Navy_CLEAN_PFAS_FOIA_request_covers.indd

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 1412120

Norfolk Naval Base
Norfolk, Virginia

July 2019

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

ANALYTICAL SUMMARY DATA PACKAGE
SDG # 1412120

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 5, 2015
Report Revision #: 01
Revision Date: January 21, 2015
Total # of Pages: 66

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

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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 #.

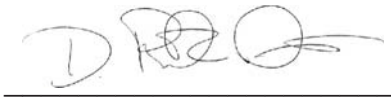
All samples that were received were analyzed and none of the samples were placed on hold without analyses. Samples were subcontracted to Accutest Laboratories for Extractables by GCMS by Method EPA 537 Mod.

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

LOGIN REVIEW REPORT (ln01r) Accutest Laboratories Southeast, Inc. Dec 10 2014, 07:35 pm CS Rep: MMO

Job Number: FA20472 Client project: 470612.LT.FI.20

Account: ELTNN Empirical Labs

Project: ELTNN25555 NSN Site 20 LTM NEW PROJECT 04-DEC-14

Report to: HC Date: 19-DEC-14 Deliv: FULT1 StateCode: VA Program: DOD-QSM4

CHECK
Client
Project
Deliverables
Matrix
TAT
Tests
Metals SW846

Sample Number	Client ID	Site	Matx	Receive Date	Collect Date/Time	TAT	Due Date	Samp By	Product List
FA20472-1	NBS20-MW103-1214		GW	05-DEC-14	04-DEC-14 14:40	14	19-DEC-14	THGB	ENERGY,LC537UCMR3
FA20472-2	NBS20-MW103P-1214		GW	05-DEC-14	04-DEC-14 14:45	14	19-DEC-14	THGB	LC537UCMR3
FA20472-3	NBS20-MW105-1214		GW	05-DEC-14	03-DEC-14 12:50	14	19-DEC-14	THGB	LC537UCMR3
FA20472-4	NBS20-MW13-1214		GW	05-DEC-14	04-DEC-14 12:25	14	19-DEC-14	THGB	LC537UCMR3
FA20472-5	NBS20-MW14-1214		GW	05-DEC-14	02-DEC-14 14:25	14	19-DEC-14	THGB	LC537UCMR3
FA20472-6	NBS20-MW8-1214		GW	05-DEC-14	04-DEC-14 16:35	14	19-DEC-14	THGB	LC537UCMR3
FA20472-7	NBS20-MW52-1214		GW	05-DEC-14	04-DEC-14 10:30	14	19-DEC-14	THGB	LC537UCMR3
FA20472-8	NBS20-MW54-1214		GW	05-DEC-14	04-DEC-14 16:35	14	19-DEC-14	THGB	LC537UCMR3
FA20472-9	NBS20-MW55-1214		GW	05-DEC-14	03-DEC-14 10:20	14	19-DEC-14	THGB	LC537UCMR3
FA20472-10	NBS20-MW55P-1214		GW	05-DEC-14	03-DEC-14 10:25	14	19-DEC-14	THGB	LC537UCMR3
FA20472-11	NBS20-MW57-1214		GW	05-DEC-14	03-DEC-14 12:55	14	19-DEC-14	THGB	LC537UCMR3
FA20472-12	NBS20-MW58-1214		GW	05-DEC-14	04-DEC-14 10:20	14	19-DEC-14	THGB	LC537UCMR3
FA20472-13	NBS20-MW60-1214		GW	05-DEC-14	03-DEC-14 15:40	14	19-DEC-14	THGB	LC537UCMR3
FA20472-14	NBS20-TW02-1214		GW	05-DEC-14	03-DEC-14 16:00	14	19-DEC-14	THGB	

Comments: FA20472-14
per client do not run

INVOICE1UD Address (account):
Accounts Payable
Empirical Labs
621 Mainstream Dr
Suite 270
Nashville, TN 37228 (615)345-1115
ap@empirlabs.com

PO Number: 954774

LOGIN REVIEW REPORT (ln01r) Accutest Laboratories Southeast, Inc. Dec 10 2014, 07:35 pm CS Rep: MMO

Job Number: FA20472 Client project: 470612.LT.FI.20

Account: ELTNN Empirical Labs

Project: ELTNN25555 NSN Site 20 LTM NEW PROJECT 04-DEC-14

Report to: HC Date: 19-DEC-14 Deliv: FULT1 StateCode: VA Program: DOD-QSM4

CHECK
Client
Project
Deliverables
Matrix
TAT
Tests
Metals SW846

Sample Number	Client ID	Site	Matx	Receive Date	Collect Date/Time	TAT	Due Date	Samp By	Product List

EDDs: ELTNN ELTNN25555 SNEDDCH2 EMAIL sgordon@empirlabs.com

Distribution2 Sample Receipts ELTNN mwalker@empirlabs.com;sgordon@empirlabs.com;rvogel@empirlabs.com

Login: _____ Date: _____
Login Review: _____ Date: _____
CS Review: _____ Date: _____
ID Review: _____ Date: _____

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 # FA20472 PAGE 1 OF 2

Accutest Quote # SKIFF#

Client / Reporting Information

Company Name: CH2M Hill
Address: 5701 Cleveland St Ste 200
City: Virginia Beach State: VA Zip: 23462
Project Contact: Juliana Dean E-mail: Juliana.dean@ch2m.com
Phone#: 757 671 6232
Sampler(s) Name(s) (Printed): Troy Horn Gwen Buchlay

Project Information

Project Name: CPZO NSN
Street:
City State:
Project #: 470612.LT.FI.20
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	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	PFC	LAB USE ONLY
1	NBS20-MW-103-1214	12/4	1440			2										X	
2	-MW-103P-1214	12/4	1445													X	
3	-MW-105-1214	12/3	1250													X	
4	-MW-13-1214	12/4	1225													X	
5	-MW-14-1214	12/2	1425													X	
6	-MW-8-1214	12/4	1635													X	
7	-MW52-1214	12/4	1030													X	
8	-MW54-1214	12/4	1635													X	
9	-MW55-1214	12/3	~~1255~~	1020												X	
10	~~-MW55P-1214 #KEEP~~	~~12/3~~	~~1300~~	1025												X	
11	-MW57-1214	12/3	1255													X	
12	-MW58-1214	12/4	1020													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

Keep MW55P

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	12/4/14 1900	2 FX	3 FX 12-05-14	1000	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		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: 2-2

1412120 Summ Package

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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 # FA20472 PAGE 2 OF 2

Accutest Quote #	SKIFF#

Client / Reporting Information

Company Name
Address
City State Zip
Project Contact SEE PAGE 1 Email
Phone#
Sampler(s) Name(s) (Printed)

Project Information

Project Name:
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	TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	PFU	LAB USE ONLY
	~~NBS20-MW102-1214~~																
	~~MW102P 1214~~																
13	NBS20-MW60-1214	12/3	1540			2										X	
	-EB120214	12/2	1445			2										X	
	-EB120314	12/3	1200			2										X	
	-EB120414	12/4	1700			2										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

EB samples to follow in next shipment

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	12/4/14 1900	2	3 12-05-14	1000	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		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: _____

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1412120 Summ Package

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20472 CLIENT: CH2M Hill PROJECT: LPZ0 NSN

DATE/TIME RECEIVED: 12-05-14 1000 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 7721 0222 7440

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
- [Y] TRIP BLANK NOT PROVIDED
- [Y] 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: 1.8
- [ ] CORRECTED TEMPS: 2.2

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)
- [X] 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: Received Extra Sample NBS-20-TW02-1214 12-03-14 16:00 Will Be Sample #14 Read Comments on Page 2 For EB Samples

TECHNICIAN SIGNATURE/DATE RWilla 12-06-14 REVIEWER SIGNATURE/DATE Jay Tice 12-6-14

From: (804) 615-9461
Troy Horn

5701 Cleveland St
Ste 200
VIRGINIA BEACH, VA 23462

Origin ID: NTUA

FedEx Express

J14221409230Suv

Ship Date: 04DEC14
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 #

FRI - 05 DEC 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7721 0222 7440

DSR
32811
FL-US
MCO

XH TIXA

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.

1412120

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: 01/07/2015 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: 12/05/2014 10:00

Logged In By: Sonya Gordon Date Logged In: 12/10/2014 17:46

Samples Received at: **2.2°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)					
1412120-01 NBS20-MW103-1214 [Water] Sampled 12/04/2014 14:40 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 13:40	Select PFC
1412120-02 NBS20-MW103P-1214 [Water] Sampled 12/04/2014 14:45 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 13:45	Select PFC
1412120-03 NBS20-MW105-1214 [Water] Sampled 12/03/2014 12:50 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 11:50	Select PFC
1412120-04 NBS20-MW13-1214 [Water] Sampled 12/04/2014 12:25 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 11:25	Select PFC
1412120-05 NBS20-MW14-1214 [Water] Sampled 12/02/2014 14:25 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	05/31/2015 13:25	Select PFC
1412120-06 NBS20-MW08-1214 [Water] Sampled 12/04/2014 16:35 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 15:35	Select PFC

1412120

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)					
1412120-07 NBS20-MW52-1214 [Water] Sampled 12/04/2014 10:30 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 09:30	Select PFC
1412120-08 NBS20-MW54-1214 [Water] Sampled 12/04/2014 16:35 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 15:35	Select PFC
1412120-09 NBS20-MW55-1214 [Water] Sampled 12/03/2014 10:20 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 09:20	Select PFC
1412120-10 NBS20-MW55P-1214 [Water] Sampled 12/03/2014 10:25 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 09:25	Select PFC
1412120-11 NBS20-MW57-1214 [Water] Sampled 12/03/2014 12:55 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 11:55	Select PFC
1412120-12 NBS20-MW58-1214 [Water] Sampled 12/04/2014 10:20 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 09:20	Select PFC
1412120-13 NBS20-MW60-1214 [Water] Sampled 12/03/2014 15:40 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 14:40	Select PFC

Reviewed By

Date

SUBCONTRACT ORDER

Empirical Laboratories, LLC

1412120

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-MW103-1214				
Reference No: 1412120-01 **Water**	**Sampled:12/04/2014 14:40**			
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 13:40		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW103P-1214				
Reference No: 1412120-02 **Water**	**Sampled:12/04/2014 14:45**			
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 13:45		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW105-1214				
Reference No: 1412120-03 **Water**	**Sampled:12/03/2014 12:50**			
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 11:50		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW13-1214				
Reference No: 1412120-04 **Water**	**Sampled:12/04/2014 12:25**			
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 11:25		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW14-1214				
Reference No: 1412120-05 **Water**	**Sampled:12/02/2014 14:25**			
SUB_SPECIALTY	12/30/2014 14:00	05/31/2015 13:25		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW08-1214				
Reference No: 1412120-06 **Water**	**Sampled:12/04/2014 16:35**			
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 15:35		Select PFC
Containers Supplied:				

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

SUBCONTRACT ORDER

Empirical Laboratories, LLC

1412120

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: NBS20-MW52-1214				
Reference No: 1412120-07	**Water**	**Sampled: 12/04/2014 10:30**		
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 09:30		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW54-1214				
Reference No: 1412120-08	**Water**	**Sampled: 12/04/2014 16:35**		
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 15:35		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW55-1214				
Reference No: 1412120-09	**Water**	**Sampled: 12/03/2014 10:20**		
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 09:20		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW55P-1214				
Reference No: 1412120-10	**Water**	**Sampled: 12/03/2014 10:25**		
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 09:25		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW57-1214				
Reference No: 1412120-11	**Water**	**Sampled: 12/03/2014 12:55**		
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 11:55		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW58-1214				
Reference No: 1412120-12	**Water**	**Sampled: 12/04/2014 10:20**		
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 09:20		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW60-1214				
Reference No: 1412120-13	**Water**	**Sampled: 12/03/2014 15:40**		
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 14:40		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 #: 1412120

QC LEVEL: Level IV
Report Due: 1/7/2015
Client Sample Count: 13

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	SUB_SPECIALTY
Client Sample	12/4/2014	12/5/2014	1412120-01	NBS20-MW103-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-02	NBS20-MW103P-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-03	NBS20-MW105-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-04	NBS20-MW13-1214	Water	X
Client Sample	12/2/2014	12/5/2014	1412120-05	NBS20-MW14-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-06	NBS20-MW08-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-07	NBS20-MW52-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-08	NBS20-MW54-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-09	NBS20-MW55-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-10	NBS20-MW55P-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-11	NBS20-MW57-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-12	NBS20-MW58-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-13	NBS20-MW60-1214	Water	X

Subcontractor Data Package

Southeast
ACCUTEST LABORATORIES

Reissue #2
01/16/15

Technical Report for

Empirical Labs

NSN Site 20 LTM

470612.LT.FI.20

Accutest Job Number: FA20472

Sampling Dates: 12/02/14 - 12/04/14

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: **318**

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

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Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

December 23, 2014

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

RE: Accutest job FA20472 Reissue

Dear Ms. Gordon,

The final report for job number FA20472 has been edited to reflect requested corrections. These edits have been incorporated into the revised report.

The sample ID has been revised.

Accutest apologies for any inconvenience this may have caused. Please feel free to contact us if we can be of further assistance.

Sincerely,

Accutest Laboratories, SE

January 16, 2015

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

RE: Accutest job FA20472 Reissue 2

Dear Ms. Gordon,

The final report for job number FA20472 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

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Accutest Laboratories

Sample Summary

Empirical Labs

Job No: FA20472

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20472-1	12/04/14	14:40	THGB	12/05/14	AQ	Ground Water	NBS20-MW103-1214
FA20472-2	12/04/14	14:45	THGB	12/05/14	AQ	Ground Water	NBS20-MW103P-1214
FA20472-3	12/03/14	12:50	THGB	12/05/14	AQ	Ground Water	NBS20-MW105-1214
FA20472-4	12/04/14	12:25	THGB	12/05/14	AQ	Ground Water	NBS20-MW13-1214
FA20472-5	12/02/14	14:25	THGB	12/05/14	AQ	Ground Water	NBS20-MW14-1214
FA20472-6	12/04/14	16:35	THGB	12/05/14	AQ	Ground Water	NBS20-MW08-1214
FA20472-7	12/04/14	10:30	THGB	12/05/14	AQ	Ground Water	NBS20-MW52-1214
FA20472-8	12/04/14	16:35	THGB	12/05/14	AQ	Ground Water	NBS20-MW54-1214
FA20472-9	12/03/14	10:20	THGB	12/05/14	AQ	Ground Water	NBS20-MW55-1214
FA20472-10	12/03/14	10:25	THGB	12/05/14	AQ	Ground Water	NBS20-MW55P-1214
FA20472-11	12/03/14	12:55	THGB	12/05/14	AQ	Ground Water	NBS20-MW57-1214
FA20472-12	12/04/14	10:20	THGB	12/05/14	AQ	Ground Water	NBS20-MW58-1214
FA20472-13	12/03/14	15:40	THGB	12/05/14	AQ	Ground Water	NBS20-MW60-1214

Accutest Laboratories

Sample Summary
(continued)

Empirical Labs

Job No: FA20472

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20472-14	12/03/14	16:00	THGB	12/05/14	AQ	Ground Water	NBS20-TW02-1214

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Empirical Labs **Job No:** FA20472

Site: NSN Site 20 LTM **Report Date:** 12/18/2014 12:52:25

13 Sample(s) were collected on/ between 12/02/2014 and 12/04/2014 and were received at Accutest SE on 12/05/2014 properly preserved, at 2.2 Deg. C and intact. These Samples received an Accutest job number of FA20472. 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:** OP54204

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) FA20472-5MS, FA20472-5MSD were used as the QC samples indicated.

Sample(s) FA20472-12, FA20472-8 have surrogates outside control limits due to dilution.

FA20472-6: Dilution required due to matrix interference (internal standard failure).

FA20472-8 for 13C2-PFHxA: Outside control limits due to dilution.

FA20472-12 for 13C2-PFHxA: Outside control limits due to dilution.

FA20472-12 for 13C2-PFDA: Outside control limits due to dilution.

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 18, 2014

Kim Benham, Client Services (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
FA20472-1	MSSEMI	Q8795.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA20472-12	MSSEMI	Q8806.D	Perfluorobutanesulfonic acid, Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-12	MSSEMI	Q8807.D	13C2-PFDA, 13C2-PFHxA, Perfluorooctanoic acid
FA20472-13	MSSEMI	Q8792.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-13	MSSEMI	Q8808.D	Perfluorooctanoic acid
FA20472-2	MSSEMI	Q8796.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-3	MSSEMI	Q8778.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA20472-4	MSSEMI	Q8779.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-7	MSSEMI	Q8783.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-8	MSSEMI	Q8784.D	Perfluorohexanesulfonic acid
FA20472-8	MSSEMI	Q8805.D	Perfluorooctanesulfonic acid, Perfluorooctanoic acid
OP54204-BS	MSSEMI	Q8776.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
OP54204-MS	MSSEMI	Q8781.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
OP54204-MSD	MSSEMI	Q8782.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ280-ICV280	MSSEMI	Q8642.D	Perfluorodecanesulfonic acid, Perfluorododecanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid, Perfluoroundecanoic acid

15 Manual Integrations were found for FA20472

Summary of Hits

Job Number: FA20472
Account: Empirical Labs
Project: NSN Site 20 LTM
Collected: 12/02/14 thru 12/04/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20472-1	**NBS20-MW103-1214**					
Perfluoroheptanoic acid		0.0130 J	0.020	0.016	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0311	0.020	0.016	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.00987 J	0.020	0.016	ug/l	EPA 537 MOD
FA20472-2	**NBS20-MW103P-1214**					
Perfluoroheptanoic acid		0.0124 J	0.020	0.016	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0305	0.020	0.016	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0103 J	0.020	0.016	ug/l	EPA 537 MOD
FA20472-3	**NBS20-MW105-1214**					
Perfluoroheptanoic acid		0.0231	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0631	0.042	0.033	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0195 J	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.234	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.357	0.021	0.017	ug/l	EPA 537 MOD
FA20472-4	**NBS20-MW13-1214**					
Perfluoroheptanoic acid		0.0269	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0232 J	0.042	0.033	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0957	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0862	0.021	0.017	ug/l	EPA 537 MOD
FA20472-5	**NBS20-MW14-1214**					
No hits reported in this sample.						
FA20472-6	**NBS20-MW08-1214**					
Perfluoroheptanoic acid [a]		0.0535 J	0.10	0.083	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid [a]		0.145	0.10	0.083	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid [a]		0.782	0.10	0.083	ug/l	EPA 537 MOD
FA20472-7	**NBS20-MW52-1214**					
Perfluorooctanoic acid		0.0195 J	0.040	0.032	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0434	0.020	0.016	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0535	0.020	0.016	ug/l	EPA 537 MOD

Summary of Hits

Job Number: FA20472
Account: Empirical Labs
Project: NSN Site 20 LTM
Collected: 12/02/14 thru 12/04/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20472-8	**NBS20-MW54-1214**					
Perfluoroheptanoic acid		0.0584	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.800	0.21	0.17	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0280	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.275	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.542	0.10	0.083	ug/l	EPA 537 MOD
FA20472-9	**NBS20-MW55-1214**					
No hits reported in this sample.						
FA20472-10	**NBS20-MW55P-1214**					
No hits reported in this sample.						
FA20472-11	**NBS20-MW57-1214**					
No hits reported in this sample.						
FA20472-12	**NBS20-MW58-1214**					
Perfluoroheptanoic acid		0.104	0.10	0.083	ug/l	EPA 537 MOD
Perfluorooctanoic acid		3.30	0.83	0.67	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.130	0.10	0.083	ug/l	EPA 537 MOD
FA20472-13	**NBS20-MW60-1214**					
Perfluoroheptanoic acid		0.0254	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.625	0.083	0.067	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0341	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.289	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.151	0.021	0.017	ug/l	EPA 537 MOD

(a) Dilution required due to matrix interference (internal standard failure).

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	NBS20-MW103-1214		
Lab Sample ID:	FA20472-1	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8795.D	1	12/16/14	NAF	12/11/14	OP54204	SQ284
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	0.0130	0.020	0.016	0.0080	ug/l	J
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	0.0311	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.00987	0.020	0.016	0.0080	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	98%		70-130%
	13C2-PFDA	100%		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-MW103P-1214		
Lab Sample ID:	FA20472-2	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8796.D	1	12/16/14	NAF	12/11/14	OP54204	SQ284
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	0.0124	0.020	0.016	0.0080	ug/l	J
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	0.0305	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0103	0.020	0.016	0.0080	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	92%		70-130%
	13C2-PFDA	96%		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-MW105-1214		
Lab Sample ID:	FA20472-3	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8778.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	0.0231	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.0631	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	0.0195	0.021	0.017	0.0083	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.234	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.357	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	113%		70-130%
	13C2-PFDA	109%		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-MW13-1214		
Lab Sample ID:	FA20472-4	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8779.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	0.0232	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	0.017 U	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0957	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0862	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	115%		70-130%
	13C2-PFDA	97%		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-MW14-1214		
Lab Sample ID:	FA20472-5	**Date Sampled:**	12/02/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8780.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	0.017 U	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.017 U	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	119%		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-MW08-1214		
Lab Sample ID:	FA20472-6	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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 [a]	Q8804.D	5	12/16/14	NAF	12/11/14	OP54204	SQ285
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	0.0535	0.10	0.083	0.042	ug/l	J
335-67-1	Perfluorooctanoic acid	0.17 U	0.21	0.17	0.083	ug/l	
375-95-1	Perfluorononanoic acid	0.083 U	0.10	0.083	0.042	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.083 U	0.10	0.083	0.042	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.145	0.10	0.083	0.042	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.782	0.10	0.083	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	107%		70-130%
	13C2-PFDA	113%		70-130%

(a) Dilution required due to matrix interference (internal standard failure).

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-MW52-1214		
Lab Sample ID:	FA20472-7	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8783.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	0.0195	0.040	0.032	0.016	ug/l	J
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	0.0434	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0535	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	119%		70-130%
	13C2-PFDA	100%		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-MW54-1214		
Lab Sample ID:	FA20472-8	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8784.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
Run #2	Q8805.D	5	12/16/14	NAF	12/11/14	OP54204	SQ285

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

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0584	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.800 [a]	0.21	0.17	0.083	ug/l	
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.0280	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.275	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.542 [a]	0.10	0.083	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	130%	135% [b]	70-130%
	13C2-PFDA	118%	104%	70-130%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

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-MW55-1214		
Lab Sample ID:	FA20472-9	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8785.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	94%		70-130%
	13C2-PFDA	88%		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-MW55P-1214		
Lab Sample ID:	FA20472-10	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8789.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	105%		70-130%
	13C2-PFDA	94%		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-MW57-1214		
Lab Sample ID:	FA20472-11	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8790.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	108%		70-130%
	13C2-PFDA	91%		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-MW58-1214		
Lab Sample ID:	FA20472-12	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8806.D	5	12/16/14	NAF	12/11/14	OP54204	SQ285
Run #2	Q8807.D	20	12/16/14	NAF	12/11/14	OP54204	SQ285

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

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.104	0.10	0.083	0.042	ug/l	
335-67-1	Perfluorooctanoic acid	3.30 [a]	0.83	0.67	0.33	ug/l	
375-95-1	Perfluorononanoic acid	0.083 U	0.10	0.083	0.042	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.083 U	0.10	0.083	0.042	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.130	0.10	0.083	0.042	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.083 U	0.10	0.083	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	127%	0% [b]	70-130%
	13C2-PFDA	106%	0% [b]	70-130%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

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-MW60-1214		
Lab Sample ID:	FA20472-13	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8792.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
Run #2	Q8808.D	2	12/16/14	NAF	12/11/14	OP54204	SQ285

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

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0254	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.625 [a]	0.083	0.067	0.033	ug/l	
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.0341	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.289	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.151	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	112%	100%	70-130%
	13C2-PFDA	110%	97%	70-130%

(a) Result is from Run# 2

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
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www.accutest.com

Accutest JOB # FA20472 PAGE 1 OF 2

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: CH2M Hill
Address: 5701 Cleveland St Ste 200
City: Virginia Beach State: VA Zip: 23462
Project Contact: Juliana Dean E-mail: Juliana.dean@ch2m.com
Phone#: 757 671 6232
Sampler(s) Name(s) (Printed): Tony Korn Gwen Buckley

Project Information

Project Name: LP20 NSN
Street
City State
Project #: 470612.LT.FI.20
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	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION	PFC	LAB USE ONLY
1	NBS20-MW-103-1214	12/4	1440			2		X	
2	-MW-103P-1214	12/4	1445			1		X	
3	-MW-105-1214	12/3	1250					X	
4	-MW-13-1214	12/4	1225					X	
5	-MW-14-1214	12/2	1425					X	
6	-MW-8-1214	12/4	1635					X	
7	-MW52-1214	12/4	1030					X	
8	-MW54-1214	12/4	1635					X	
9	-MW55-1214	12/3 ~~1355~~	1020					X	
10	~~-MW55P-1214 8KEEP~~	~~12/3~~	~~1300~~	1025				X	
11	-MW57-1214	12/3	1255					X	
12	-MW58-1214	12/4	1020					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

Keep MW55P

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	12/4/14 1900	2 FX	3 FX 12-05-14	1000	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		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: 2.2

FA20472: Chain of Custody
Page 1 of 6

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 # FA20472 PAGE 2 OF 2

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name
Address
City State Zip
Project Contact SEE PAGE 1 Email
Phone# Fax #
Sampler(s) Name(s) (Printed)

Project Information

Project Name:
Street
City State
Project # 1
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	Collection DATE	Collection TIME	Sampled By	Matrix	Total # of Bottles	Container Information	PFC	LAB USE ONLY
	~~NBS20-MW102-1214~~								
	~~MW102P 1214~~								
13	NBS20-MW60-1214	12/3	1540			2		X	
	-EB120214	12/2	1445			2		X	
	-EB120314	12/3	1200			2		X	
	-EB120414	12/4	1700			2		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

EB samples to follow in next shipment

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	12/4/14 1900	2	3 12-05-14	1000	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		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: _____

5.1 5

FA20472: Chain of Custody
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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20472 CLIENT: CH2M Hill PROJECT: LPZO NSN

DATE/TIME RECEIVED: 12-05-14 1000 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 7721 0222 7440

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
- [Y] TRIP BLANK NOT PROVIDED
- [Y] 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: 1.8
- [ ] CORRECTED TEMPS: 2.2

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)
- [X] 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: Received Extra Sample NBS-20-TW02-1214 12-03-14 16:00 Will Be Sample #14 Read Comments on Page 2 For EB Samples

TECHNICIAN SIGNATURE/DATE RW 12-06-14 REVIEWER SIGNATURE/DATE JG 12-6-14

NF 10/14

receipt confirmation 102914.xls

FA20472: Chain of Custody

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From: (804) 615-9461
Troy Horn

Origin ID: NTUA

5701 Cleveland St
Ste 200
VIRGINIA BEACH, VA 23462

J1422140923330JU

Ship Date: 04DEC14
ActWgt: 50.0 LB
CAD: 104174249/INET3550

Delivery Address Bar Code

Ref # 470812.kfi.20
Invoice #
PO #
Dept #

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

ORLANDO, FL 32811

TRK# 7721 0222 7440
0201

FRI - 05 DEC 10:30A
PRIORITY OVERNIGHT
DSR
32811
FL-US
MCO

XH TIXA

5223/0C56/429

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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https://www.fedex.com/shipping/html/en//PrintIFrame.html 12/4/2014

5.1 5

FA20472: Chain of Custody
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Job Change Order: FA20472_12/8/2014

Requested Date:	12/8/2014	**Received Date:**	12/5/2014
Account Name:	Empirical Labs	**Due Date:**	12/19/2014
Project	NSN Site 20 LTM	**Deliverable:**	FULT1
CSR:	MMO	**TAT (Days):**	14

Sample #:
FA20472-14

Change: Sample received, but not listed on COC. Per client request do not analyze the sample.

NBS20-TW-02-1214

Above Changes Per: Sonya Gordon **Date:** 12/8/2014

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

Job Change Order: FA20472_12/23/2014

Requested Date:	12/23/2014	**Received Date:**	12/5/2014
Account Name:	Empirical Labs	**Due Date:**	12/19/2014
Project	NSN Site 20 LTM	**Deliverable:**	FULT1
CSR:	MMO	**TAT (Days):**	7

Sample #:
FA20472-6

Change: Per client ID should be SB20-MW08-1214.

NBS20-MW8-1214

Above Changes Per: Sonya Gordon **Date:** 12/23/2014

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

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FA20472: Chain of Custody
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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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54204-MB	Q8777.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284

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

FA20472-1, FA20472-2, FA20472-3, FA20472-4, FA20472-5, FA20472-6, FA20472-7, FA20472-8, FA20472-9, FA20472-10, FA20472-11, FA20472-12, FA20472-13

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	126%	70-130%
	13C2-PFDA	107%	70-130%

Blank Spike Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54204-BS	Q8776.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284

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

FA20472-1, FA20472-2, FA20472-3, FA20472-4, FA20472-5, FA20472-6, FA20472-7, FA20472-8, FA20472-9, FA20472-10, FA20472-11, FA20472-12, FA20472-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-85-9	Perfluoroheptanoic acid	0.16	0.154	96	70-130
335-67-1	Perfluorooctanoic acid	0.16	0.158	99	70-130
375-95-1	Perfluorononanoic acid	0.16	0.150	94	70-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.192	120	70-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.182	114	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.148	93	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
	13C2-PFHxA	122%	70-130%
	13C2-PFDA	104%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54204-MS	Q8781.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
OP54204-MSD	Q8782.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
FA20472-5	Q8780.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284

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

FA20472-1, FA20472-2, FA20472-3, FA20472-4, FA20472-5, FA20472-6, FA20472-7, FA20472-8, FA20472-9, FA20472-10, FA20472-11, FA20472-12, FA20472-13

CAS No.	Compound	FA20472-5 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	0.333	0.315	94	0.333	0.325	97	3	70-130/30
335-67-1	Perfluorooctanoic acid	0.042	U	0.333	0.334	100	0.333	0.338	101	1	70-130/30
375-95-1	Perfluorononanoic acid	0.021	U	0.333	0.312	94	0.333	0.313	94	0	70-130/30
375-73-5	Perfluorobutanesulfonic acid	0.021	U	0.333	0.395	118	0.333	0.420	126	6	70-130/30
355-46-4	Perfluorohexanesulfonic acid	0.021	U	0.333	0.376	113	0.333	0.396	119	5	70-130/30
1763-23-1	Perfluorooctanesulfonic acid	0.021	U	0.333	0.337	101	0.333	0.348	104	3	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	FA20472-5	Limits
	13C2-PFHxA	130%	124%	119%	70-130%
	13C2-PFDA	109%	109%	104%	70-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ284-CC280	**Injection Date:**	12/15/14
Lab File ID:	Q8774.D	**Injection Time:**	16:51
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]	26490	6.31	13031	6.91	55699	9.61
Upper Limit [c]	41705	7.31	19106	7.91	105938	10.61
Lower Limit [d]	13902	5.31	6369	5.91	35313	8.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
OP54204-BS	24201	6.31	11622	6.91	49693	9.61
OP54204-MB	27483	6.31	13252	6.91	53360	9.62
FA20472-3	21174	6.30	9818	6.89	51459	9.61
FA20472-4	25895	6.31	12108	6.89	49886	9.62
FA20472-5	25207	6.31	12269	6.91	49321	9.61
OP54204-MS	26200	6.31	12479	6.91	51800	9.61
OP54204-MSD	26459	6.31	12459	6.91	51924	9.61
FA20472-7	26192	6.31	12139	6.91	51941	9.61
FA20472-8	22856	6.31	11232	6.89	48551	9.62
FA20472-9	27320	6.31	12513	6.91	51145	9.61

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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ284-CC280	**Injection Date:**	12/15/14
Lab File ID:	Q8786.D	**Injection Time:**	21:00
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]	27830	6.31	13391	6.91	54601	9.62
Upper Limit [c]	41705	7.31	19106	7.91	105938	10.62
Lower Limit [d]	13902	5.31	6369	5.91	35313	8.62

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20402-4	29156	6.31	13323	6.91	58336	9.61
FA20472-10	29823	6.31	13437	6.91	55102	9.61
FA20472-11	30238	6.31	13921	6.91	57099	9.61
FA20472-13	28260	6.30	13776	6.89	60917	9.60

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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ284-CC280	**Injection Date:**	12/15/14
Lab File ID:	Q8793.D	**Injection Time:**	23:25
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]	30020	6.31	14852	6.91	59443	9.62
Upper Limit [c]	41705	7.31	19106	7.91	105938	10.62
Lower Limit [d]	13902	5.31	6369	5.91	35313	8.62

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20472-1	27435	6.30	11675	6.89	58489	9.62
FA20472-2	29034	6.30	12090	6.89	58958	9.61
SQ284-ECC280	30516	6.31	14680	6.91	62398	9.61

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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ285-CC280	**Injection Date:**	12/16/14
Lab File ID:	Q8802.D	**Injection Time:**	10:26
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]	22918	6.31	11747	6.91	47001	9.61
Upper Limit [c]	41705	7.31	19106	7.91	105938	10.61
Lower Limit [d]	13902	5.31	6369	5.91	35313	8.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20472-6 [e]	25395	6.30	11306	6.89	49254	9.59
FA20472-8	24231	6.31	11875	6.91	47515	9.61
FA20472-12	25666	6.30	13172	6.89	53648	9.61
FA20472-12	29064	6.31	13941	6.89	57417	9.60
FA20472-13	26613	6.30	13003	6.89	54802	9.60
SQ285-ECC280	26757	6.30	12770	6.89	53466	9.61

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.
(e) Dilution required due to matrix interference (internal standard failure).

Semivolatile Surrogate Recovery Summary

Job Number: FA20472
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
FA20472-1	Q8795.D	98	100
FA20472-2	Q8796.D	92	96
FA20472-3	Q8778.D	113	109
FA20472-4	Q8779.D	115	97
FA20472-5	Q8780.D	119	104
FA20472-6	Q8804.D	107	113
FA20472-7	Q8783.D	119	100
FA20472-8	Q8805.D	135* [a]	104
FA20472-8	Q8784.D	130	118
FA20472-9	Q8785.D	94	88
FA20472-10	Q8789.D	105	94
FA20472-11	Q8790.D	108	91
FA20472-12	Q8806.D	127	106
FA20472-12	Q8807.D	0* [a]	0* [a]
FA20472-13	Q8808.D	100	97
FA20472-13	Q8792.D	112	110
OP54204-BS	Q8776.D	122	104
OP54204-MB	Q8777.D	126	107
OP54204-MS	Q8781.D	130	109
OP54204-MSD	Q8782.D	124	109

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

(a) Outside control limits due to dilution.

Initial Calibration Summary

Job Number: FA20472
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: FA20472
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: FA20472
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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ284-CC280
Lab FileID: Q8774.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1215_PFC_SQ284\SQ284.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: Q8774
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	18.872	-5.6	94.4
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	20.993	5.0	105.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	21.379	6.9	106.9
PFBS	20.000	21.746	8.7	108.7
PFDA	20.000	24.142	20.7	120.7
PFDoDA	20.000	20.092	0.5	100.5
PFDS	20.000	25.207	# 26.0	126.0
PFHpA	20.000	20.248	1.2	101.2
PFHpS	20.000	20.273	1.4	101.4
PFHxA	20.000	21.236	6.2	106.2
PFHxS	20.000	20.636	3.2	103.2
PFNA	20.000	17.865	-10.7	89.3
PFOA	20.000	20.023	0.1	100.1
PFOS	20.000	20.289	1.4	101.4
PFPeA	20.000	20.867	4.3	104.3
PFTeDA	20.000	16.241	-18.8	81.2
PFTrDA	20.000	18.208	-9.0	91.0
PFUnDA	20.000	22.950	14.7	114.7

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ284-CC280
Lab FileID: Q8786.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1215_PFC_SQ284\SQ284.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: Q8786
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	17.647	-11.8	88.2
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	20.029	0.1	100.1
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	21.226	6.1	106.1
PFBS	20.000	21.385	6.9	106.9
PFDA	20.000	24.106	20.5	120.5
PFDoDA	20.000	20.006	0.0	100.0
PFDS	20.000	26.118	# 30.6	130.6
PFHpA	20.000	19.870	-0.6	99.4
PFHpS	20.000	20.569	2.8	102.8
PFHxA	20.000	20.080	0.4	100.4
PFHxS	20.000	20.657	3.3	103.3
PFNA	20.000	17.079	-14.6	85.4
PFOA	20.000	19.765	-1.2	98.8
PFOS	20.000	20.374	1.9	101.9
PFPeA	20.000	20.172	0.9	100.9
PFTeDA	20.000	16.599	-17.0	83.0
PFTrDA	20.000	18.251	-8.7	91.3
PFUnDA	20.000	25.885	# 29.4	129.4

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ284-CC280
Lab FileID: Q8793.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1215_PFC_SQ284\SQ284.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: Q8793
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	17.818	-10.9	89.1
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.828	-0.9	99.1
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	20.259	1.3	101.3
PFBS	20.000	20.580	2.9	102.9
PFDA	20.000	24.009	20.0	120.0
PFDoDA	20.000	20.232	1.2	101.2
PFDS	20.000	26.139	# 30.7	130.7
PFHpA	20.000	19.222	-3.9	96.1
PFHpS	20.000	19.888	-0.6	99.4
PFHxA	20.000	19.743	-1.3	98.7
PFHxS	20.000	19.796	-1.0	99.0
PFNA	20.000	17.630	-11.8	88.2
PFOA	20.000	19.970	-0.1	99.9
PFOS	20.000	19.950	-0.3	99.7
PFPeA	20.000	20.015	0.1	100.1
PFTeDA	20.000	16.359	-18.2	81.8
PFTrDA	20.000	18.160	-9.2	90.8
PFUnDA	20.000	25.585	# 27.9	127.9

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ284-ECC280
Lab FileID: Q8798.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1215_PFC_SQ284\SQ284.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: Q8798
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	17.990	-10.1	89.9
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.754	-1.2	98.8
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	20.241	1.2	101.2
PFBS	20.000	21.126	5.6	105.6
PFDA	20.000	23.740	18.7	118.7
PFDoDA	20.000	20.378	1.9	101.9
PFDS	20.000	25.771	# 28.9	128.9
PFHpA	20.000	19.757	-1.2	98.8
PFHpS	20.000	20.407	2.0	102.0
PFHxA	20.000	19.842	-0.8	99.2
PFHxS	20.000	21.009	5.0	105.0
PFNA	20.000	17.713	-11.4	88.6
PFOA	20.000	20.125	0.6	100.6
PFOS	20.000	20.179	0.9	100.9
PFPeA	20.000	20.160	0.8	100.8
PFTeDA	20.000	16.824	-15.9	84.1
PFTrDA	20.000	18.438	-7.8	92.2
PFUnDA	20.000	26.575	# 32.9	132.9

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ285-CC280
Lab FileID: Q8802.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1216_PFC_SQ285\SQ285.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: Q8802
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	16.295	-18.5	81.5
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	21.233	6.2	106.2
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	22.463	12.3	112.3
PFBS	20.000	22.718	13.6	113.6
PFDA	20.000	21.280	6.4	106.4
PFDoDA	20.000	20.626	3.1	103.1
PFDS	20.000	27.688	# 38.4	138.4
PFHpA	20.000	21.348	6.7	106.7
PFHpS	20.000	21.111	5.6	105.6
PFHxA	20.000	21.098	5.5	105.5
PFHxS	20.000	22.181	10.9	110.9
PFNA	20.000	17.364	-13.2	86.8
PFOA	20.000	20.879	4.4	104.4
PFOS	20.000	21.216	6.1	106.1
PFPeA	20.000	22.011	10.1	110.1
PFTeDA	20.000	19.458	-2.7	97.3
PFTrDA	20.000	18.232	-8.8	91.2
PFUnDA	20.000	25.700	# 28.5	128.5

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ285-ECC280
Lab FileID: Q8810.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1216_PFC_SQ285\SQ285.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: Q8810
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	18.353	-8.2	91.8
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.328	-3.4	96.6
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	20.174	0.9	100.9
PFBS	20.000	22.192	11.0	111.0
PFDA	20.000	24.458	22.3	122.3
PFDoDA	20.000	21.052	5.3	105.3
PFDS	20.000	26.635	# 33.2	133.2
PFHpA	20.000	19.992	0.0	100.0
PFHpS	20.000	21.402	7.0	107.0
PFHxA	20.000	19.659	-1.7	98.3
PFHxS	20.000	21.423	7.1	107.1
PFNA	20.000	17.443	-12.8	87.2
PFOA	20.000	20.808	4.0	104.0
PFOS	20.000	20.632	3.2	103.2
PFPeA	20.000	20.155	0.8	100.8
PFTeDA	20.000	17.812	-10.9	89.1
PFTrDA	20.000	19.319	-3.4	96.6
PFUnDA	20.000	26.079	# 30.4	130.4

CC Criteria: +/- 25%

ANALYTICAL DATA PACKAGE
SDG # 1412120

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:
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Fax (866)417-0548

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Original Report Date: January 5, 2015
Report Revision #: 01
Revision Date: January 21, 2015
Total # of Pages: 335

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

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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 #.

