	1	125						
-7	1	125						
FA20501-1	1	120						
-2	1	125						
-3	1	120						
-4	1	120						
-5	1	125						
-8	1	125						
				MB 12/17/14				
FA20501-3 MS	2	60	6	N/A	20ul	80ul	1ml	
-3 MSD	3	60						
DUP								

Comments:

Surr. ID: LC486 Conc: 1ppm Exp. Date: 05/19/15 Inj. By: MB Ver. By MB
Spk.1 ID: LC485 Conc: 250ppb Exp. Date: 05/17/15 Inj. By: MB Ver. By MB
Spk.2 ID: / Conc: / Exp. Date: / Inj. By: / Ver. By /

CH2CL2 Lot #: /
Acetonitrile Lot #: /
Syringe Filter Lot#: /
Hexane Lot #: /
Methanol Lot #: 08/052
SPE Lot #: S300-192
Na2SO4 Lot#: /
Water Lot#: OP54108 DI H_2O
Reagent #: /

Relinquished By: [signature] Date: 12/17/14

Accepted By: [signature] Date: 12/17/14

NF rev. 09/14/12 extwater_spe 091412.xls

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Sample_Basis	Extraction_Method	Result_Type	Lab_QC_Type	Sample_Medium	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	GC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/04/2014 10:20	12/05/2014			20141211	10:00:00	20141216	12:54:00	FA20472-12	20	3			13C2-PFHxA	13C2-PFHXA	0	0	PCT	*	*	PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/04/2014 10:20	12/05/2014			20141211	10:00:00	20141216	12:54:00	FA20472-12	20	3			13C2-PFDA	13C2-PFDA	0	0	PCT	*	*	PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141216	12:12:00	FA20472-8	5	2			13C2-PFHxA	13C2-PFHXA	135	135	PCT	*	*	PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MSD	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	23:01:00	OP54279-MSD	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	9	9	PCT	*	*	PR	TRG		MSP	30		20131112				4.2	0.017	0.033	0.042	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	2	1			Benzene	71-43-2	100	100	PCT	D	D	MS	TRG		LSA	120	80	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 12:30	12/06/2014			20141217	18:37:00	20141217	18:37:00	NBS20-MW97-1S-1214-MS1	10	1			1,1-Dichloroethene	75-35-4	100	100	PCT	D	D	MS	TRG		LSA	130	70	20080107				4.1	2.50	5.00	10.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MSD1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/05/2014 13:10	12/06/2014			20141216	16:59:00	20141216	16:59:00	NBS20-SW01-1214-MSD1	20	1			Benzene	71-43-2	101	101	PCT	D	D	MS	TRG		LSA	120	80	20080107				4.1	5.00	10.0	20.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW03-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	RA0	REG	W	4	12/05/2014 14:55	12/06/2014			20141212	10:15:00	20141231	15:53:00	1412073-13	10	1			1,4-Dioxane	123-91-1	102	102	UG_L	D	D	MS	TRG									4.1	1.19	2.38	4.76	1412073	5A00202		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	2	1			1,1,1-Trichloroethane	71-55-6	103	103	PCT	D	D	MS	TRG		LSA	130	65	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	2	1			cis-1,2-Dichloroethene	156-59-2	103	103	PCT	D	D	MS	TRG		LSA	125	70	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 13:10	12/06/2014			20141216	16:31:00	20141216	16:31:00	NBS20-SW01-1214-MS1	20	1			Trichloroethene	79-01-6	103	103	PCT	D	D	MS	TRG		LSA	125	70	20080107				4.1	5.00	10.0	20.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MSD1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/05/2014 13:10	12/06/2014			20141216	16:59:00	20141216	16:59:00	NBS20-SW01-1214-MSD1	20	1			cis-1,2-Dichloroethene	156-59-2	103	103	PCT	D	D	MS	TRG		LSA	125	70	20080107				4.1	5.00	10.0	20.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NBS01-A1-MW6A-R15-MS2	2	1			Benzene	71-43-2	104	104	PCT	D	D	MS	TRG		LSA	120	80	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	2	1			o-Xylene	95-47-6	104	104	PCT	D	D	MS	TRG		LSA	120	80	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	2	1			Trichloroethene	79-01-6	104	104	PCT	D	D	MS	TRG		LSA	125	70	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 12:30	12/06/2014			20141217	18:37:00	20141217	18:37:00	NBS20-MW97-1S-1214-MS1	10	1			Benzene	71-43-2	104	104	PCT	D	D	MS	TRG		LSA	120	80	20080107				4.1	2.50	5.00	10.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MSD1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/05/2014 12:30	12/06/2014			20141217	19:05:00	20141217	19:05:00	NBS20-MW97-1S-1214-MSD1	10	1			1,1-Dichloroethene	75-35-4	104	104	PCT	D	D	MS	TRG		LSA	130	70	20080107				4.1	2.50	5.00	10.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MSD1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/05/2014 13:10	12/06/2014			20141216	16:59:00	20141216	16:59:00	NBS20-SW01-1214-MSD1	20	1			trans-1,2-Dichloroethene	156-60-5	104	104	PCT	D	D	MS	TRG		LSA	140	60	20080107				4.1	5.00	10.0	20.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NBS01-A1-MW6A-R15-MS2	2	1			1,1-Dichloroethene	75-35-4	105	105	PCT	D	D	MS	TRG		LSA	130	70	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NBS01-A1-MW6A-R15-MS2	2	1			Trichloroethene	79-01-6	105	105	PCT	D	D	MS	TRG		LSA	125	70	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	2	1			Toluene	108-88-3	105	105	PCT	D	D	MS	TRG		LSA	120	75	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MSD1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/05/2014 12:30	12/06/2014			20141217	19:05:00	20141217	19:05:00	NBS20-MW97-1S-1214-MSD1	10	1			Benzene	71-43-2	105	105	PCT	D	D	MS	TRG		LSA	120	80	20080107				4.1	2.50	5.00	10.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MSD1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/05/2014 13:10	12/06/2014			20141216	16:59:00	20141216	16:59:00	NBS20-SW01-1214-MSD1	20	1			Trichloroethene	79-01-6	105	105	PCT	D	D	MS	TRG		LSA	125	70	20080107				4.1	5.00	10.0	20.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NBS01-A1-MW6A-R15-MS2	2	1			1,1,1-Trichloroethane	71-55-6	106	106	PCT	D	D	MS	TRG		LSA	130	65	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NBS01-A1-MW6A-R15-MS2	2	1			o-Xylene	95-47-6	106	106	PCT	D	D	MS	TRG		LSA	120	80	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	2	1			Ethylbenzene	100-41-4	106	106	PCT	D	D	MS	TRG		LSA	125	75	20080107				4.1	0.500	1.00	2.00	1412045	4L34611		

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Sample_Basis	Extraction_Method	Result_Type	Lab_QC_Type	Sample_Medium	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_Time	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	GC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW57-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:55	12/05/2014			20141211	10:00:00	20141215	22:23:00	FA20472-11	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 14:45	12/06/2014			20141216	10:00:00	20141218	21:48:00	FA20501-6	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:00	12/06/2014			20141216	10:00:00	20141218	22:08:00	FA20501-7	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 17:00	12/06/2014			20141217	11:00:00	20141220	00:00:00	FA20501-8	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW101-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141217	11:00:00	20141219	22:01:00	FA20501-2	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW59-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 10:55	12/06/2014			20141217	11:00:00	20141219	23:40:00	FA20501-5	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 14:45	12/06/2014			20141216	10:00:00	20141218	21:48:00	FA20501-6	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:00	12/06/2014			20141216	10:00:00	20141218	22:08:00	FA20501-7	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 17:00	12/06/2014			20141217	11:00:00	20141220	00:00:00	FA20501-8	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW101-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141217	11:00:00	20141219	22:01:00	FA20501-2	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW59-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 10:55	12/06/2014			20141217	11:00:00	20141219	23:40:00	FA20501-5	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 14:45	12/06/2014			20141216	10:00:00	20141218	21:48:00	FA20501-6	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:00	12/06/2014			20141216	10:00:00	20141218	22:08:00	FA20501-7	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 17:00	12/06/2014			20141217	11:00:00	20141220	00:00:00	FA20501-8	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW101-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141217	11:00:00	20141219	22:01:00	FA20501-2	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW59-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 10:55	12/06/2014			20141217	11:00:00	20141219	23:40:00	FA20501-5	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 14:45	12/06/2014			20141216	10:00:00	20141218	21:48:00	FA20501-6	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:00	12/06/2014			20141216	10:00:00	20141218	22:08:00	FA20501-7	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 17:00	12/06/2014			20141217	11:00:00	20141220	00:00:00	FA20501-8	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW101-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141217	11:00:00	20141219	22:01:00	FA20501-2	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW59-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 10:55	12/06/2014			20141217	11:00:00	20141219	23:40:00	FA20501-5	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 14:45	12/06/2014			20141216	10:00:00	20141218	21:48:00	FA20501-6	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:00	12/06/2014			20141216	10:00:00	20141218	22:08:00	FA20501-7	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 17:00	12/06/2014			20141217	11:00:00	20141220	00:00:00	FA20501-8	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OP54279		