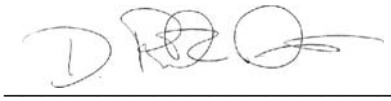
All samples that were received were analyzed and none of the samples were placed on hold without analyses. Samples were subcontracted to Accutest Laboratories for Extractables by GCMS by Method EPA 537 Mod.

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

LOGIN REVIEW REPORT (ln01r) Accutest Laboratories Southeast, Inc. Dec 10 2014, 07:35 pm CS Rep: MMO

Job Number: FA20472 Client project: 470612.LT.FI.20

Account: ELTNN Empirical Labs

Project: ELTNN25555 NSN Site 20 LTM NEW PROJECT 04-DEC-14

Report to: HC Date: 19-DEC-14 Deliv: FULT1 StateCode: VA Program: DOD-QSM4

CHECK
Client
Project
Deliverables
Matrix
TAT
Tests
Metals SW846

Sample Number	Client ID	Site	Matx	Receive Date	Collect Date/Time	TAT	Due Date	Samp By	Product List
FA20472-1	NBS20-MW103-1214		GW	05-DEC-14	04-DEC-14 14:40	14	19-DEC-14	THGB	ENERGY,LC537UCMR3
FA20472-2	NBS20-MW103P-1214		GW	05-DEC-14	04-DEC-14 14:45	14	19-DEC-14	THGB	LC537UCMR3
FA20472-3	NBS20-MW105-1214		GW	05-DEC-14	03-DEC-14 12:50	14	19-DEC-14	THGB	LC537UCMR3
FA20472-4	NBS20-MW13-1214		GW	05-DEC-14	04-DEC-14 12:25	14	19-DEC-14	THGB	LC537UCMR3
FA20472-5	NBS20-MW14-1214		GW	05-DEC-14	02-DEC-14 14:25	14	19-DEC-14	THGB	LC537UCMR3
FA20472-6	NBS20-MW8-1214		GW	05-DEC-14	04-DEC-14 16:35	14	19-DEC-14	THGB	LC537UCMR3
FA20472-7	NBS20-MW52-1214		GW	05-DEC-14	04-DEC-14 10:30	14	19-DEC-14	THGB	LC537UCMR3
FA20472-8	NBS20-MW54-1214		GW	05-DEC-14	04-DEC-14 16:35	14	19-DEC-14	THGB	LC537UCMR3
FA20472-9	NBS20-MW55-1214		GW	05-DEC-14	03-DEC-14 10:20	14	19-DEC-14	THGB	LC537UCMR3
FA20472-10	NBS20-MW55P-1214		GW	05-DEC-14	03-DEC-14 10:25	14	19-DEC-14	THGB	LC537UCMR3
FA20472-11	NBS20-MW57-1214		GW	05-DEC-14	03-DEC-14 12:55	14	19-DEC-14	THGB	LC537UCMR3
FA20472-12	NBS20-MW58-1214		GW	05-DEC-14	04-DEC-14 10:20	14	19-DEC-14	THGB	LC537UCMR3
FA20472-13	NBS20-MW60-1214		GW	05-DEC-14	03-DEC-14 15:40	14	19-DEC-14	THGB	LC537UCMR3
FA20472-14	NBS20-TW02-1214		GW	05-DEC-14	03-DEC-14 16:00	14	19-DEC-14	THGB	

Comments: FA20472-14
per client do not run

INVOICE1UD Address (account):
Accounts Payable
Empirical Labs
621 Mainstream Dr
Suite 270
Nashville, TN 37228 (615)345-1115
ap@empirlabs.com

PO Number: 954774

LOGIN REVIEW REPORT (ln01r) Accutest Laboratories Southeast, Inc. Dec 10 2014, 07:35 pm CS Rep: MMO

Job Number: FA20472 Client project: 470612.LT.FI.20

Account: ELTNN Empirical Labs

Project: ELTNN25555 NSN Site 20 LTM NEW PROJECT 04-DEC-14

Report to: HC Date: 19-DEC-14 Deliv: FULT1 StateCode: VA Program: DOD-QSM4

CHECK
Client
Project
Deliverables
Matrix
TAT
Tests
Metals SW846

Sample Number	Client ID	Site	Matx	Receive Date	Collect Date/Time	TAT	Due Date	Samp By	Product List

EDDs: ELTNN ELTNN25555 SNEDDCH2 EMAIL sgordon@empirlabs.com

Distribution2 Sample Receipts ELTNN mwalker@empirlabs.com;sgordon@empirlabs.com;rvogel@empirlabs.com

Login: _____ Date: _____
Login Review: _____ Date: _____
CS Review: _____ Date: _____
ID Review: _____ Date: _____

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 # FA20472 PAGE 1 OF 2

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: CH2M Hill
Address: 5701 Cleveland St Ste 200
City: Virginia Beach State: VA Zip: 23462
Project Contact: Juliana Dean E-mail: Juliana.dean@ch2m.com
Phone#: 757 671 6232
Sampler(s) Name(s) (Printed): Troy Horn Gwen Buchlay

Project Information

Project Name: CPZO NSN
Street:
City State:
Project #: 470612.LT.FI.20
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	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	PFC	LAB USE ONLY
1	NBS20-MW-103-1214	12/4	1440			2										X	
2	-MW-103P-1214	12/4	1445													X	
3	-MW-105-1214	12/3	1250													X	
4	-MW-13-1214	12/4	1225													X	
5	-MW-14-1214	12/2	1425													X	
6	-MW-8-1214	12/4	1635													X	
7	-MW52-1214	12/4	1030													X	
8	-MW54-1214	12/4	1635													X	
9	-MW55-1214	12/3	~~1255~~ 1020													X	
10	~~-MW55P-1214 #KEEP~~	~~12/3~~	~~1300~~ 1025													X	
11	-MW57-1214	12/3	1255													X	
12	-MW58-1214	12/4	1020													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

Keep MW55P

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	12/4/14 1900	2 FX	3 FX 12-05-14	1000	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		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: 2-2

1412120 Data Package

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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 # FA20472 PAGE 2 OF 2

Accutest Quote #	SKIFF#

Client / Reporting Information

Company Name
Address
City State Zip
Project Contact SEE PAGE 1 Email
Phone#
Sampler(s) Name(s) (Printed)

Project Information

Project Name:
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	TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	PFC	LAB USE ONLY
	~~NBS20-MW102-1214~~																
	~~MW102P 1214~~																
13	NBS20-MW60-1214	12/3	1540			2										X	
	-EB120214	12/2	1445			2										X	
	-EB120314	12/3	1200			2										X	
	-EB120414	12/4	1700			2										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

EB samples to follow in next shipment

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	12/4/14 1900	2	3 12-05-14	1000	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		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: _____

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1412120 Data Package

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20472 CLIENT: CH2M Hill PROJECT: LPZO NSN

DATE/TIME RECEIVED: 12-05-14 1000 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 7721 0222 7440

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
- [Y] TRIP BLANK NOT PROVIDED
- [Y] 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: 1.8
- [ ] CORRECTED TEMPS: 2.2

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)
- [X] 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: Received Extra Sample NBS-20-TW02-1214 12-03-14 16:00 Will Be Sample #14 Read Comments on Page 2 For EB Samples

TECHNICIAN SIGNATURE/DATE R Will 12-06-14 REVIEWER SIGNATURE/DATE Jay Tee 12-6-14

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

J14221409230Suv

Ship Date: 04DEC14
ActWgt: 50.0 LB
CAD: 104174249/INET3550

Delivery Address Bar Code

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

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

Muna Mohammed
Accutest Laboratories
4405 Vineland Rd

ORLANDO, FL 32811

FRI - 05 DEC 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7721 0222 7440

DSR
32811
FL-US
MCO

XH TIXA

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.

1412120

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: NSN CTO-WE79

Project Manager: Sonya Gordon
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: 01/07/2015 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: 12/05/2014 10:00
Logged In By: Sonya Gordon
Date Logged In: 12/10/2014 17:46

Samples Received at: **2.2°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)					
1412120-01 NBS20-MW103-1214 [Water] Sampled 12/04/2014 14:40 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 13:40	Select PFC
1412120-02 NBS20-MW103P-1214 [Water] Sampled 12/04/2014 14:45 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 13:45	Select PFC
1412120-03 NBS20-MW105-1214 [Water] Sampled 12/03/2014 12:50 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 11:50	Select PFC
1412120-04 NBS20-MW13-1214 [Water] Sampled 12/04/2014 12:25 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 11:25	Select PFC
1412120-05 NBS20-MW14-1214 [Water] Sampled 12/02/2014 14:25 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	05/31/2015 13:25	Select PFC
1412120-06 NBS20-MW08-1214 [Water] Sampled 12/04/2014 16:35 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 15:35	Select PFC

1412120

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)					
1412120-07 NBS20-MW52-1214 [Water] Sampled 12/04/2014 10:30 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 09:30	Select PFC
1412120-08 NBS20-MW54-1214 [Water] Sampled 12/04/2014 16:35 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 15:35	Select PFC
1412120-09 NBS20-MW55-1214 [Water] Sampled 12/03/2014 10:20 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 09:20	Select PFC
1412120-10 NBS20-MW55P-1214 [Water] Sampled 12/03/2014 10:25 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 09:25	Select PFC
1412120-11 NBS20-MW57-1214 [Water] Sampled 12/03/2014 12:55 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 11:55	Select PFC
1412120-12 NBS20-MW58-1214 [Water] Sampled 12/04/2014 10:20 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/02/2015 09:20	Select PFC
1412120-13 NBS20-MW60-1214 [Water] Sampled 12/03/2014 15:40 Eastern 'Client Sample'					
SUB_SPECIAL1	SUB_SPECIALTY	12/30/2014 14:00	20	06/01/2015 14:40	Select PFC

Reviewed By

Date

SUBCONTRACT ORDER

Empirical Laboratories, LLC

1412120

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-MW103-1214				
Reference No: 1412120-01 **Water**	**Sampled:12/04/2014 14:40**			
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 13:40		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW103P-1214				
Reference No: 1412120-02 **Water**	**Sampled:12/04/2014 14:45**			
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 13:45		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW105-1214				
Reference No: 1412120-03 **Water**	**Sampled:12/03/2014 12:50**			
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 11:50		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW13-1214				
Reference No: 1412120-04 **Water**	**Sampled:12/04/2014 12:25**			
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 11:25		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW14-1214				
Reference No: 1412120-05 **Water**	**Sampled:12/02/2014 14:25**			
SUB_SPECIALTY	12/30/2014 14:00	05/31/2015 13:25		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW08-1214				
Reference No: 1412120-06 **Water**	**Sampled:12/04/2014 16:35**			
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 15:35		Select PFC
Containers Supplied:				

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

SUBCONTRACT ORDER

Empirical Laboratories, LLC

1412120

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: NBS20-MW52-1214				
Reference No: 1412120-07	**Water**	**Sampled: 12/04/2014 10:30**		
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 09:30		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW54-1214				
Reference No: 1412120-08	**Water**	**Sampled: 12/04/2014 16:35**		
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 15:35		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW55-1214				
Reference No: 1412120-09	**Water**	**Sampled: 12/03/2014 10:20**		
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 09:20		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW55P-1214				
Reference No: 1412120-10	**Water**	**Sampled: 12/03/2014 10:25**		
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 09:25		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW57-1214				
Reference No: 1412120-11	**Water**	**Sampled: 12/03/2014 12:55**		
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 11:55		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW58-1214				
Reference No: 1412120-12	**Water**	**Sampled: 12/04/2014 10:20**		
SUB_SPECIALTY	12/30/2014 14:00	06/02/2015 09:20		Select PFC
Containers Supplied:				
Sample ID: NBS20-MW60-1214				
Reference No: 1412120-13	**Water**	**Sampled: 12/03/2014 15:40**		
SUB_SPECIALTY	12/30/2014 14:00	06/01/2015 14:40		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 #: 1412120

QC LEVEL: Level IV
Report Due: 1/7/2015
Client Sample Count: 13

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	SUB_SPECIALTY
Client Sample	12/4/2014	12/5/2014	1412120-01	NBS20-MW103-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-02	NBS20-MW103P-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-03	NBS20-MW105-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-04	NBS20-MW13-1214	Water	X
Client Sample	12/2/2014	12/5/2014	1412120-05	NBS20-MW14-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-06	NBS20-MW08-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-07	NBS20-MW52-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-08	NBS20-MW54-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-09	NBS20-MW55-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-10	NBS20-MW55P-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-11	NBS20-MW57-1214	Water	X
Client Sample	12/4/2014	12/5/2014	1412120-12	NBS20-MW58-1214	Water	X
Client Sample	12/3/2014	12/5/2014	1412120-13	NBS20-MW60-1214	Water	X

Subcontractor Data Package

Southeast ACCUTEST LABORATORIES

Reissue #2
01/16/15

Technical Report for

Empirical Labs

NSN Site 20 LTM

470612.LT.FI.20

Accutest Job Number: FA20472

Sampling Dates: 12/02/14 - 12/04/14

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: **318**

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

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

December 23, 2014

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

RE: Accutest job FA20472 Reissue

Dear Ms. Gordon,

The final report for job number FA20472 has been edited to reflect requested corrections. These edits have been incorporated into the revised report.

The sample ID has been revised.

Accutest apologies for any inconvenience this may have caused. Please feel free to contact us if we can be of further assistance.

Sincerely,

Accutest Laboratories, SE

January 16, 2015

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

RE: Accutest job FA20472 Reissue 2

Dear Ms. Gordon,

The final report for job number FA20472 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

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Accutest Laboratories

Sample Summary

Empirical Labs

Job No: FA20472

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20472-1	12/04/14	14:40	THGB	12/05/14	AQ	Ground Water	NBS20-MW103-1214
FA20472-2	12/04/14	14:45	THGB	12/05/14	AQ	Ground Water	NBS20-MW103P-1214
FA20472-3	12/03/14	12:50	THGB	12/05/14	AQ	Ground Water	NBS20-MW105-1214
FA20472-4	12/04/14	12:25	THGB	12/05/14	AQ	Ground Water	NBS20-MW13-1214
FA20472-5	12/02/14	14:25	THGB	12/05/14	AQ	Ground Water	NBS20-MW14-1214
FA20472-6	12/04/14	16:35	THGB	12/05/14	AQ	Ground Water	NBS20-MW08-1214
FA20472-7	12/04/14	10:30	THGB	12/05/14	AQ	Ground Water	NBS20-MW52-1214
FA20472-8	12/04/14	16:35	THGB	12/05/14	AQ	Ground Water	NBS20-MW54-1214
FA20472-9	12/03/14	10:20	THGB	12/05/14	AQ	Ground Water	NBS20-MW55-1214
FA20472-10	12/03/14	10:25	THGB	12/05/14	AQ	Ground Water	NBS20-MW55P-1214
FA20472-11	12/03/14	12:55	THGB	12/05/14	AQ	Ground Water	NBS20-MW57-1214
FA20472-12	12/04/14	10:20	THGB	12/05/14	AQ	Ground Water	NBS20-MW58-1214
FA20472-13	12/03/14	15:40	THGB	12/05/14	AQ	Ground Water	NBS20-MW60-1214

Accutest Laboratories

Sample Summary
(continued)

Empirical Labs

Job No: FA20472

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20472-14	12/03/14	16:00	THGB	12/05/14	AQ	Ground Water	NBS20-TW02-1214

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Empirical Labs **Job No:** FA20472

Site: NSN Site 20 LTM **Report Date:** 12/18/2014 12:52:25

13 Sample(s) were collected on/ between 12/02/2014 and 12/04/2014 and were received at Accutest SE on 12/05/2014 properly preserved, at 2.2 Deg. C and intact. These Samples received an Accutest job number of FA20472. 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:** OP54204

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) FA20472-5MS, FA20472-5MSD were used as the QC samples indicated.

Sample(s) FA20472-12, FA20472-8 have surrogates outside control limits due to dilution.

FA20472-6: Dilution required due to matrix interference (internal standard failure).

FA20472-8 for 13C2-PFHxA: Outside control limits due to dilution.

FA20472-12 for 13C2-PFHxA: Outside control limits due to dilution.

FA20472-12 for 13C2-PFDA: Outside control limits due to dilution.

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 18, 2014

Kim Benham, Client Services (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
FA20472-1	MSSEMI	Q8795.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA20472-12	MSSEMI	Q8806.D	Perfluorobutanesulfonic acid, Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-12	MSSEMI	Q8807.D	13C2-PFDA, 13C2-PFHxA, Perfluorooctanoic acid
FA20472-13	MSSEMI	Q8792.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-13	MSSEMI	Q8808.D	Perfluorooctanoic acid
FA20472-2	MSSEMI	Q8796.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-3	MSSEMI	Q8778.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA20472-4	MSSEMI	Q8779.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-7	MSSEMI	Q8783.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA20472-8	MSSEMI	Q8784.D	Perfluorohexanesulfonic acid
FA20472-8	MSSEMI	Q8805.D	Perfluorooctanesulfonic acid, Perfluorooctanoic acid
OP54204-BS	MSSEMI	Q8776.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
OP54204-MS	MSSEMI	Q8781.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
OP54204-MSD	MSSEMI	Q8782.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ280-ICV280	MSSEMI	Q8642.D	Perfluorodecanesulfonic acid, Perfluorododecanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid, Perfluoroundecanoic acid

15 Manual Integrations were found for FA20472

Summary of Hits

Job Number: FA20472
Account: Empirical Labs
Project: NSN Site 20 LTM
Collected: 12/02/14 thru 12/04/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20472-1	**NBS20-MW103-1214**					
Perfluoroheptanoic acid		0.0130 J	0.020	0.016	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0311	0.020	0.016	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.00987 J	0.020	0.016	ug/l	EPA 537 MOD
FA20472-2	**NBS20-MW103P-1214**					
Perfluoroheptanoic acid		0.0124 J	0.020	0.016	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0305	0.020	0.016	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0103 J	0.020	0.016	ug/l	EPA 537 MOD
FA20472-3	**NBS20-MW105-1214**					
Perfluoroheptanoic acid		0.0231	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0631	0.042	0.033	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0195 J	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.234	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.357	0.021	0.017	ug/l	EPA 537 MOD
FA20472-4	**NBS20-MW13-1214**					
Perfluoroheptanoic acid		0.0269	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0232 J	0.042	0.033	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0957	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0862	0.021	0.017	ug/l	EPA 537 MOD
FA20472-5	**NBS20-MW14-1214**					
No hits reported in this sample.						
FA20472-6	**NBS20-MW08-1214**					
Perfluoroheptanoic acid [a]		0.0535 J	0.10	0.083	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid [a]		0.145	0.10	0.083	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid [a]		0.782	0.10	0.083	ug/l	EPA 537 MOD
FA20472-7	**NBS20-MW52-1214**					
Perfluorooctanoic acid		0.0195 J	0.040	0.032	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0434	0.020	0.016	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0535	0.020	0.016	ug/l	EPA 537 MOD

Summary of Hits

Job Number: FA20472
Account: Empirical Labs
Project: NSN Site 20 LTM
Collected: 12/02/14 thru 12/04/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20472-8	**NBS20-MW54-1214**					
Perfluoroheptanoic acid		0.0584	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.800	0.21	0.17	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0280	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.275	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.542	0.10	0.083	ug/l	EPA 537 MOD
FA20472-9	**NBS20-MW55-1214**					
No hits reported in this sample.						
FA20472-10	**NBS20-MW55P-1214**					
No hits reported in this sample.						
FA20472-11	**NBS20-MW57-1214**					
No hits reported in this sample.						
FA20472-12	**NBS20-MW58-1214**					
Perfluoroheptanoic acid		0.104	0.10	0.083	ug/l	EPA 537 MOD
Perfluorooctanoic acid		3.30	0.83	0.67	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.130	0.10	0.083	ug/l	EPA 537 MOD
FA20472-13	**NBS20-MW60-1214**					
Perfluoroheptanoic acid		0.0254	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.625	0.083	0.067	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0341	0.021	0.017	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.289	0.021	0.017	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.151	0.021	0.017	ug/l	EPA 537 MOD

(a) Dilution required due to matrix interference (internal standard failure).

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	NBS20-MW103-1214		
Lab Sample ID:	FA20472-1	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8795.D	1	12/16/14	NAF	12/11/14	OP54204	SQ284
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	0.0130	0.020	0.016	0.0080	ug/l	J
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	0.0311	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.00987	0.020	0.016	0.0080	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	98%		70-130%
	13C2-PFDA	100%		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-MW103P-1214		
Lab Sample ID:	FA20472-2	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8796.D	1	12/16/14	NAF	12/11/14	OP54204	SQ284
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	0.0124	0.020	0.016	0.0080	ug/l	J
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	0.0305	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0103	0.020	0.016	0.0080	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	92%		70-130%
	13C2-PFDA	96%		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-MW105-1214		
Lab Sample ID:	FA20472-3	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8778.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	0.0231	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.0631	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	0.0195	0.021	0.017	0.0083	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.234	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.357	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	113%		70-130%
	13C2-PFDA	109%		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-MW13-1214		
Lab Sample ID:	FA20472-4	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8779.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	0.0232	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	0.017 U	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0957	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0862	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	115%		70-130%
	13C2-PFDA	97%		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-MW14-1214		
Lab Sample ID:	FA20472-5	**Date Sampled:**	12/02/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8780.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	0.017 U	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.017 U	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	119%		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-MW08-1214		
Lab Sample ID:	FA20472-6	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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 [a]	Q8804.D	5	12/16/14	NAF	12/11/14	OP54204	SQ285
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	0.0535	0.10	0.083	0.042	ug/l	J
335-67-1	Perfluorooctanoic acid	0.17 U	0.21	0.17	0.083	ug/l	
375-95-1	Perfluorononanoic acid	0.083 U	0.10	0.083	0.042	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.083 U	0.10	0.083	0.042	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.145	0.10	0.083	0.042	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.782	0.10	0.083	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	107%		70-130%
	13C2-PFDA	113%		70-130%

(a) Dilution required due to matrix interference (internal standard failure).

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-MW52-1214		
Lab Sample ID:	FA20472-7	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8783.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	0.0195	0.040	0.032	0.016	ug/l	J
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	0.0434	0.020	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0535	0.020	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	119%		70-130%
	13C2-PFDA	100%		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-MW54-1214		
Lab Sample ID:	FA20472-8	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8784.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
Run #2	Q8805.D	5	12/16/14	NAF	12/11/14	OP54204	SQ285

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

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0584	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.800 [a]	0.21	0.17	0.083	ug/l	
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.0280	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.275	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.542 [a]	0.10	0.083	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	130%	135% [b]	70-130%
	13C2-PFDA	118%	104%	70-130%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

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-MW55-1214		
Lab Sample ID:	FA20472-9	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8785.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	94%		70-130%
	13C2-PFDA	88%		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-MW55P-1214		
Lab Sample ID:	FA20472-10	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8789.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	105%		70-130%
	13C2-PFDA	94%		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-MW57-1214		
Lab Sample ID:	FA20472-11	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8790.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
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	108%		70-130%
	13C2-PFDA	91%		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-MW58-1214		
Lab Sample ID:	FA20472-12	**Date Sampled:**	12/04/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8806.D	5	12/16/14	NAF	12/11/14	OP54204	SQ285
Run #2	Q8807.D	20	12/16/14	NAF	12/11/14	OP54204	SQ285

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

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.104	0.10	0.083	0.042	ug/l	
335-67-1	Perfluorooctanoic acid	3.30 [a]	0.83	0.67	0.33	ug/l	
375-95-1	Perfluorononanoic acid	0.083 U	0.10	0.083	0.042	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.083 U	0.10	0.083	0.042	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.130	0.10	0.083	0.042	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.083 U	0.10	0.083	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	127%	0% [b]	70-130%
	13C2-PFDA	106%	0% [b]	70-130%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

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-MW60-1214		
Lab Sample ID:	FA20472-13	**Date Sampled:**	12/03/14
Matrix:	AQ - Ground Water	**Date Received:**	12/05/14
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	Q8792.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
Run #2	Q8808.D	2	12/16/14	NAF	12/11/14	OP54204	SQ285

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

Perfluorinated Carboxylic Acids and Sulfonates

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS							
375-85-9	Perfluoroheptanoic acid	0.0254	0.021	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.625 [a]	0.083	0.067	0.033	ug/l	
375-95-1	Perfluorononanoic acid	0.017 U	0.021	0.017	0.0083	ug/l	
PERFLUOROALKYLSULFONATES							
375-73-5	Perfluorobutanesulfonic acid	0.0341	0.021	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.289	0.021	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.151	0.021	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	112%	100%	70-130%
	13C2-PFDA	110%	97%	70-130%

(a) Result is from Run# 2

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

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 # FA20472 PAGE 1 OF 2

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: CH2M Hill
Address: 5701 Cleveland St Ste 200
City: Virginia Beach State: VA Zip: 23462
Project Contact: Juliana Dean E-mail: Juliana.dean@ch2m.com
Phone#: 757 671 6232
Sampler(s) Name(s) (Printed): Tony Korn Gwen Buckley

Project Information

Project Name: LP20 NSN
Street
City State
Project #: 470612.LT.FI.20
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	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION	PFC	LAB USE ONLY
1	NBS20-MW-103-1214	12/4	1440			2		X	
2	-MW-103P-1214	12/4	1445			1		X	
3	-MW-105-1214	12/3	1250					X	
4	-MW-13-1214	12/4	1225					X	
5	-MW-14-1214	12/2	1425					X	
6	-MW-8-1214	12/4	1635					X	
7	-MW52-1214	12/4	1030					X	
8	-MW54-1214	12/4	1635					X	
9	-MW55-1214	12/3 ~~1355~~	1020					X	
10	~~-MW55P-1214 8KEEP~~	~~12/3~~	~~1300~~	1025				X	
11	-MW57-1214	12/3	1255					X	
12	-MW58-1214	12/4	1020					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

Keep MW55P

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	12/4/14 1900	2 FX	3 FX 12-05-14	1000	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		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: 2.2

FA20472: Chain of Custody
Page 1 of 6

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 # FA20472 PAGE 2 OF 2

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name
Address
City State Zip
Project Contact SEE PAGE 1 Email
Phone# Fax #
Sampler(s) Name(s) (Printed)

Project Information

Project Name:
Street
City State
Project # 1
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	Collection DATE	Collection TIME	Sampled By	Matrix	Total # of Bottles	Container Information	PFC	LAB USE ONLY
	~~NBS20-MW102-1214~~								
	~~MW102P 1214~~								
13	NBS20-MW60-1214	12/3	1540			2		X	
	-EB120214	12/2	1445			2		X	
	-EB120314	12/3	1200			2		X	
	-EB120414	12/4	1700			2		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

EB samples to follow in next shipment

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	12/4/14 1900	2	3 12-05-14	1000	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		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: _____

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FA20472: Chain of Custody
Page 2 of 6

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20472 CLIENT: CH2M Hill PROJECT: LPZO NSN

DATE/TIME RECEIVED: 12-05-14 1000 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 7721 0222 7440

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
- [Y] TRIP BLANK NOT PROVIDED
- [Y] 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: 1.8
- [ ] CORRECTED TEMPS: 2.2

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)
- [X] 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: Received Extra Sample NBS-20-TW02-1214 12-03-14 16:00 Will Be Sample #14 Read Comments on Page 2 For EB Samples

TECHNICIAN SIGNATURE/DATE RW 12-06-14 REVIEWER SIGNATURE/DATE JG 12-6-14

NF 10/14

receipt confirmation 102914.xls

FA20472: Chain of Custody

Page 3 of 6

Page 1 of 1

From: (804) 615-9461
Troy Horn

Origin ID: NTUA

5701 Cleveland St
Ste 200
VIRGINIA BEACH, VA 23462

J1422140923330JU

Ship Date: 04DEC14
ActWgt: 50.0 LB
CAD: 104174249/INET3550

Delivery Address Bar Code

Ref # 470812.kfi.20
Invoice #
PO #
Dept #

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

ORLANDO, FL 32811

TRK# 7721 0222 7440
0201

FRI - 05 DEC 10:30A
PRIORITY OVERNIGHT
DSR
32811
FL-US
MCO

XH TIXA

5223/0C56/429

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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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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FA20472: Chain of Custody
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Job Change Order: FA20472_12/8/2014

Requested Date:	12/8/2014	**Received Date:**	12/5/2014
Account Name:	Empirical Labs	**Due Date:**	12/19/2014
Project	NSN Site 20 LTM	**Deliverable:**	FULT1
CSR:	MMO	**TAT (Days):**	14

Sample #:
FA20472-14

Change: Sample received, but not listed on COC. Per client request do not analyze the sample.

NBS20-TW-02-1214

Above Changes Per: Sonya Gordon **Date:** 12/8/2014

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

Job Change Order: FA20472_12/23/2014

Requested Date:	12/23/2014	**Received Date:**	12/5/2014
Account Name:	Empirical Labs	**Due Date:**	12/19/2014
Project	NSN Site 20 LTM	**Deliverable:**	FULT1
CSR:	MMO	**TAT (Days):**	7

Sample #:
FA20472-6

Change: Per client ID should be SB20-MW08-1214.

NBS20-MW8-1214

Above Changes Per: Sonya Gordon **Date:** 12/23/2014

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

FA20472: Chain of Custody
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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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54204-MB	Q8777.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284

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

FA20472-1, FA20472-2, FA20472-3, FA20472-4, FA20472-5, FA20472-6, FA20472-7, FA20472-8, FA20472-9, FA20472-10, FA20472-11, FA20472-12, FA20472-13

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	126%	70-130%
	13C2-PFDA	107%	70-130%

Blank Spike Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54204-BS	Q8776.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284

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

FA20472-1, FA20472-2, FA20472-3, FA20472-4, FA20472-5, FA20472-6, FA20472-7, FA20472-8, FA20472-9, FA20472-10, FA20472-11, FA20472-12, FA20472-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-85-9	Perfluoroheptanoic acid	0.16	0.154	96	70-130
335-67-1	Perfluorooctanoic acid	0.16	0.158	99	70-130
375-95-1	Perfluorononanoic acid	0.16	0.150	94	70-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.192	120	70-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.182	114	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.148	93	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
	13C2-PFHxA	122%	70-130%
	13C2-PFDA	104%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54204-MS	Q8781.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
OP54204-MSD	Q8782.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284
FA20472-5	Q8780.D	1	12/15/14	NAF	12/11/14	OP54204	SQ284

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

FA20472-1, FA20472-2, FA20472-3, FA20472-4, FA20472-5, FA20472-6, FA20472-7, FA20472-8, FA20472-9, FA20472-10, FA20472-11, FA20472-12, FA20472-13

CAS No.	Compound	FA20472-5 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	0.333	0.315	94	0.333	0.325	97	3	70-130/30
335-67-1	Perfluorooctanoic acid	0.042	U	0.333	0.334	100	0.333	0.338	101	1	70-130/30
375-95-1	Perfluorononanoic acid	0.021	U	0.333	0.312	94	0.333	0.313	94	0	70-130/30
375-73-5	Perfluorobutanesulfonic acid	0.021	U	0.333	0.395	118	0.333	0.420	126	6	70-130/30
355-46-4	Perfluorohexanesulfonic acid	0.021	U	0.333	0.376	113	0.333	0.396	119	5	70-130/30
1763-23-1	Perfluorooctanesulfonic acid	0.021	U	0.333	0.337	101	0.333	0.348	104	3	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	FA20472-5	Limits
	13C2-PFHxA	130%	124%	119%	70-130%
	13C2-PFDA	109%	109%	104%	70-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ284-CC280	**Injection Date:**	12/15/14
Lab File ID:	Q8774.D	**Injection Time:**	16:51
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]	26490	6.31	13031	6.91	55699	9.61
Upper Limit [c]	41705	7.31	19106	7.91	105938	10.61
Lower Limit [d]	13902	5.31	6369	5.91	35313	8.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
OP54204-BS	24201	6.31	11622	6.91	49693	9.61
OP54204-MB	27483	6.31	13252	6.91	53360	9.62
FA20472-3	21174	6.30	9818	6.89	51459	9.61
FA20472-4	25895	6.31	12108	6.89	49886	9.62
FA20472-5	25207	6.31	12269	6.91	49321	9.61
OP54204-MS	26200	6.31	12479	6.91	51800	9.61
OP54204-MSD	26459	6.31	12459	6.91	51924	9.61
FA20472-7	26192	6.31	12139	6.91	51941	9.61
FA20472-8	22856	6.31	11232	6.89	48551	9.62
FA20472-9	27320	6.31	12513	6.91	51145	9.61

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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ284-CC280	**Injection Date:**	12/15/14
Lab File ID:	Q8786.D	**Injection Time:**	21:00
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]	27830	6.31	13391	6.91	54601	9.62
Upper Limit [c]	41705	7.31	19106	7.91	105938	10.62
Lower Limit [d]	13902	5.31	6369	5.91	35313	8.62

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20402-4	29156	6.31	13323	6.91	58336	9.61
FA20472-10	29823	6.31	13437	6.91	55102	9.61
FA20472-11	30238	6.31	13921	6.91	57099	9.61
FA20472-13	28260	6.30	13776	6.89	60917	9.60

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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ284-CC280	**Injection Date:**	12/15/14
Lab File ID:	Q8793.D	**Injection Time:**	23:25
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]	30020	6.31	14852	6.91	59443	9.62
Upper Limit [c]	41705	7.31	19106	7.91	105938	10.62
Lower Limit [d]	13902	5.31	6369	5.91	35313	8.62

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20472-1	27435	6.30	11675	6.89	58489	9.62
FA20472-2	29034	6.30	12090	6.89	58958	9.61
SQ284-ECC280	30516	6.31	14680	6.91	62398	9.61

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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM

Check Std:	SQ285-CC280	**Injection Date:**	12/16/14
Lab File ID:	Q8802.D	**Injection Time:**	10:26
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]	22918	6.31	11747	6.91	47001	9.61
Upper Limit [c]	41705	7.31	19106	7.91	105938	10.61
Lower Limit [d]	13902	5.31	6369	5.91	35313	8.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
FA20472-6 [e]	25395	6.30	11306	6.89	49254	9.59
FA20472-8	24231	6.31	11875	6.91	47515	9.61
FA20472-12	25666	6.30	13172	6.89	53648	9.61
FA20472-12	29064	6.31	13941	6.89	57417	9.60
FA20472-13	26613	6.30	13003	6.89	54802	9.60
SQ285-ECC280	26757	6.30	12770	6.89	53466	9.61

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.
(e) Dilution required due to matrix interference (internal standard failure).

Semivolatile Surrogate Recovery Summary

Job Number: FA20472
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
FA20472-1	Q8795.D	98	100
FA20472-2	Q8796.D	92	96
FA20472-3	Q8778.D	113	109
FA20472-4	Q8779.D	115	97
FA20472-5	Q8780.D	119	104
FA20472-6	Q8804.D	107	113
FA20472-7	Q8783.D	119	100
FA20472-8	Q8805.D	135* [a]	104
FA20472-8	Q8784.D	130	118
FA20472-9	Q8785.D	94	88
FA20472-10	Q8789.D	105	94
FA20472-11	Q8790.D	108	91
FA20472-12	Q8806.D	127	106
FA20472-12	Q8807.D	0* [a]	0* [a]
FA20472-13	Q8808.D	100	97
FA20472-13	Q8792.D	112	110
OP54204-BS	Q8776.D	122	104
OP54204-MB	Q8777.D	126	107
OP54204-MS	Q8781.D	130	109
OP54204-MSD	Q8782.D	124	109

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

(a) Outside control limits due to dilution.

Initial Calibration Summary

Job Number: FA20472
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: FA20472
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: FA20472
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: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ284-CC280
Lab FileID: Q8774.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1215_PFC_SQ284\SQ284.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: Q8774
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	18.872	-5.6	94.4
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	20.993	5.0	105.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	21.379	6.9	106.9
PFBS	20.000	21.746	8.7	108.7
PFDA	20.000	24.142	20.7	120.7
PFDoDA	20.000	20.092	0.5	100.5
PFDS	20.000	25.207	# 26.0	126.0
PFHpA	20.000	20.248	1.2	101.2
PFHpS	20.000	20.273	1.4	101.4
PFHxA	20.000	21.236	6.2	106.2
PFHxS	20.000	20.636	3.2	103.2
PFNA	20.000	17.865	-10.7	89.3
PFOA	20.000	20.023	0.1	100.1
PFOS	20.000	20.289	1.4	101.4
PFPeA	20.000	20.867	4.3	104.3
PFTeDA	20.000	16.241	-18.8	81.2
PFTrDA	20.000	18.208	-9.0	91.0
PFUnDA	20.000	22.950	14.7	114.7

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ284-CC280
Lab FileID: Q8786.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1215_PFC_SQ284\SQ284.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: Q8786
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	17.647	-11.8	88.2
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	20.029	0.1	100.1
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	21.226	6.1	106.1
PFBS	20.000	21.385	6.9	106.9
PFDA	20.000	24.106	20.5	120.5
PFDoDA	20.000	20.006	0.0	100.0
PFDS	20.000	26.118	# 30.6	130.6
PFHpA	20.000	19.870	-0.6	99.4
PFHpS	20.000	20.569	2.8	102.8
PFHxA	20.000	20.080	0.4	100.4
PFHxS	20.000	20.657	3.3	103.3
PFNA	20.000	17.079	-14.6	85.4
PFOA	20.000	19.765	-1.2	98.8
PFOS	20.000	20.374	1.9	101.9
PFPeA	20.000	20.172	0.9	100.9
PFTeDA	20.000	16.599	-17.0	83.0
PFTrDA	20.000	18.251	-8.7	91.3
PFUnDA	20.000	25.885	# 29.4	129.4

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ284-CC280
Lab FileID: Q8793.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1215_PFC_SQ284\SQ284.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: Q8793
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	17.818	-10.9	89.1
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.828	-0.9	99.1
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	20.259	1.3	101.3
PFBS	20.000	20.580	2.9	102.9
PFDA	20.000	24.009	20.0	120.0
PFDoDA	20.000	20.232	1.2	101.2
PFDS	20.000	26.139	# 30.7	130.7
PFHpA	20.000	19.222	-3.9	96.1
PFHpS	20.000	19.888	-0.6	99.4
PFHxA	20.000	19.743	-1.3	98.7
PFHxS	20.000	19.796	-1.0	99.0
PFNA	20.000	17.630	-11.8	88.2
PFOA	20.000	19.970	-0.1	99.9
PFOS	20.000	19.950	-0.3	99.7
PFPeA	20.000	20.015	0.1	100.1
PFTeDA	20.000	16.359	-18.2	81.8
PFTrDA	20.000	18.160	-9.2	90.8
PFUnDA	20.000	25.585	# 27.9	127.9

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ284-ECC280
Lab FileID: Q8798.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1215_PFC_SQ284\SQ284.batch.bin

Level ID:Calibration File
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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: Q8798
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	17.990	-10.1	89.9
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.754	-1.2	98.8
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	20.241	1.2	101.2
PFBS	20.000	21.126	5.6	105.6
PFDA	20.000	23.740	18.7	118.7
PFDoDA	20.000	20.378	1.9	101.9
PFDS	20.000	25.771	# 28.9	128.9
PFHpA	20.000	19.757	-1.2	98.8
PFHpS	20.000	20.407	2.0	102.0
PFHxA	20.000	19.842	-0.8	99.2
PFHxS	20.000	21.009	5.0	105.0
PFNA	20.000	17.713	-11.4	88.6
PFOA	20.000	20.125	0.6	100.6
PFOS	20.000	20.179	0.9	100.9
PFPeA	20.000	20.160	0.8	100.8
PFTeDA	20.000	16.824	-15.9	84.1
PFTrDA	20.000	18.438	-7.8	92.2
PFUnDA	20.000	26.575	# 32.9	132.9

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ285-CC280
Lab FileID: Q8802.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1216_PFC_SQ285\SQ285.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1208_PFC_SQ280\Q8634.d
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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: Q8802
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	16.295	-18.5	81.5
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	21.233	6.2	106.2
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	22.463	12.3	112.3
PFBS	20.000	22.718	13.6	113.6
PFDA	20.000	21.280	6.4	106.4
PFDoDA	20.000	20.626	3.1	103.1
PFDS	20.000	27.688	# 38.4	138.4
PFHpA	20.000	21.348	6.7	106.7
PFHpS	20.000	21.111	5.6	105.6
PFHxA	20.000	21.098	5.5	105.5
PFHxS	20.000	22.181	10.9	110.9
PFNA	20.000	17.364	-13.2	86.8
PFOA	20.000	20.879	4.4	104.4
PFOS	20.000	21.216	6.1	106.1
PFPeA	20.000	22.011	10.1	110.1
PFTeDA	20.000	19.458	-2.7	97.3
PFTrDA	20.000	18.232	-8.8	91.2
PFUnDA	20.000	25.700	# 28.5	128.5

CC Criteria: +/- 25%

Continuing Calibration Summary

Job Number: FA20472
Account: ELTNN Empirical Labs
Project: NSN Site 20 LTM
Sample: SQ285-ECC280
Lab FileID: Q8810.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1216_PFC_SQ285\SQ285.batch.bin

Level ID:Calibration File
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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: Q8810
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-PFDA	20.000	18.353	-8.2	91.8
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.328	-3.4	96.6
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
PFBA	20.000	20.174	0.9	100.9
PFBS	20.000	22.192	11.0	111.0
PFDA	20.000	24.458	22.3	122.3
PFDoDA	20.000	21.052	5.3	105.3
PFDS	20.000	26.635	# 33.2	133.2
PFHpA	20.000	19.992	0.0	100.0
PFHpS	20.000	21.402	7.0	107.0
PFHxA	20.000	19.659	-1.7	98.3
PFHxS	20.000	21.423	7.1	107.1
PFNA	20.000	17.443	-12.8	87.2
PFOA	20.000	20.808	4.0	104.0
PFOS	20.000	20.632	3.2	103.2
PFPeA	20.000	20.155	0.8	100.8
PFTeDA	20.000	17.812	-10.9	89.1
PFTrDA	20.000	19.319	-3.4	96.6
PFUnDA	20.000	26.079	# 30.4	130.4

CC Criteria: +/- 25%

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/16/14 12:21

Perfluorinated Compounds by LC/MS/MS.

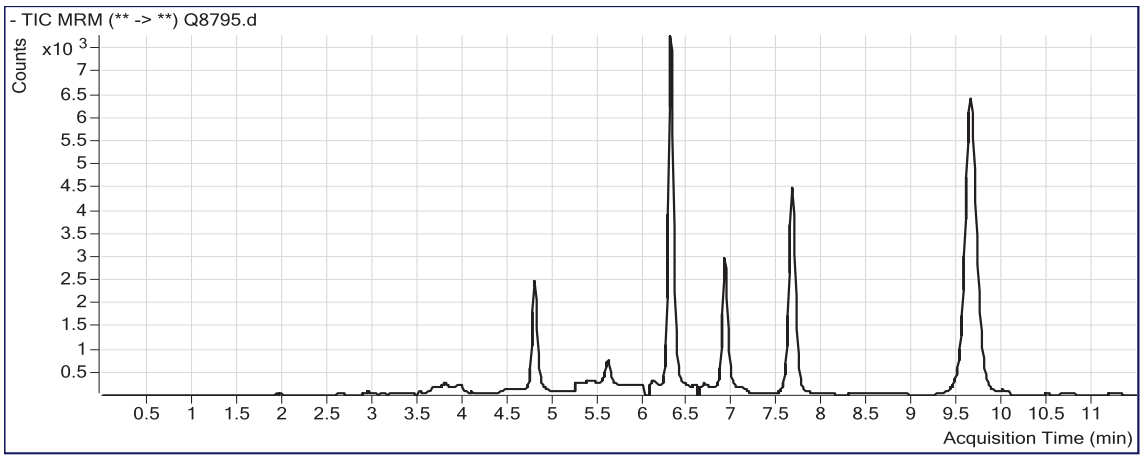
Data File	:	Q8795.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 00:06
Sample Name	:	FA20472-1
Vial	:	Vial 21
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.296	415.0 -> 370.0	27435	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	11675	20.000	µg/L		-0.013
13C2-PFDoDA	9.622	615.0 -> 570.0	58489	20.000	µg/L		0.012
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	8829	19.57	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 97.87%				
13C2-PFDA	7.645	515.0 -> 470.0	23342	19.94	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.72%				
Target Compounds							**Qvalue**
PFBA	2.952	213.0 -> 169.0	314	0.955	µg/L		100
PFPeA	3.799	263.0 -> 219.0	332	2.017	µg/L		100
PFHxA	4.783	313.0 -> 269.0	862	1.820	µg/L		98
PFHpA	5.597	363.0 -> 319.0	745	1.621	µg/L		78
PFHxS	5.605	399.0 -> 80.0	1077	3.887	µg/L	m	86
PFOA	6.299	413.0 -> 369.0	2778	1.999	µg/L	m	75
PFOS	6.661	499.0 -> 80.0	721	1.234	µg/L	m	84
PFTeDA	11.223	713.0 -> 669.0	375	0.417	µg/L		100

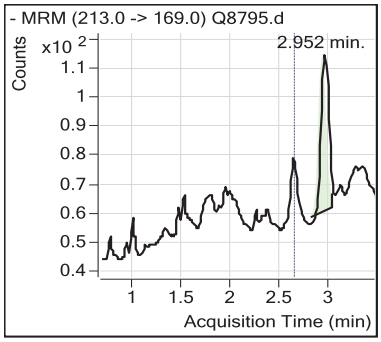
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

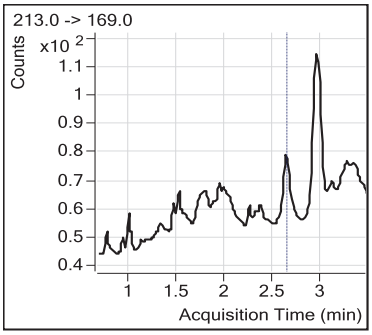
Perfluorinated Compounds by LC/MS/MS.

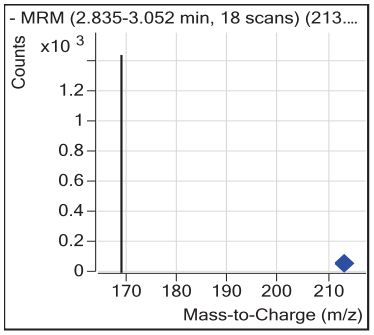
Data File	:	Q8795.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 00:06
Sample Name	:	FA20472-1
Vial	:	Vial 21
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



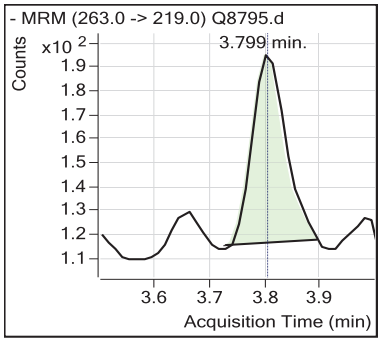
PFBA

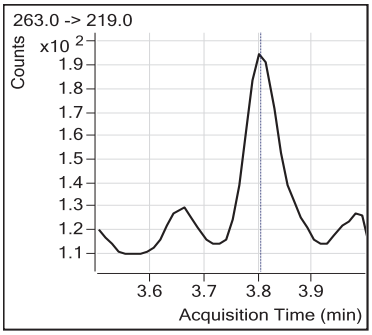


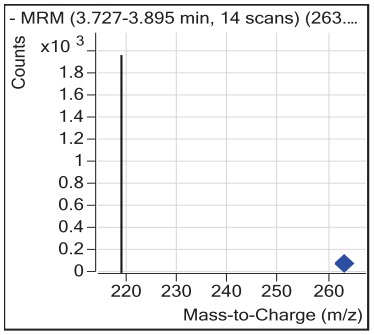




PFPeA

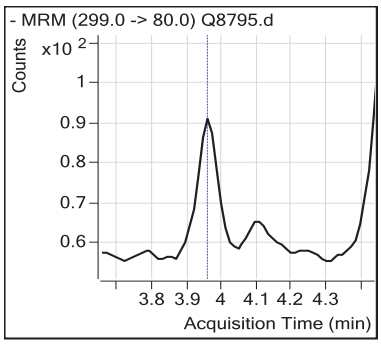


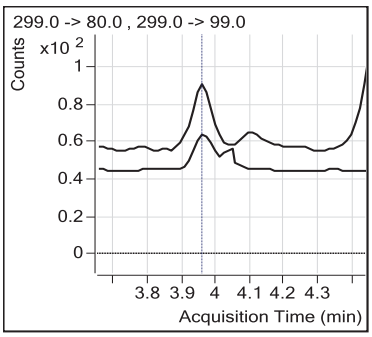


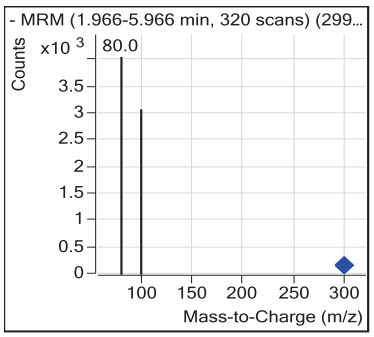


Perfluorinated Compounds by LC/MS/MS.

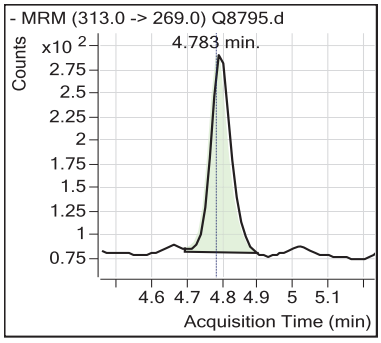
PFBS

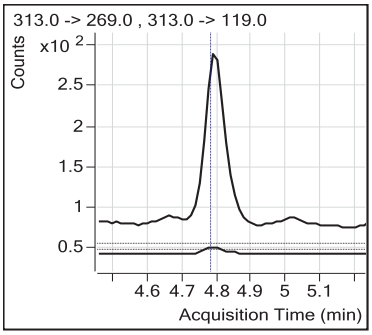


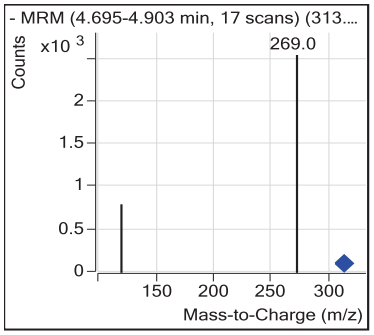




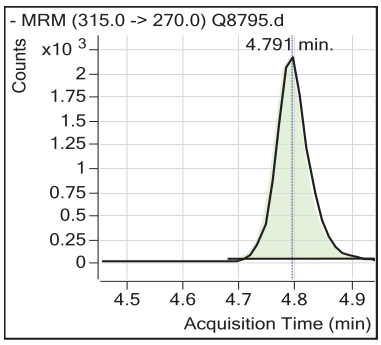
PFHxA

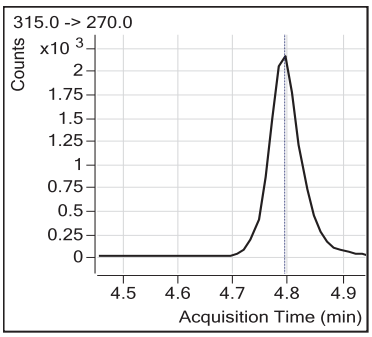


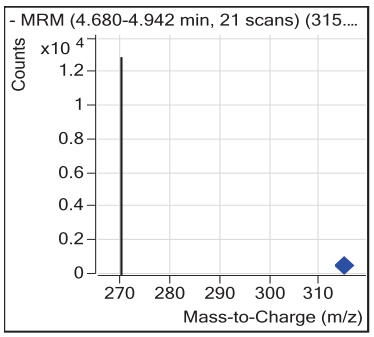




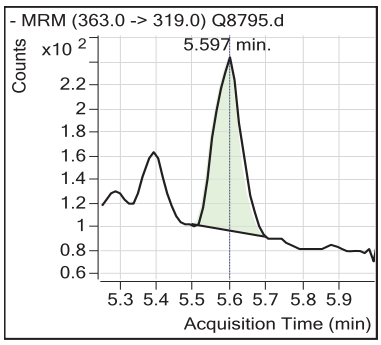
13C2-PFHxA

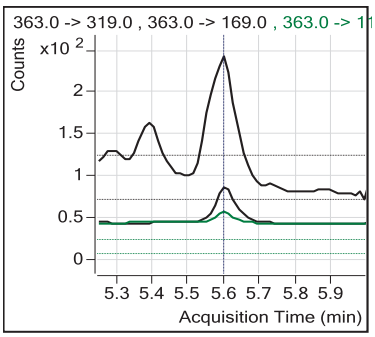


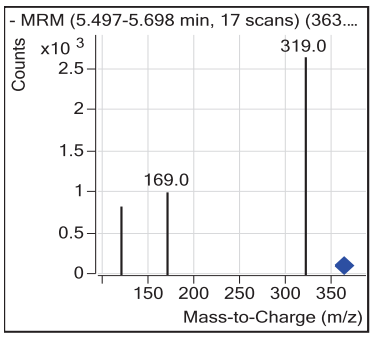




PFHpA

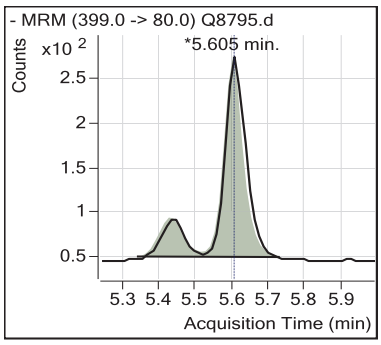


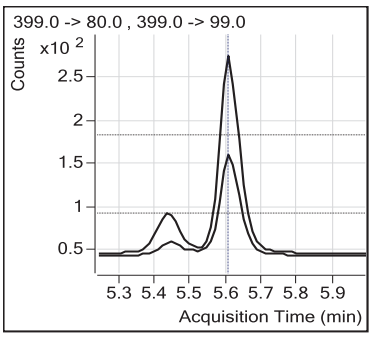


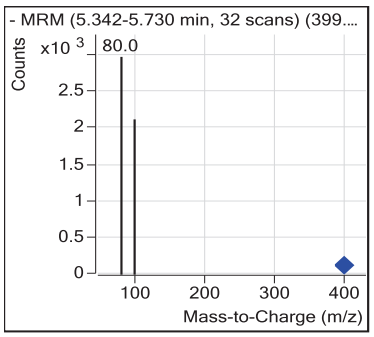


Perfluorinated Compounds by LC/MS/MS.

PFHxS







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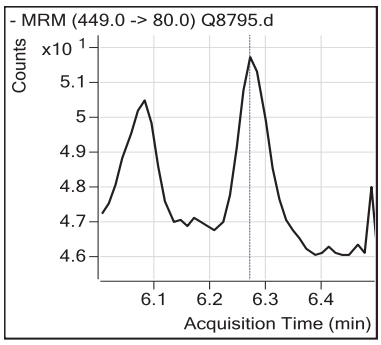
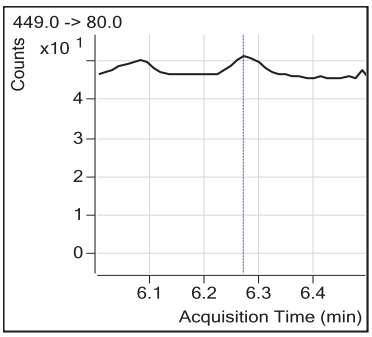
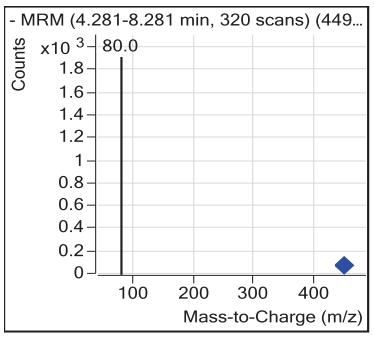
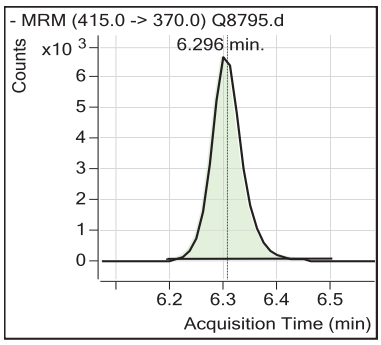
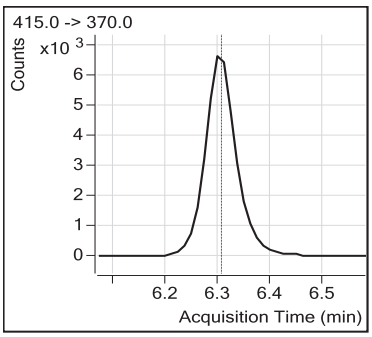


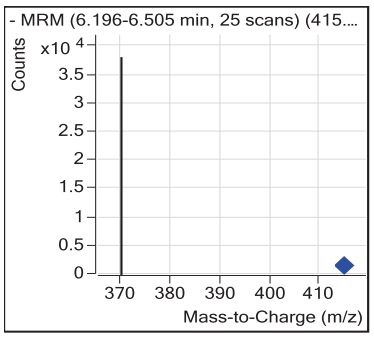




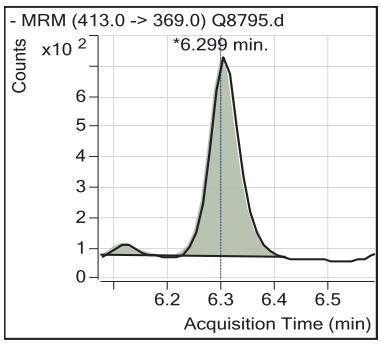
13C2-PFOA

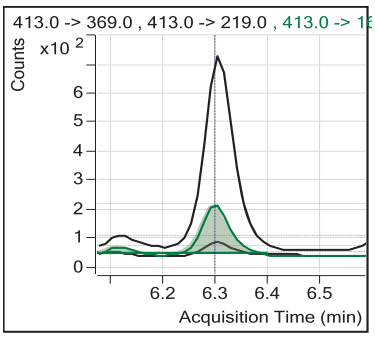


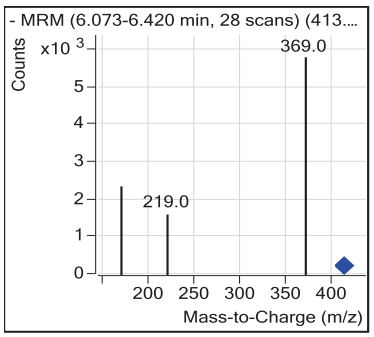




PFOA

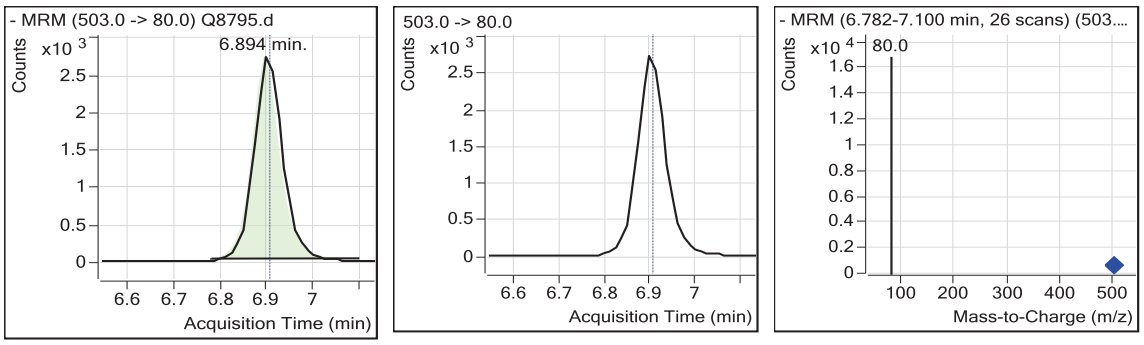




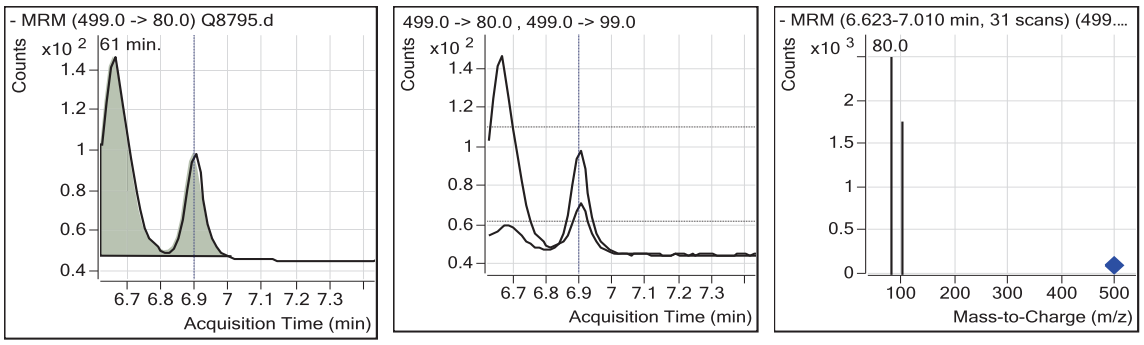


Perfluorinated Compounds by LC/MS/MS.

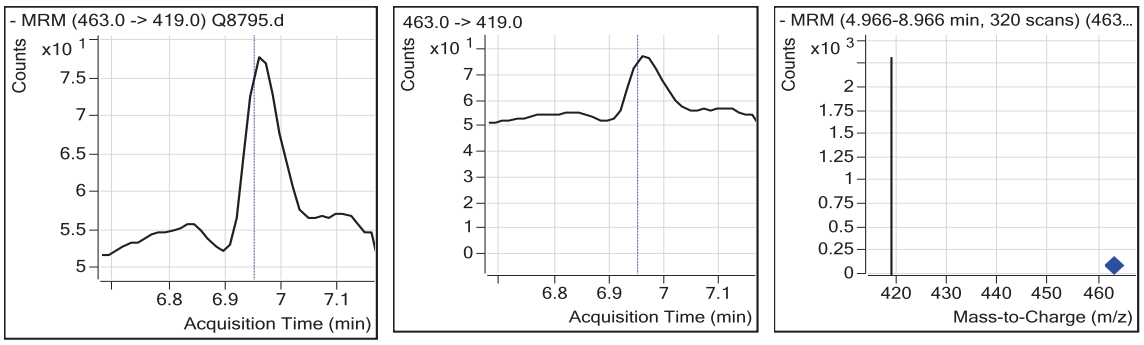
13C4-PFOS



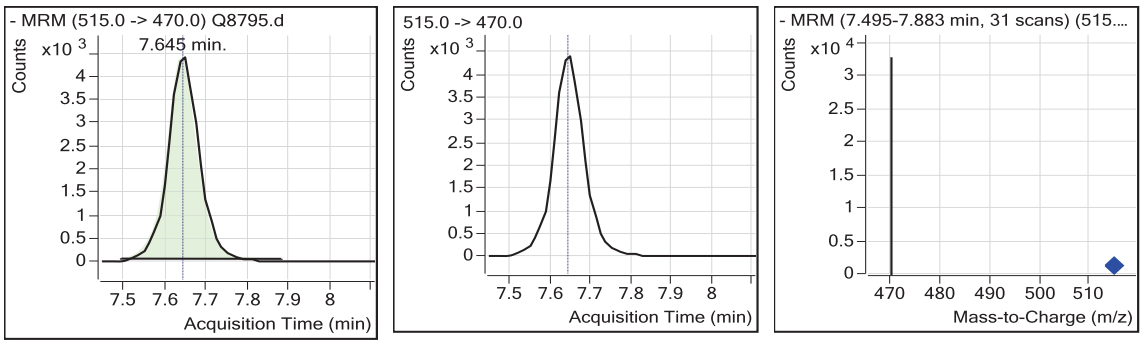
PFOS



PFNA



13C2-PFDA

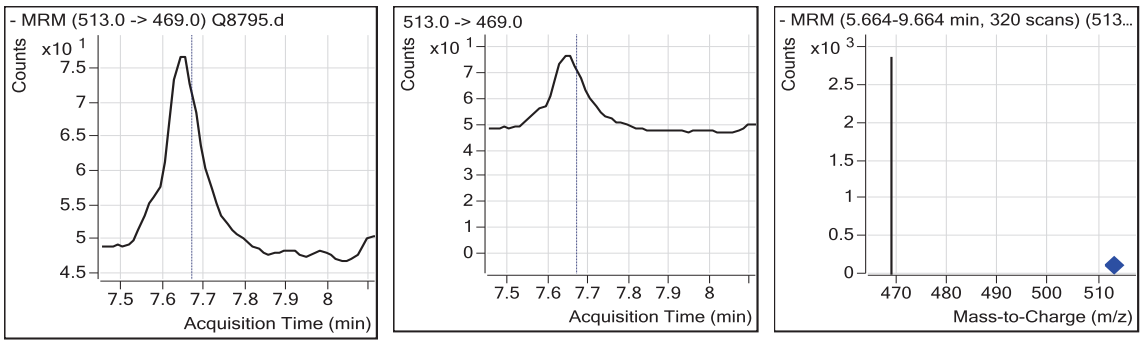


7.1.1

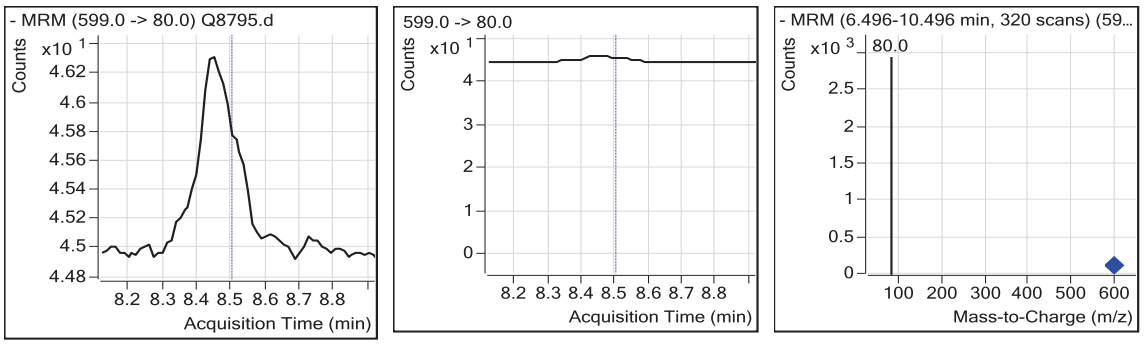
7

Perfluorinated Compounds by LC/MS/MS.

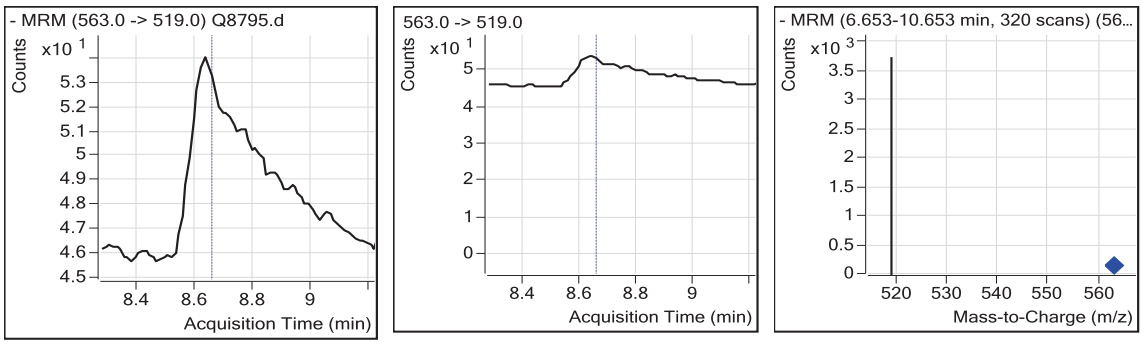
PFDA



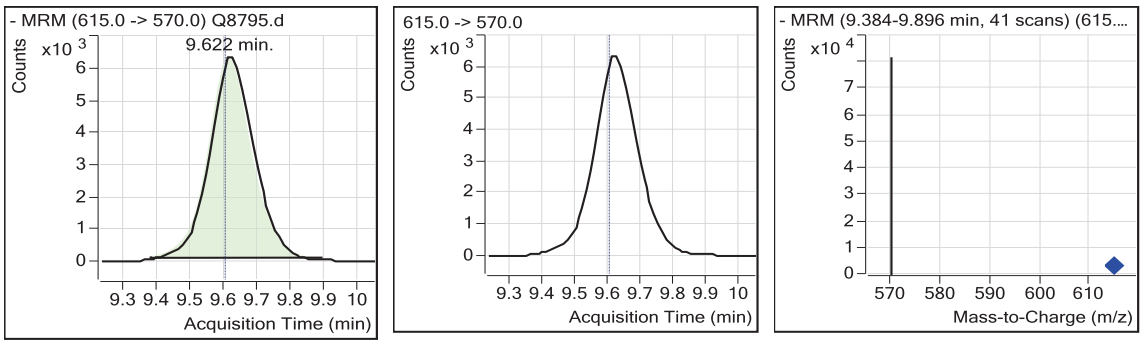
PFDS



PFUnDA

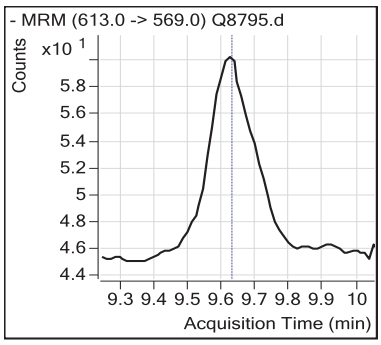


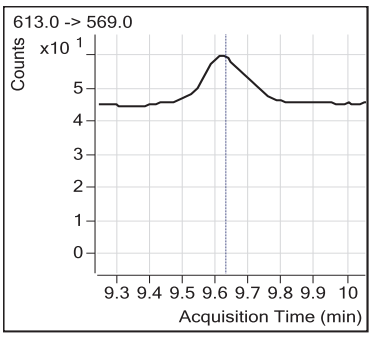
13C2-PFDoDA

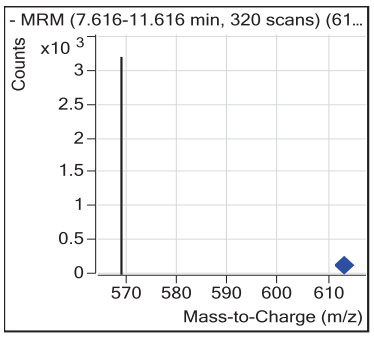


Perfluorinated Compounds by LC/MS/MS.

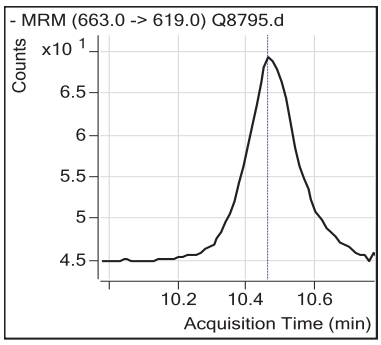
PFDoDA

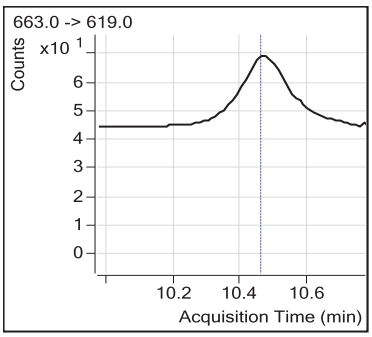


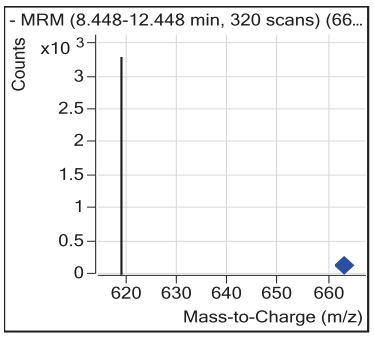




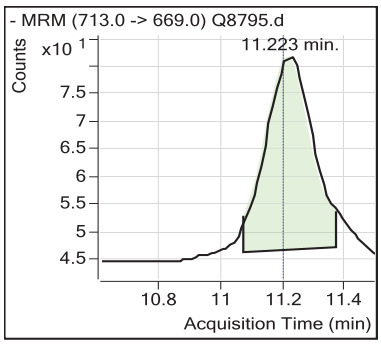
PFTrDA

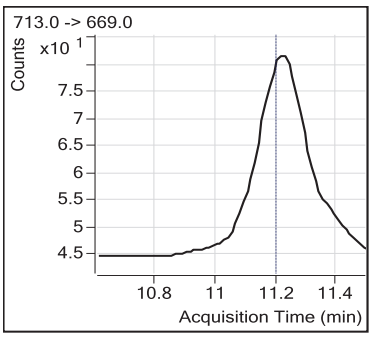


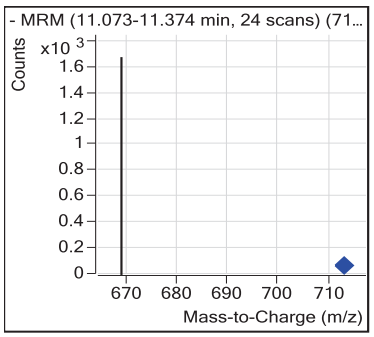




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-1
Lab FileID: Q8795.D
Injection Time: 12/16/14 00:06
Method: EPA 537 MOD
Analyst approved: 12/16/14 10:26 Nancy Saunders
Supervisor approved: 12/16/14 12:21 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanoic acid	335-67-1		6.30	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.66	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/16/14 12:21

Perfluorinated Compounds by LC/MS/MS.