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Sample_Basis	Extraction_Method	Result_Type	Lab_QC_Type	Sample_Medium	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_Time	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	GC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N6247011D8012	WE79		NORFOLK_NB	4L15015-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 09:42	12/15/2014			20141215	09:42:00	20141215	09:42:00	4L15015-BLK1	1	1			Vinyl chloride	75-01-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4L15026-BLK1	1	1			1,1-Dichloroethene	75-35-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4L15026-BLK1	1	1			Benzene	71-43-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4L15026-BLK1	1	1			cis-1,2-Dichloroethene	156-59-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4L15026-BLK1	1	1			trans-1,2-Dichloroethene	156-60-5	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4L15026-BLK1	1	1			Trichloroethene	79-01-6	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4L15026-BLK1	1	1			Vinyl chloride	75-01-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 08:15	12/05/2014			20141215	10:11:00	20141215	10:11:00	1412066-12	1	1			trans-1,2-Dichloroethene	156-60-5	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 08:15	12/05/2014			20141215	10:11:00	20141215	10:11:00	1412066-12	1	1			Trichloroethene	79-01-6	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 08:15	12/05/2014			20141215	10:11:00	20141215	10:11:00	1412066-12	1	1			Vinyl chloride	75-01-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-10	1	1			1,1-Dichloroethene	75-35-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-10	1	1			Benzene	71-43-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-10	1	1			cis-1,2-Dichloroethene	156-59-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-10	1	1			trans-1,2-Dichloroethene	156-60-5	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-10	1	1			Trichloroethene	79-01-6	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-10	1	1			Vinyl chloride	75-01-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141216	00:39:00	20141216	00:39:00	1412066-07	1	1			1,1-Dichloroethene	75-35-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141216	00:39:00	20141216	00:39:00	1412066-07	1	1			Benzene	71-43-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141216	00:39:00	20141216	00:39:00	1412066-07	1	1			trans-1,2-Dichloroethene	156-60-5	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141216	00:39:00	20141216	00:39:00	1412066-07	1	1			Trichloroethene	79-01-6	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141216	00:39:00	20141216	00:39:00	1412066-07	1	1			Vinyl chloride	75-01-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			1,1-Dichloroethene	75-35-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			Benzene	71-43-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			cis-1,2-Dichloroethene	156-59-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			trans-1,2-Dichloroethene	156-60-5	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			Trichloroethene	79-01-6	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			Vinyl chloride	75-01-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4L16001-BLK1	1	1			1,1-Dichloroethene	75-35-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4L16001-BLK1	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4L16001-BLK1	1	1			Benzene	71-43-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4L16001-BLK1	1	1			cis-1,2-Dichloroethene	156-59-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4L16001-BLK1	1	1			trans-1,2-Dichloroethene	156-60-5	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4L16001-BLK1	1	1			Trichloroethene	79-01-6	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4L16001-BLK1	1	1			Vinyl chloride	75-01-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			1,1-Dichloroethene	75-35-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			Benzene	71-43-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			cis-1,2-Dichloroethene	156-59-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			trans-1,2-Dichloroethene	156-60-5	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			Trichloroethene	79-01-6	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			Vinyl chloride	75-01-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141215	10:38:00	20141215	10:38:00	1412073-01	1	1			1,1-Dichloroethene	75-35-4	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141215	10:38:00	20141215	10:38:00	1412073-01	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141215	10:38:00	20141215	10:38:00	1412073-01	1	1			Benzene	71-43-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141215	10:38:00	20141215	10:38:00	1412073-01	1	1			cis-1,2-Dichloroethene	156-59-2	0.500	0.500	UG_L	U	U	MS	TRG									4.1	0.250	0.500	1.00	1412073	4L35006		