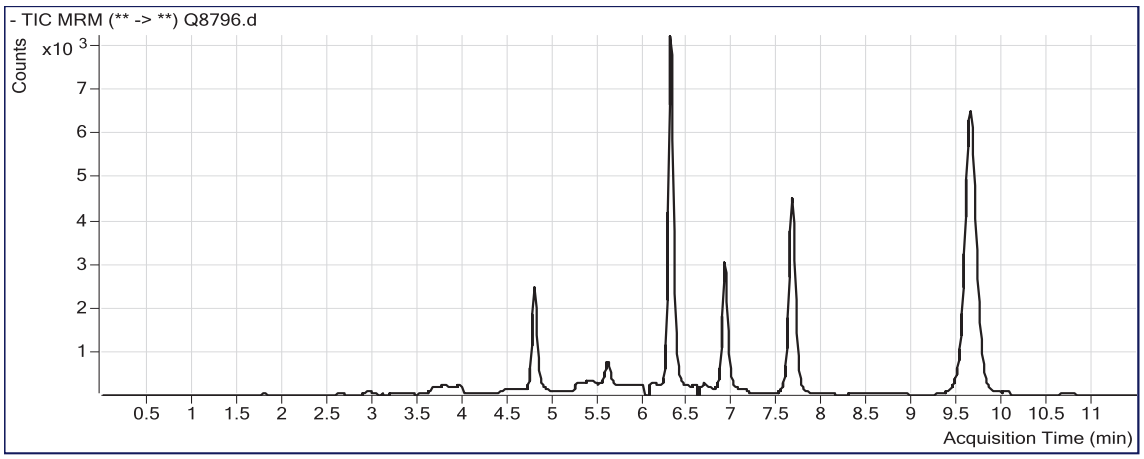
Data File	:	Q8796.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 00:27
Sample Name	:	FA20472-2
Vial	:	Vial 22
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.296	415.0 -> 370.0	29034	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	12090	20.000	µg/L		-0.013
13C2-PFDoDA	9.610	615.0 -> 570.0	58958	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	8758	18.34	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 91.72%				
13C2-PFDA	7.645	515.0 -> 470.0	23739	19.17	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 95.83%				
Target Compounds							**Qvalue**
PFBA	2.965	213.0 -> 169.0	454	1.303	µg/L		100
PFPeA	3.799	263.0 -> 219.0	324	1.861	µg/L		100
PFHxA	4.783	313.0 -> 269.0	889	1.773	µg/L		97
PFHpA	5.597	363.0 -> 319.0	757	1.556	µg/L		82
PFHxS	5.605	399.0 -> 80.0	1093	3.810	µg/L	m	87
PFOA	6.299	413.0 -> 369.0	2684	1.825	µg/L		81
PFOS	6.661	499.0 -> 80.0	778	1.286	µg/L	m	82

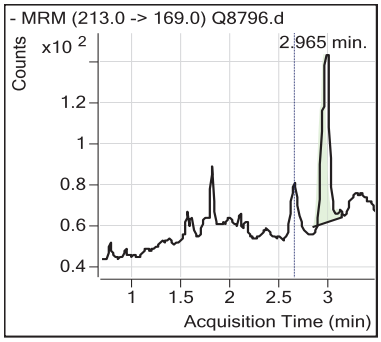
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

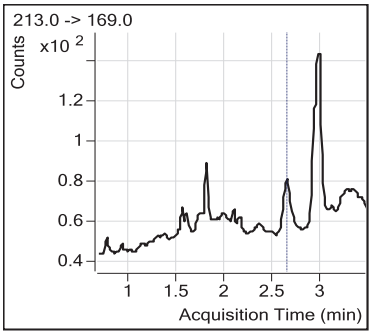
Perfluorinated Compounds by LC/MS/MS.

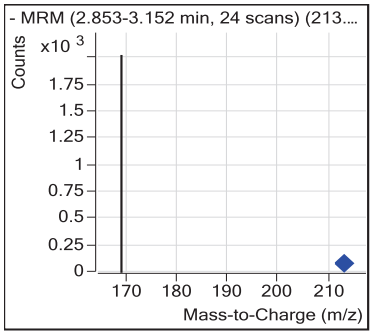
Data File	:	Q8796.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 00:27
Sample Name	:	FA20472-2
Vial	:	Vial 22
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



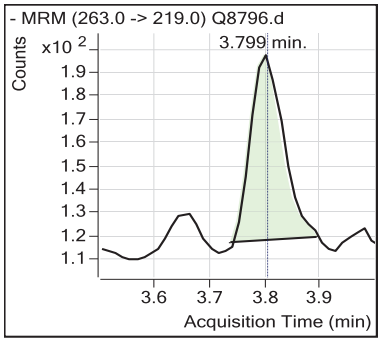
PFBA

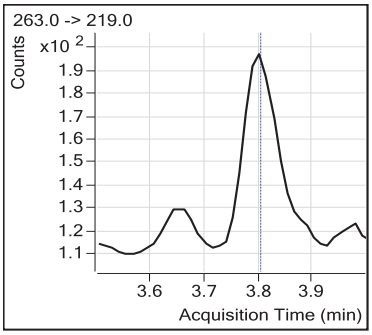


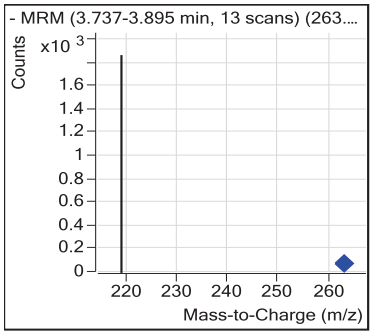




PFPeA

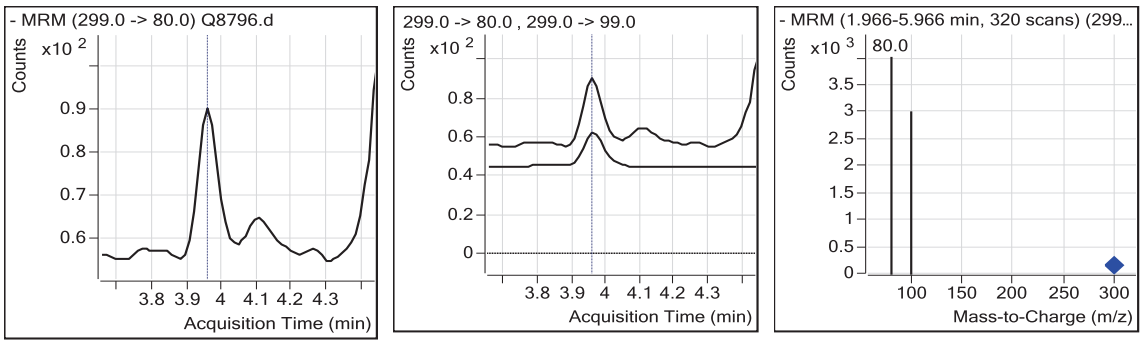




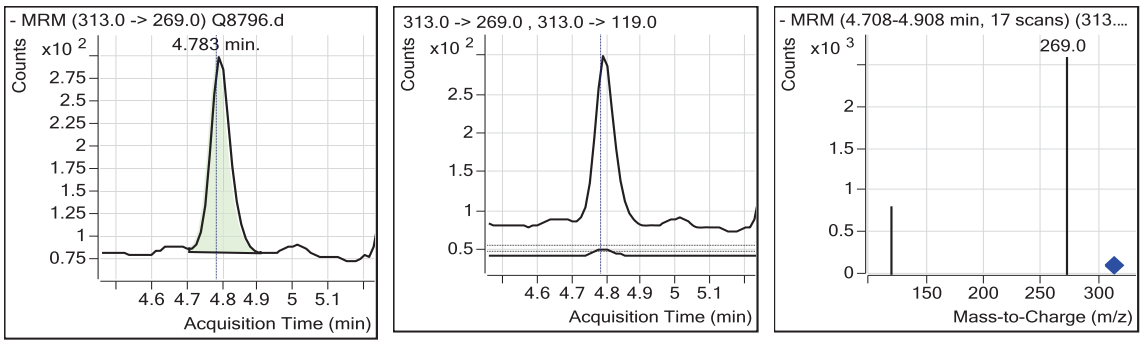


Perfluorinated Compounds by LC/MS/MS.

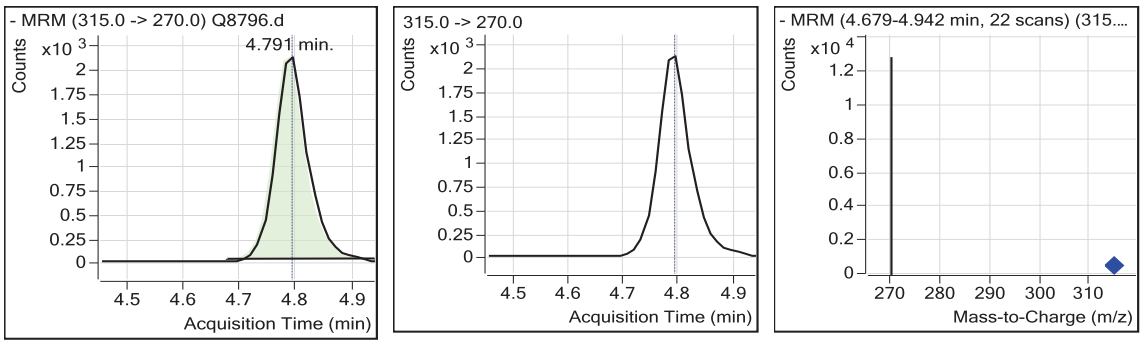
PFBS



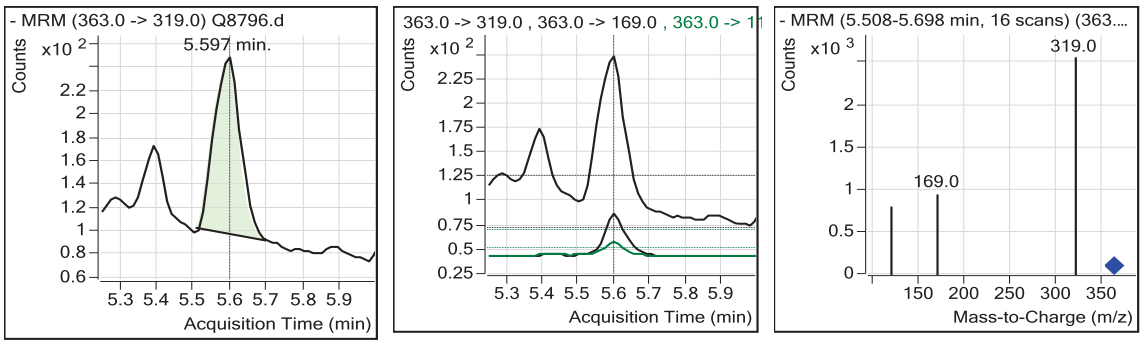
PFHxA



13C2-PFHxA



PFHpA

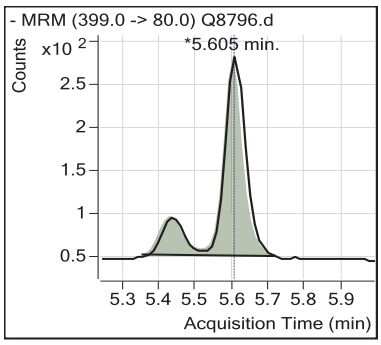


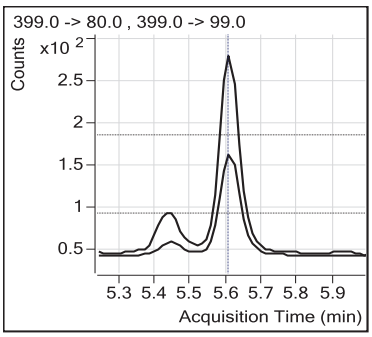
7.1.2

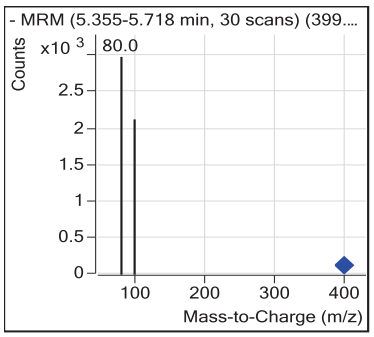
7

Perfluorinated Compounds by LC/MS/MS.

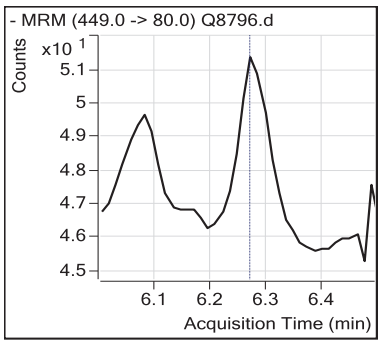
PFHxS

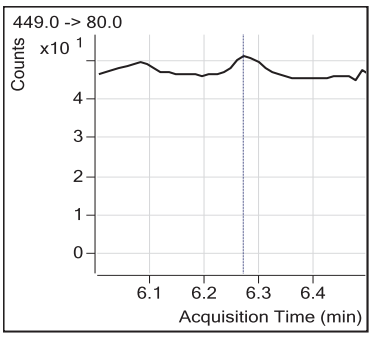


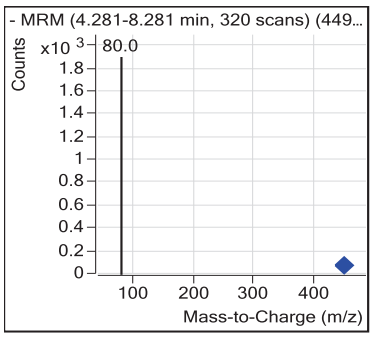




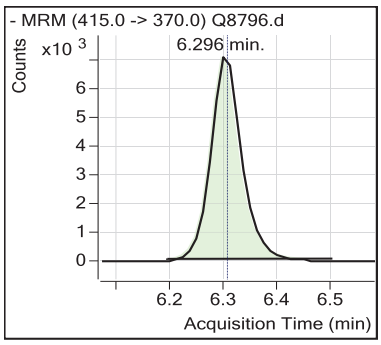
PFHpS

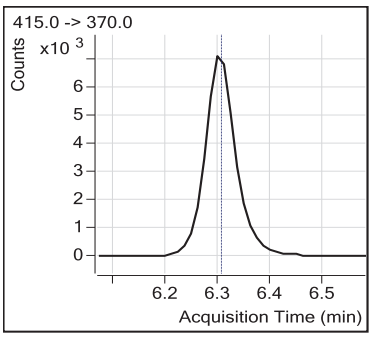


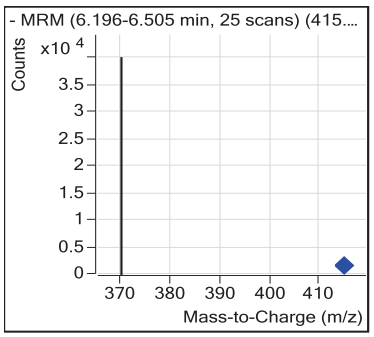




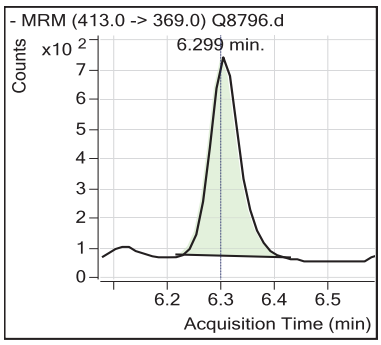
13C2-PFOA

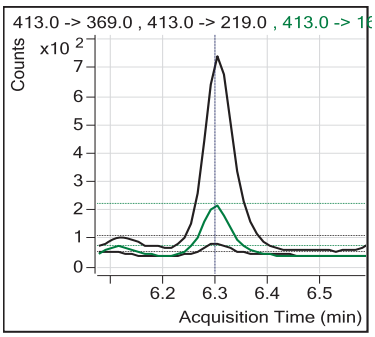


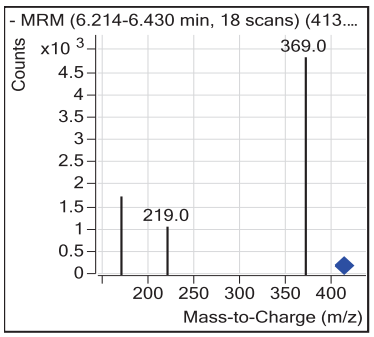




PFOA

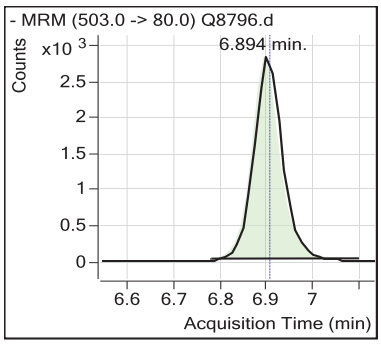


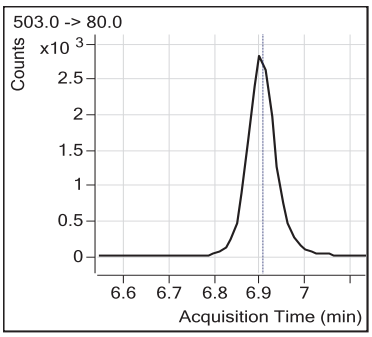


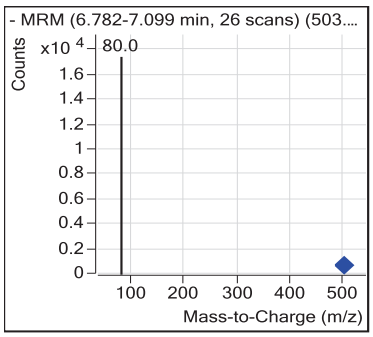


Perfluorinated Compounds by LC/MS/MS.

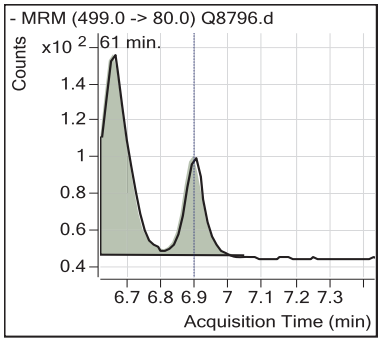
13C4-PFOS

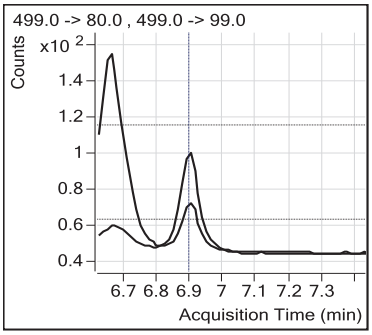


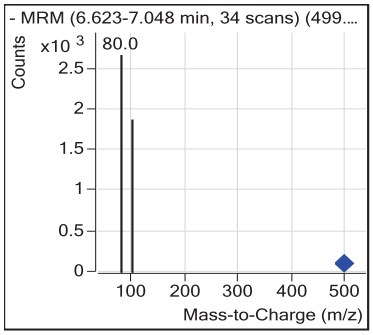




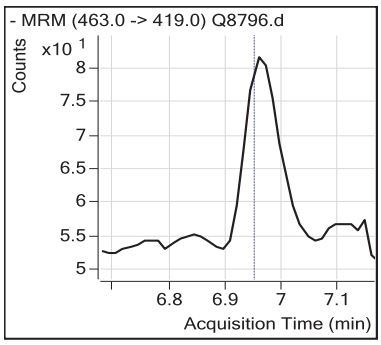
PFOS

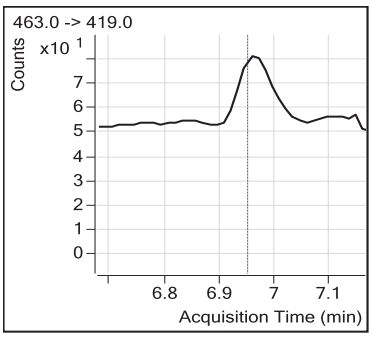


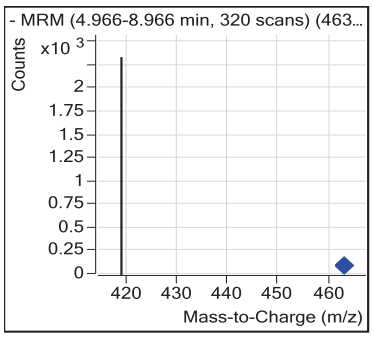




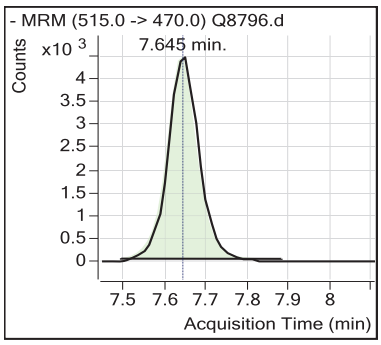
PFNA

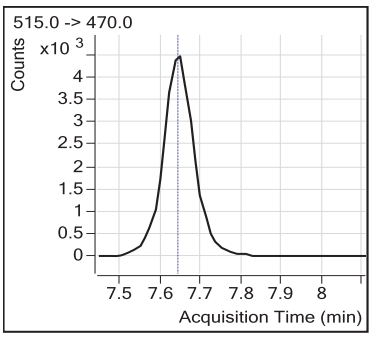


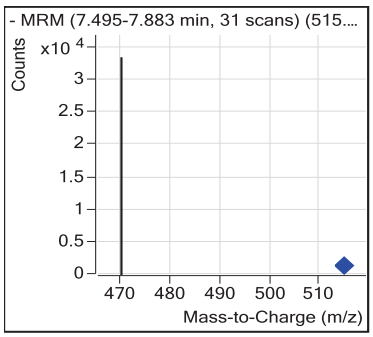




13C2-PFDA

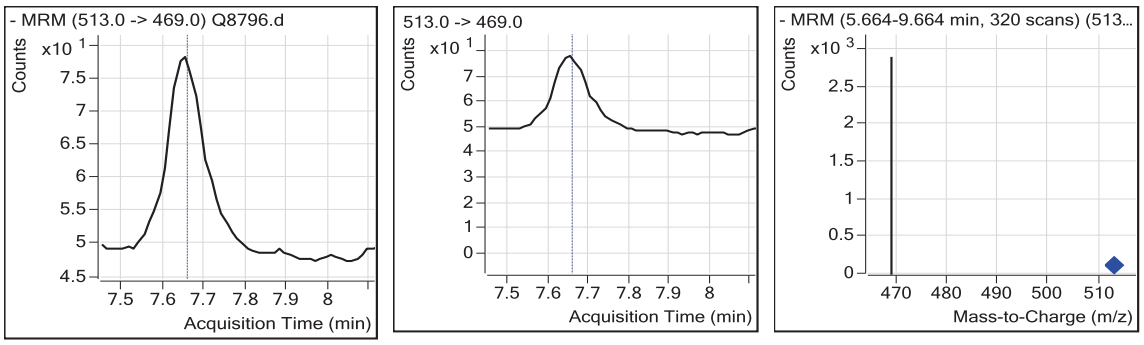






Perfluorinated Compounds by LC/MS/MS.

PFDA



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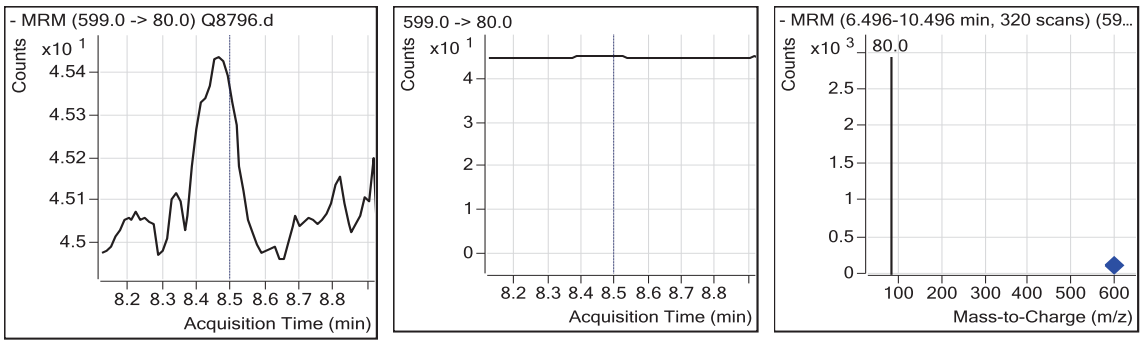

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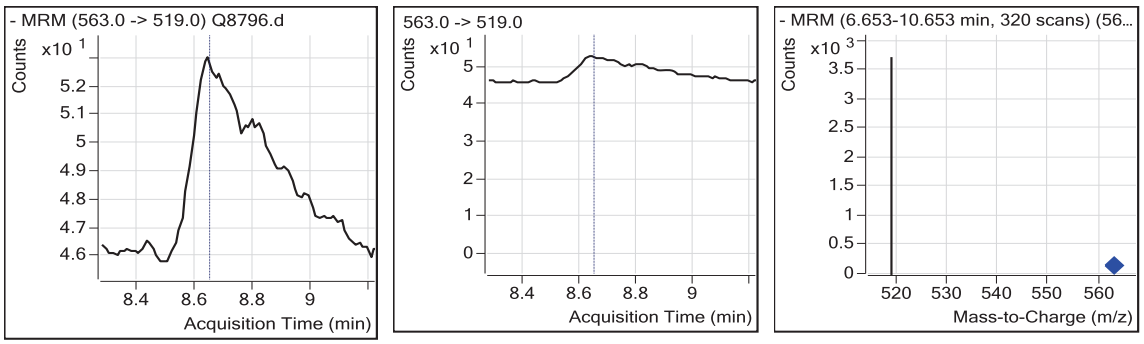

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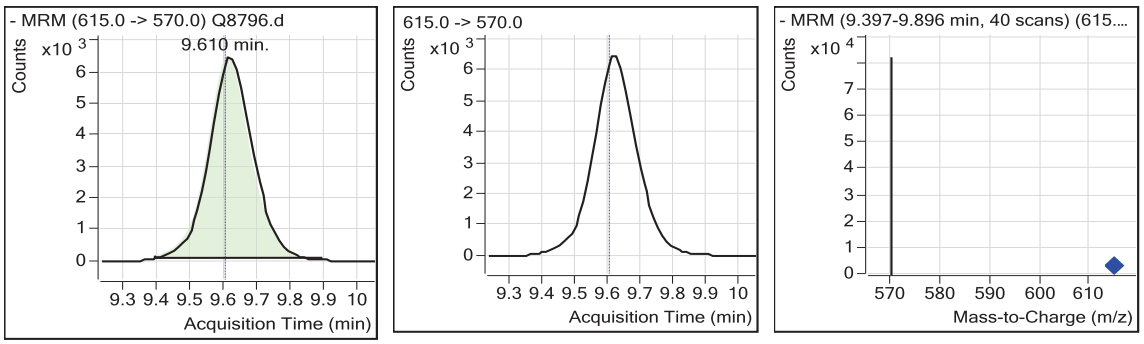
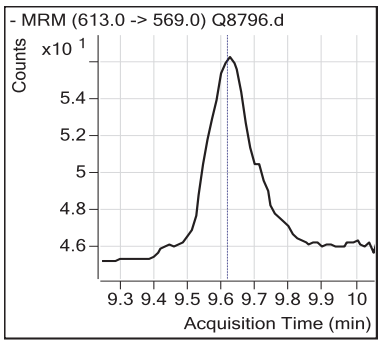
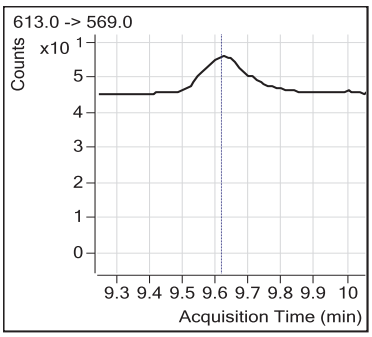
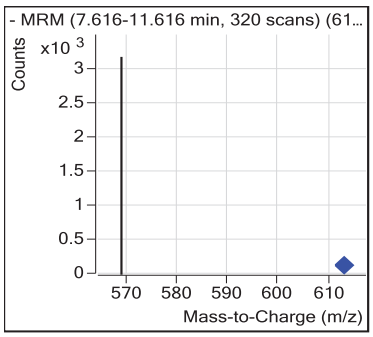


Perfluorinated Compounds by LC/MS/MS.

PFDoDA







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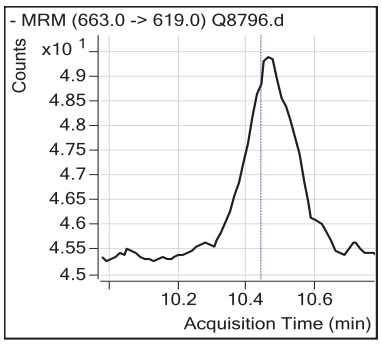
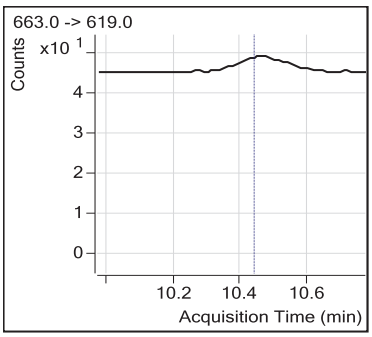
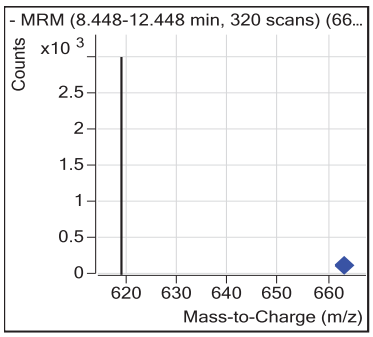
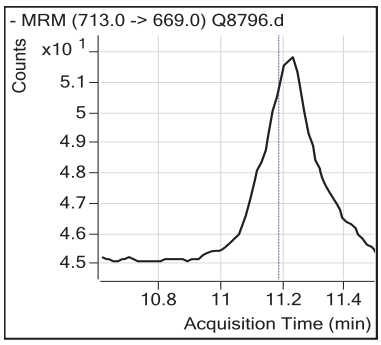
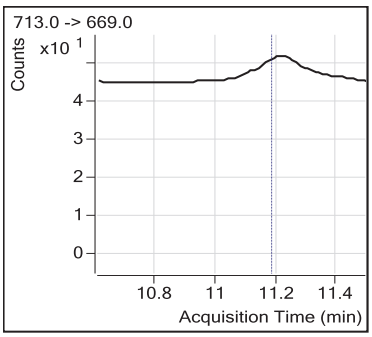


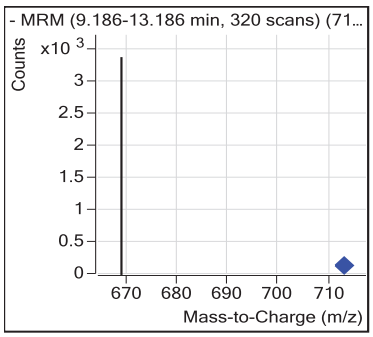




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-2
Lab FileID: Q8796.D
Injection Time: 12/16/14 00:27
Method: EPA 537 MOD
Analyst approved: 12/16/14 10:26 Nancy Saunders
Supervisor approved: 12/16/14 12:21 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.66	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/16/14 10:17

Perfluorinated Compounds by LC/MS/MS.

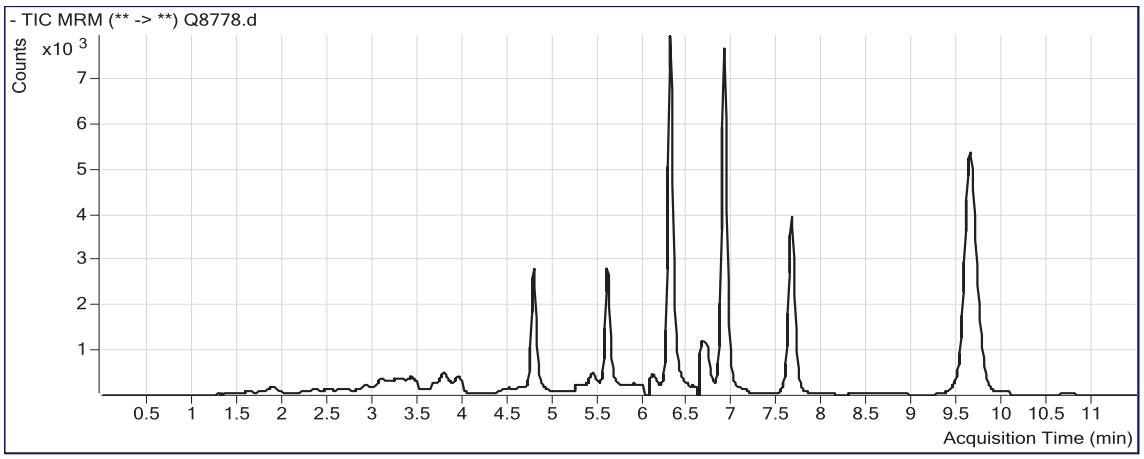
Data File	:	Q8778.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 18:14
Sample Name	:	FA20472-3
Vial	:	Vial 9
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.296	415.0 -> 370.0	21174	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	9818	20.000	µg/L		-0.013
13C2-PFDoDA	9.610	615.0 -> 570.0	51459	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.779	315.0 -> 270.0	7837	22.51	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 112.55%				
13C2-PFDA	7.633	515.0 -> 470.0	19745	21.86	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 109.30%				
Target Compounds							**Qvalue**
PFBA	2.527	213.0 -> 169.0	0	0.000	µg/L	m	1
PFPeA	3.786	263.0 -> 219.0	1311	10.329	µg/L		100
PFBS	3.941	299.0 -> 80.0	340	2.342	µg/L		94
PFHxA	4.783	313.0 -> 269.0	2763	7.557	µg/L		99
PFHxS	5.592	399.0 -> 80.0	6530	28.030	µg/L	m	86
PFHpA	5.597	363.0 -> 319.0	984	2.775	µg/L		93
PFOA	6.299	413.0 -> 369.0	8121	7.571	µg/L	# m	65
PFOS	6.885	499.0 -> 80.0	21013	42.793	µg/L	m	100
PFNA	6.954	463.0 -> 419.0	350	0.548	µg/L		100

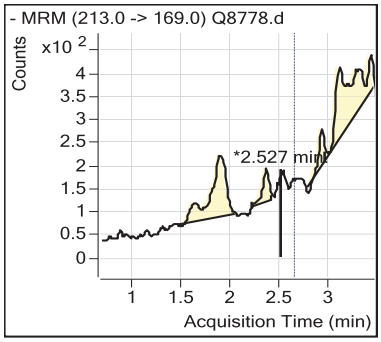
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

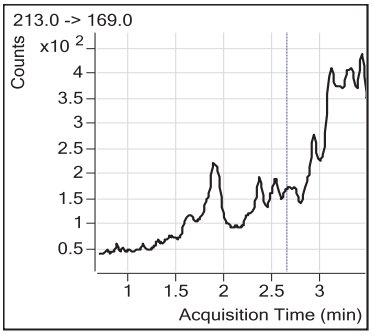
Perfluorinated Compounds by LC/MS/MS.

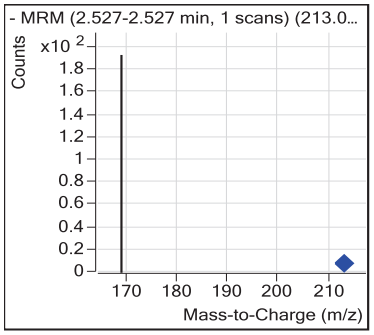
Data File	:	Q8778.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 18:14
Sample Name	:	FA20472-3
Vial	:	Vial 9
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



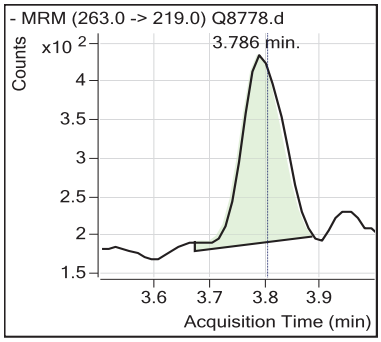
PFBA

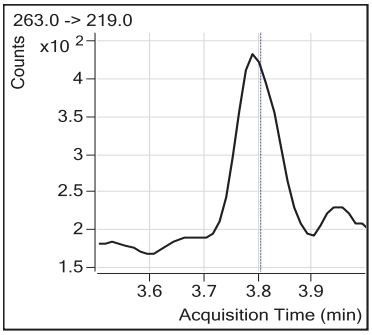


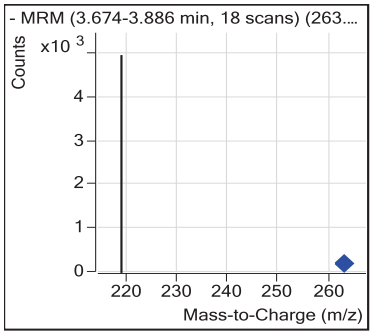




PFPeA

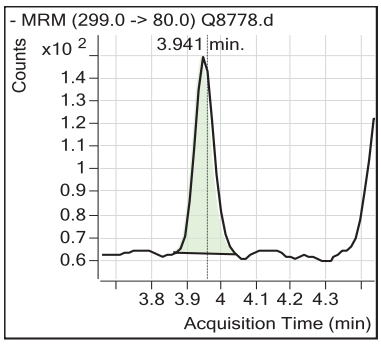


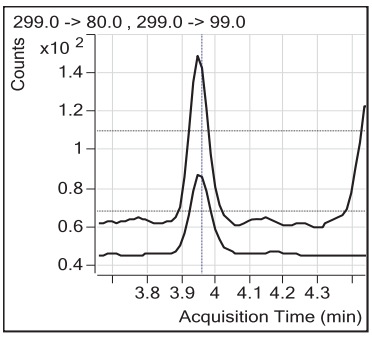


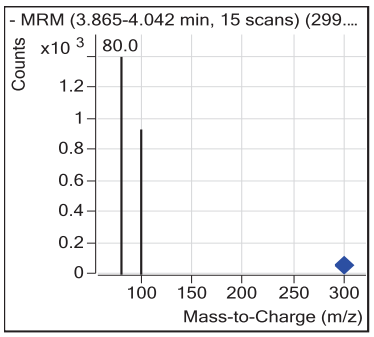


Perfluorinated Compounds by LC/MS/MS.

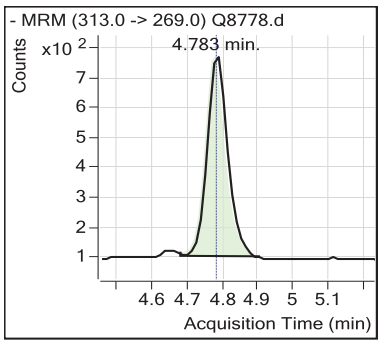
PFBS

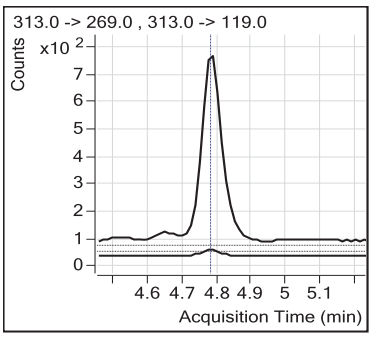


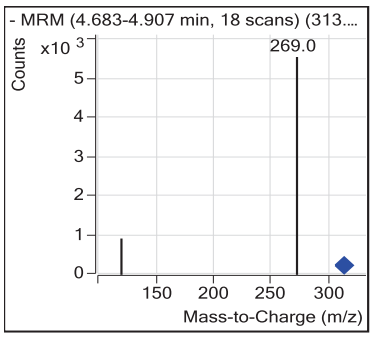




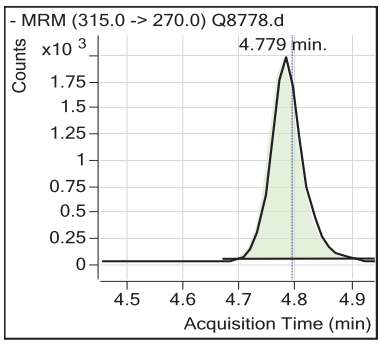
PFHxA

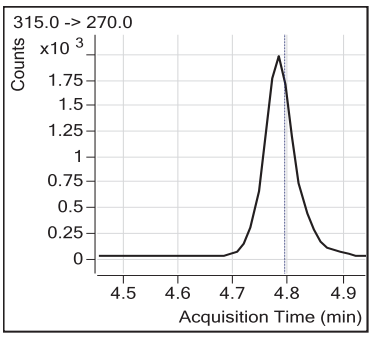


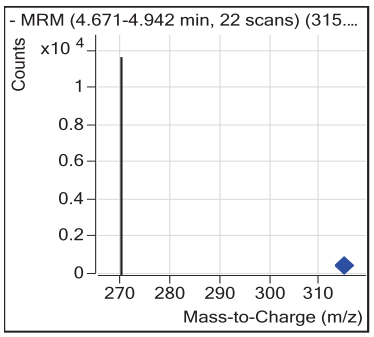




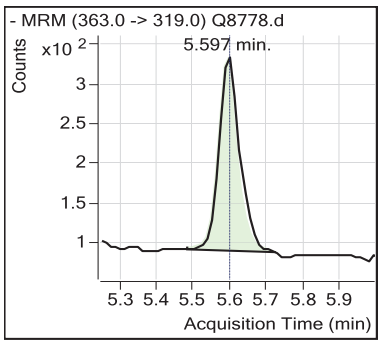
13C2-PFHxA

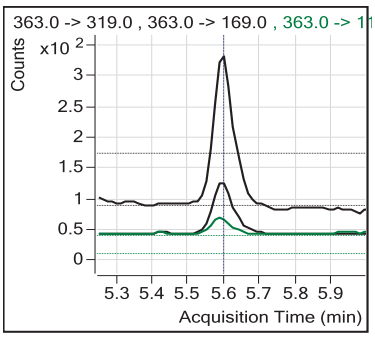


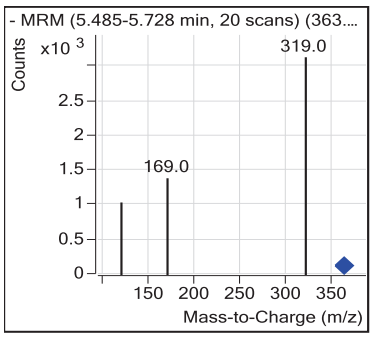




PFHpA

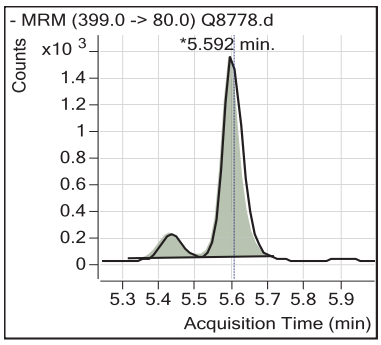


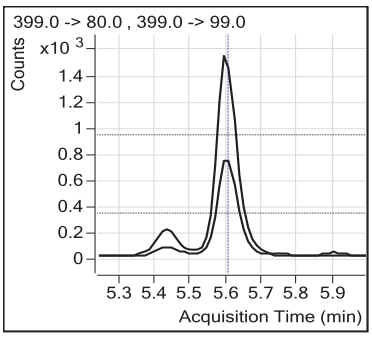


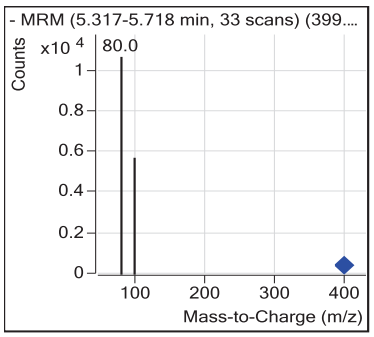


Perfluorinated Compounds by LC/MS/MS.

PFHxS







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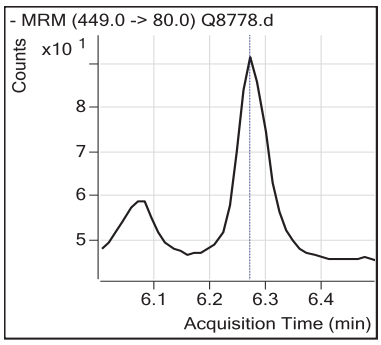
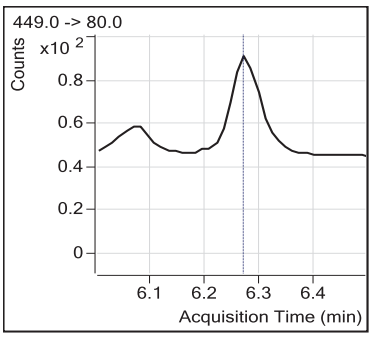
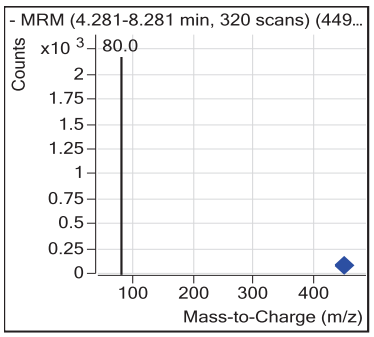
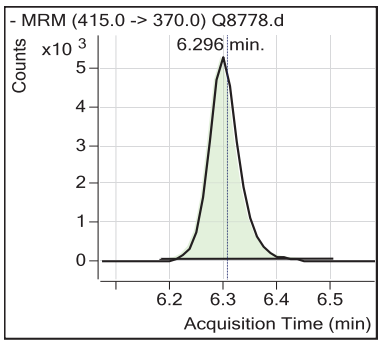
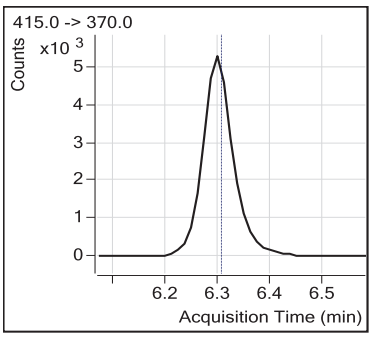


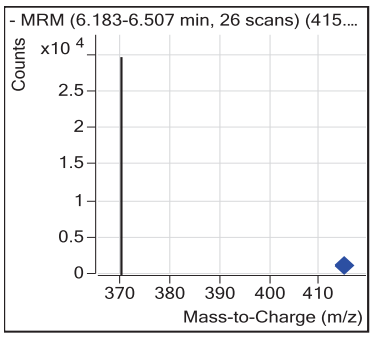




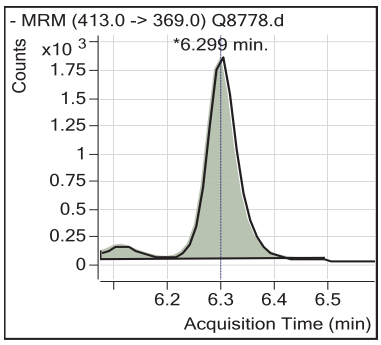
13C2-PFOA

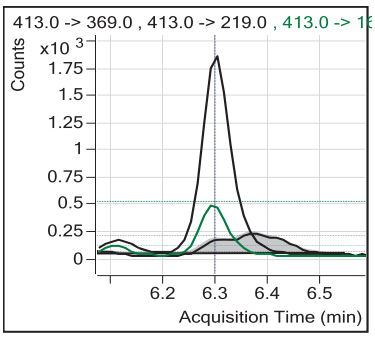


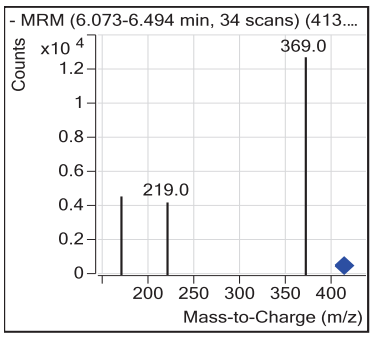




PFOA

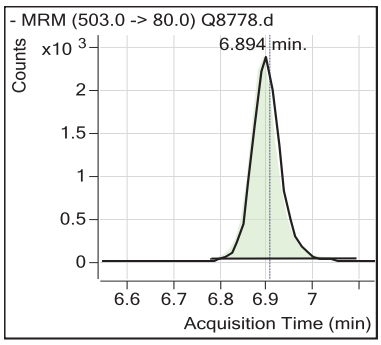


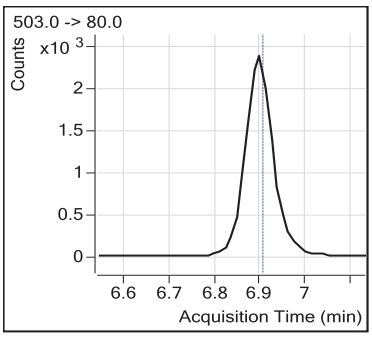


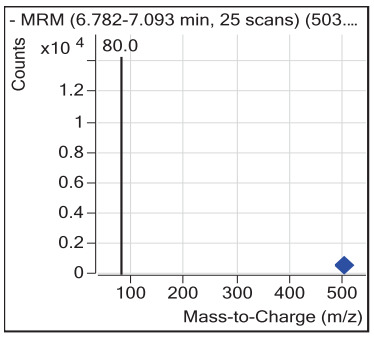


Perfluorinated Compounds by LC/MS/MS.

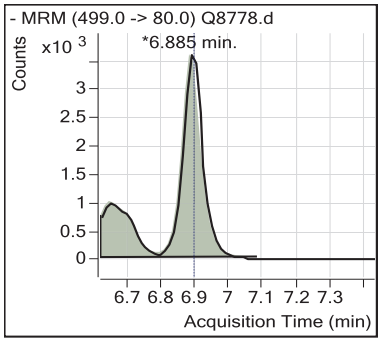
13C4-PFOS

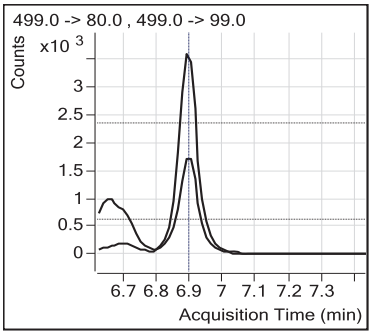


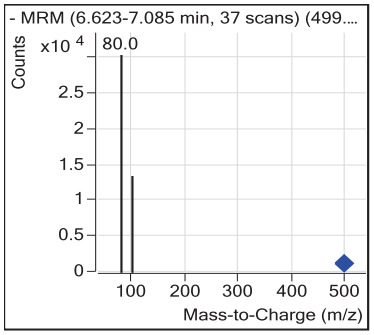




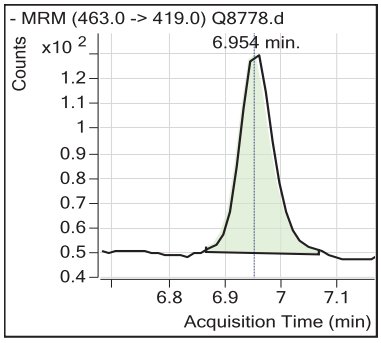
PFOS

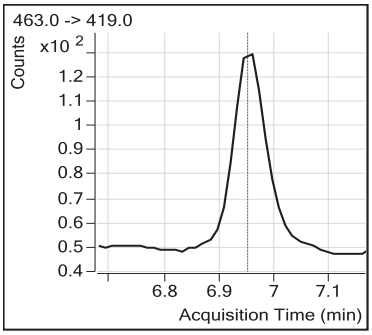


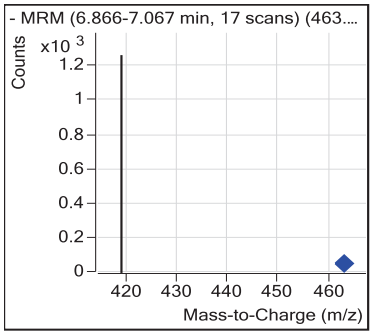




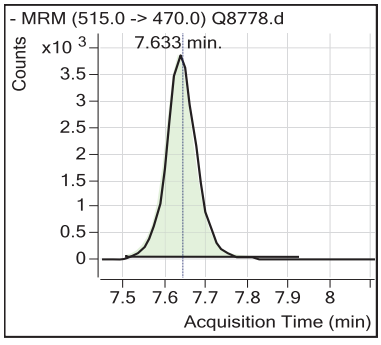
PFNA

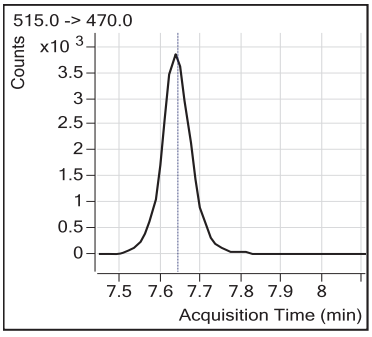


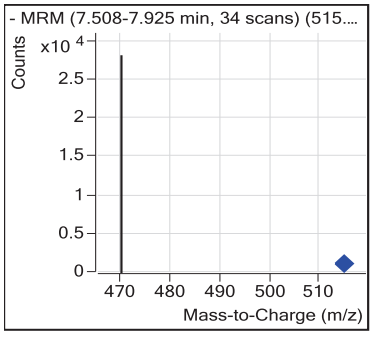




13C2-PFDA

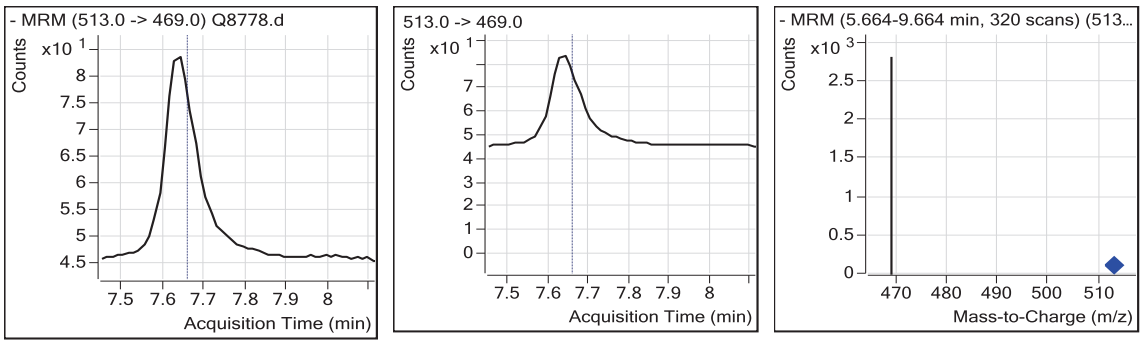




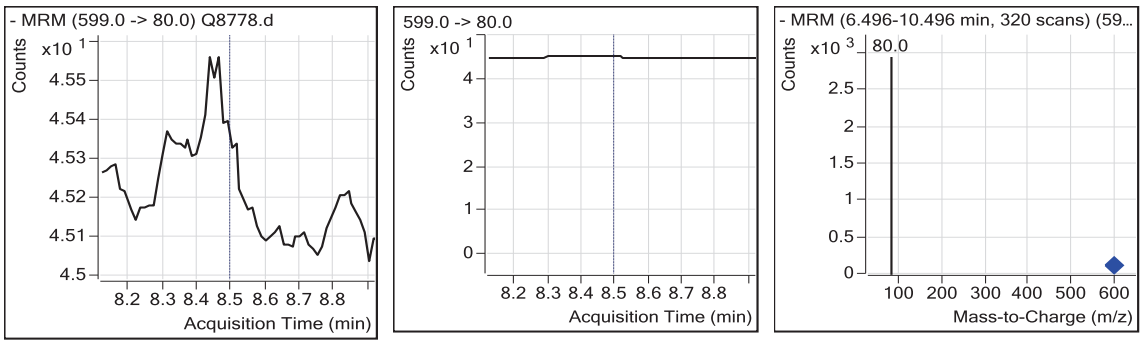


Perfluorinated Compounds by LC/MS/MS.

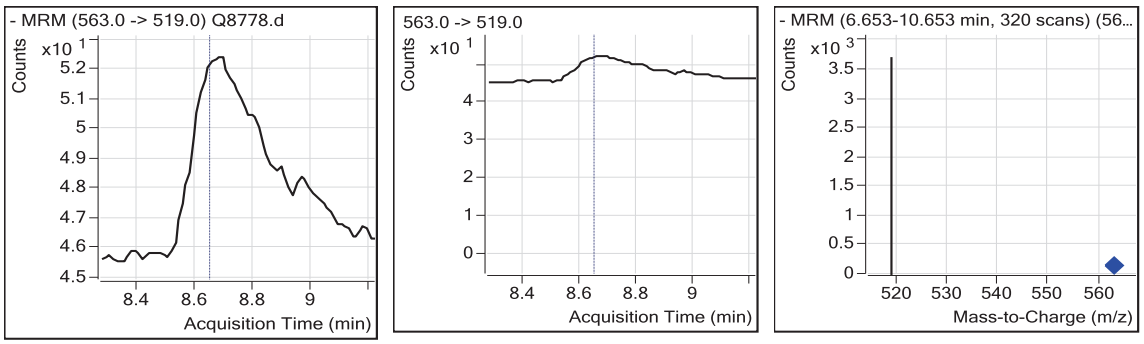
PFDA



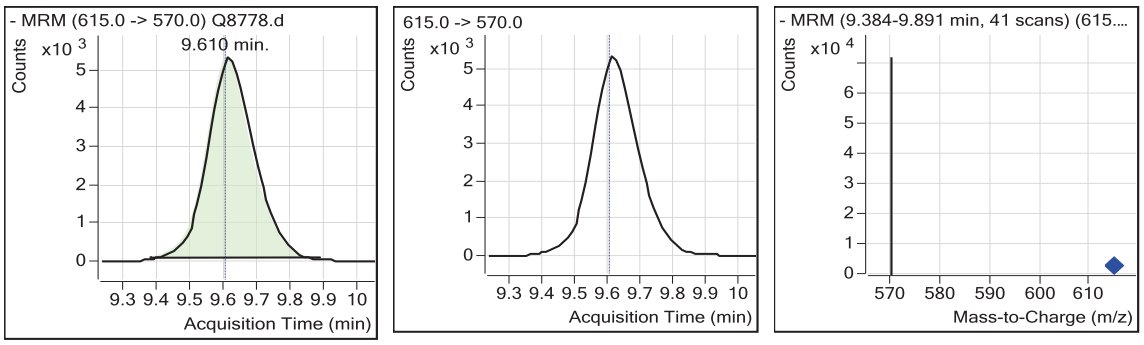
PFDS



PFUnDA

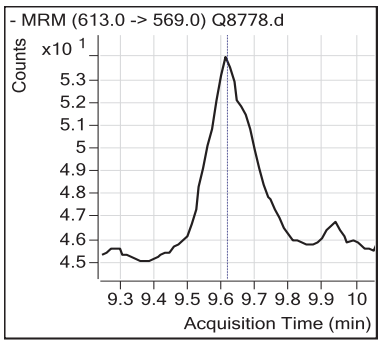


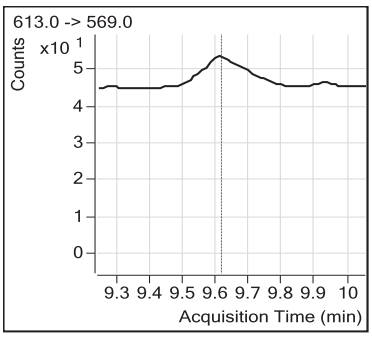
13C2-PFDoDA

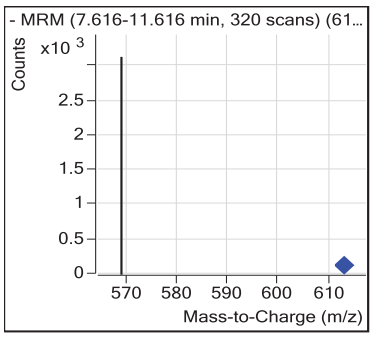


Perfluorinated Compounds by LC/MS/MS.

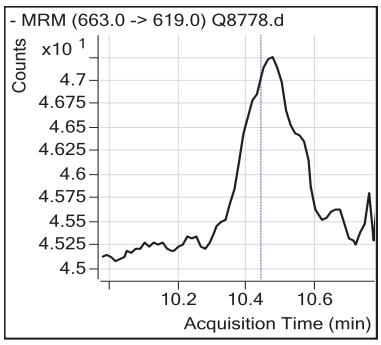
PFDoDA

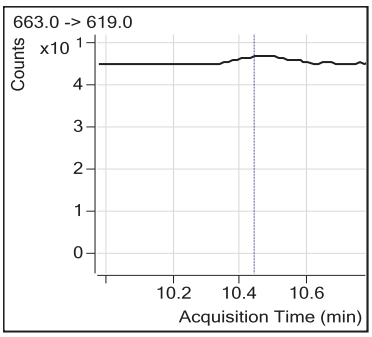


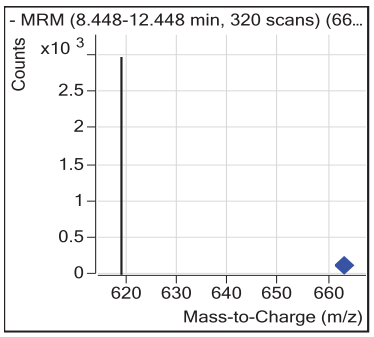




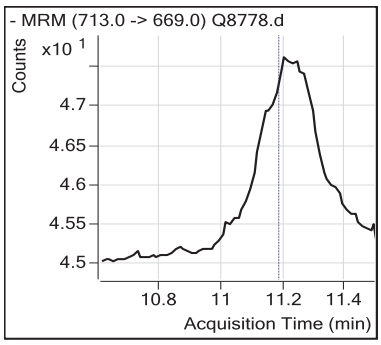
PFTrDA

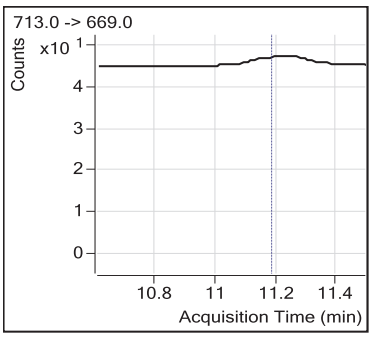


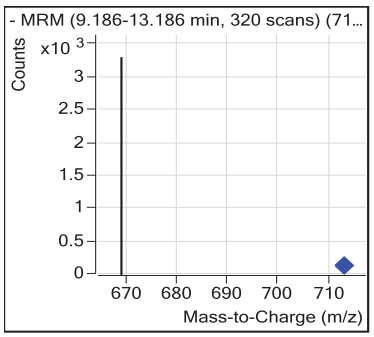




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-3
Lab FileID: Q8778.D
Injection Time: 12/15/14 18:14
Method: EPA 537 MOD
Analyst approved: 12/16/14 09:33 Nancy Saunders
Supervisor approved: 12/16/14 10:17 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		2.53	Split peak
Perfluorohexanesulfonic acid	355-46-4		5.59	Split peak
Perfluorooctanoic acid	335-67-1		6.30	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.88	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/16/14 10:17

Perfluorinated Compounds by LC/MS/MS.

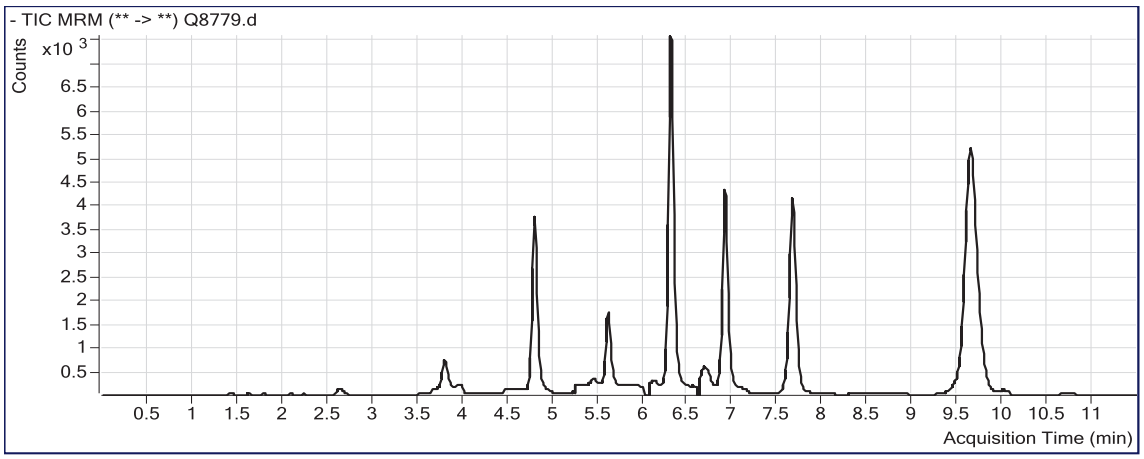
Data File	:	Q8779.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 18:35
Sample Name	:	FA20472-4
Vial	:	Vial 10
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.309	415.0 -> 370.0	25895	20.000	µg/L		0.000
13C4-PFOS	6.894	503.0 -> 80.0	12108	20.000	µg/L		-0.013
13C2-PFDoDA	9.622	615.0 -> 570.0	49886	20.000	µg/L		0.013
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	9766	22.94	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 114.69%				
13C2-PFDA	7.645	515.0 -> 470.0	21385	19.36	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 96.79%				
Target Compounds							**Qvalue**
PFBA	2.639	213.0 -> 169.0	683	2.198	µg/L		100
PFPeA	3.799	263.0 -> 219.0	2740	17.645	µg/L		100
PFHxA	4.783	313.0 -> 269.0	5332	11.926	µg/L		99
PFHpA	5.597	363.0 -> 319.0	1398	3.224	µg/L		91
PFHxS	5.605	399.0 -> 80.0	3301	11.489	µg/L	m	89
PFOA	6.299	413.0 -> 369.0	3651	2.783	µg/L		82
PFOS	6.898	499.0 -> 80.0	6263	10.341	µg/L	m	98

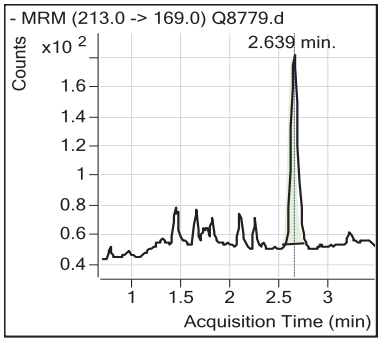
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

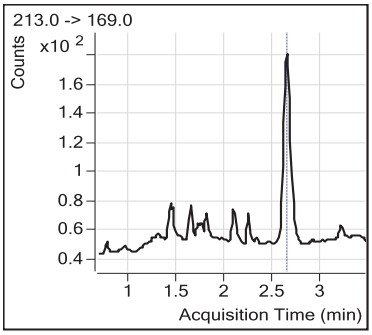
Perfluorinated Compounds by LC/MS/MS.

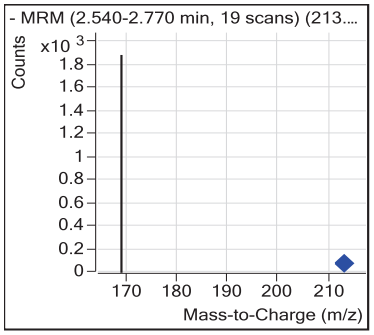
Data File	:	Q8779.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 18:35
Sample Name	:	FA20472-4
Vial	:	Vial 10
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



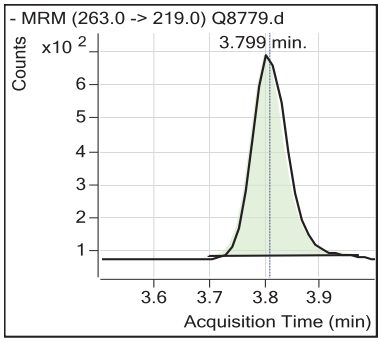
PFBA

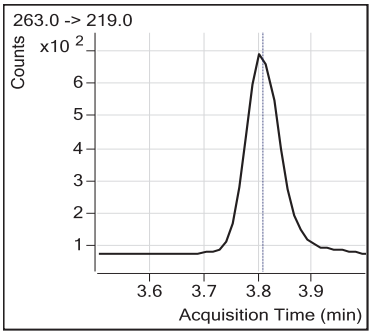


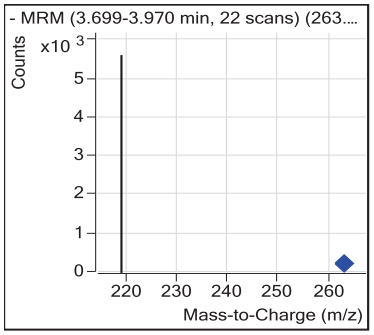




PFPeA

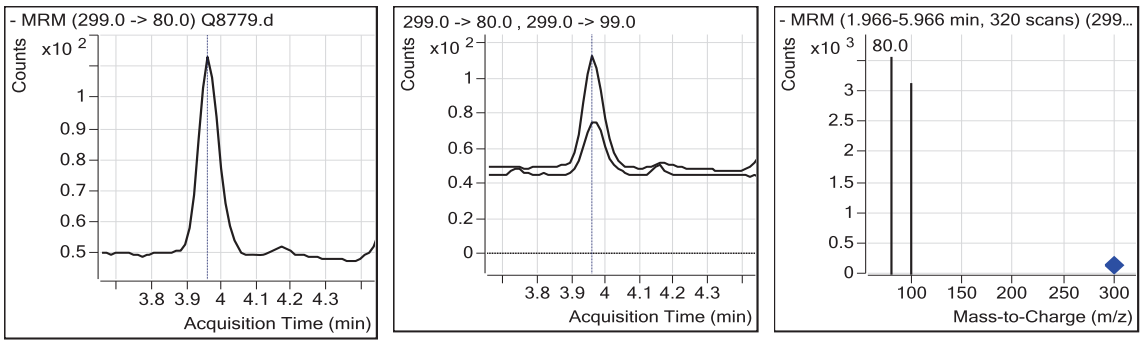




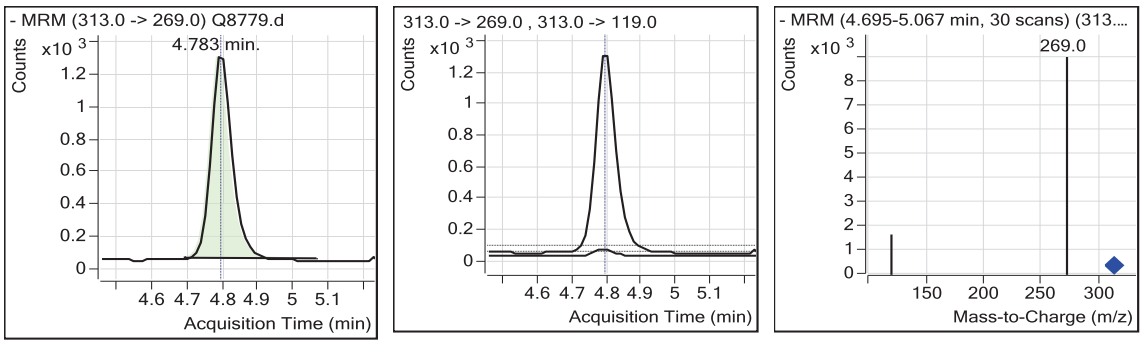


Perfluorinated Compounds by LC/MS/MS.

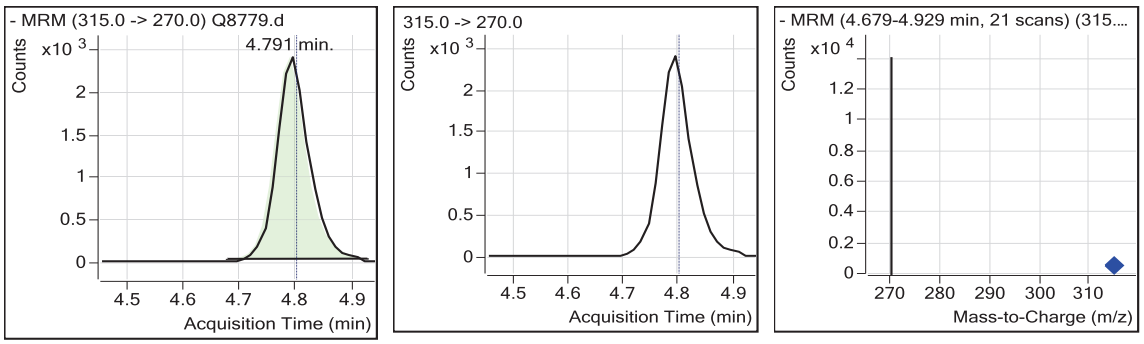
PFBS



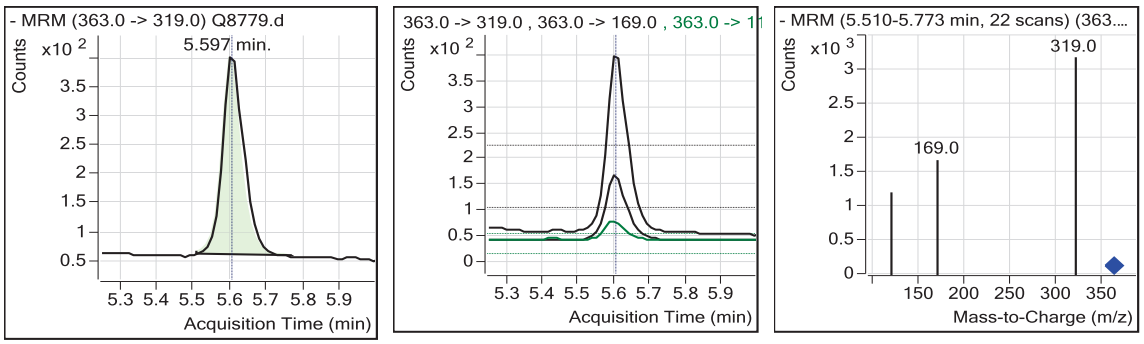
PFHxA



13C2-PFHxA

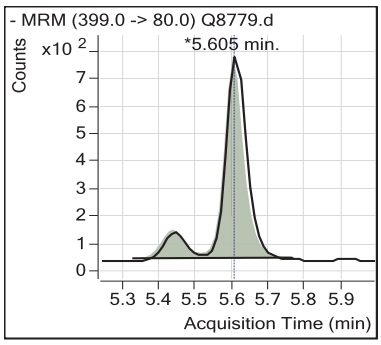


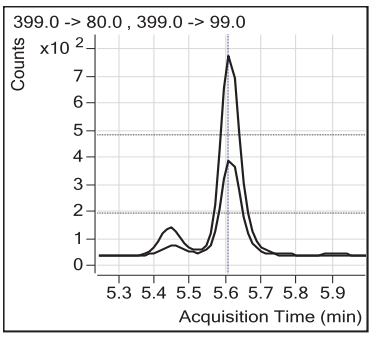
PFHpA

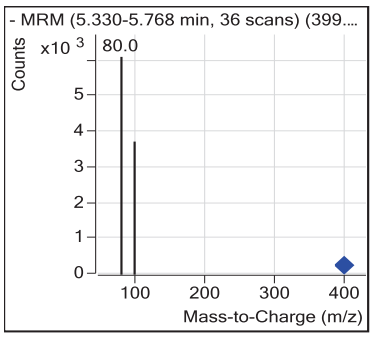


Perfluorinated Compounds by LC/MS/MS.

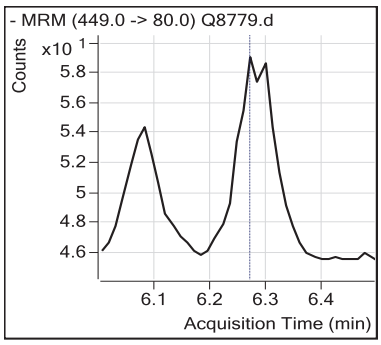
PFHxS

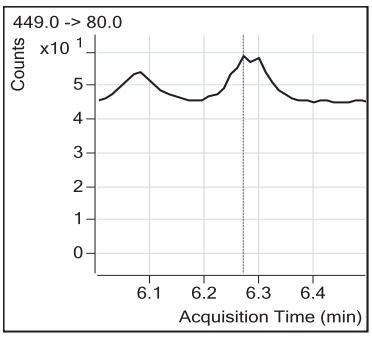


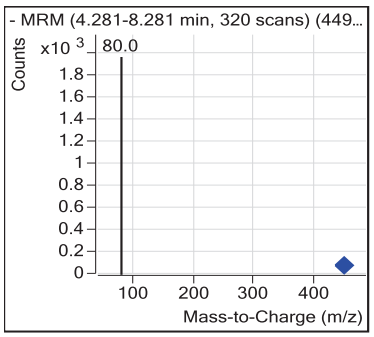




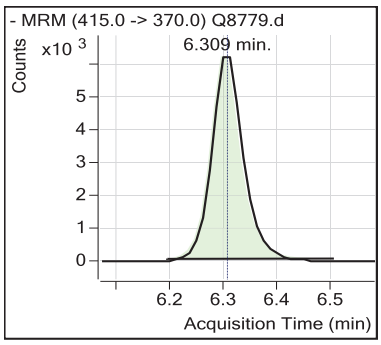
PFHpS

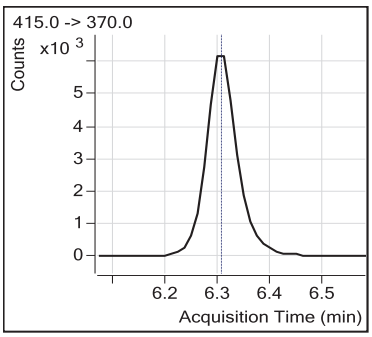


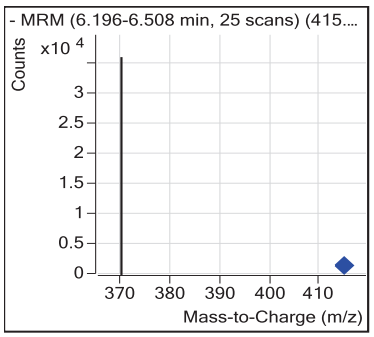




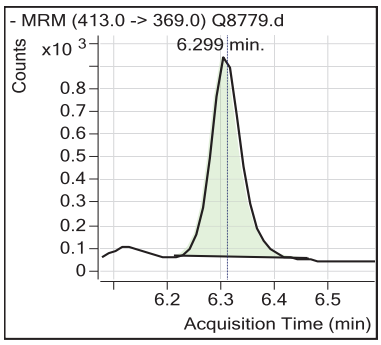
13C2-PFOA

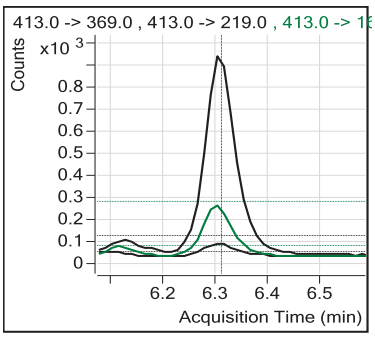


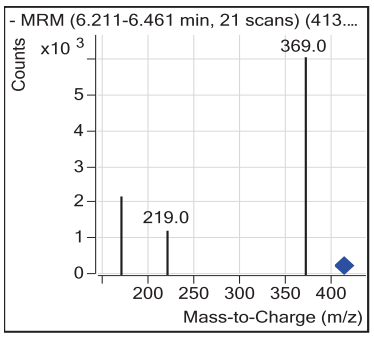




PFOA

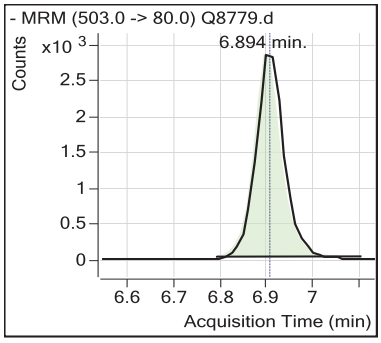


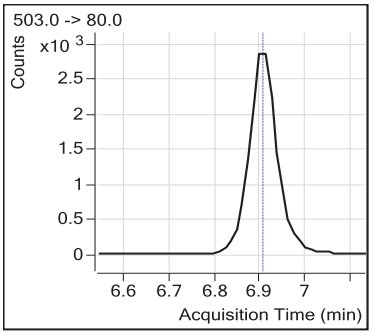


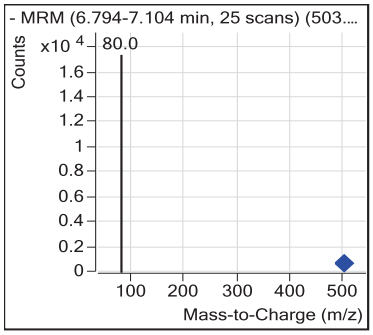


Perfluorinated Compounds by LC/MS/MS.