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CHEM_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Sample_Basis	Extraction_Method	Result_Type	Lab_QC_Type	Sample_Medium	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_Time	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	GC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MS2	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MS	W	4	12/05/2014 12:30	12/06/2014			20141212	10:15:00	20141230	01:57:00	NBS20-MW97-1S-1214-MS2	1	1			2,4,6-Tribromophenol	118-79-6	100	100	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103P-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 14:45	12/05/2014			20141210	15:00:00	20141226	13:55:00	1412066-05	1	1			2,4,6-Tribromophenol	118-79-6	101	101	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0490	0.196	0.392	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW57-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 12:55	12/05/2014			20141210	15:00:00	20141226	18:13:00	1412066-16	1	1			2,4,6-Tribromophenol	118-79-6	101	101	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW52-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 10:30	12/05/2014			20141210	15:00:00	20141226	15:13:00	1412066-08	1	1			2,4,6-Tribromophenol	118-79-6	102	102	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 15:40	12/05/2014			20141210	15:00:00	20141226	19:04:00	1412066-18	1	1			2,4,6-Tribromophenol	118-79-6	102	102	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MSD1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MSD	W	4	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141229	23:03:00	NBS20-SW01-1214-MSD1	1	1			2,4,6-Tribromophenol	118-79-6	103	103	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	4L09027-BSD1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BSD	W	4	12/09/2014 16:30	12/09/2014			20141209	16:30:00	20141226	11:44:00	4L09027-BSD1	1	1			2,4,6-Tribromophenol	118-79-6	105	105	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141210	15:00:00	20141226	14:47:00	1412066-07	1	1			2,4,6-Tribromophenol	118-79-6	105	105	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	4L09027-BSD1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BSD	W	4	12/09/2014 16:30	12/09/2014			20141209	16:30:00	20141226	11:44:00	4L09027-BSD1	1	1			2,4,6-Tribromophenol	118-79-6	105	105	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MS1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MS	W	4	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141229	22:37:00	NBS20-SW01-1214-MS1	1	1			2,4,6-Tribromophenol	118-79-6	105	105	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 14:40	12/05/2014			20141210	15:00:00	20141226	03:39:00	1412066-04	1	1			2,4,6-Tribromophenol	118-79-6	107	107	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412066	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 12:00	12/06/2014			20141210	16:50:00	20141212	17:02:00	1412073-02	1	1			2,4,6-Tribromophenol	118-79-6	110	110	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412073	4L34616		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4L15026-BS1	1	1			1,2-Dichloroethane	107-06-2	113	113	PCT			MS	TRG		LSA	130	70	20080107				4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			1,2-Dichloroethane	107-06-2	120	120	PCT			MS	TRG		LSA	130	70	20080107				4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L09034-BS2	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BS	W	4	12/10/2014 16:50	12/10/2014			20141210	16:50:00	20141212	12:14:00	4L09034-BS2	1	1			2,4,6-Tribromophenol	118-79-6	56.9	56.9	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	4L34616		
N6247011D8012	WE79		NORFOLK_NB	4L09034-BLK2	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BLK	W	4	12/10/2014 16:50	12/10/2014			20141210	16:50:00	20141212	11:47:00	4L09034-BLK2	1	1			2,4,6-Tribromophenol	118-79-6	70.9	70.9	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	4L34616		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW03-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	RAD	W	4	12/05/2014 14:55	12/06/2014			20141212	10:15:00	20141231	15:53:00	1412073-13	10	1			2,4,6-Tribromophenol	118-79-6	86.3	86.3	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.476	1.90	3.81	1412073	5A00202		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW101-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 14:35	12/06/2014			20141212	10:15:00	20141229	23:28:00	1412073-09	1	1			2,4,6-Tribromophenol	118-79-6	89.0	89.0	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-2D-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 11:10	12/06/2014			20141212	10:15:00	20141230	01:05:00	1412073-11	1	1			2,4,6-Tribromophenol	118-79-6	89.1	89.1	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW10-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 09:45	12/06/2014			20141212	10:15:00	20141230	00:40:00	1412073-10	1	1			2,4,6-Tribromophenol	118-79-6	89.2	89.2	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	4L11022-BLK1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BLK	W	4	12/12/2014 10:15	12/12/2014			20141212	10:15:00	20141229	16:12:00	4L11022-BLK1	1	1			2,4,6-Tribromophenol	118-79-6	90.2	90.2	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TW02-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 16:00	12/05/2014			20141210	15:00:00	20141226	19:30:00	1412066-19	1	1			2,4,6-Tribromophenol	118-79-6	92.1	92.1	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141209	16:30:00	20141226	19:56:00	1412073-01	1	1			2,4,6-Tribromophenol	118-79-6	92.4	92.4	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412073	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW102P-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 10:00	12/05/2014			20141210	15:00:00	20141226	12:37:00	1412066-02	1	1			2,4,6-Tribromophenol	118-79-6	92.5	92.5	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0476	0.190	0.381	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW51-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 11:50	12/05/2014			20141210	15:00:00	20141226	13:03:00	1412066-03	1	1			2,4,6-Tribromophenol	118-79-6	92.9	92.9	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	4L11022-BS1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BS	W	4	12/12/2014 10:15	12/12/2014			20141212	10:15:00	20141229	16:37:00	4L11022-BS1	1	1			2,4,6-Tribromophenol	118-79-6	92.9	92.9	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141229	22:11:00	1412073-08	1	1			2,4,6-Tribromophenol	118-79-6	93.1	93.1	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 17:00	12/06/2014			20141211	16:01:00	20141229	20:28:00	1412073-03	1	1			2,4,6-Tribromophenol	118-79-6	93.3	93.3	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW53-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 16:10	12/06/2014			20141212	10:15:00	20141230	03:13:00	1412073-14	1	1			2,4,6-Tribromophenol	118-79-6	93.5	93.5	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW03-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 14:55	12/06/2014			20141212	10:15:00	20141230	02:48:00	1412073-13	1	1			2,4,6-Tribromophenol	118-79-6	93.5	93.5	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0476	0.190	0.381	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 12:30	12/06/2014			20141212	10:15:00	20141230	01:31:00	1412073-12	1	1			2,4,6-Tribromophenol	118-79-6	93.7	93.7	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW21-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 12:15	12/06/2014			20141212	10:15:00	20141229	21:45:00	1412073-07	1	1			2,4,6-Tribromophenol	118-79-6	94.4	94.4	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW55-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 10:20	12/05/2014			20141210	15:00:00	20141226	17:22:00	1412066-14	1	1			2,4,6-Tribromophenol	118-79-6	94.7	94.7	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141210	15:00:00	20141226	16:05:00	1412066-10	1	1			2,4,6-Tribromophenol	118-79-6	95.6	95.6	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0490	0.196	0.392	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW14-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/02/2014 14:25	12/05/2014			20141209	16:30:00	20141226	16:56:00	1412066-13	1	1			2,4,6-Tribromophenol	118-79-6	95.7	95.7	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW102-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 09:55	12/05/2014			20141210	15:00:00	20141226	12:10:00	1412066-01	1	1			2,4,6-Tribromophenol	118-79-6	96.7	96.7	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW56-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 14:05	12/05/2014			20141210	15:00:00	20141226	18:38:00	1412066-17	1	1			2,4,6-Tribromophenol	118-79-6	97.0	97.0	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	4L09027-BLK1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BLK	W	4	12/09/2014 16:30	12/09/2014			20141209	16:30:00	20141226	10:50:00	4L09027-BLK1	1	1			2,4,6-Tribromophenol	118-79-6	97.2	97.2	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	4L09027-BLK1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BLK	W	4	12/09/2014 16:30	12/09/2014			20141209	16:30:00	20141226	10:50:00	4L09027-BLK1	1	1			2,4,6-Tribromophenol	118-79-6	97.2	97.2	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW100-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 09:10	12/06/2014			20141212	10:15:00	20141229	20:54:00	1412073-05	1	1			2,4,6-Tribromophenol	118-79-6	97.9	97.9	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	4L09027-BS1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BS	W	4	12/09/2014 16:30	12/09/2014			20141209	16:30:00	20141226	11:17:00	4L09027-BS1	1	1			2,4,6-Tribromophenol	118-79-6	98.5	98.5	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	4L09027-BS1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BS	W	4	12/09/2014 16:30	12/09/2014			20141209	16:30:00	20141226	11:17:00	4L09027-BS1	1	1			2,4,6-Tribromophenol	118-79-6	98.5	98.5	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW59-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 10:55	12/06/2014			20141212	10:15:00	20141229	21:20:00	1412073-06	1	1			2,4,6-Tribromophenol	118-79-6	98.6	98.6	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0490	0.196	0.392	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MSD2	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MSD	W	4	12/05/2014 12:30	12/06/2014			20141212	10:15:00	20141230	02:22:00	NBS20-MW97-1S-1214-MSD2	1	1			2,4,6-Tribromophenol	118-79-6	98.9	98.9	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW13-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 12:25	12/05/2014			20141210	15:00:00	20141226	15:39:00	1412066-09	1	1			2,4,6-Tribromophenol	118-79-6	99.2	99.2	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 12:50	12/05/2014			20141210	15:00:00	20141226	16:31:00	1412066-11	1	1			2,4,6-Tribromophenol	118-79-6	99.6	99.6	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW55P-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 10:25	12/05/2014			20141210	15:00:00	20141226	17:47:00	1412066-15	1	1			2,4,6-Tribromophenol	118-79-6	99.9	99.9	PCT_REC	X	X	MS	SURR		LSA	125	40	20080107				4.1	0.0490	0.196	0.392	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 08:15	12/05/2014			20141215	10:11:00	20141215	10:11:00	1412066-12	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	XU	XU	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 09:42	12/15/2014			20141215	09:42:00	20141215	09:42:00	4L15015-BLK1	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	XU	XU	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4L15026-BLK1	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	XU	XU	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW14-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 14:25	12/05/2014			20141215	11:38:00	20141215	11:38:00	1412066-13	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	XU	XU	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-10	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	XU	XU	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141216	00:39:00	20141216	00:39:00	1412066-07	1	1			1,2-Dichloroethane	107-06-2	0.500	0.500	UG_L	XU	XU	MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW102-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 09:55	12/05/2014			20141215	23:12:00	20141215	23:12:00	1412066-01	2	1			1,2-Dichloroethane	107-06-2	1.00	1.00	UG_L	XU	XU	MS	TRG									4.1	0.500	1.00	2.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW102P-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:00	12/05/2014			20141215	23:41:00	20141215	23:41:00	1412066-02	2	1			1,2-Dichloroethane	107-06-2	1.00	1.00	UG_L	XU	XU	MS	TRG									4.1	0.500	1.00	2.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW51-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 11:50	12/05/2014			20141216	00:10:00	20141216	00:10:00	1412066-03	2	1			1,2-Dichloroethane	107-06-2	1.00	1.00	UG_L	XU	XU	MS	TRG									4.1	0.500	1.00	2.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW52-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:30	12/05/2014			20141216	03:03:00	20141216	03:03:00	1412066-08	2	1			1,2-Dichloroethane	107-06-2	1.00	1.00	UG_L	XU	XU	MS	TRG									4.1	0.500	1.00	2.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW55-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 10:20	12/05/2014			20141215	12:07:00	20141215	12:07:00	1412066-14	2	1			1,2-Dichloroethane	107-06-2	1.00	1.00	UG_L	XU	XU	MS	TRG									4.1	0.500	1.00	2.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW55P-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 10:25	12/05/2014			20141215	12:36:00	20141215	12:36:00	1412066-15	2	1			1,2-Dichloroethane	107-06-2	1.00	1.00	UG_L	XU	XU	MS	TRG									4.1	0.500	1.00	2.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW56-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 14:05	12/05/2014			20141215	13:33:00	20141215	13:33:00	1412066-17	2	1			1,2-Dichloroethane	107-06-2	1.00	1.00	UG_L	XU	XU	MS	TRG									4.1	0.500	1.00	2.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW57-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:55	12/05/2014			20141215	13:05:00	20141215	13:05:00	1412066-16	2	1			1,2-Dichloroethane	107-06-2	1.00	1.00	UG_L	XU	XU	MS	TRG									4.1	0.500	1.00	2.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:50	12/05/2014			20141215	15:58:00	20141215	15:58:00	1412066-11	5	1			1,2-Dichloroethane	107-06-2	2.50	2.50	UG_L	XU	XU	MS	TRG									4.1	1.25	2.50	5.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW13-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 12:25	12/05/2014			20141216	03:32:00	20141216	03:32:00	1412066-09	5	1			1,2-Dichloroethane	107-06-2	2.50	2.50	UG_L	XU	XU	MS	TRG									4.1	1.25	2.50	5.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 14:40	12/05/2014			20141216	04:30:00	20141216	04:30:00	1412066-04	500	1			1,2-Dichloroethane	107-06-2	250	250	UG_L	XU	XU	MS	TRG									4.1	125	250	500	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103P-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 14:45	12/05/2014			20141216	04:59:00	20141216	04:59:00	1412066-05	500	1			1,2-Dichloroethane	107-06-2	250	250	UG_L	XU	XU	MS	TRG									4.1	125	250	500	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TW02-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 16:00	12/05/2014			20141215	16:56:00	20141215	16:56:00	1412066-19	5000	1			1,2-Dichloroethane	107-06-2	2500	2500	UG_L	XU	XU	MS	TRG									4.1	1250	2500	5000	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW08-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	04:01:00	20141216	04:01:00	1412066-06	10	1			1,2-Dichloroethane	107-06-2	5.00	5.00	UG_L	XU	XU	MS	TRG									4.1	2.50	5.00	10.0	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 15:40	12/05/2014			20141215	16:27:00	20141215	16:27:00	1412066-18	10	1			1,2-Dichloroethane	107-06-2	5.00	5.00	UG_L	XU	XU	MS	TRG									4.1	2.50	5.00	10.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW14-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MSD	W	UNK	12/04/2014 14:25	12/05/2014			20141211	10:00:00	20141215	19:37:00	OP54204-MSD	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	0	0	PCT			PR	TRG		MSP	30		20131112				4.2	0.017	0.033	0.042	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:50	12/05/2014			20141211	10:00:00	20141215	18:14:00	FA20472-3	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.0231	0.0231	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 15:40	12/05/2014			20141211	10:00:00	20141215	23:04:00	FA20472-13	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.0254	0.0254	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW13-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 12:25	12/05/2014			20141211	10:00:00	20141215	18:35:00	FA20472-4	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.0269	0.0269	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	22:21:00	FA20501-3	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.0269	0.0269	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141215	20:18:00	FA20472-8	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.028	0.028	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103P-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 14:45	12/05/2014			20141211	10:00:00	20141216	00:27:00	FA20472-2	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.0305	0.0305	UG_L			PR	TRG									4.2	0.008	0.016	0.02	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 14:40	12/05/2014			20141211	10:00:00	20141216	00:06:00	FA20472-1	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.0311	0.0311	UG_L			PR	TRG									4.2	0.008	0.016	0.02	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 15:10	12/04/2014			20141208	10:00:00	20141209	17:25:00	FA20402-3	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	0.0319	0.0319	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 15:40	12/05/2014			20141211	10:00:00	20141215	23:04:00	FA20472-13	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.0341	0.0341	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 15:05	12/04/2014			20141208	10:00:00	20141209	17:04:00	FA20402-2	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	0.0344	0.0344	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	22:21:00	FA20501-3	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0393	0.0393	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW21-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 12:15	12/06/2014			20141217	11:00:00	20141219	23:20:00	FA20501-4	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.0411	0.0411	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW52-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:30	12/05/2014			20141211	10:00:00	20141215	19:58:00	FA20472-7	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.0434	0.0434	UG_L			PR	TRG									4.2	0.008	0.016	0.02	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW21-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 12:15	12/06/2014			20141217	11:00:00	20141219	23:20:00	FA20501-4	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.051	0.051	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW52-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:30	12/05/2014			20141211	10:00:00	20141215	19:58:00	FA20472-7	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0535	0.0535	UG_L			PR	TRG									4.2	0.008	0.016	0.02	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141215	20:18:00	FA20472-8	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.0584	0.0584	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:50	12/05/2014			20141211	10:00:00	20141215	18:14:00	FA20472-3	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.0631	0.0631	UG_L			PR	TRG									4.2	0.017	0.033	0.042	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 14:20	12/04/2014			20141208	10:00:00	20141215	21:41:00	FA20402-4	1	3			Perfluorooctanoic Acid (PFOA)	335-67-1	0.0792	0.0792	UG_L			PR	TRG									4.2	0.017	0.033	0.042	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW13-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 12:25	12/05/2014			20141211	10:00:00	20141215	18:35:00	FA20472-4	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.0862	0.0862	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW13-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 12:25	12/05/2014			20141211	10:00:00	20141215	18:35:00	FA20472-4	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.0957	0.0957	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	22:21:00	FA20501-3	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.0988	0.0988	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:20	12/05/2014			20141211	10:00:00	20141216	12:33:00	FA20472-12	5	2			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.104	0.104	UG_L			PR	TRG									4.2	0.042	0.083	0.1	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:20	12/05/2014			20141211	10:00:00	20141216	12:33:00	FA20472-12	5	2			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.13	0.13	UG_L			PR	TRG									4.2	0.042	0.083	0.1	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW08-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141216	11:50:00	FA20472-6	5	2			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.145	0.145	UG_L			PR	TRG									4.2	0.042	0.083	0.1	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 15:40	12/05/2014			20141211	10:00:00	20141215	23:04:00	FA20472-13	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.151	0.151	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 15:10	12/04/2014			20141208	10:00:00	20141209	17:25:00	FA20402-3	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.157	0.157	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 15:05	12/04/2014			20141208	10:00:00	20141209	17:04:00	FA20402-2	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.157	0.157	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 15:05	12/04/2014			20141208	10:00:00	20141209	17:04:00	FA20402-2	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.214	0.214	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 15:10	12/04/2014			20141208	10:00:00	20141209	17:25:00	FA20402-3	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.219	0.219	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:50	12/05/2014			20141211	10:00:00	20141215	18:14:00	FA20472-3	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.234	0.234	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141215	20:18:00	FA20472-8	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.275	0.275	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 15:40	12/05/2014			20141211	10:00:00	20141215	23:04:00	FA20472-13	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.289	0.289	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 14:20	12/04/2014			20141208	10:00:00	20141215	21:41:00	FA20402-4	1	3			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.312	0.312	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 15:05	12/04/2014			20141208	10:00:00	20141209	17:04:00	FA20402-2	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.32	0.32	UG_L			PR	TRG									4.2	0.017	0.033	0.042	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 15:10	12/04/2014			20141208	10:00:00	20141209	17:25:00	FA20402-3	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.323	0.323	UG_L			PR	TRG									4.2	0.017	0.033	0.042	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:50	12/05/2014			20141211	10:00:00	20141215	18:14:00	FA20472-3	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.357	0.357	UG_L			PR	TRG									4.2	0.0083	0.017	0.021	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-2D-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 11:10	12/06/2014			20141212	10:15:00	20141230	01:05:00	1412073-11	1	1			1,4-Dioxane	123-91-1	0.476	0.476	UG_L			MS	TRG									4.1	0.116	0.231	0.463	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW102P-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 10:00	12/05/2014			20141210	15:00:00	20141226	12:37:00	1412066-02	1	1			1,4-Dioxane	123-91-1	0.539	0.539	UG_L			MS	TRG									4.1	0.119	0.238	0.476	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141216	12:12:00	FA20472-8	5	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.542	0.542	UG_L			PR	TRG									4.2	0.042	0.083	0.1	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/03/2014 15:40	12/05/2014			20141211	10:00:00	20141216	13:15:00	FA20472-13	2	2			Perfluorooctanoic Acid (PFOA)	335-67-1	0.625	0.625	UG_L			PR	TRG									4.2	0.033	0.067	0.083	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW102-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 09:55	12/05/2014			20141210	15:00:00	20141226	12:10:00	1412066-01	1	1			1,4-Dioxane	123-91-1	0.663	0.663	UG_L			MS	TRG									4.1	0.125	0.250	0.500	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW08-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141216	11:50:00	FA20472-6	5	2			Perfluorooctane Sulfonate (PFOS)	1763-23-1	0.782	0.782	UG_L			PR	TRG									4.2	0.042	0.083	0.1	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141216	12:12:00	FA20472-8	5	2			Perfluorooctanoic Acid (PFOA)	335-67-1	0.8	0.8	UG_L			PR	TRG									4.2	0.083	0.17	0.21	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 12:50	12/05/2014			20141210	15:00:00	20141226	16:31:00	1412066-11	1	1			1,4-Dioxane	123-91-1	0.816	0.816	UG_L			MS	TRG									4.1	0.120	0.240	0.481	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/02/2014 15:05	12/04/2014			20141208	11:45:00	20141209	17:14:00	1412045-05	1	1			1,4-Dioxane	123-91-1	0.838	0.838	UG_L			MS	TRG									4.1	0.118	0.236	0.472	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/02/2014 15:10	12/04/2014			20141208	11:45:00	20141209	17:40:00	1412045-06	1	1			1,4-Dioxane	123-91-1	0.938	0.938	UG_L			MS	TRG									4.1	0.123	0.245	0.490	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MSD	W	UNK	12/03/2014 14:20	12/04/2014			20141208	10:00:00	20141209	18:27:00	OP54151-MSD	1	1			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	1	1	PCT			PR	TRG		MSP	30		20131112				4.2	0.008	0.016	0.02	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW14-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MSD	W	UNK	12/04/2014 14:25	12/05/2014			20141211	10:00:00	20141215	19:37:00	OP54204-MSD	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	1	1	PCT			PR	TRG		MSP	30		20131112				4.2	0.033	0.067	0.083	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW30B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 12:20	12/04/2014			20141209	17:04:00	20141209	17:04:00	1412045-01	1	1			Vinyl chloride	75-01-4	1.05	1.05	UG_L			MS	TRG									4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141216	00:39:00	20141216	00:39:00	1412066-07	1	1			cis-1,2-Dichloroethene	156-59-2	1.40	1.40	UG_L			MS	TRG									4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/02/2014 15:05	12/04/2014			20141208	10:00:00	20141215	15:49:00	FA20402-2	20	2			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	1.53	1.53	UG_L			PR	TRG									4.2	0.17	0.33	0.42	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW56-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 14:05	12/05/2014			20141210	15:00:00	20141226	18:38:00	1412066-17	1	1			1,4-Dioxane	123-91-1	1.58	1.58	UG_L			MS	TRG									4.1	0.116	0.231	0.463	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/02/2014 15:10	12/04/2014			20141208	10:00:00	20141215	16:09:00	FA20402-3	20	2			Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	1.58	1.58	UG_L			PR	TRG									4.2	0.17	0.33	0.42	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 15:40	12/05/2014			20141210	15:00:00	20141226	19:04:00	1412066-18	1	1			1,4-Dioxane	123-91-1	1.73	1.73	UG_L			MS	TRG									4.1	0.120	0.240	0.481	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW24B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 09:10	12/04/2014			20141209	19:49:00	20141209	19:49:00	1412045-08	1	1			Vinyl chloride	75-01-4	1.86	1.86	UG_L			MS	TRG									4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MSD	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	23:01:00	OP54279-MSD	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	10	10	PCT			PR	TRG		MSP	30		20131112				4.2	0.017	0.033	0.042	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MSD	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	23:01:00	OP54279-MSD	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	10	10	PCT			PR	TRG		MSP	30		20131112				4.2	0.033	0.067	0.083	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW24B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 09:10	12/04/2014			20141209	19:49:00	20141209	19:49:00	1412045-08	1	1			trans-1,2-Dichloroethene	156-60-5	10.8	10.8	UG_L			MS	TRG									4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			cis-1,2-Dichloroethene	156-59-2	100	100	PCT			MS	TRG		LSA	125	70	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L10013-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/10/2014 06:47	12/10/2014			20141210	06:47:00	20141210	06:47:00	4L10013-BS1	1	1			Dibromofluoromethane	1868-53-7	100	100	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34608		
N6247011D8012	WE79		NORFOLK_NB	4L10013-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/10/2014 06:47	12/10/2014			20141210	06:47:00	20141210	06:47:00	4L10013-BS1	1	1			m- and p-Xylene	m&pXylene	100	100	PCT			MS	TRG		LSA	130	75	20080107				4.1	0.500	1.00	2.00	1412045	4L34608		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW24B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 09:10	12/04/2014			20141209	19:49:00	20141209	19:49:00	1412045-08	1	1			1,2-Dichloroethane-d4	17060-07-0	100	100	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW24B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 09:10	12/04/2014			20141209	19:49:00	20141209	19:49:00	1412045-08	1	1			Toluene-d8	2037-26-5	100	100	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	1	1			Toluene-d8	2037-26-5	100	100	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A2-MW29-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 11:50	12/04/2014			20141209	17:59:00	20141209	17:59:00	1412045-04	1	1			Bromofluorobenzene	460-00-4	100	100	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:10	12/04/2014			20141209	18:54:00	20141209	18:54:00	1412045-06	2	1			Toluene-d8	2037-26-5	100	100	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW18B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 13:25	12/04/2014			20141209	17:32:00	20141209	17:32:00	1412045-02	1	1			Bromofluorobenzene	460-00-4	100	100	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW30B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 12:20	12/04/2014			20141209	17:04:00	20141209	17:04:00	1412045-01	1	1			Toluene-d8	2037-26-5	100	100	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 09:42	12/15/2014			20141215	09:42:00	20141215	09:42:00	4L15015-BLK1	1	1			Bromofluorobenzene	460-00-4	100	100	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			Bromofluorobenzene	460-00-4	100	100	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 14:40	12/05/2014			20141211	10:00:00	20141216	00:06:00	FA20472-1	1	1			13C2-PFDA	13C2-PFDA	100	100	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW14-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/02/2014 14:25	12/05/2014			20141211	10:00:00	20141215	19:16:00	OP54204-MS	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	100	100	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.033	0.067	0.083	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW52-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:30	12/05/2014			20141211	10:00:00	20141215	19:58:00	FA20472-7	1	1			13C2-PFDA	13C2-PFDA	100	100	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/03/2014 15:40	12/05/2014			20141211	10:00:00	20141216	13:15:00	