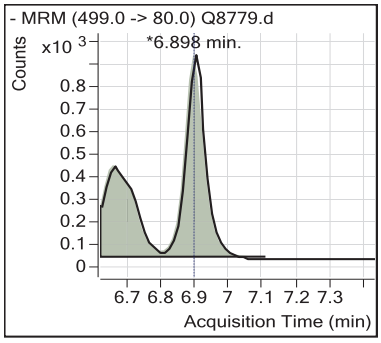
13C4-PFOS

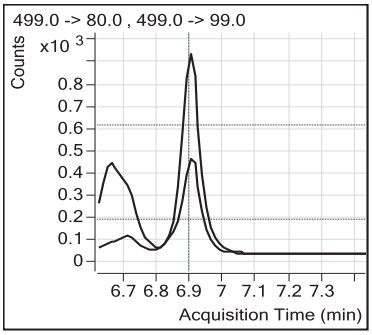


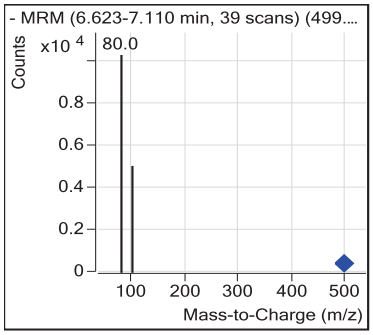




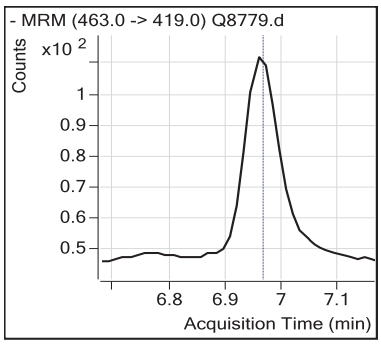
PFOS

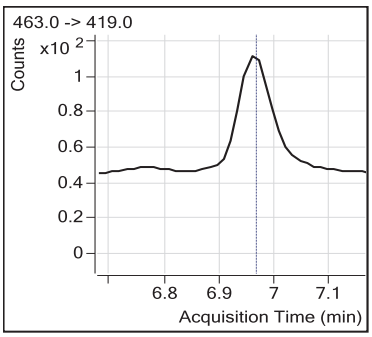


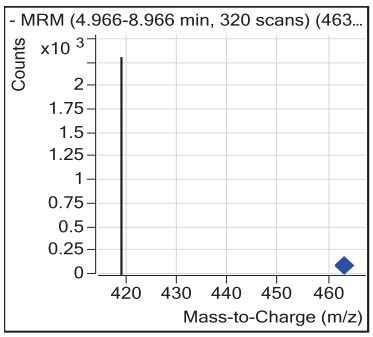




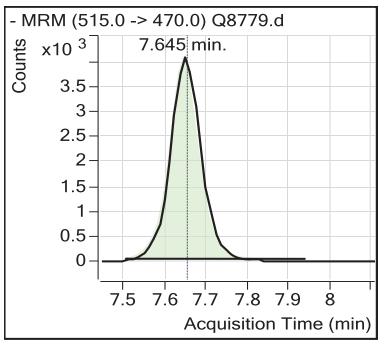
PFNA

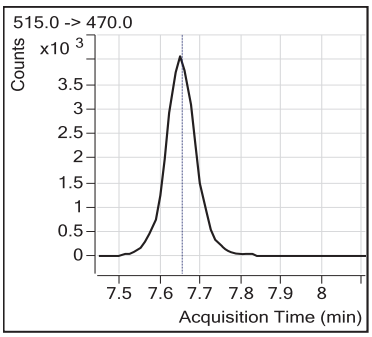


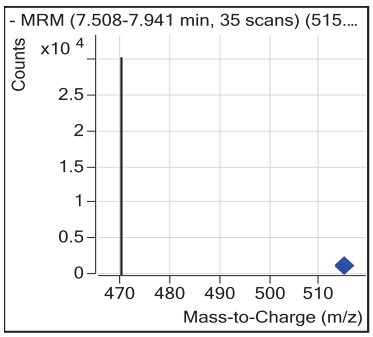




13C2-PFDA

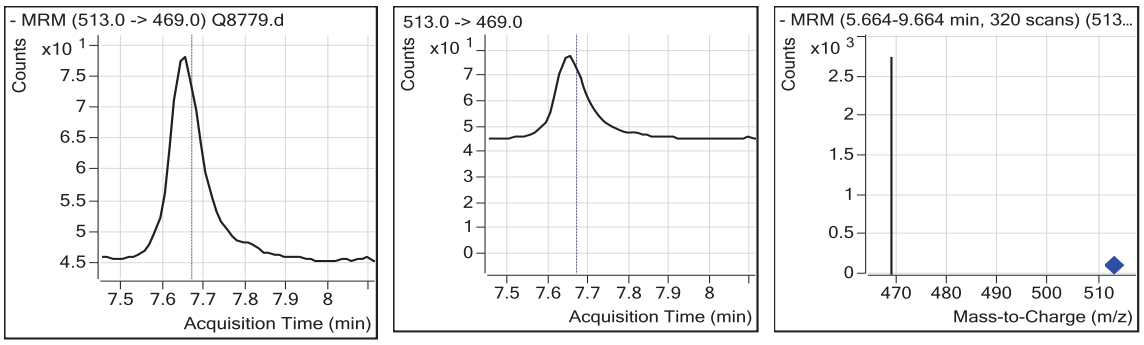




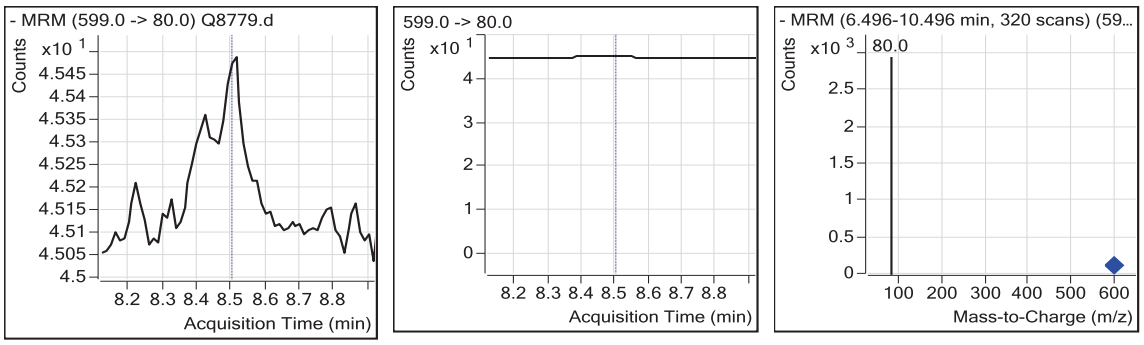


Perfluorinated Compounds by LC/MS/MS.

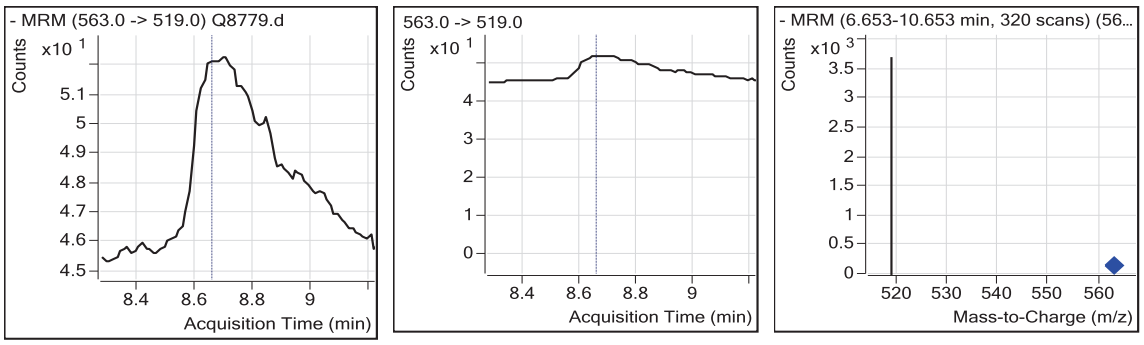
PFDA



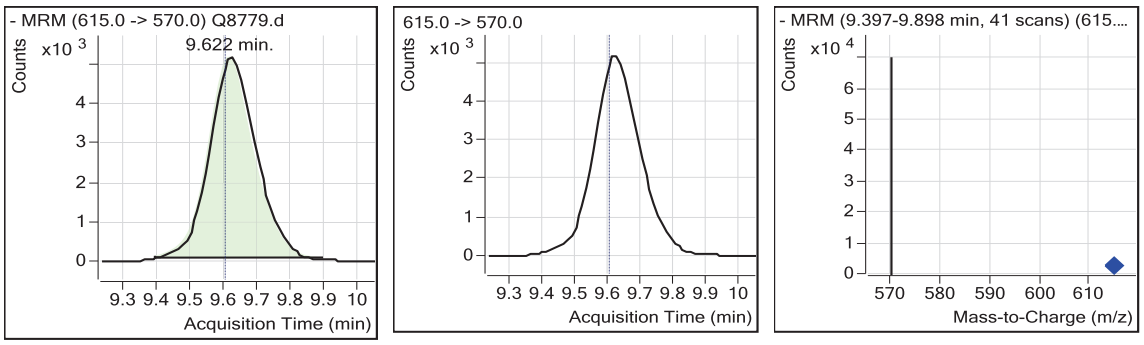
PFDS



PFUnDA

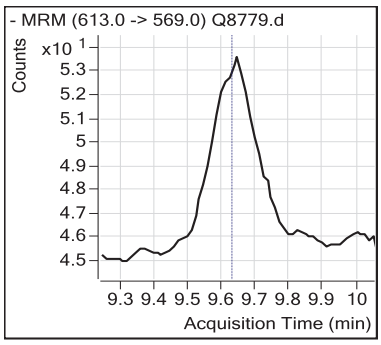


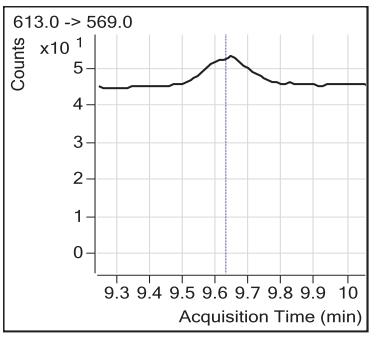
13C2-PFDoDA

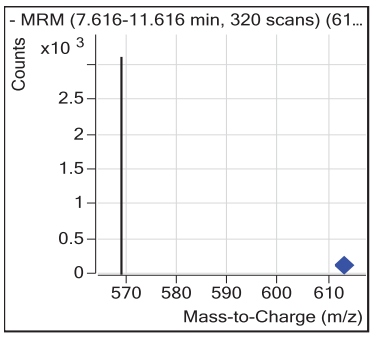


Perfluorinated Compounds by LC/MS/MS.

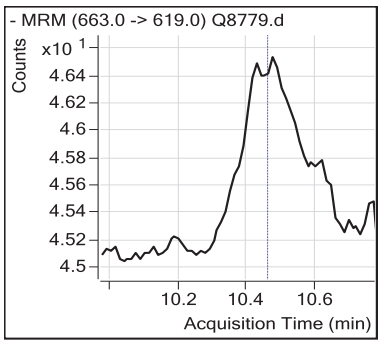
PFDoDA

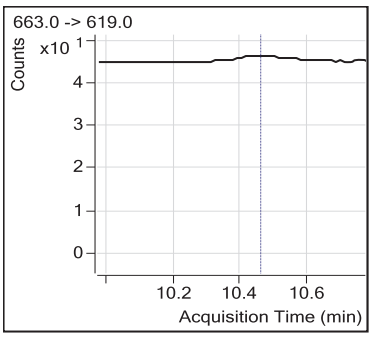


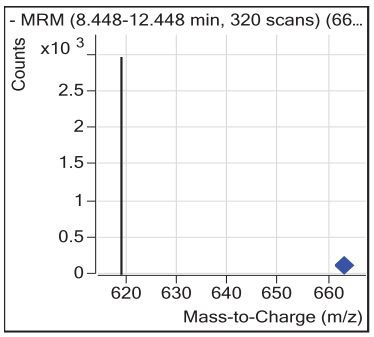




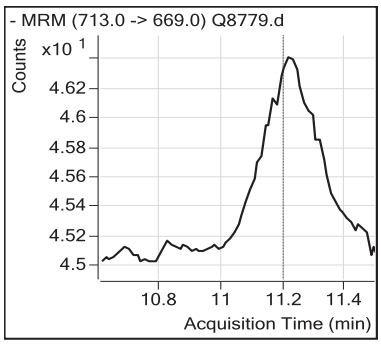
PFTrDA

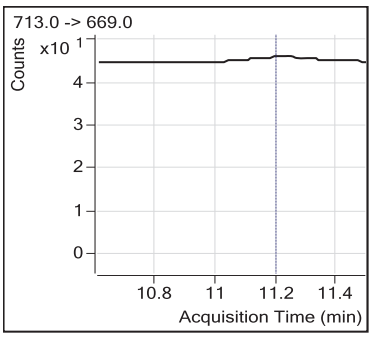


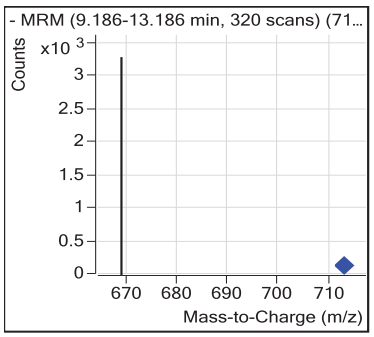




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-4
Lab FileID: Q8779.D
Injection Time: 12/15/14 18:35

Method: EPA 537 MOD
Analyst approved: 12/16/14 09:33 Nancy Saunders
Supervisor approved: 12/16/14 10:17 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Perfluorinated Compounds by LC/MS/MS.

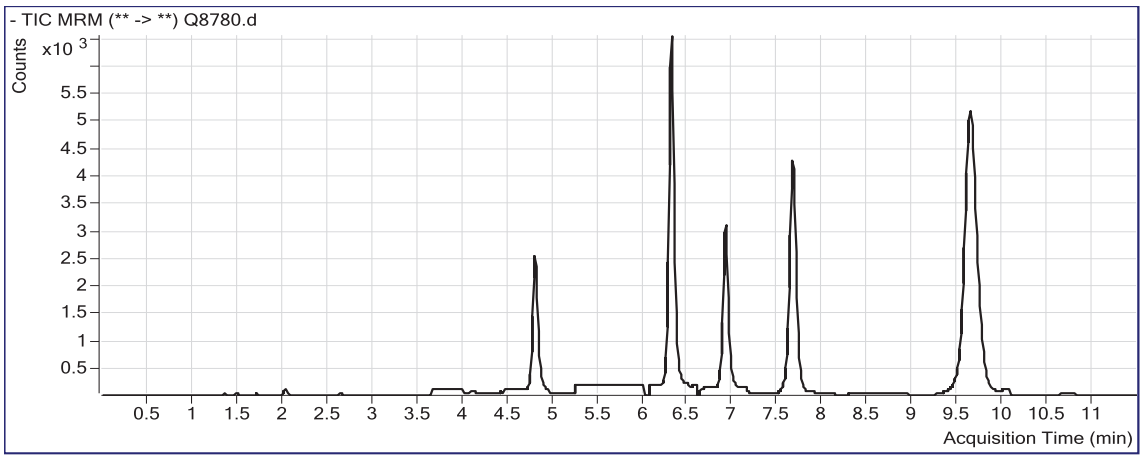
Data File	:	Q8780.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 18:55
Sample Name	:	FA20472-5
Vial	:	Vial 11
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	25207	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	12269	20.000	µg/L	0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	49321	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	9898	23.88	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 119.41%			
13C2-PFDA	7.645	515.0 -> 470.0	22309	20.75	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 103.73%			
Target Compounds						**Qvalue**
PFOA	6.299	413.0 -> 369.0	504	0.394	µg/L	69

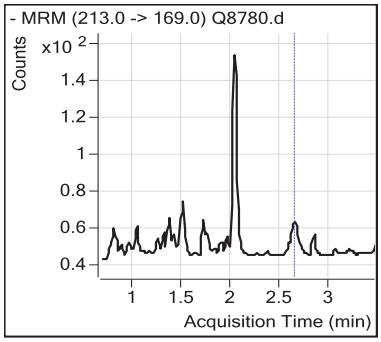
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

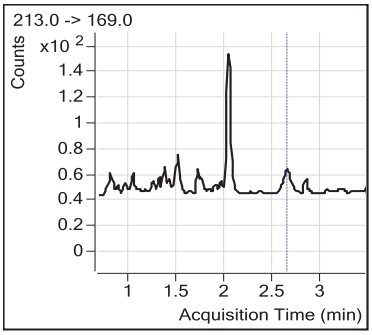
Perfluorinated Compounds by LC/MS/MS.

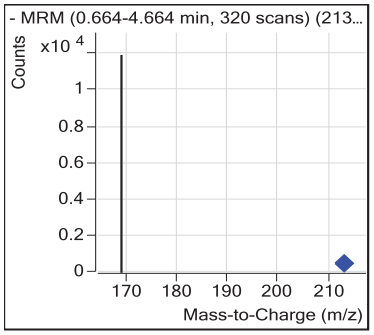
Data File	:	Q8780.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 18:55
Sample Name	:	FA20472-5
Vial	:	Vial 11
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



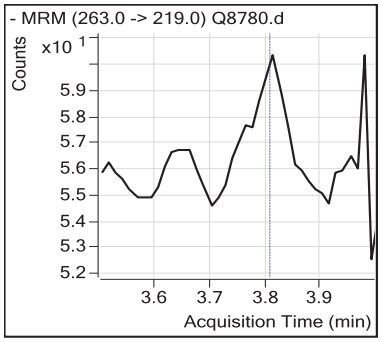
PFBA

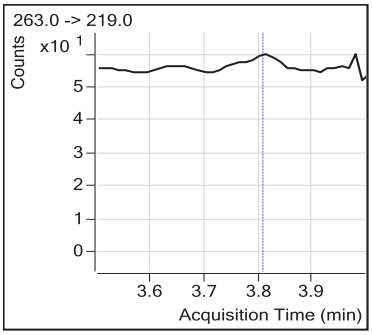


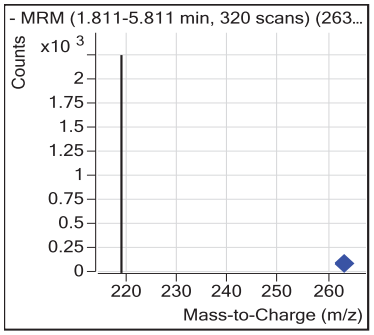




PFPeA

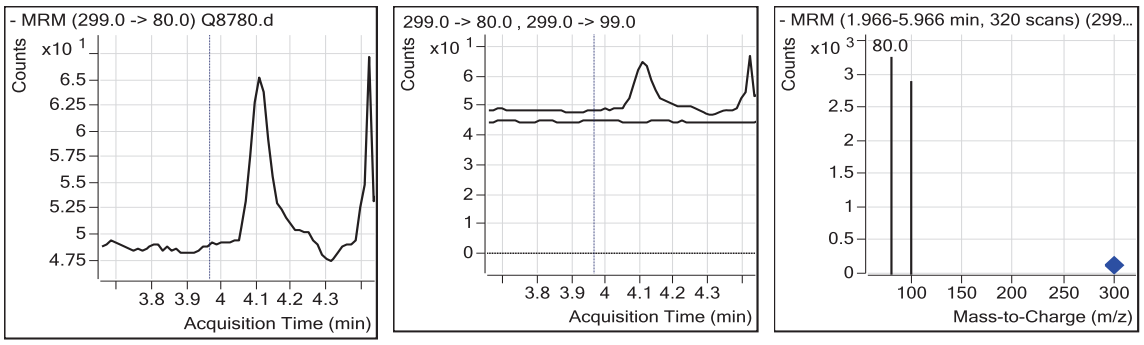




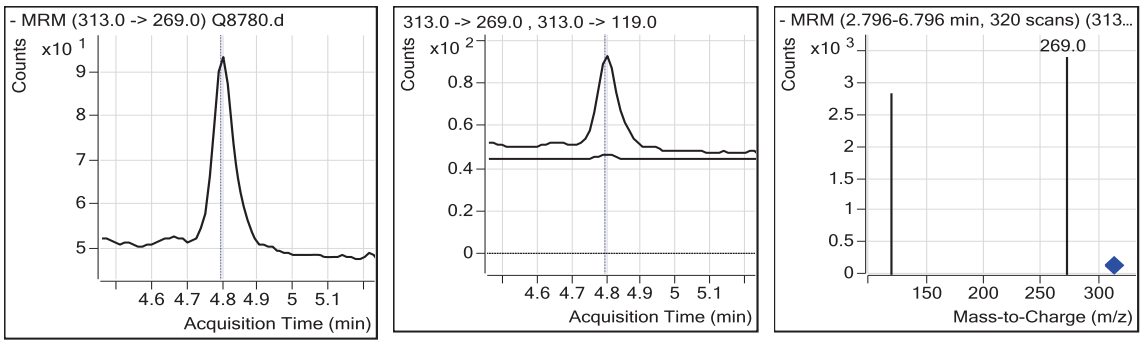


Perfluorinated Compounds by LC/MS/MS.

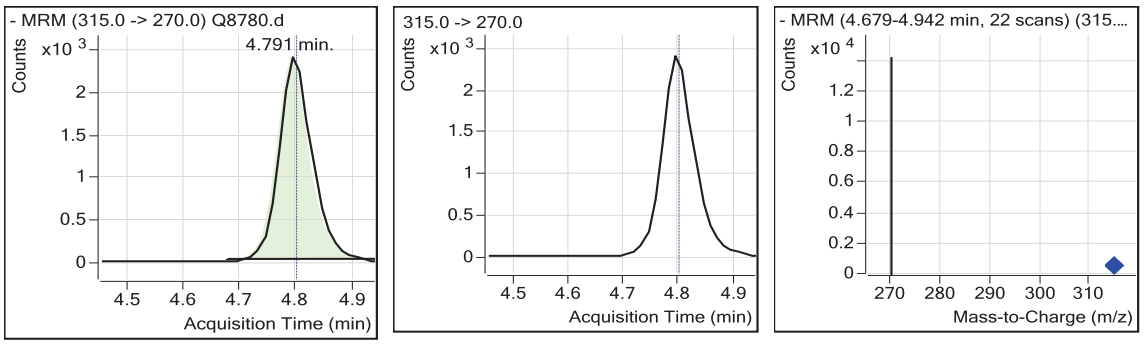
PFBS



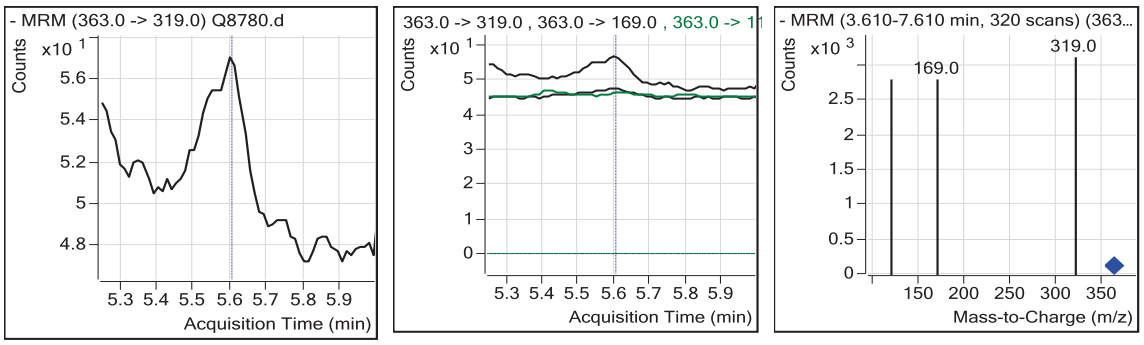
PFHxA



13C2-PFHxA



PFHpA

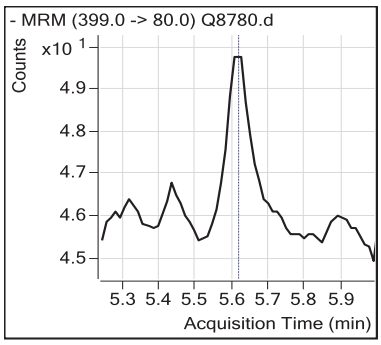


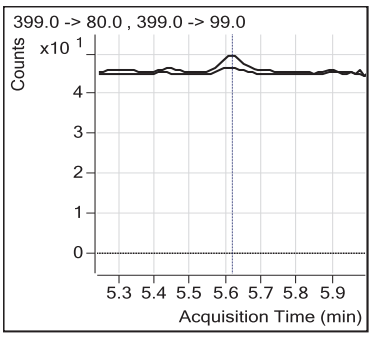
7.1.5

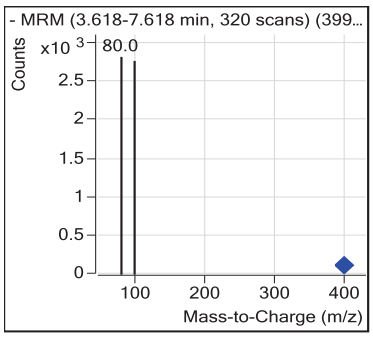
7

Perfluorinated Compounds by LC/MS/MS.

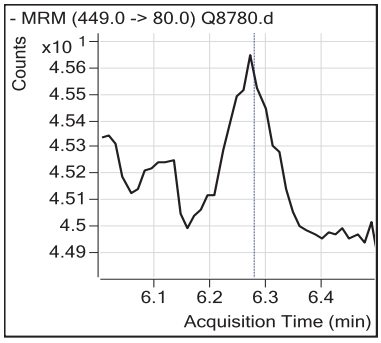
PFHxS

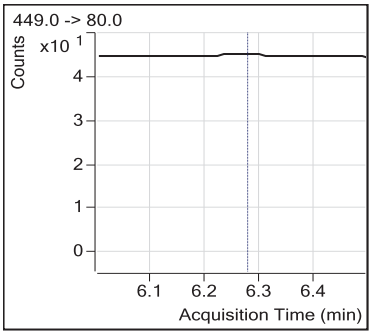


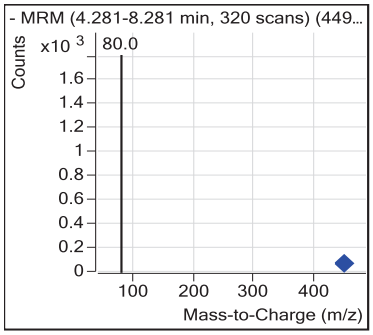




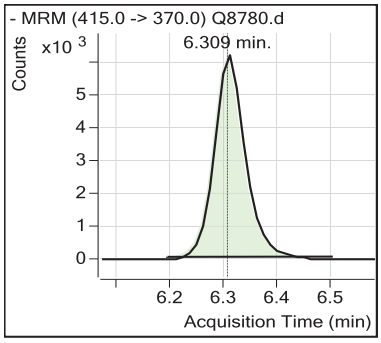
PFHpS

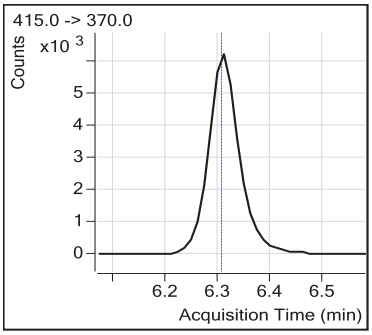


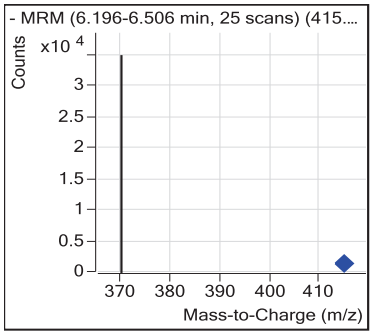




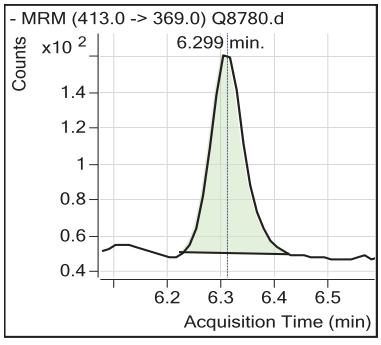
13C2-PFOA

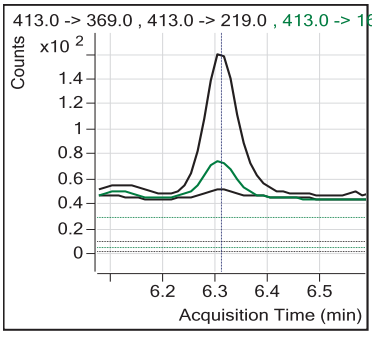


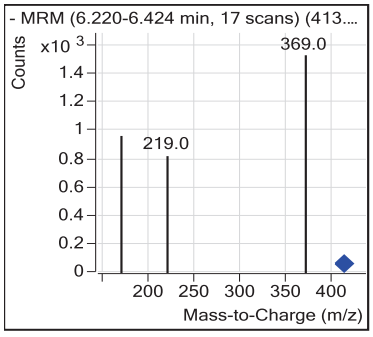




PFOA

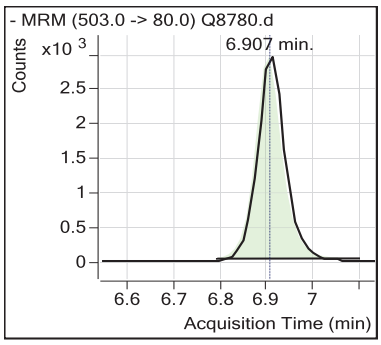


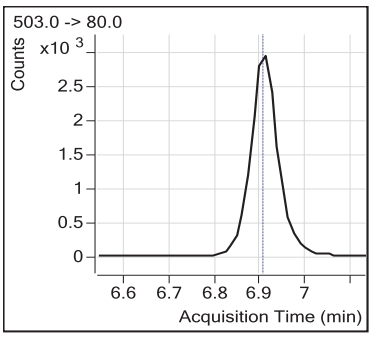


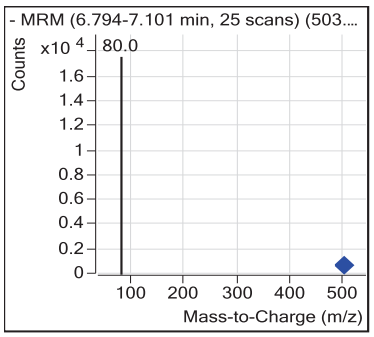


Perfluorinated Compounds by LC/MS/MS.

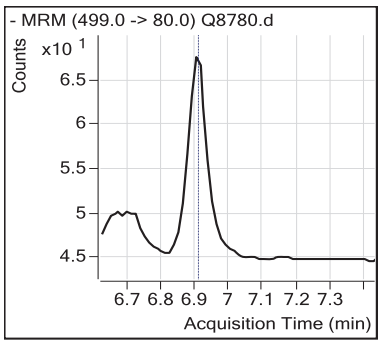
13C4-PFOS

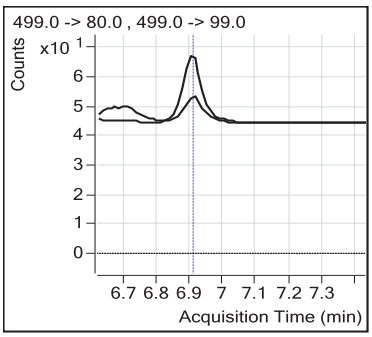


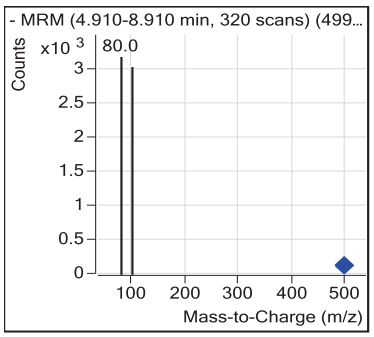




PFOS







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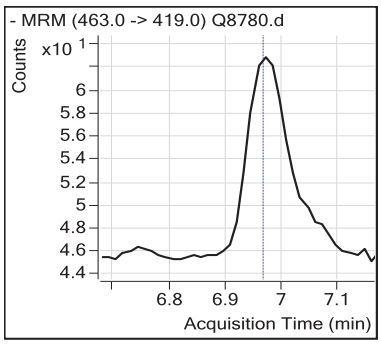
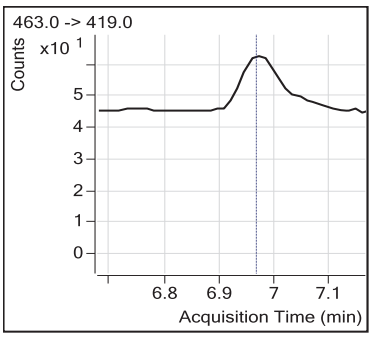
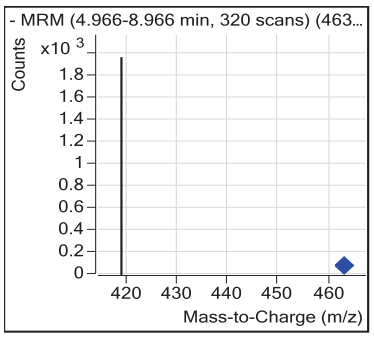
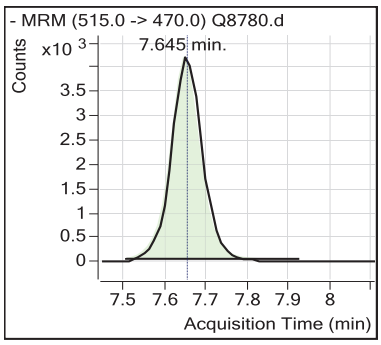
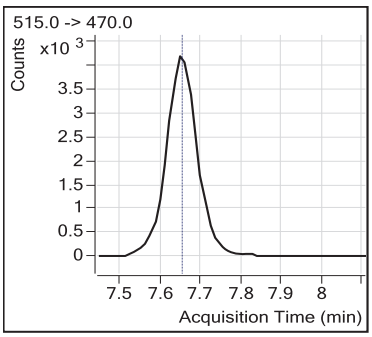


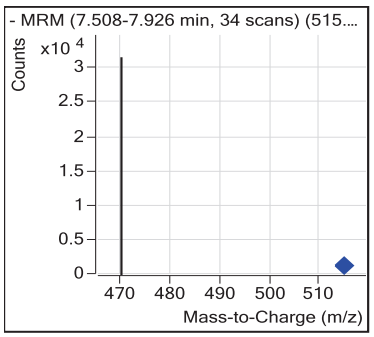




13C2-PFDA

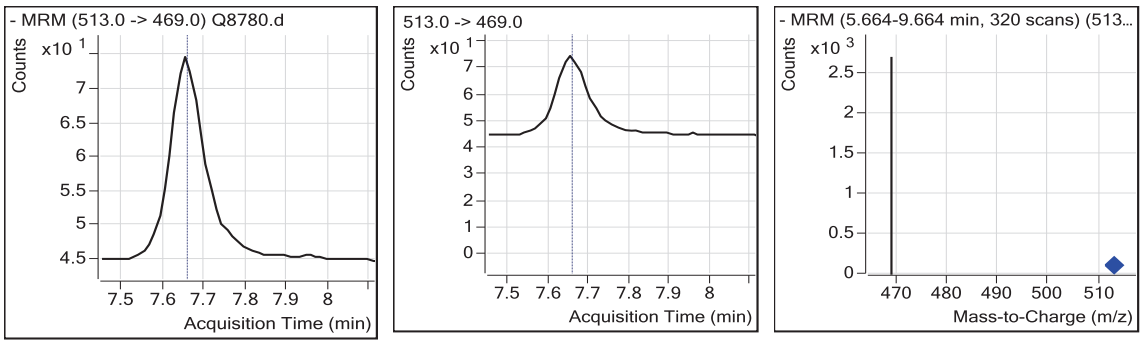






Perfluorinated Compounds by LC/MS/MS.