FA20472-13	2	2			13C2-PFHxA	13C2-PFHXA	100	100	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	OP54254-MS	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	20:10:00	OP54254-MS	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	100	100	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.017	0.033	0.042	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	OP54254-MS	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	20:10:00	OP54254-MS	1	1			13C2-PFDA	13C2-PFDA	100	100	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			Dibromofluoromethane	1868-53-7	100	100	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/17/2014 08:04	12/17/2014			20141217	08:04:00	20141217	08:04:00	4L17003-BS1	1	1			Dibromofluoromethane	1868-53-7	100	100	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141215	10:38:00	20141215	10:38:00	1412073-01	1	1			Dibromofluoromethane	1868-53-7	100	100	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:00	12/06/2014			20141215	11:05:00	20141215	11:05:00	1412073-02	1	1			Bromofluorobenzene	460-00-4	100	100	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 17:00	12/06/2014			20141216	09:09:00	20141216	09:09:00	1412073-03	1	1			Bromofluorobenzene	460-00-4	100	100	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW03-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 14:55	12/06/2014			20141217	17:42:00	20141217	17:42:00	1412073-13	100	1			1,2-Dichloroethane-d4	17060-07-0	100	100	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MSD1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/05/2014 12:30	12/06/2014			20141217	19:05:00	20141217	19:05:00	NBS20-MW97-1S-1214-MSD1	1	1			Bromofluorobenzene	460-00-4	100	100	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/09/2014 13:52	12/09/2014			20141209	13:52:00	20141209	13:52:00	4L09021-BLK1	1	1			Toluene-d8	2037-26-5	101	101	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			trans-1,2-Dichloroethene	156-60-5	101	101	PCT			MS	TRG		LSA	140	60	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 14:20	12/04/2014			20141209	20:16:00	20141209	20:16:00	1412045-09	2	1			Toluene-d8	2037-26-5	101	101	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NBS01-A1-MW6A-R15-MS2	1	1			Bromofluorobenzene	460-00-4	101	101	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NBS01-A1-MW6A-R15-MS2	1	1			Toluene-d8	2037-26-5	101	101	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	1	1			Bromofluorobenzene	460-00-4	101	101	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A2-MW28B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 17:45	12/04/2014			20141209	19:21:00	20141209	19:21:00	1412045-07	2	1			Toluene-d8	2037-26-5	101	101	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:05	12/04/2014			20141209	18:26:00	20141209	18:26:00	1412045-05	2	1			Toluene-d8	2037-26-5	101	101	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-EB01-120314	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 16:15	12/04/2014			20141210	10:38:00	20141210	10:38:00	1412045-11	1	1			Bromofluorobenzene	460-00-4	101	101	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34608		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 14:20	12/04/2014			20141208	11:45:00	20141209	18:57:00	1412045-09	1	1			2,4,6-Tribromophenol	118-79-6	101	101	PCT_REC			MS	SURR		LSA	125	40	20080107				4.1	0.0481	0.192	0.385	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			1,1-Dichloroethene	75-35-4	101	101	PCT			MS	TRG		LSA	130	70	20080107				4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			1,2-Dichloroethane-d4	17060-07-0	101	101	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4L15026-BS1	1	1			Dibromofluoromethane	1868-53-7	101	101	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4L15026-BS1	1	1			Toluene-d8	2037-26-5	101	101	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS01-EB01-120314	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 16:15	12/04/2014			20141208	10:00:00	20141209	18:48:00	FA20402-5	1	1			13C2-PFDA	13C2-PFDA	101	101	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW14-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/02/2014 14:25	12/05/2014			20141211	10:00:00	20141215	19:16:00	OP54204-MS	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	101	101	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.017	0.033	0.042	1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 17:00	12/06/2014			20141217	11:00:00	20141220	00:00:00	FA20501-8	1	1			13C2-PFDA	13C2-PFDA	101	101	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	22:41:00	OP54279-MS	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	101	101	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.033	0.067	0.083	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 08:21	12/15/2014			20141215	08:21:00	20141215	08:21:00	4L15025-BS1	1	1			Dibromofluoromethane	1868-53-7	101	101	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 08:21	12/15/2014			20141215	08:21:00	20141215	08:21:00	4L15025-BS1	1	1			trans-1,2-Dichloroethene	156-60-5	101	101	PCT			MS	TRG		LSA	140	60	20080107				4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/16/2014 06:24	12/16/2014			20141216	06:24:00	20141216	06:24:00	4L16001-BS1	1	1			Bromofluorobenzene	460-00-4	101	101	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141215	10:38:00	20141215	10:38:00	1412073-01	1	1			1,2-Dichloroethane-d4	17060-07-0	101	101	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 12:30	12/06/2014			20141217	18:37:00	20141217	18:37:00	NBS20-MW97-1S-1214-MS1	1	1			Bromofluorobenzene	460-00-4	101	101	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L09034-BS2	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BS	W	4	12/10/2014 16:50	12/10/2014			20141210	16:50:00	20141212	12:14:00	4L09034-BS2	1	1			Terphenyl-d14	1718-51-0	101	101	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0500	0.100	0.200	1412073	4L34616		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			1,1,1-Trichloroethane	71-55-6	102	102	PCT			MS	TRG		LSA	130	65	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 13:20	12/04/2014			20141209	20:44:00	20141209	20:44:00	1412045-10	1	1			1,2-Dichloroethane-d4	17060-07-0	102	102	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A2-MW29-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 11:50	12/04/2014			20141209	17:59:00	20141209	17:59:00	1412045-04	1	1			Toluene-d8	2037-26-5	102	102	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141208	11:45:00	20141209	19:23:00	NBS01-A1-MW6A-R15-MS1	1	1			2,4,6-Tribromophenol	118-79-6	102	102	PCT_REC			MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			cis-1,2-Dichloroethene	156-59-2	102	102	PCT			MS	TRG		LSA	125	70	20080107				4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:50	12/05/2014			20141215	15:58:00	20141215	15:58:00	1412066-11	5	1			Bromofluorobenzene	460-00-4	102	102	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 08:15	12/05/2014			20141215	10:11:00	20141215	10:11:00	1412066-12	1	1			1,2-Dichloroethane-d4	17060-07-0	102	102	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	SF5200602	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/08/2014 10:00				20141208	10:00:00	20141209	16:02:00	OP54151-MB	1	1			13C2-PFDA	13C2-PFDA	102	102	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	OP54254-MS	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	20:10:00	OP54254-MS	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	102	102	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.0083	0.017	0.021	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			1,2-Dichloroethane-d4	17060-07-0	102	102	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/16/2014 06:24	12/16/2014			20141216	06:24:00	20141216	06:24:00	4L16001-BS1	1	1			Dibromofluoromethane	1868-53-7	102	102	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/16/2014 06:24	12/16/2014			20141216	06:24:00	20141216	06:24:00	4L16001-BS1	1	1			trans-1,2-Dichloroethene	156-60-5	102	102	PCT			MS	TRG		LSA	140	60	20080107				4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:00	12/06/2014			20141215	11:05:00	20141215	11:05:00	1412073-02	1	1			Dibromofluoromethane	1868-53-7	102	102	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 17:00	12/06/2014			20141216	09:09:00	20141216	09:09:00	1412073-03	1	1			1,2-Dichloroethane-d4	17060-07-0	102	102	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 13:10	12/06/2014			20141216	16:31:00	20141216	16:31:00	NBS20-SW01-1214-MS1	1	1			Bromofluorobenzene	460-00-4	102	102	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 12:00	12/06/2014			20141210	16:50:00	20141212	17:02:00	1412073-02	1	1			Terphenyl-d14	1718-51-0	102	102	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0463	0.0926	0.185	1412073	4L34616		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			o-Xylene	95-47-6	103	103	PCT			MS	TRG		LSA	120	80	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			Toluene	108-88-3	103	103	PCT			MS	TRG		LSA	120	75	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW18B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 13:25	12/04/2014			20141209	17:32:00	20141209	17:32:00	1412045-02	1	1			1,2-Dichloroethane-d4	17060-07-0	103	103	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			trans-1,2-Dichloroethene	156-60-5	103	103	PCT			MS	TRG		LSA	140	60	20080107				4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4L15026-BLK1	1	1			Bromofluorobenzene	460-00-4	103	103	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4L15026-BS1	1	1			Trichloroethene	79-01-6	103	103	PCT			MS	TRG		LSA	125	70	20080107				4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW30B-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/01/2014 12:20	12/04/2014			20141208	10:00:00	20141209	16:43:00	FA20402-1	1	1			13C2-PFHxA	13C2-PFHXA	103	103	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/02/2014 15:05	12/04/2014			20141208	10:00:00	20141215	15:49:00	FA20402-2	20	2			13C2-PFHxA	13C2-PFHXA	103	103	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/03/2014 14:20	12/04/2014			20141208	10:00:00	20141209	18:06:00	OP54151-MS	1	1			Perfluorobutanesulfonic Acid (PFBS)	375-73-5	103	103	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.008	0.016	0.02	1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	OP54279-BS	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BS	W	UNK	12/17/2014 11:00				20141217	11:00:00	20141219	18:05:00	OP54279-BS	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	103	103	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.008	0.016	0.02	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW10-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 09:45	12/06/2014			20141217	11:00:00	20141221	12:14:00	FA20501-1	1	1			13C2-PFHxA	13C2-PFHXA	103	103	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	22:41:00	OP54279-MS	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	103	103	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.017	0.033	0.042	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 08:21	12/15/2014			20141215	08:21:00	20141215	08:21:00	4L15025-BS1	1	1			1,2-Dichloroethane	107-06-2	103	103	PCT			MS	TRG		LSA	130	70	20080107				4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 08:21	12/15/2014			20141215	08:21:00	20141215	08:21:00	4L15025-BS1	1	1			Bromofluorobenzene	460-00-4	103	103	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 08:21	12/15/2014			20141215	08:21:00	20141215	08:21:00	4L15025-BS1	1	1			cis-1,2-Dichloroethene	156-59-2	103	103	PCT			MS	TRG		LSA	125	70	20080107				4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/17/2014 08:04	12/17/2014			20141217	08:04:00	20141217	08:04:00	4L17003-BS1	1	1			Benzene	71-43-2	103	103	PCT			MS	TRG		LSA	120	80	20080107				4.1	0.250	0.500	1.00	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 17:00	12/06/2014			20141216	09:09:00	20141216	09:09:00	1412073-03	1	1			Dibromofluoromethane	1868-53-7	103	103	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW100-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 09:10	12/06/2014			20141216	11:30:00	20141216	11:30:00	1412073-05	2	1			Dibromofluoromethane	1868-53-7	103	103	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Sample_Basis	Extraction_Method	Result_Type	Lab_QC_Type	Sample_Medium	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	GC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW21-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 12:15	12/06/2014			20141217	14:58:00	20141217	14:58:00	1412073-07	2	1			Dibromofluoromethane	1868-53-7	103	103	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			Tetrachloroethene	127-18-4	104	104	PCT			MS	TRG		LSA	150	45	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L10013-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/10/2014 08:43	12/10/2014			20141210	08:43:00	20141210	08:43:00	4L10013-BLK1	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34608		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			Vinyl chloride	75-01-4	104	104	PCT			MS	TRG		LSA	145	50	20080107				4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	OP54204-BS	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BS	W	UNK	12/11/2014 10:00				20141211	10:00:00	20141215	17:33:00	OP54204-BS	1	1			13C2-PFDA	13C2-PFDA	104	104	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW14-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 14:25	12/05/2014			20141211	10:00:00	20141215	18:55:00	FA20472-5	1	1			13C2-PFDA	13C2-PFDA	104	104	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW54-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/04/2014 16:35	12/05/2014			20141211	10:00:00	20141216	12:12:00	FA20472-8	5	2			13C2-PFDA	13C2-PFDA	104	104	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/02/2014 14:45	12/06/2014			20141216	10:00:00	20141218	21:48:00	FA20501-6	1	1			13C2-PFDA	13C2-PFDA	104	104	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 08:21	12/15/2014			20141215	08:21:00	20141215	08:21:00	4L15025-BS1	1	1			Trichloroethene	79-01-6	104	104	PCT			MS	TRG		LSA	125	70	20080107				4.1	0.250	0.500	1.00	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/16/2014 06:24	12/16/2014			20141216	06:24:00	20141216	06:24:00	4L16001-BS1	1	1			Trichloroethene	79-01-6	104	104	PCT			MS	TRG		LSA	125	70	20080107				4.1	0.250	0.500	1.00	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW101-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 14:35	12/06/2014			20141217	18:10:00	20141217	18:10:00	1412073-09	200	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-2D-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 11:10	12/06/2014			20141217	15:25:00	20141217	15:25:00	1412073-11	2	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 13:10	12/06/2014			20141216	10:59:00	20141216	10:59:00	1412073-08	20	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214-MS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 13:10	12/06/2014			20141216	16:31:00	20141216	16:31:00	NBS20-SW01-1214-MS1	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TB120514	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 08:30	12/06/2014			20141216	08:41:00	20141216	08:41:00	1412073-04	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			1,1-Dichloroethene	75-35-4	105	105	PCT			MS	TRG		LSA	130	70	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			Trichloroethene	79-01-6	105	105	PCT			MS	TRG		LSA	125	70	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L10013-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/10/2014 06:47	12/10/2014			20141210	06:47:00	20141210	06:47:00	4L10013-BS1	1	1			1,1,1-Trichloroethane	71-55-6	105	105	PCT			MS	TRG		LSA	130	65	20080107				4.1	0.250	0.500	1.00	1412045	4L34608		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/02/2014 15:10	12/04/2014			20141208	11:45:00	20141209	17:40:00	1412045-06	1	1			2,4,6-Tribromophenol	118-79-6	105	105	PCT_REC			MS	SURR		LSA	125	40	20080107				4.1	0.0490	0.196	0.392	1412045	4L34407		