PFDA



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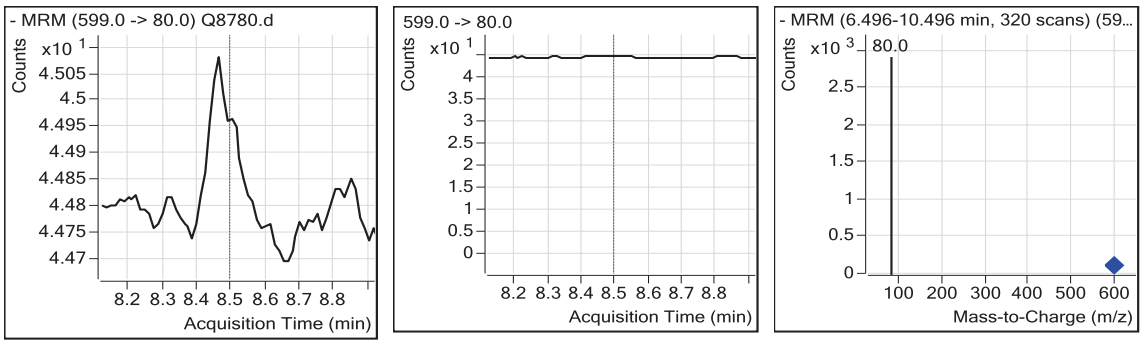
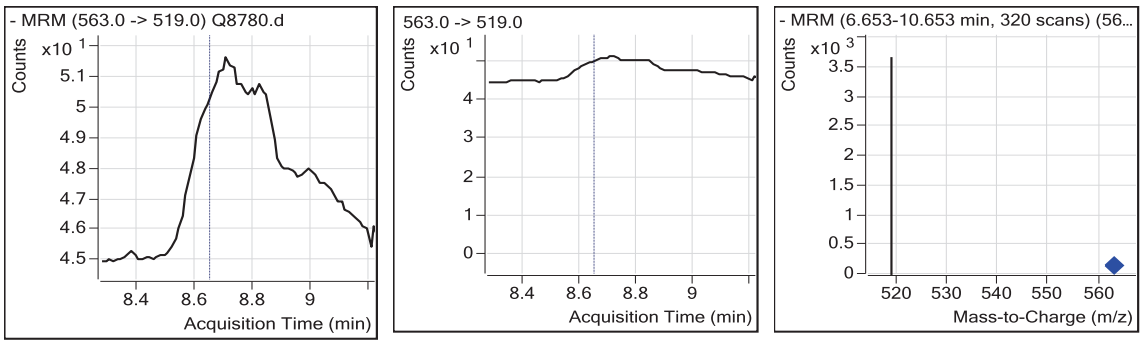
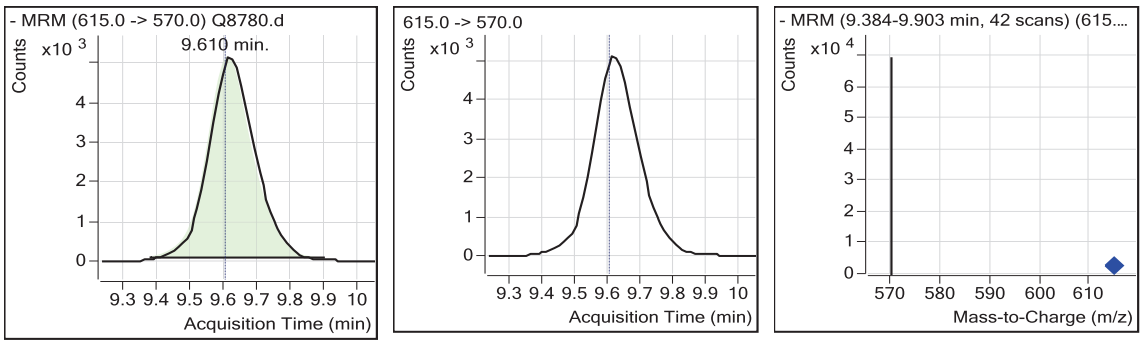


PFUnDA

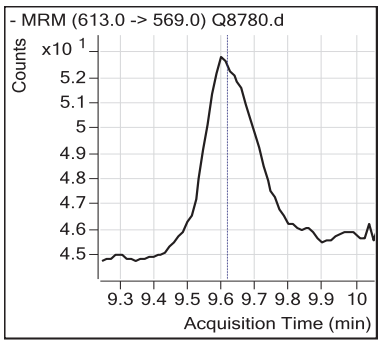


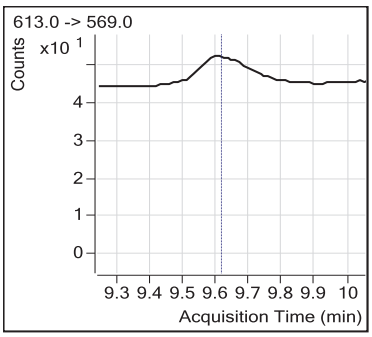
13C2-PFDoDA

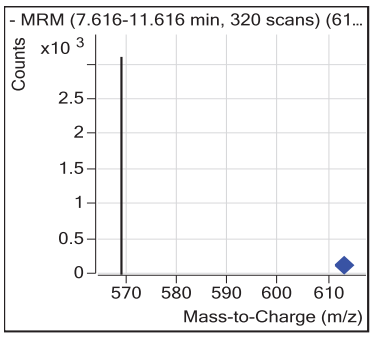


Perfluorinated Compounds by LC/MS/MS.

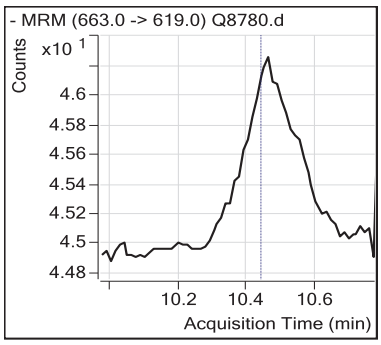
PFDoDA

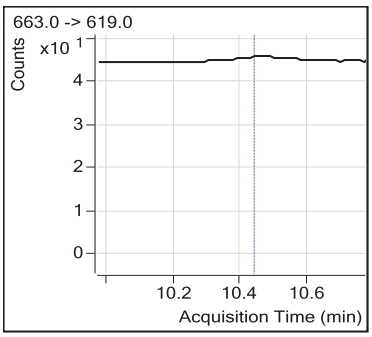


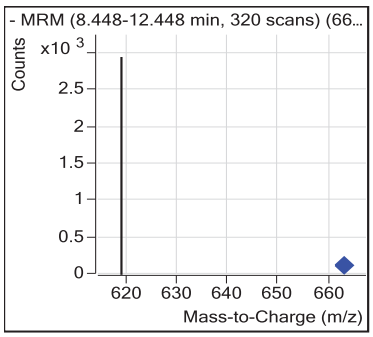




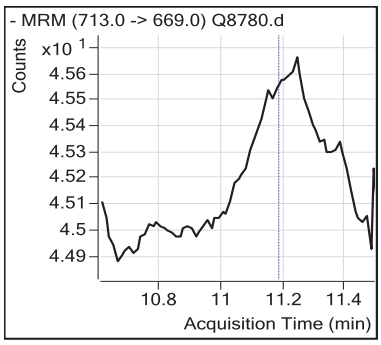
PFTrDA

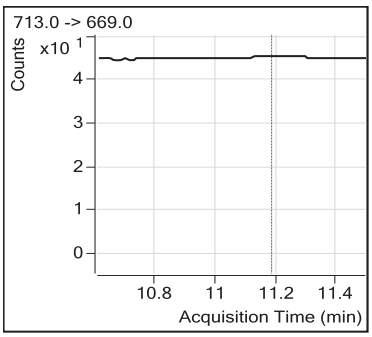


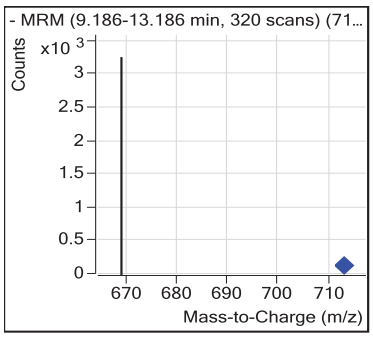




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

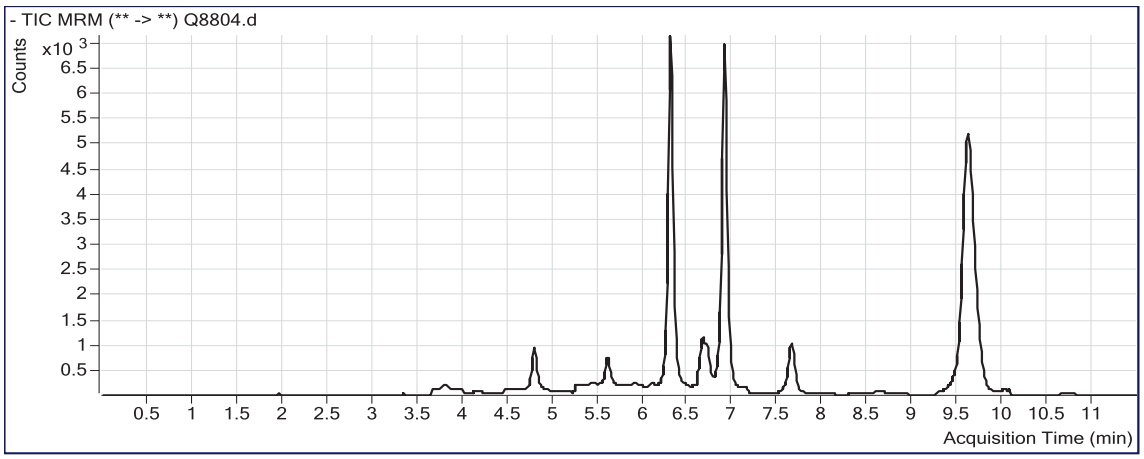
Data File	:	Q8804.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 11:50
Sample Name	:	FA20472-6
Vial	:	Vial 4
Sample Info	:	OP54204,SQ285,120,,,1,5,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.296	415.0 -> 370.0	25395	20.000	µg/L	-0.012
13C4-PFOS	6.895	503.0 -> 80.0	11306	20.000	µg/L	-0.012
13C2-PFDoDA	9.585	615.0 -> 570.0	49254	20.000	µg/L	-0.025
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	1783	4.27	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 21.35%			
13C2-PFDA	7.633	515.0 -> 470.0	4905	4.53	µg/L	-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 22.64%			
Target Compounds						**Qvalue**
PFPeA	3.799	263.0 -> 219.0	453	2.977	µg/L	100
PFHxA	4.783	313.0 -> 269.0	1614	3.681	µg/L	99
PFHpA	5.597	363.0 -> 319.0	546	1.284	µg/L	99
PFHxS	5.605	399.0 -> 80.0	934	3.482	µg/L	81
PFOA	6.299	413.0 -> 369.0	2071	1.610	µg/L	79
PFOS	6.898	499.0 -> 80.0	10608	18.759	µg/L	73
PFNA	6.954	463.0 -> 419.0	323	0.422	µg/L	100
PFDA	7.639	513.0 -> 469.0	378	0.506	µg/L	100

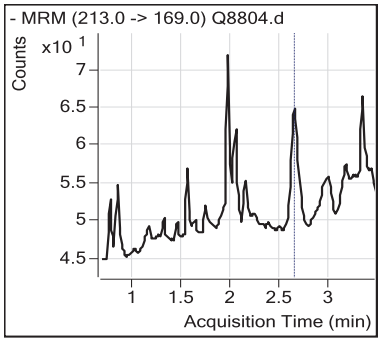
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

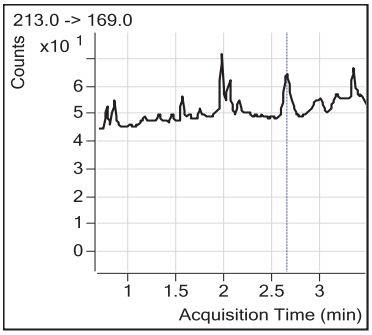
Perfluorinated Compounds by LC/MS/MS.

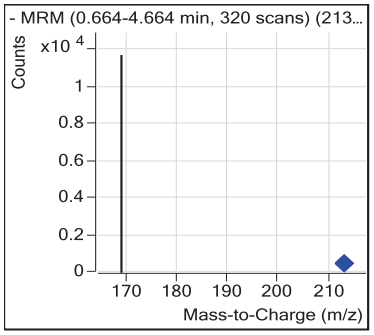
Data File	:	Q8804.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 11:50
Sample Name	:	FA20472-6
Vial	:	Vial 4
Sample Info	:	OP54204,SQ285,120,,,1,5,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24



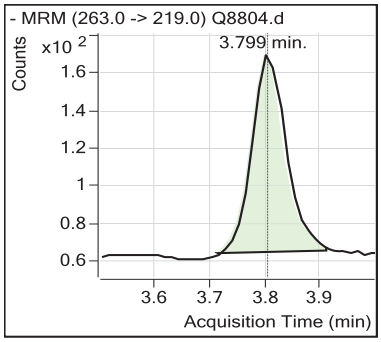
PFBA

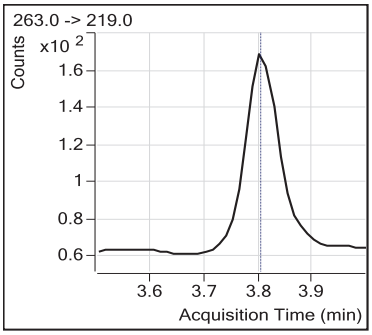


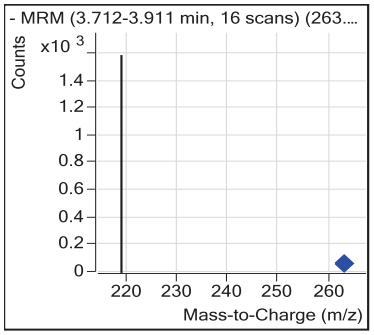




PFPeA

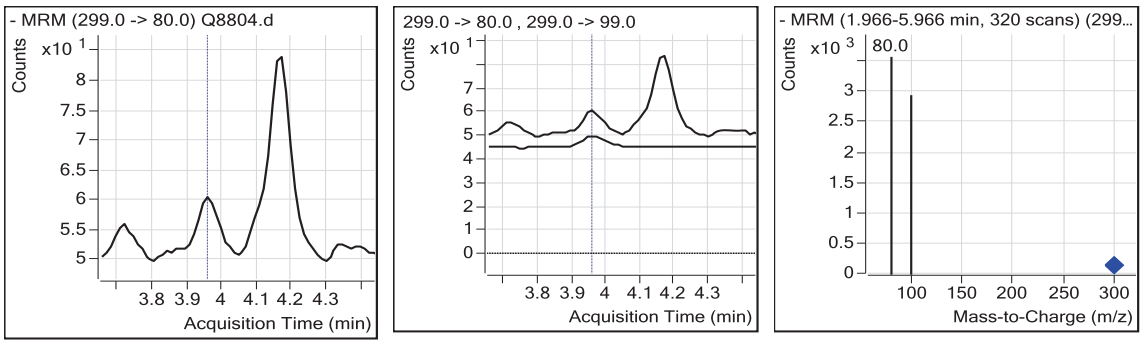




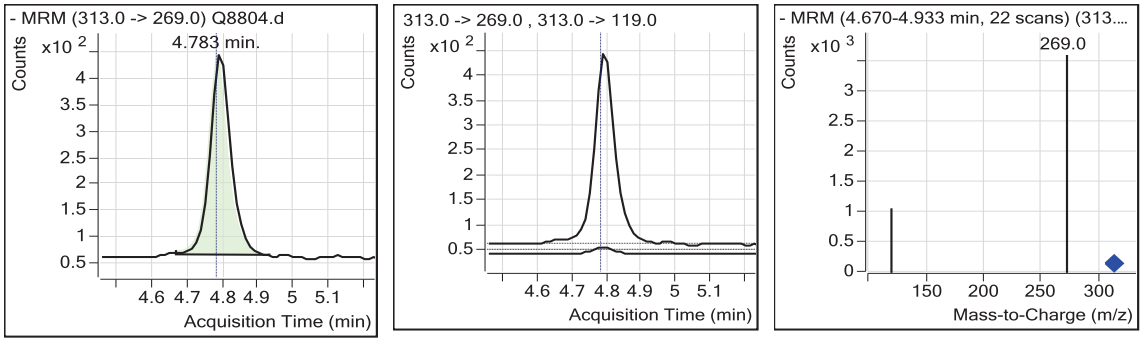


Perfluorinated Compounds by LC/MS/MS.

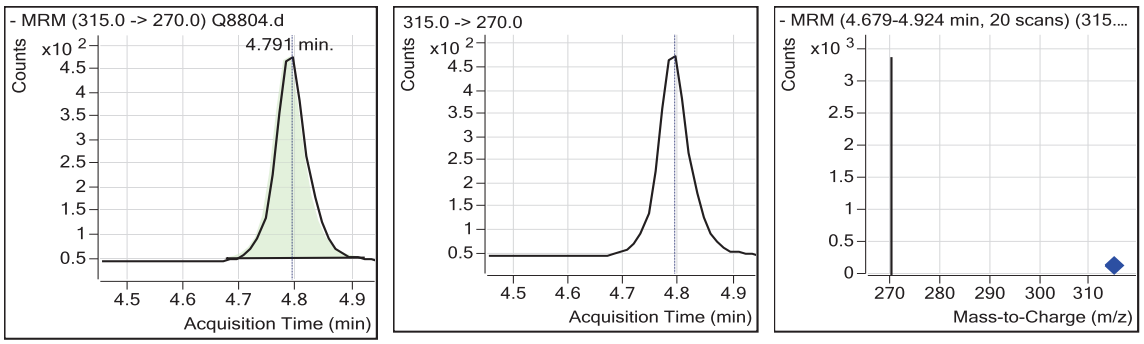
PFBS



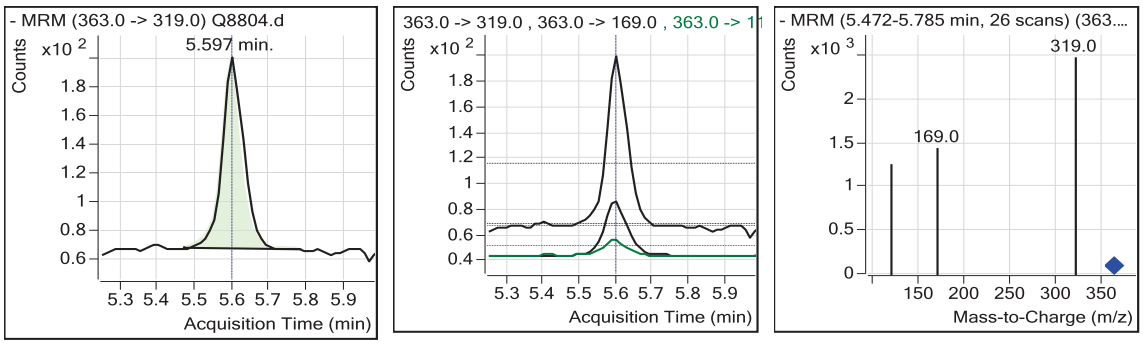
PFHxA



13C2-PFHxA

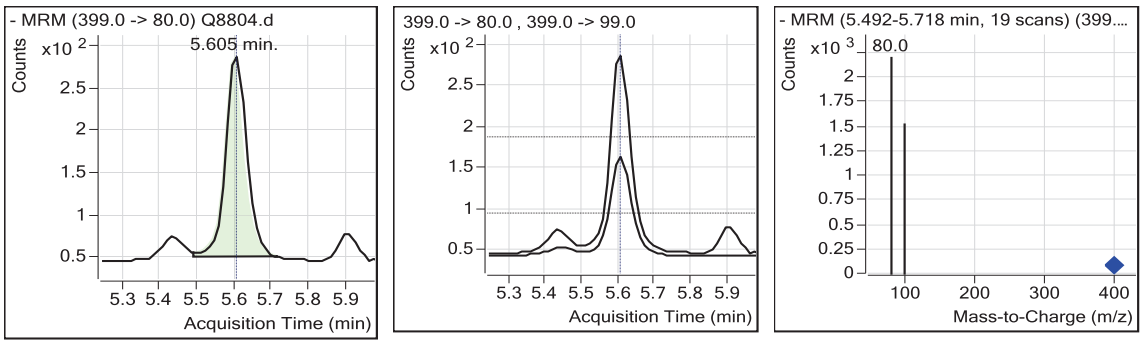


PFHpA

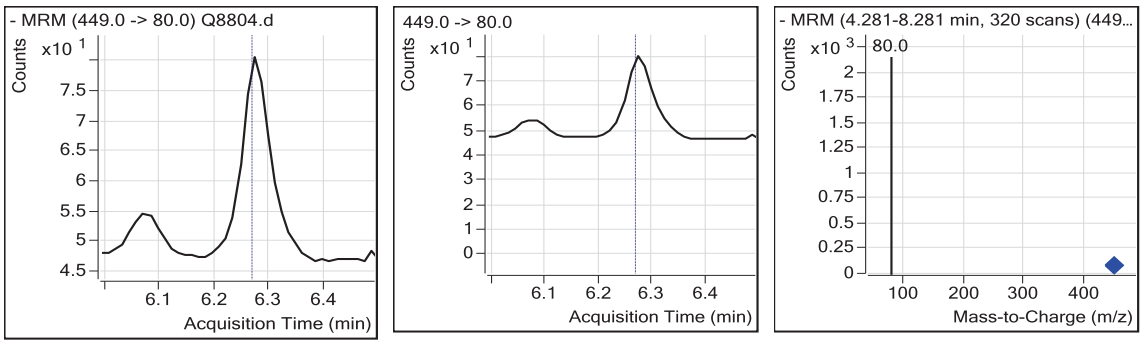


Perfluorinated Compounds by LC/MS/MS.

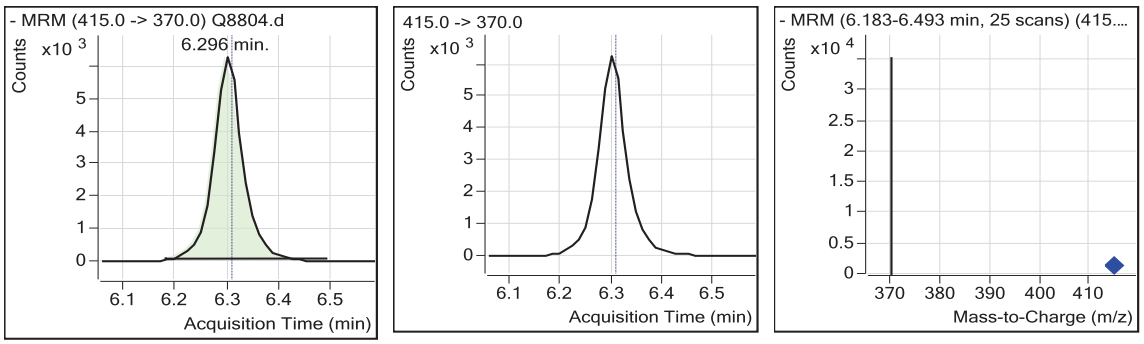
PFHxS



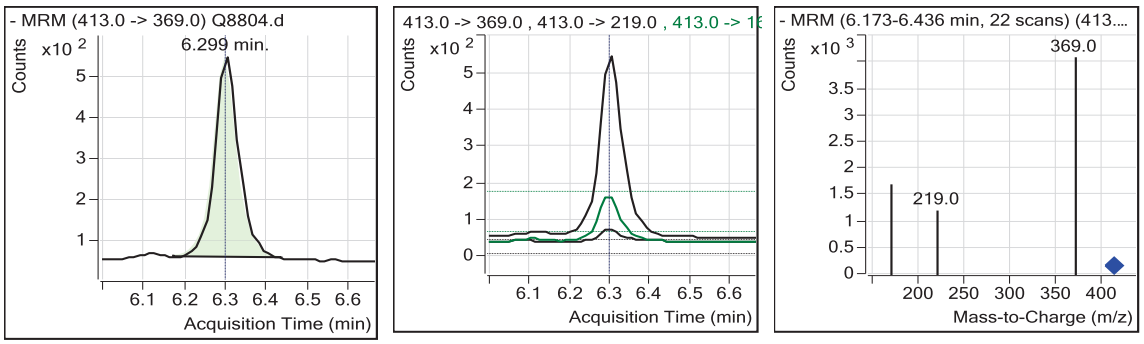
PFHpS



13C2-PFOA

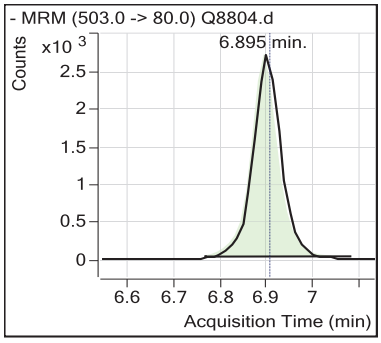


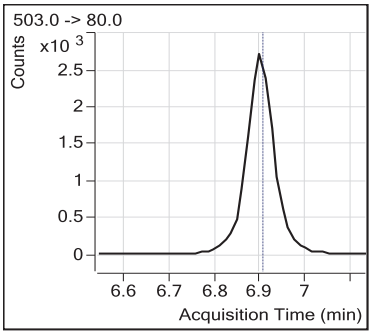
PFOA

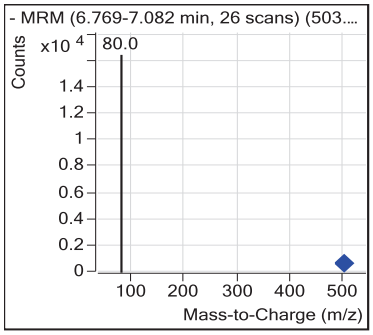


Perfluorinated Compounds by LC/MS/MS.

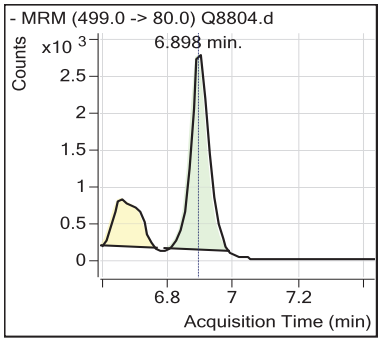
13C4-PFOS

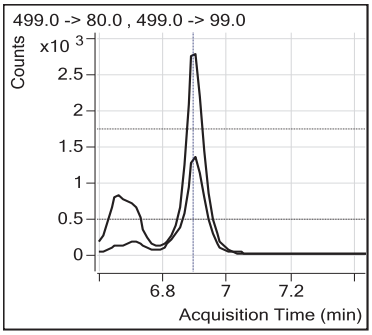


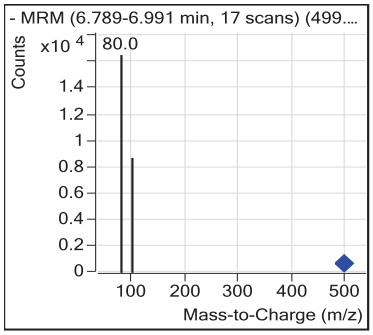




PFOS







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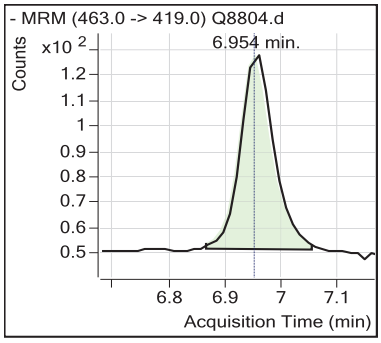
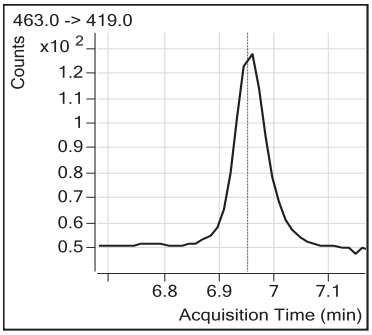
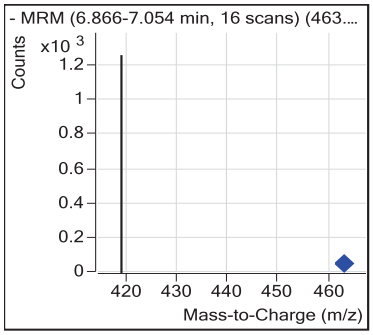
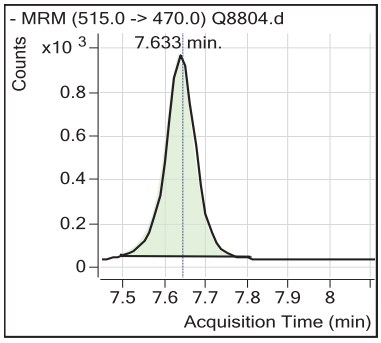
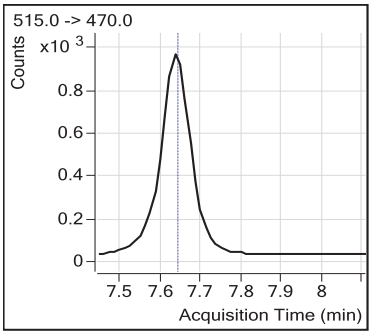


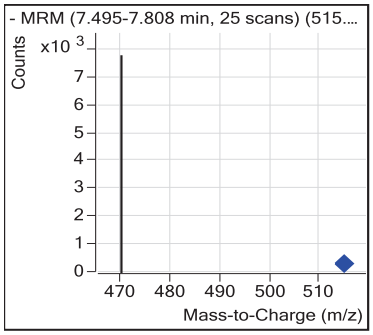




13C2-PFDA

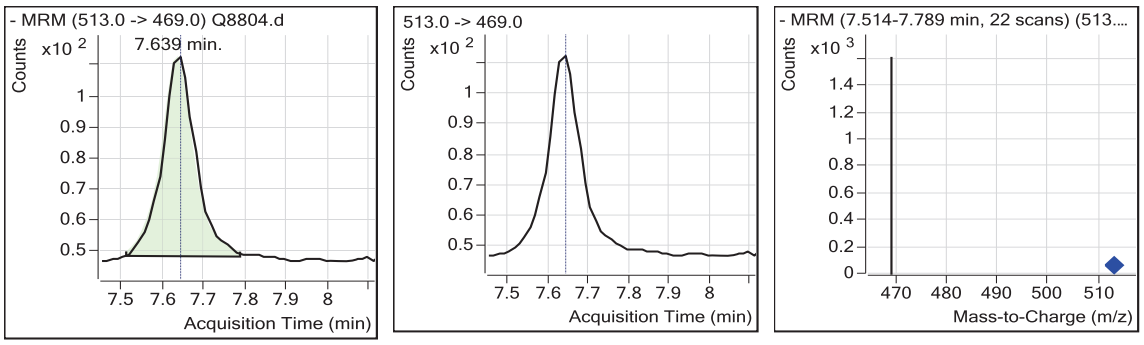




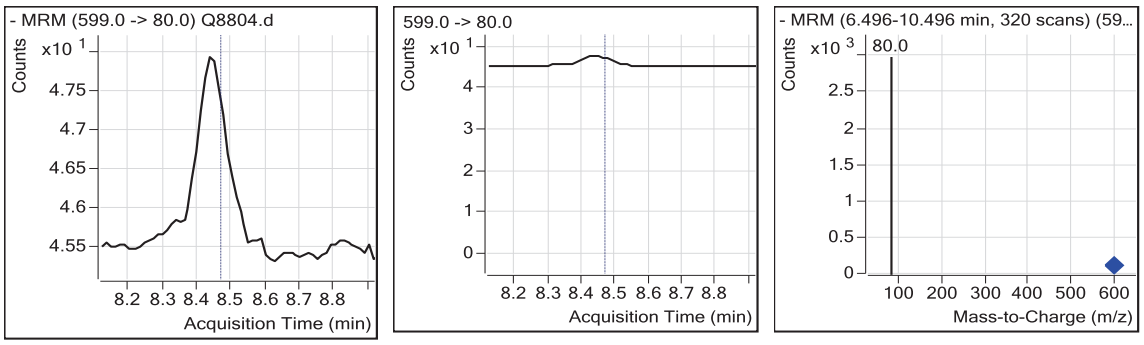


Perfluorinated Compounds by LC/MS/MS.

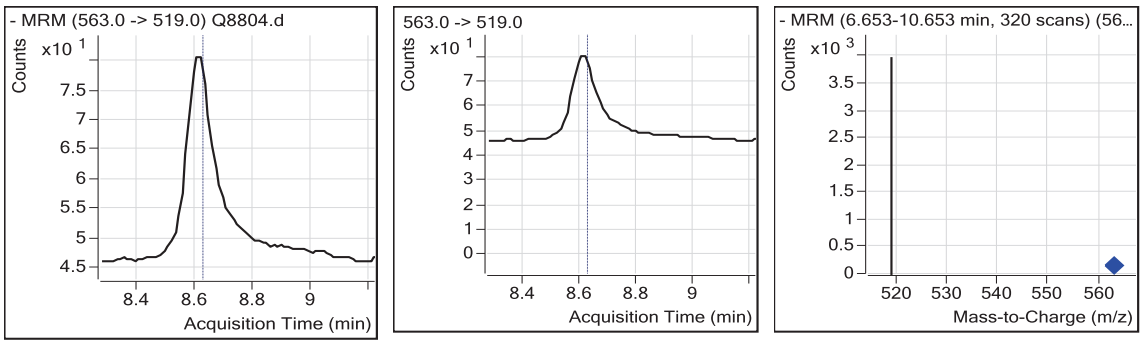
PFDA



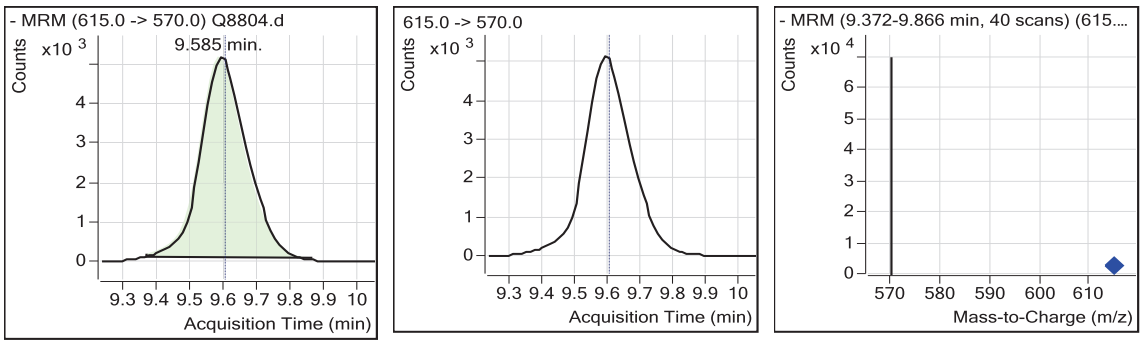
PFDS



PFUnDA



13C2-PFDoDA

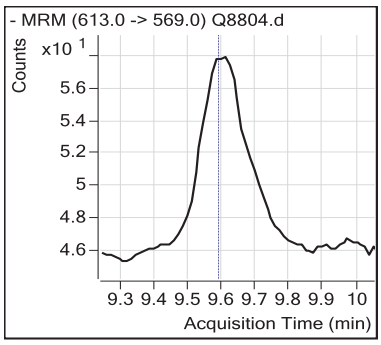


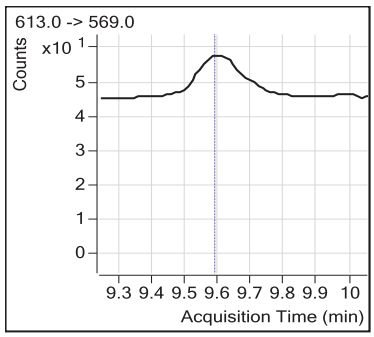
7.1.6

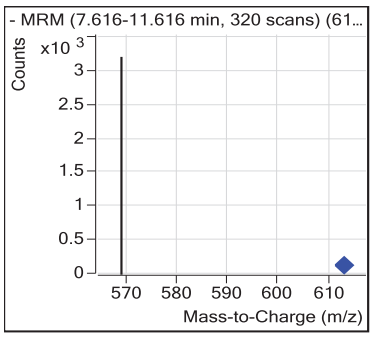
7

Perfluorinated Compounds by LC/MS/MS.

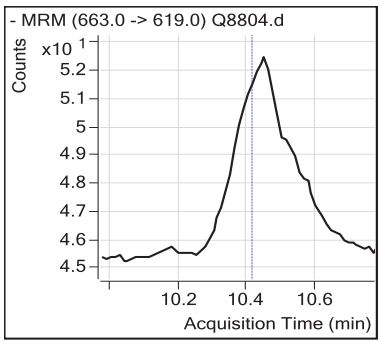
PFDoDA

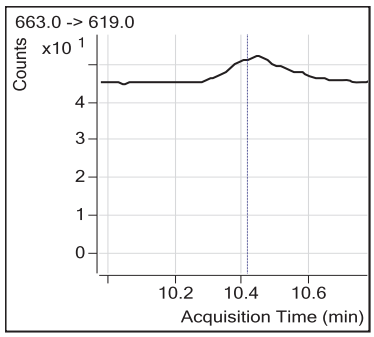


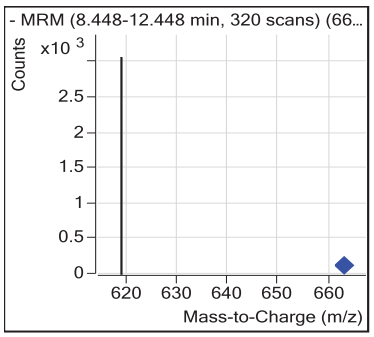




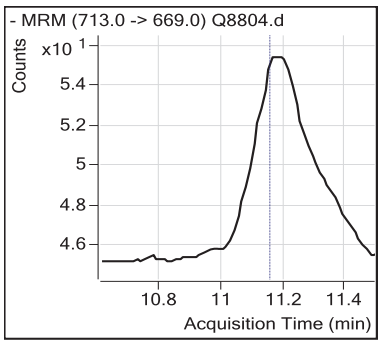
PFTrDA

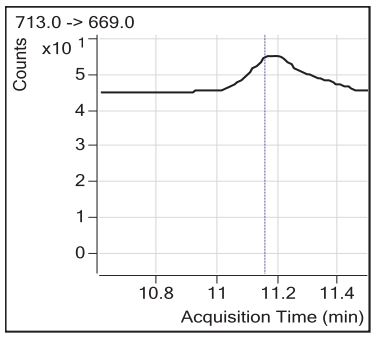


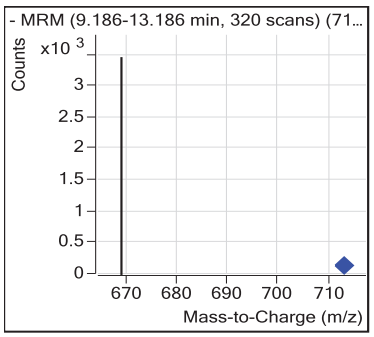




PFTeDA







Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/16/14 10:17

Perfluorinated Compounds by LC/MS/MS.