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Sample_Basis	Extraction_Method	Result_Type	Lab_QC_Type	Sample_Medium	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analyte_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	GC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N6247011D8012	WE79		NORFOLK_NB	4L08014-BS1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BS	W	4	12/08/2014 11:45	12/08/2014			20141208	11:45:00	20141209	11:36:00	4L08014-BS1	1	1			2-Fluorobiphenyl	321-60-8	70.6	70.6	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0500	0.100	0.200	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-2D-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 11:10	12/06/2014			20141212	10:15:00	20141230	01:05:00	1412073-11	1	1			Terphenyl-d14	1718-51-0	70.7	70.7	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0463	0.0926	0.185	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW102-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 09:55	12/05/2014			20141210	15:00:00	20141226	12:10:00	1412066-01	1	1			2-Fluorobiphenyl	321-60-8	71.1	71.1	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0500	0.100	0.200	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW52-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 10:30	12/05/2014			20141210	15:00:00	20141226	15:13:00	1412066-08	1	1			2-Fluorobiphenyl	321-60-8	71.2	71.2	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0463	0.0926	0.185	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW59-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 10:55	12/06/2014			20141212	10:15:00	20141229	21:20:00	1412073-06	1	1			Terphenyl-d14	1718-51-0	71.4	71.4	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0490	0.0980	0.196	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141208	11:45:00	20141209	19:49:00	NBS01-A1-MW6A-R15-MSD1	1	1			2-Fluorobiphenyl	321-60-8	71.5	71.5	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0463	0.0926	0.185	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/02/2014 15:10	12/04/2014			20141208	11:45:00	20141209	17:40:00	1412045-06	1	1			2-Fluorobiphenyl	321-60-8	71.7	71.7	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0490	0.0980	0.196	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/02/2014 15:05	12/04/2014			20141208	11:45:00	20141209	17:14:00	1412045-05	1	1			Terphenyl-d14	1718-51-0	72.1	72.1	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0472	0.0943	0.189	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 17:00	12/06/2014			20141211	16:01:00	20141229	20:28:00	1412073-03	1	1			2-Fluorobiphenyl	321-60-8	72.3	72.3	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0463	0.0926	0.185	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS01-EB01-120314	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 16:15	12/04/2014			20141208	11:45:00	20141209	20:40:00	1412045-11	1	1			2-Fluorobiphenyl	321-60-8	72.4	72.4	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0463	0.0926	0.185	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW21-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 12:15	12/06/2014			20141212	10:15:00	20141229	21:45:00	1412073-07	1	1			Terphenyl-d14	1718-51-0	73.1	73.1	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0500	0.100	0.200	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141208	11:45:00	20141209	19:23:00	NBS01-A1-MW6A-R15-MS1	1	1			2-Fluorobiphenyl	321-60-8	73.7	73.7	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0463	0.0926	0.185	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141210	15:00:00	20141226	14:47:00	1412066-07	1	1			2-Fluorobiphenyl	321-60-8	74.8	74.8	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0463	0.0926	0.185	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141209	16:30:00	20141226	19:56:00	1412073-01	1	1			2-Fluorobiphenyl	321-60-8	74.8	74.8	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0463	0.0926	0.185	1412073	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MS2	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MS	W	4	12/05/2014 12:30	12/06/2014			20141212	10:15:00	20141230	01:57:00	NBS20-MW97-1S-1214-MS2	1	1			2-Fluorobiphenyl	321-60-8	75.0	75.0	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0481	0.0962	0.192	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103P-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 14:45	12/05/2014			20141210	15:00:00	20141226	13:55:00	1412066-05	1	1			2-Fluorobiphenyl	321-60-8	75.7	75.7	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0490	0.0980	0.196	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 14:40	12/05/2014			20141210	15:00:00	20141230	03:39:00	1412066-04	1	1			2-Fluorobiphenyl	321-60-8	75.8	75.8	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0463	0.0926	0.185	1412066	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW55P-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/03/2014 10:25	12/05/2014			20141210	15:00:00	20141226	17:47:00	1412066-15	1	1			2-Fluorobiphenyl	321-60-8	75.8	75.8	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0490	0.0980	0.196	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	4L11022-BS1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	BS	W	4	12/12/2014 10:15	12/12/2014			20141212	10:15:00	20141229	16:37:00	4L11022-BS1	1	1			2-Fluorobiphenyl	321-60-8	75.8	75.8	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0500	0.100	0.200	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141229	22:11:00	1412073-08	1	1			Terphenyl-d14	1718-51-0	75.9	75.9	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0481	0.0962	0.192	1412073	4L36507		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW97-1S-1214-MSD2	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MSD	W	4	12/05/2014 12:30	12/06/2014			20141212	10:15:00	20141230	02:22:00	NBS20-MW97-1S-1214-MSD2	1	1			2-Fluorobiphenyl	321-60-8	76.1	76.1	PCT_REC			MS	SURR		LSA	110	50	20080107				4.1	0.0481	0.0962	0.192	1412073	4L36519		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW51-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 11:50	12/05/2014			20141210	15:00:00	20141226	13:03:00	1412066-03	1	1			Terphenyl-d14	1718-51-0	76.6	76.6	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0481	0.0962	0.192	1412066	4L36402		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW102P-1214	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	REG	W	4	12/04/2014 10:00	12/05/2014			20141210	15:00:00	20141226	12:37:00	1412066-02	1	1			Terphenyl-d14	1718-51-0	76.7	76.7	PCT_REC			MS	SURR		LSA	135	50	20080107				4.1	0.0476	0.0952	0.190	1412066	4L36402		

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	Sample_Basis	Extraction_Method	Result_Type	Lab_QC_Type	Sample_Medium	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_Time	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	Percent_Moisture	Percent_Lipid	Chem_Name	Analyte_ID	Analysis_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	QC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/04/2014 10:30	12/05/2014			20141216	03:03:00	20141216	03:03:00	1412066-08	2	1			1,2-Dichloroethane-d4	17060-07-0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			Toluene-d8	2037-26-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/05/2014 12:15	12/06/2014			20141217	14:58:00	20141217	14:58:00	1412073-07	2	1			1,2-Dichloroethane-d4	17060-07-0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NBS01-A1-MW6A-R15-MSD2	1	1			Dibromofluoromethane	1868-53-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/01/2014 14:00	12/04/2014			20141209	14:19:00	20141209	14:19:00	1412045-03	1	1			1,2-Dichloroethane-d4	17060-07-0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-10	1	1			1,2-Dichloroethane-d4	17060-07-0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/05/2014 13:10	12/06/2014			20141216	10:59:00	20141216	10:59:00	1412073-08	20	1			1,2-Dichloroethane-d4	17060-07-0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/02/2014 15:10	12/04/2014			20141209	18:54:00	20141209	18:54:00	1412045-06	2	1			Dibromofluoromethane	1868-53-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/02/2014 15:05	12/04/2014			20141209	18:26:00	20141209	18:26:00	1412045-05	2	1			Dibromofluoromethane	1868-53-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/03/2014 09:10	12/04/2014			20141208	11:45:00	20141209	18:31:00	1412045-08	1	1			2,4,6-Tribromophenol	118-79-6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/03/2014 16:15	12/04/2014			20141208	11:45:00	20141209	20:40:00	1412045-11	1	1			2,4,6-Tribromophenol	118-79-6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/05/2014 14:55	12/06/2014			20141217	17:42:00	20141217	17:42:00	1412073-13	100	1			Bromofluorobenzene	460-00-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/05/2014 13:10	12/06/2014			20141216	10:59:00	20141216	10:59:00	1412073-08	20	1			Toluene-d8	2037-26-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	BLK	W	4	12/09/2014 13:52	12/09/2014			20141209	13:52:00	20141209	13:52:00	4L09021-BLK1	1	1			1,2-Dichloroethane-d4	17060-07-0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	BS	W	4	12/10/2014 06:47	12/10/2014			20141210	06:47:00	20141210	06:47:00	4L10013-BS1	1	1			Bromofluorobenzene	460-00-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/01/2014 13:25	12/04/2014			20141209	17:32:00	20141209	17:32:00	1412045-02	1	1			Dibromofluoromethane	1868-53-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/05/2014 12:30	12/06/2014			20141217	11:16:00	20141217	11:16:00	1412073-12	10	1			Bromofluorobenzene	460-00-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/02/2014 14:25	12/05/2014			20141215	11:38:00	20141215	11:38:00	1412066-13	1	1			1,2-Dichloroethane-d4	17060-07-0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/02/2014 14:25	12/05/2014			20141215	11:38:00	20141215	11:38:00	1412066-13	1	1			Toluene-d8	2037-26-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/04/2014 11:50	12/05/2014			20141216	00:10:00	20141216	00:10:00	1412066-03	2	1			Bromofluorobenzene	460-00-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141215	10:38:00	20141215	10:38:00	1412073-01	1	1			Bromofluorobenzene	460-00-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:05	12/04/2014			20141209	18:26:00	20141209	18:26:00	1412045-05	2	1			Bromofluorobenzene	460-00-4	96.8	96.8	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4L15015-BS1	1	1			Benzene	71-43-2	96.8	96.8	PCT			MS	TRG		LSA	120	80	20080107				4.1	0.250	0.500	1.00	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4L15026-BS1	1	1			Benzene	71-43-2	96.8	96.8	PCT			MS	TRG		LSA	120	80	20080107				4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW56-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 14:05	12/05/2014			20141215	13:33:00	20141215	13:33:00	1412066-17	2	1			Bromofluorobenzene	460-00-4	96.8	96.8	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 14:20	12/04/2014			20141209	20:16:00	20141209	20:16:00	1412045-09	2	1			Dibromofluoromethane	1868-53-7	96.9	96.9	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MSD	W	UNK	12/03/2014 14:20	12/04/2014			20141208	10:00:00	20141209	18:27:00	OP54151-MSD	1	1			13C2-PFHxA	13C2-PFHXA	97	97	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412119	OP54151		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW13-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 12:25	12/05/2014			20141211	10:00:00	20141215	18:35:00	FA20472-4	1	1			13C2-PFDA	13C2-PFDA	97	97	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DL1	REG	W	UNK	12/03/2014 15:40	12/05/2014			20141211	10:00:00	20141216	13:15:00	FA20472-13	2	2			13C2-PFDA	13C2-PFDA	97	97	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	OP54254-BS	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BS	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	18:31:00	OP54254-BS	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	97	97	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.016	0.032	0.04	1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TB120514	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 08:30	12/06/2014			20141216	08:41:00	20141216	08:41:00	1412073-04	1	1			1,2-Dichloroethane-d4	17060-07-0	97.0	97.0	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/17/2014 08:04	12/17/2014			20141217	08:04:00	20141217	08:04:00	4L17003-BS1	1	1			Bromofluorobenzene	460-00-4	97.1	97.1	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120414	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 17:00	12/06/2014			20141216	09:09:00	20141216	09:09:00	1412073-03	1	1			Toluene-d8	2037-26-5	97.1	97.1	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-TB120514	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 08:30	12/06/2014			20141216	08:41:00	20141216	08:41:00	1412073-04	1	1			Bromofluorobenzene	460-00-4	97.1	97.1	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			Bromofluorobenzene	460-00-4	97.2	97.2	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW24B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 09:10	12/04/2014			20141209	19:49:00	20141209	19:49:00	1412045-08	1	1			Dibromofluoromethane	1868-53-7	97.2	97.2	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A2-MW29-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 11:50	12/04/2014			20141209	17:59:00	20141209	17:59:00	1412045-04	1	1			Dibromofluoromethane	1868-53-7	97.2	97.2	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-TB01-120114	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:00	12/04/2014			20141209	14:19:00	20141209	14:19:00	1412045-03	1	1			Dibromofluoromethane	1868-53-7	97.2	97.2	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW105-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:50	12/05/2014			20141215	15:58:00	20141215	15:58:00	1412066-11	5	1			1,2-Dichloroethane-d4	17060-07-0	97.2	97.2	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A2-MW29-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 11:50	12/04/2014			20141209	17:59:00	20141209	17:59:00	1412045-04	1	1			1,2-Dichloroethane-d4	17060-07-0	97.3	97.3	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW60-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 15:40	12/05/2014			20141215	16:27:00	20141215	16:27:00	1412066-18	10	1			Bromofluorobenzene	460-00-4	97.3	97.3	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L10013-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/10/2014 08:43	12/10/2014			20141210	08:43:00	20141210	08:43:00	4L10013-BLK1	1	1			1,2-Dichloroethane-d4	17060-07-0	97.4	97.4	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412045	4L34608		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4L16001-BLK1	1	1			Bromofluorobenzene	460-00-4	97.4	97.4	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 13:20	12/04/2014			20141209	20:44:00	20141209	20:44:00	1412045-10	1	1			Dibromofluoromethane	1868-53-7	97.5	97.5	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW58-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:20	12/05/2014			20141216	00:39:00	20141216	00:39:00	1412066-07	1	1			Bromofluorobenzene	460-00-4	97.5	97.5	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/16/2014 06:24	12/16/2014			20141216	06:24:00	20141216	06:24:00	4L16001-BS1	1	1			Toluene-d8	2037-26-5	97.5	97.5	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW100-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 09:10	12/06/2014			20141216	11:30:00	20141216	11:30:00	1412073-05	2	1			Bromofluorobenzene	460-00-4	97.5	97.5	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	4L10013-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/10/2014 06:47	12/10/2014			20141210	06:47:00	20141210	06:47:00	4L10013-BS1	1	1			Toluene-d8	2037-26-5	97.6	97.6	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34608		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4L15026-BS1	1	1			1,1-Dichloroethene	75-35-4	97.6	97.6	PCT			MS	TRG		LSA	130	70	20080107				4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW30B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 12:20	12/04/2014			20141209	17:04:00	20141209	17:04:00	1412045-01	1	1			Dibromofluoromethane	1868-53-7	97.8	97.8	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 14:40	12/05/2014			20141216	04:30:00	20141216	04:30:00	1412066-04	500	1			1,2-Dichloroethane-d4	17060-07-0	97.8	97.8	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW52-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:30	12/05/2014			20141216	03:03:00	20141216	03:03:00	1412066-08	2	1			Bromofluorobenzene	460-00-4	97.8	97.8	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW55-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 10:20	12/05/2014			20141215	12:07:00	20141215	12:07:00	1412066-14	2	1			1,2-Dichloroethane-d4	17060-07-0	97.9	97.9	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW10-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 09:45	12/06/2014			20141217	11:45:00	20141217	11:45:00	1412073-10	1	1			1,2-Dichloroethane-d4	17060-07-0	97.9	97.9	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW103-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 14:40	12/05/2014			20141211	10:00:00	20141216	00:06:00	FA20472-1	1	1			13C2-PFHxA	13C2-PFHXA	98	98	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412120	OP54204		
N6247011D8012	WE79		NORFOLK_NB	OP54279-BS	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BS	W	UNK	12/17/2014 11:00				20141217	11:00:00	20141219	18:05:00	OP54279-BS	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	98	98	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.016	0.032	0.04	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:00	12/06/2014			20141216	10:00:00	20141218	22:08:00	FA20501-7	1	1			13C2-PFDA	13C2-PFDA	98	98	PCT			PR	SURR		SLSA	130	70	20131112				4.2				1412121	OP54254		
N6247011D8012	WE79		NORFOLK_NB	NBS20-SW01-1214	NONS	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/05/2014 13:10	12/06/2014			20141217	11:00:00	20141219	22:41:00	OP54279-MS	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	98	98	PCT			PR	TRG		MSA	130	70	20131112				4.2	0.017	0.033	0.042	1412121	OP54279		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MS2	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	MS	W	4	12/03/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NBS01-A1-MW6A-R15-MS2	1	1			Dibromofluoromethane	1868-53-7	98.0	98.0	PCT_REC			MS	SURR		LSA	115	85	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A2-MW28B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 17:45	12/04/2014			20141209	19:21:00	20141209	19:21:00	1412045-07	2	1			Bromofluorobenzene	460-00-4	98.0	98.0	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 09:42	12/15/2014			20141215	09:42:00	20141215	09:42:00	4L15015-BLK1	1	1			Toluene-d8	2037-26-5	98.0	98.0	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4L15026-BS1	1	1			cis-1,2-Dichloroethene	156-59-2	98.0	98.0	PCT			MS	TRG		LSA	125	70	20080107				4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	4L17003-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4L17003-BLK1	1	1			Bromofluorobenzene	460-00-4	98.0	98.0	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW53-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 16:10	12/06/2014			20141217	15:53:00	20141217	15:53:00	1412073-14	2	1			Bromofluorobenzene	460-00-4	98.0	98.0	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35207		
N6247011D8012	WE79		NORFOLK_NB	NBS01-EB01-120314	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 16:15	12/04/2014			20141210	10:38:00	20141210	10:38:00	1412045-11	1	1			1,2-Dichloroethane-d4	17060-07-0	98.1	98.1	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412045	4L34608		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:00	12/06/2014			20141215	11:05:00	20141215	11:05:00	1412073-02	1	1			1,2-Dichloroethane-d4	17060-07-0	98.1	98.1	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120314	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:00	12/06/2014			20141215	11:05:00	20141215	11:05:00	1412073-02	1	1			Toluene-d8	2037-26-5	98.1	98.1	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L09021-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4L09021-BS1	1	1			1,2-Dichloroethane	107-06-2	98.2	98.2	PCT			MS	TRG		LSA	130	70	20080107				4.1	0.250	0.500	1.00	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 14:20	12/04/2014			20141209	20:16:00	20141209	20:16:00	1412045-09	2	1			1,2-Dichloroethane-d4	17060-07-0	98.2	98.2	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			Bromofluorobenzene	460-00-4	98.2	98.2	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 08:21	12/15/2014			20141215	08:21:00	20141215	08:21:00	4L15025-BS1	1	1			Toluene-d8	2037-26-5	98.2	98.2	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L16001-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/16/2014 06:24	12/16/2014			20141216	06:24:00	20141216	06:24:00	4L16001-BS1	1	1			1,2-Dichloroethane-d4	17060-07-0	98.2	98.2	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412073	4L35107		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 13:20	12/04/2014			20141209	20:44:00	20141209	20:44:00	1412045-10	1	1			Bromofluorobenzene	460-00-4	98.3	98.3	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A-MW12P-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:10	12/04/2014			20141209	18:54:00	20141209	18:54:00	1412045-06	2	1			Bromofluorobenzene	460-00-4	98.3	98.3	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW6A-R15-MSD1	NONS	SVOA	8270D	SVOA	ELABT	EMPIRICAL LABS		WET	SW3510C	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141208	11:45:00	20141209	19:49:00	NBS01-A1-MW6A-R15-MSD1	1	1			2,4,6-Tribromophenol	118-79-6	98.3	98.3	PCT_REC			MS	SURR		LSA	125	40	20080107				4.1	0.0463	0.185	0.370	1412045	4L34407		
N6247011D8012	WE79		NORFOLK_NB	NBS20-MW55P-1214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 10:25	12/05/2014			20141215	12:36:00	20141215	12:36:00	1412066-15	2	1			Bromofluorobenzene	460-00-4	98.3	98.3	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15025-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4L15025-BLK1	1	1			Toluene-d8	2037-26-5	98.3	98.3	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	4L15015-BLK1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 09:42	12/15/2014			20141215	09:42:00	20141215	09:42:00	4L15015-BLK1	1	1			1,2-Dichloroethane-d4	17060-07-0	98.4	98.4	PCT_REC			MS	SURR		LSA	120	70	20080107				4.1	0.250	0.500	30.0	1412066	4L35010		
N6247011D8012	WE79		NORFOLK_NB	4L15026-BS1	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4L15026-BS1	1	1			trans-1,2-Dichloroethene	156-60-5	98.4	98.4	PCT			MS	TRG		LSA	140	60	20080107				4.1	0.250	0.500	1.00	1412066	4L35011		
N6247011D8012	WE79		NORFOLK_NB	NBS20-EB120214	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141215	10:38:00	20141215	10:38:00	1412073-01	1	1			Toluene-d8	2037-26-5	98.4	98.4	PCT_REC			MS	SURR		LSA	120	85	20080107				4.1	0.250	0.500	30.0	1412073	4L35006		
N6247011D8012	WE79		NORFOLK_NB	NBS01-A1-MW24B-R15	NONE	VOA	8260B	VOA	ELABT	EMPIRICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 09:10	12/04/2014			20141209	19:49:00	20141209	19:49:00	1412045-08	1	1			Bromofluorobenzene	460-00-4	98.5	98.5	PCT_REC			MS	SURR		LSA	120	75	20080107				4.1	0.250	0.500	30.0	1412045	4L34611		

M E M O R A N D U M CH2MHILL

Data Validation Summary

Naval Station, Norfolk Site 20

TO: Juliana Dean/VBO

Anita Dodson/VBO

FROM: Tiffany McGlynn/GNV

CC: Herb Kelly/GNV

DATE: February 12, 2015

Introduction

The following data validation report discusses the data validation process and findings for Accutest Laboratories, for SDG 1412121.

Samples were analyzed using the following analytical methods:

- 537_MOD Semivolatiles

The samples included in this SDG are listed in the table below.

Sample Name	Matrix
NBS20-MW10-1214	Water
NBS20-MW101-1214	Water
NBS20-SW01-1214	Water
NBS20-MW21-1214	Water
NBS20-MW59-1214	Water
NBS20-EB120214	Water
NBS20-EB120314	Water
NBS20-EB120414	Water

Data Evaluation

Data was evaluated in accordance with the analytical methods and with the criteria found in the following guidance documents: Sampling and Analysis Plan Long-Term Monitoring Plan for Groundwater Sites 1,2,3,6,18, and 20 Naval Station Norfolk, Norfolk Virginia, Contract Task Order WE79 (December 2014) and Region III Modifications for Organic Data Review (EPA 1994) as applicable. The samples were evaluated based on the following criteria:

- Data Completeness
- Technical Holding Times
- Instrument Tuning
- Initial/Continuing Calibrations
- Blanks
- Internal Standards
- Laboratory Control Samples
- Matrix Spike Recoveries
- Surrogate Recoveries
- Field Duplicates
- Identification/Quantitation
- Reporting Limits

Overall Evaluation of Data/Potential Usability Issues

Specific details regarding qualification of the data are addressed in the sections below. If an issue is not addressed there were no actions required based on unmet quality criteria. When more than one qualifier is associated with a compound/analyte, the validator has chosen the qualifier that best indicates possible bias in the results and qualified these data accordingly.

Data Completeness

The SDG was received complete and intact.

Technical Holding Times

According to the chain of custody records, sampling was performed on 12/2/14 through 12/5/14. Samples were received at the laboratory on 12/6/14. All sample preparation and analyses were performed within holding time requirements.

Matrix Spike/Spike Duplicate

For spiked sample NBS20-SW01-1214, perfluorohexanesulfonic Acid (PFHxS) exhibited high recoveries in the MS/MSD. Affected data are summarized in the table below.

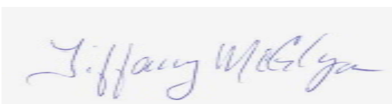
Sample ID	Compound	Q Flag	Qual Code
NBS20-SW01-1214	Perfluorohexanesulfonic Acid (PFHxS	K	MSH

Conclusion

These data can be used in the project decision-making process as qualified by the data quality evaluation process.

Please do not hesitate to contact us about this validation report.

Sincerely,



Tiffany McGlynn

Qualification Flags

Exclude	More appropriate data exist for this analyte.
R	Data were rejected for use.
UL	Analyte not detected, quantitation limit is potentially biased low.
UJ	Analyte not detected, estimated quantitation limit.
U	Analyte not detected.
B	Not detected substantially above the level reported in laboratory or field blanks.
L	Analyte present, estimated value potentially biased low.
K	Analyte present, estimated value potentially biased high.
N	Analyte identification presumptive; no second column analysis performed or GC/MS tentative identification.
J	Analyte present, estimated value.
NJ	Analysis indicates the presence of an analyte that was "tentatively identified" and the associated value represents its approximate concentration.
None	Placeholder for calculating quality control issues that do not require flagging.
=	Analyte was detected at a concentration greater than the quantitation limit.

Qualifier Code Reference

Value	Description
%SOL	High Moisture content
2C	Second Column – Poor Dual Column Reproducibility
2S	Second Source – Bad reproducibility between tandem detectors
BD	Blank Spike/Blank Spike Duplicate(LCS/LCSD) Precision
BRL	Below Reporting Limit
BSH	Blank Spike/LCS – High Recovery
BSL	Blank Spike/LCS – Low Recovery
CC	Continuing Calibration
CCBL	Continuing Calibration Blank Contamination
CCH	Continuing Calibration Verification – High Recovery
CCL	Continuing Calibration Verification – Low Recovery
DL	Redundant Result – due to Dilution
EBL	Equipment Blank Contamination
EMPC	Estimated Possible Maximum Concentration
ESH	Extraction Standard - High Recovery
ESL	Extraction Standard - Low Recovery
FBL	Field Blank Contamination
FD	Field Duplicate
HT	Holding Time
ICB	Initial Calibration – Bad Linearity or Curve Function
ICH	Initial Calibration – High Relative Response Factors
ICL	Initial Calibration – Low Relative Response Factors
IR15	Ion ratio exceeds +/- 15% difference
ISH	Internal Standard – High Recovery
ISL	Internal Standard – Low Recovery
LD	Lab Duplicate Reproducibility
LR	Concentration Exceeds Linear Range
MBL	Method Blank Contamination
MDP	Matrix Spike/Matrix Spike Duplicate Precision
MI	Matrix interference obscuring the raw data

MSH	Matrix Spike and/or Matrix Spike Duplicate – High Recovery
MSL	Matrix Spike and/or Matrix Spike Duplicate – Low Recovery
OT	Other
PD	Pesticide Degradation
RE	Redundant Result - due to Reanalysis or Re-extraction
SD	Serial Dilution Reproducibility
SSH	Spiked Surrogate – High Recovery
SSL	Spiked Surrogate – Low Recovery
TBL	Trip Blank Contamination
TN	Tune

LOCATION_NAME	SITE_NAME	INSTALLATION_ID	LOCATION_TYPE	LOCATION_TYPE_DESC	SDG	COORD_X	COORD_Y	ANALYTICAL_METHOD_GRP_DESC	SAMPLE_NAME	SAMPLE_MATRIX	SAMPLE_MATRIX_DESC	COLLECT_DATE
NBS20-SW-1	SITE 00020	NORFOLK_NB	SWS	Surface water body - nonspecific	1412121	12126388	3510026	Perfluoroalkyl Compounds	NBS20-SW01-1214	WG	Ground water	05-Dec-14
NBS20-MW-101	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126100	3510010	Perfluoroalkyl Compounds	NBS20-MW101-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120414	WQ	Water for QC samples	04-Dec-14
NBS20-MW-101	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126100	3510010	Perfluoroalkyl Compounds	NBS20-MW101-1214	WG	Ground water	05-Dec-14
NBS20-MW-101	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126100	3510010	Perfluoroalkyl Compounds	NBS20-MW101-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120214	WQ	Water for QC samples	02-Dec-14
NBS20-MW59	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126021	3509990.6	Perfluoroalkyl Compounds	NBS20-MW59-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120214	WQ	Water for QC samples	02-Dec-14
NBS20-MW-10	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12127157	3511110.3	Perfluoroalkyl Compounds	NBS20-MW10-1214	WG	Ground water	05-Dec-14
NBS20-MW-10	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12127157	3511110.3	Perfluoroalkyl Compounds	NBS20-MW10-1214	WG	Ground water	05-Dec-14
NBS20-SW-1	SITE 00020	NORFOLK_NB	SWS	Surface water body - nonspecific	1412121	12126388	3510026	Perfluoroalkyl Compounds	NBS20-SW01-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120214	WQ	Water for QC samples	02-Dec-14
NBS20-MW-101	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126100	3510010	Perfluoroalkyl Compounds	NBS20-MW101-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120214	WQ	Water for QC samples	02-Dec-14
NBS20-MW-101	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126100	3510010	Perfluoroalkyl Compounds	NBS20-MW101-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120314	WQ	Water for QC samples	03-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120314	WQ	Water for QC samples	03-Dec-14
NBS20-MW-21	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126801.5	3510057	Perfluoroalkyl Compounds	NBS20-MW21-1214	WG	Ground water	05-Dec-14
NBS20-MW-10	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12127157	3511110.3	Perfluoroalkyl Compounds	NBS20-MW10-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120214	WQ	Water for QC samples	02-Dec-14
NBS20-MW-21	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126801.5	3510057	Perfluoroalkyl Compounds	NBS20-MW21-1214	WG	Ground water	05-Dec-14
NBS20-MW59	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126021	3509990.6	Perfluoroalkyl Compounds	NBS20-MW59-1214	WG	Ground water	05-Dec-14
NBS20-SW-1	SITE 00020	NORFOLK_NB	SWS	Surface water body - nonspecific	1412121	12126388	3510026	Perfluoroalkyl Compounds	NBS20-SW01-1214	WG	Ground water	05-Dec-14
NBS20-SW-1	SITE 00020	NORFOLK_NB	SWS	Surface water body - nonspecific	1412121	12126388	3510026	Perfluoroalkyl Compounds	NBS20-SW01-1214	WG	Ground water	05-Dec-14
NBS20-MW59	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126021	3509990.6	Perfluoroalkyl Compounds	NBS20-MW59-1214	WG	Ground water	05-Dec-14
NBS20-MW-21	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126801.5	3510057	Perfluoroalkyl Compounds	NBS20-MW21-1214	WG	Ground water	05-Dec-14
NBS20-MW59	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126021	3509990.6	Perfluoroalkyl Compounds	NBS20-MW59-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120414	WQ	Water for QC samples	04-Dec-14
NBS20-MW-10	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12127157	3511110.3	Perfluoroalkyl Compounds	NBS20-MW10-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120414	WQ	Water for QC samples	04-Dec-14
NBS20-MW59	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126021	3509990.6	Perfluoroalkyl Compounds	NBS20-MW59-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120414	WQ	Water for QC samples	04-Dec-14
NBS20-MW-101	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126100	3510010	Perfluoroalkyl Compounds	NBS20-MW101-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120314	WQ	Water for QC samples	03-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120414	WQ	Water for QC samples	04-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120314	WQ	Water for QC samples	03-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120414	WQ	Water for QC samples	04-Dec-14
NBS20-MW59	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126021	3509990.6	Perfluoroalkyl Compounds	NBS20-MW59-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120314	WQ	Water for QC samples	03-Dec-14
NBS20-SW-1	SITE 00020	NORFOLK_NB	SWS	Surface water body - nonspecific	1412121	12126388	3510026	Perfluoroalkyl Compounds	NBS20-SW01-1214	WG	Ground water	05-Dec-14
NBS20-MW-21	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126801.5	3510057	Perfluoroalkyl Compounds	NBS20-MW21-1214	WG	Ground water	05-Dec-14
NBS20-MW-21	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126801.5	3510057	Perfluoroalkyl Compounds	NBS20-MW21-1214	WG	Ground water	05-Dec-14

LOCATION_NAME	SITE_NAME	INSTALLATION_ID	LOCATION_TYPE	LOCATION_TYPE_DESC	SDG	COORD_X	COORD_Y	ANALYTICAL_METHOD_GRP_DESC	SAMPLE_NAME	SAMPLE_MATRIX	SAMPLE_MATRIX_DESC	COLLECT_DATE
NBS20-MW-21	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12126801.5	3510057	Perfluoroalkyl Compounds	NBS20-MW21-1214	WG	Ground water	05-Dec-14
NBS20-SW-1	SITE 00020	NORFOLK_NB	SWS	Surface water body - nonspecific	1412121	12126388	3510026	Perfluoroalkyl Compounds	NBS20-SW01-1214	WG	Ground water	05-Dec-14
NBS20-MW-10	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12127157	3511110.3	Perfluoroalkyl Compounds	NBS20-MW10-1214	WG	Ground water	05-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120314	WQ	Water for QC samples	03-Dec-14
"	"	NORFOLK_NB	"	"	1412121			Perfluoroalkyl Compounds	NBS20-EB120214	WQ	Water for QC samples	02-Dec-14
NBS20-MW-10	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412121	12127157	3511110.3	Perfluoroalkyl Compounds	NBS20-MW10-1214	WG	Ground water	05-Dec-14