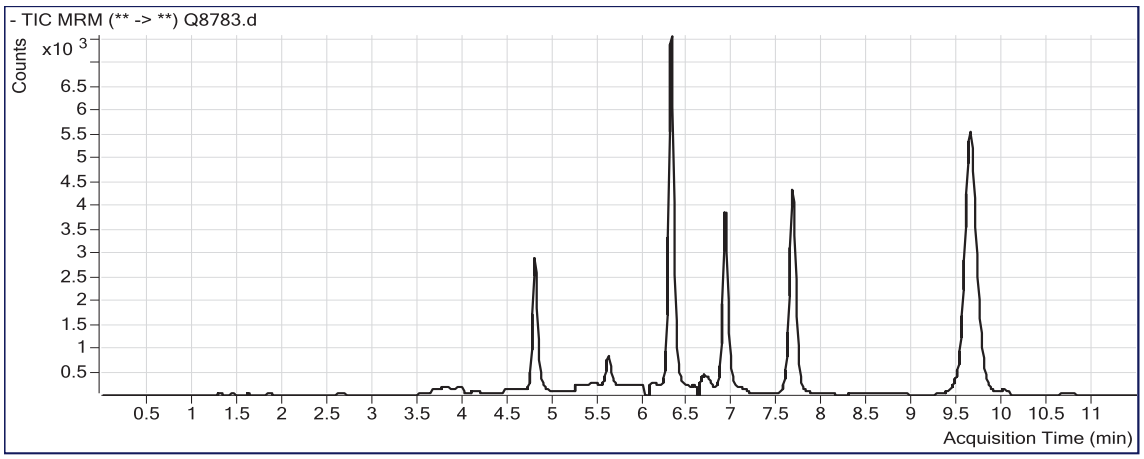
Data File	:	Q8783.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 19:58
Sample Name	:	FA20472-7
Vial	:	Vial 14
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.309	415.0 -> 370.0	26192	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	12139	20.000	µg/L		0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	51941	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	10286	23.89	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 119.43%				
13C2-PFDA	7.645	515.0 -> 470.0	22423	20.07	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 100.34%				
Target Compounds							**Qvalue**
PFPeA	3.799	263.0 -> 219.0	205	1.304	µg/L		100
PFHxA	4.796	313.0 -> 269.0	876	1.937	µg/L		97
PFHxS	5.605	399.0 -> 80.0	1562	5.423	µg/L	m	88
PFHpA	5.610	363.0 -> 319.0	352	0.801	µg/L		99
PFOA	6.299	413.0 -> 369.0	3231	2.435	µg/L		81
PFOS	6.898	499.0 -> 80.0	4062	6.690	µg/L	m	95
PFNA	6.954	463.0 -> 419.0	317	0.402	µg/L		100

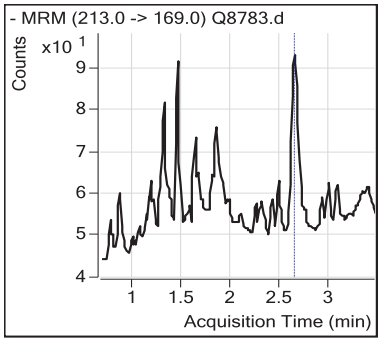
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

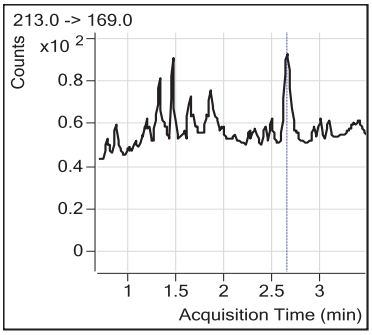
Perfluorinated Compounds by LC/MS/MS.

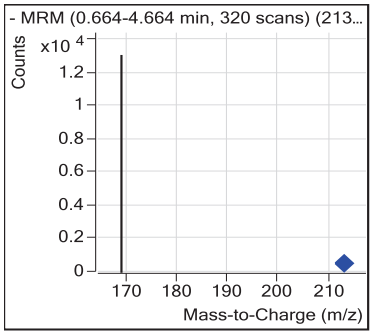
Data File	:	Q8783.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 19:58
Sample Name	:	FA20472-7
Vial	:	Vial 14
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



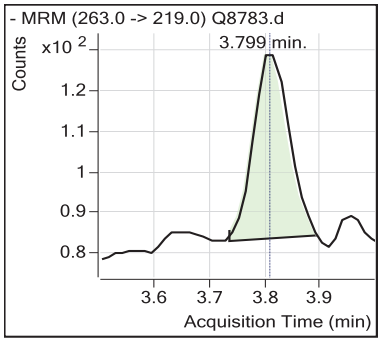
PFBA

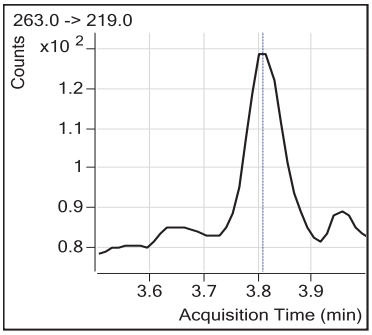


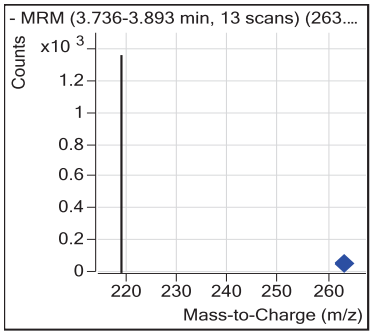




PFPeA

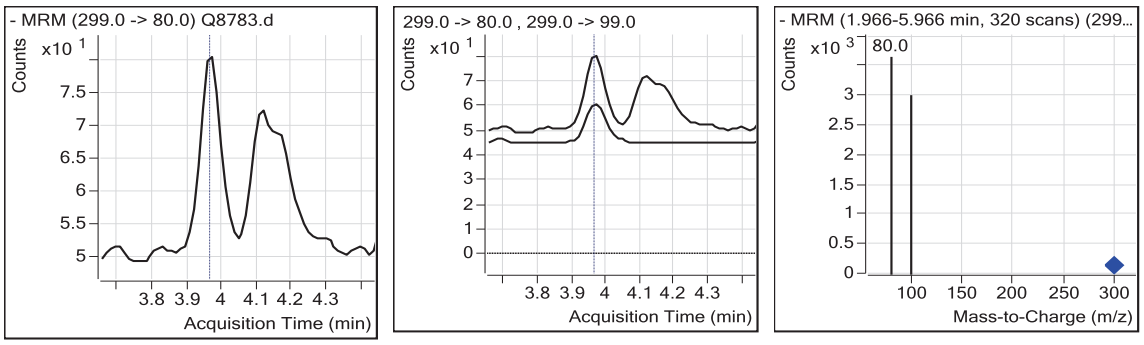




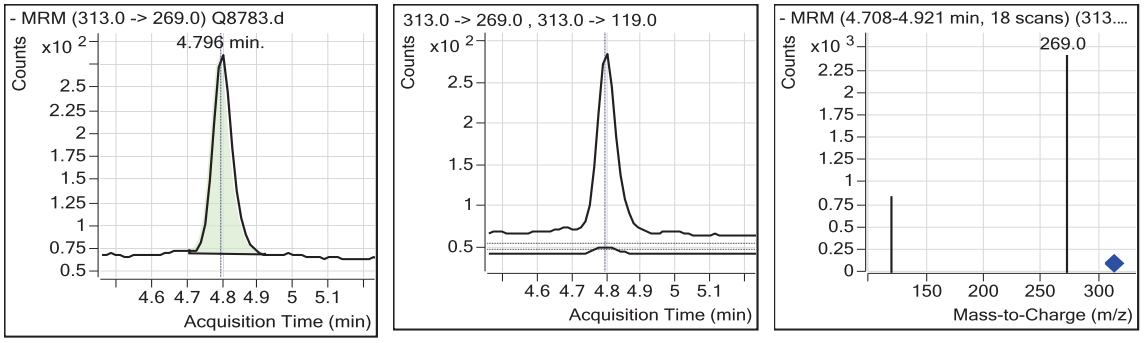


Perfluorinated Compounds by LC/MS/MS.

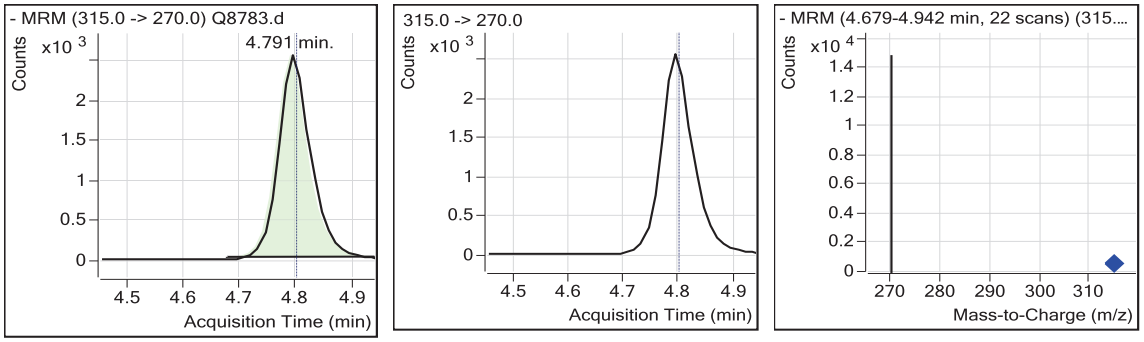
PFBS



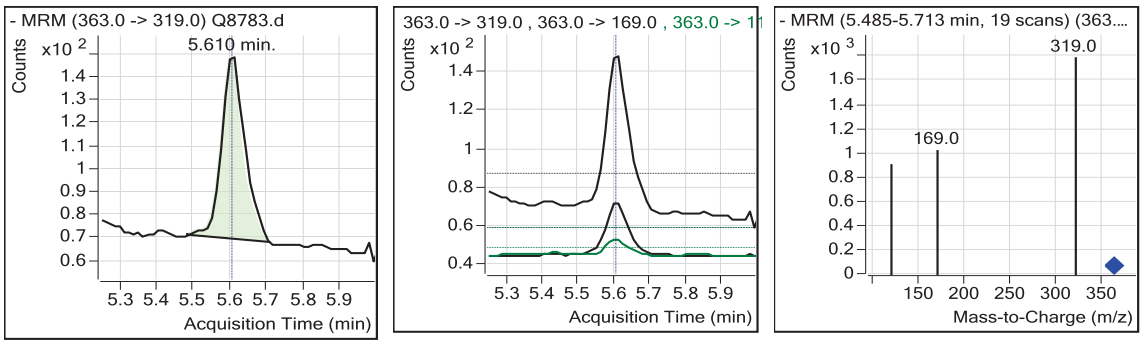
PFHxA



13C2-PFHxA

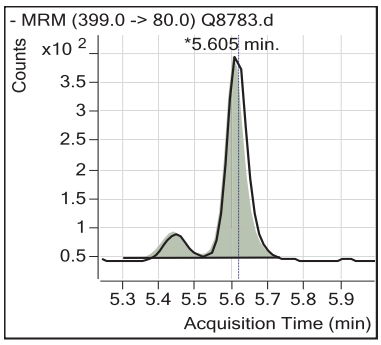


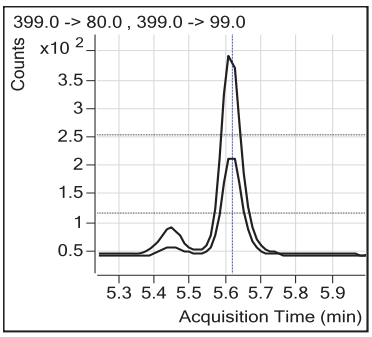
PFHpA

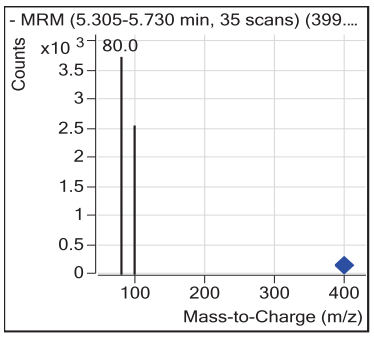


Perfluorinated Compounds by LC/MS/MS.

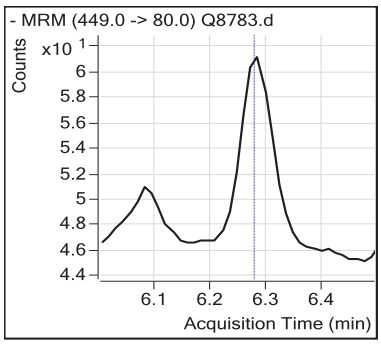
PFHxS

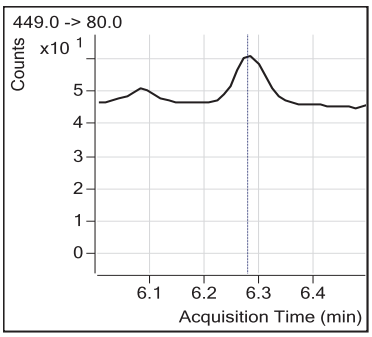


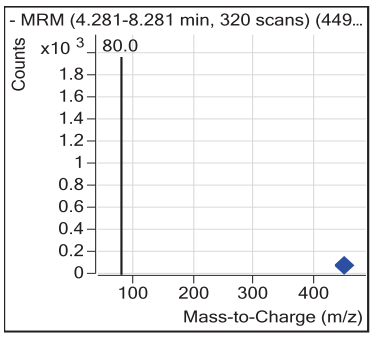




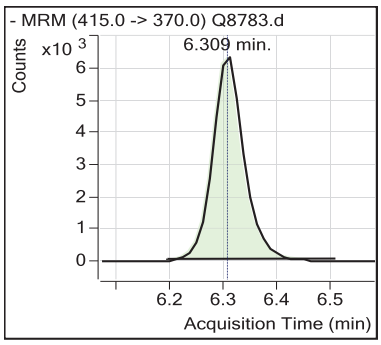
PFHpS

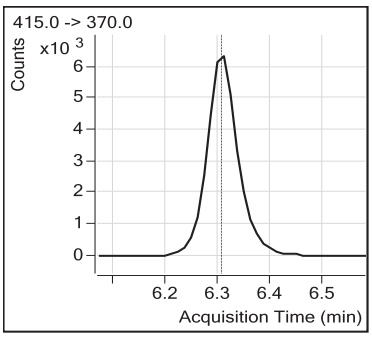


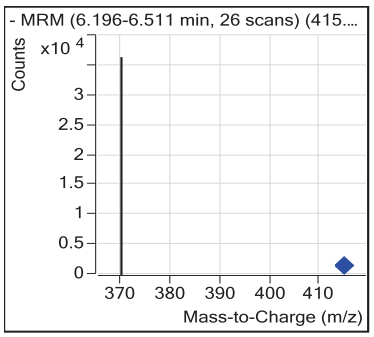




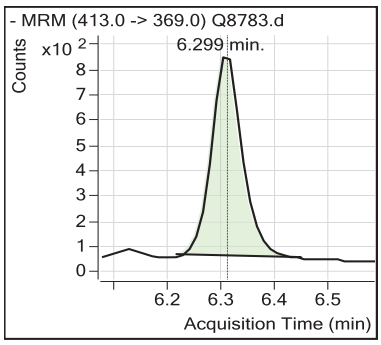
13C2-PFOA

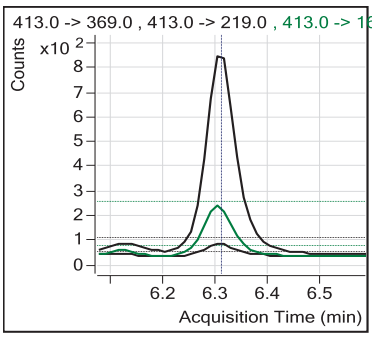


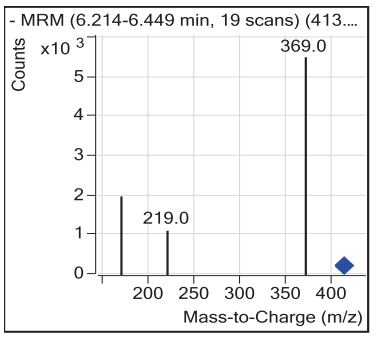




PFOA

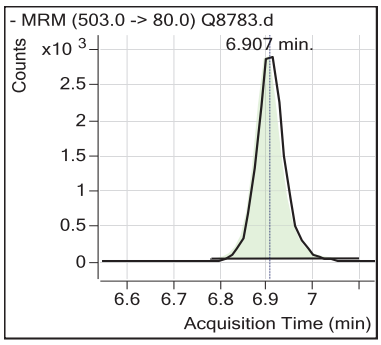


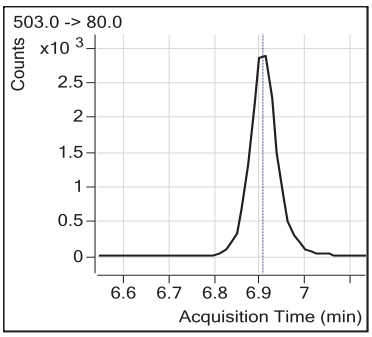


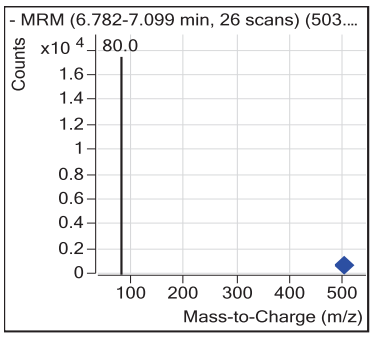


Perfluorinated Compounds by LC/MS/MS.

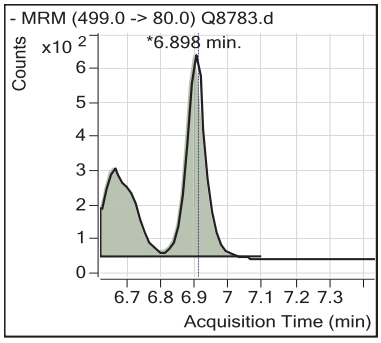
13C4-PFOS

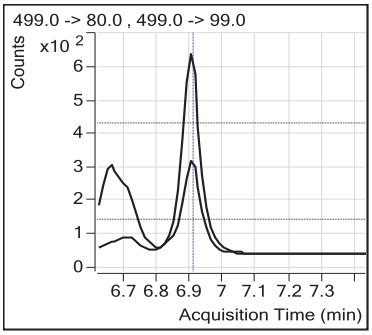


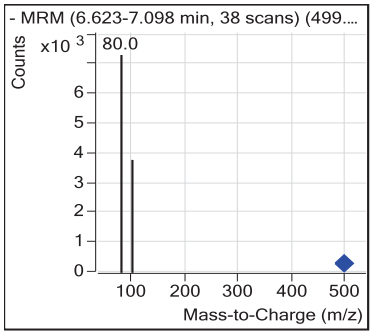




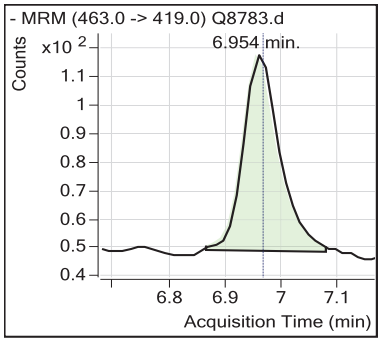
PFOS

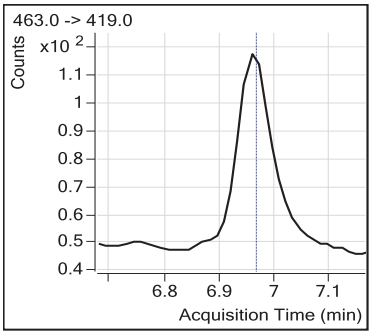


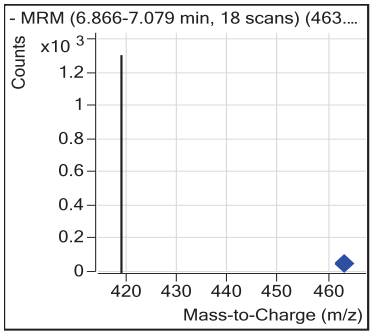




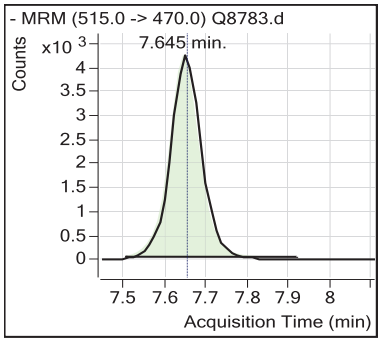
PFNA

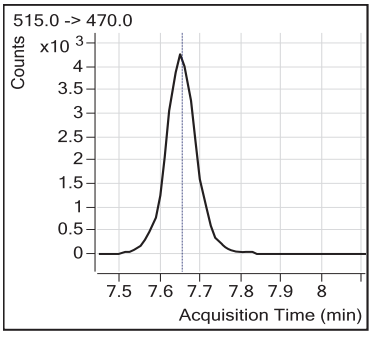


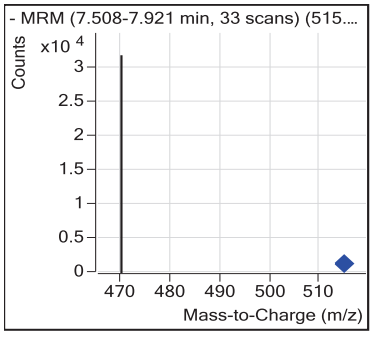




13C2-PFDA

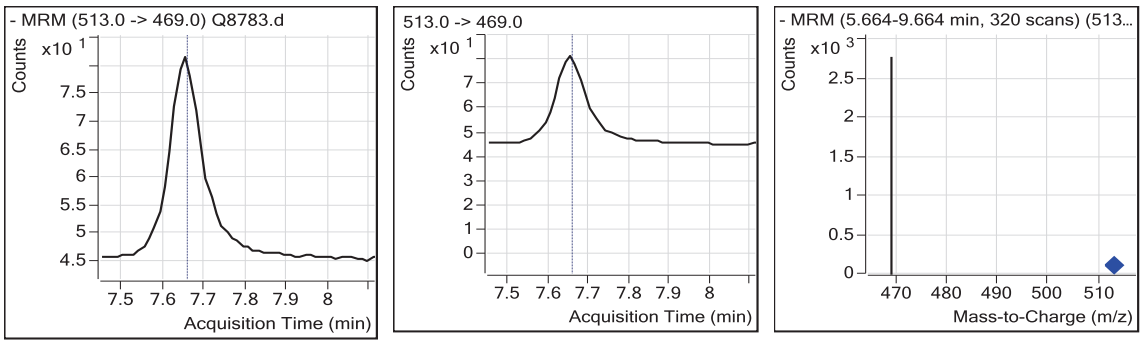




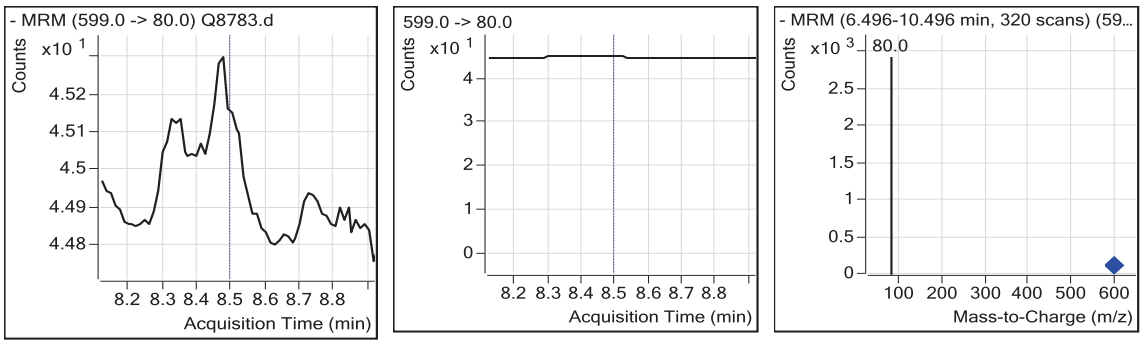


Perfluorinated Compounds by LC/MS/MS.

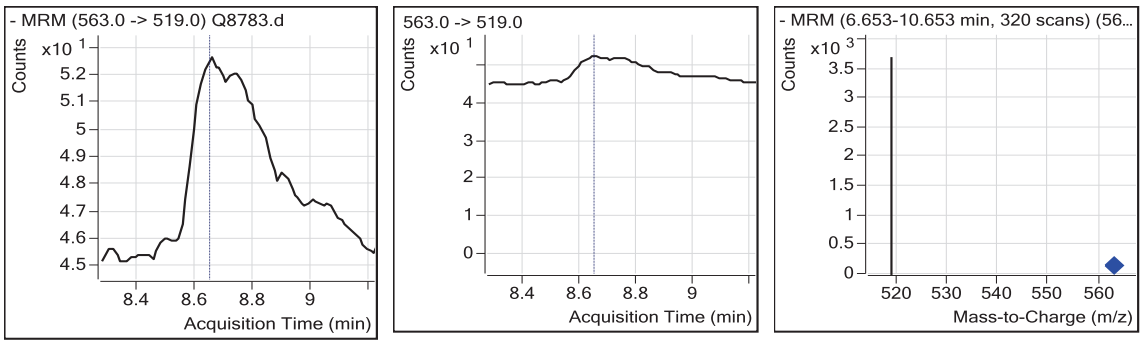
PFDA



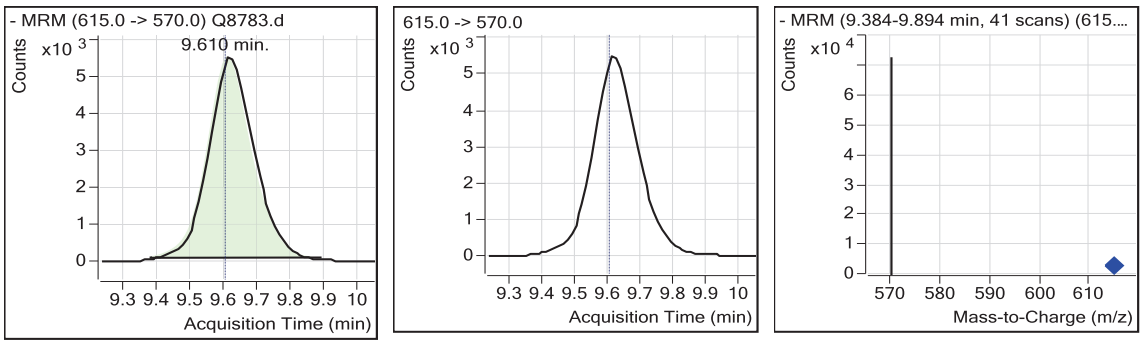
PFDS



PFUnDA

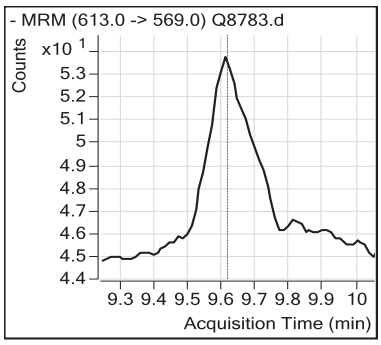


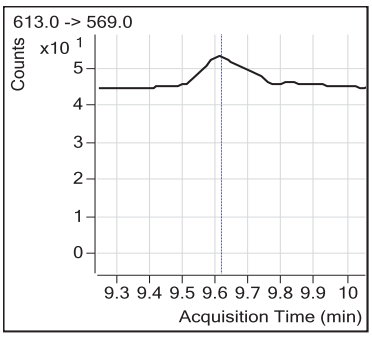
13C2-PFDoDA

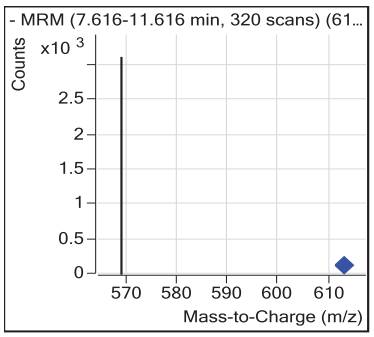


Perfluorinated Compounds by LC/MS/MS.

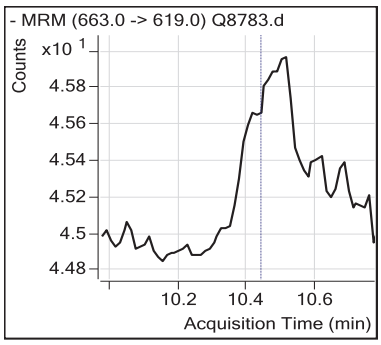
PFDoDA

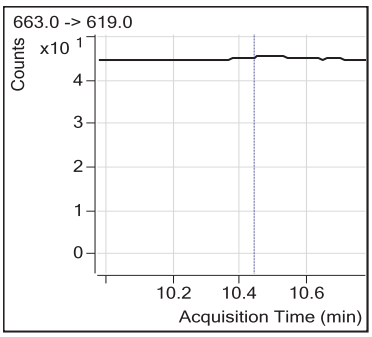


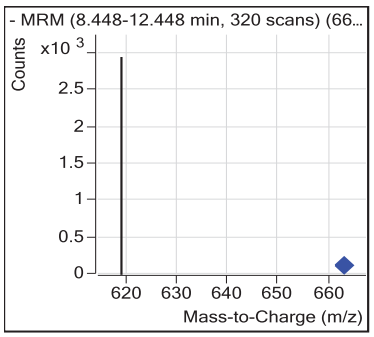




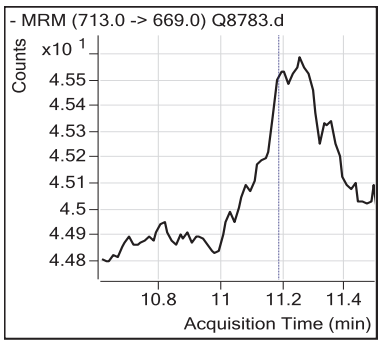
PFTrDA

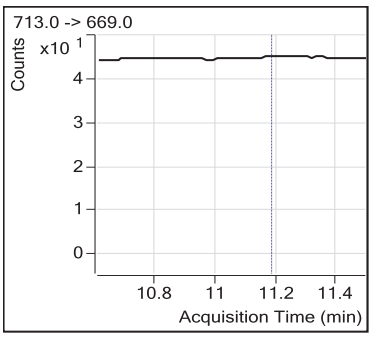


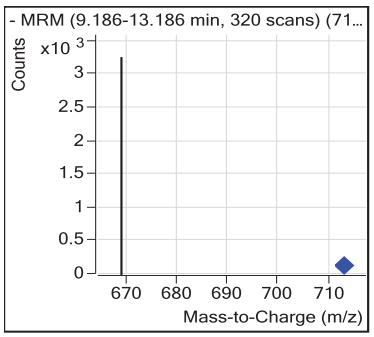




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-7
Lab FileID: Q8783.D
Injection Time: 12/15/14 19:58
Method: EPA 537 MOD
Analyst approved: 12/16/14 09:33 Nancy Saunders
Supervisor approved: 12/16/14 10:17 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/17/14 14:40

Perfluorinated Compounds by LC/MS/MS.

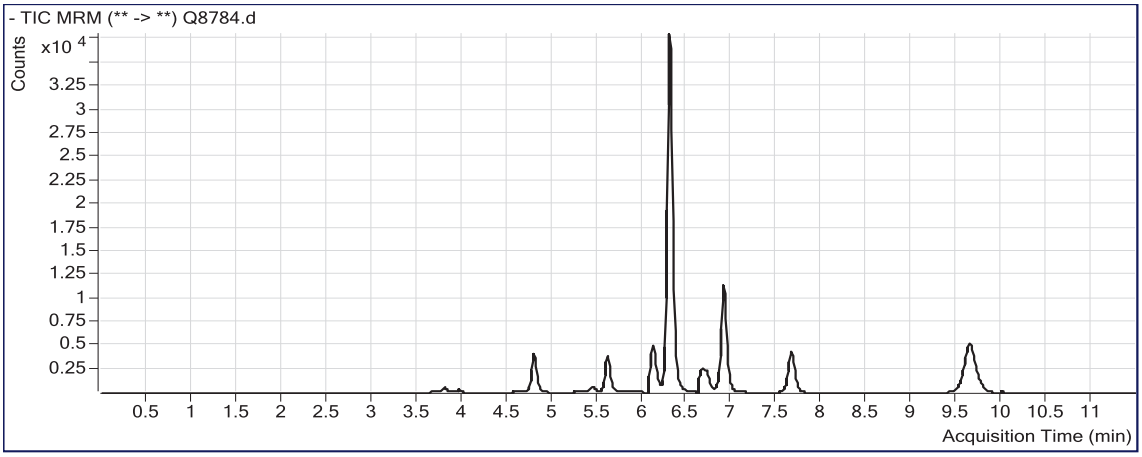
Data File	:	Q8784.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 20:18
Sample Name	:	FA20472-8
Vial	:	Vial 15
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.309	415.0 -> 370.0	22856	20.000	µg/L		0.000
13C4-PFOS	6.894	503.0 -> 80.0	11232	20.000	µg/L		-0.013
13C2-PFDoDA	9.622	615.0 -> 570.0	48551	20.000	µg/L		0.012
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	9761	25.97	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 129.87%				
13C2-PFDA	7.645	515.0 -> 470.0	22950	23.54	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 117.69%				
Target Compounds							**Qvalue**
PFBA	2.639	213.0 -> 169.0	488	1.779	µg/L		100
PFPeA	3.811	263.0 -> 219.0	1921	14.013	µg/L		100
PFBS	3.966	299.0 -> 80.0	557	3.358	µg/L		99
PFHxA	4.796	313.0 -> 269.0	7271	18.425	µg/L	m	100
PFHxS	5.605	399.0 -> 80.0	8798	33.011	µg/L	m	90
PFHpA	5.610	363.0 -> 319.0	2683	7.010	µg/L		99
PFHpS	6.281	449.0 -> 80.0	333	1.000	µg/L		100
PFOA	6.299	413.0 -> 369.0	104670	90.400	µg/L	# m	71
PFOS	6.898	499.0 -> 80.0	38367	68.297	µg/L	m	98
PFNA	6.954	463.0 -> 419.0	579	0.842	µg/L		100
PFDA	7.652	513.0 -> 469.0	353	0.479	µg/L		100

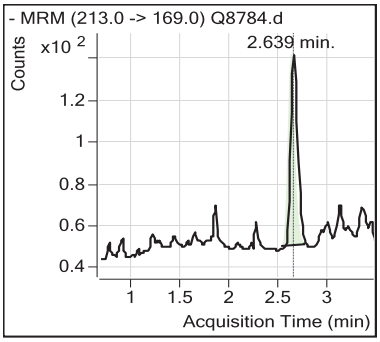
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

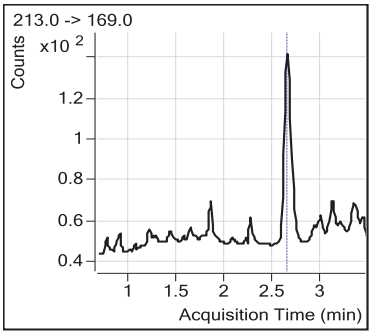
Perfluorinated Compounds by LC/MS/MS.

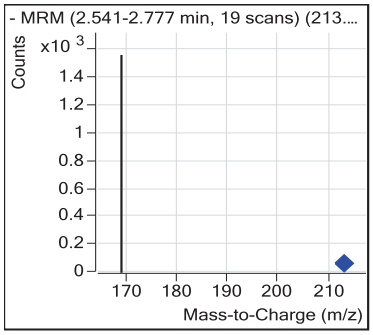
Data File	:	Q8784.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 20:18
Sample Name	:	FA20472-8
Vial	:	Vial 15
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



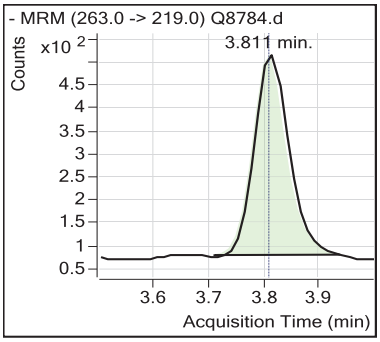
PFBA

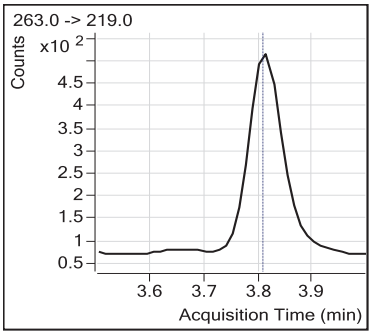


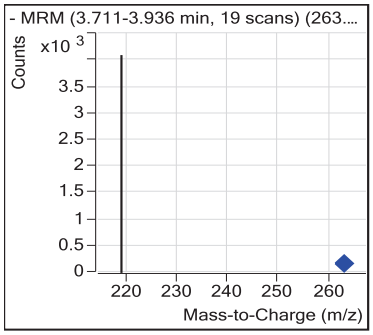




PFPeA

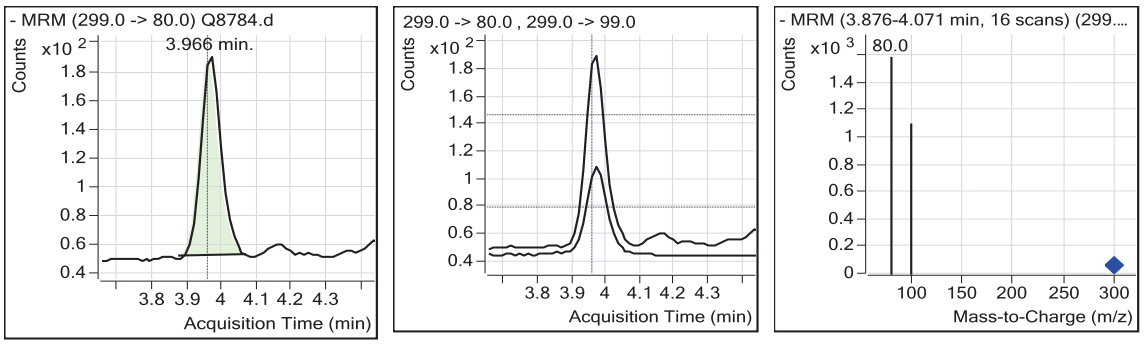




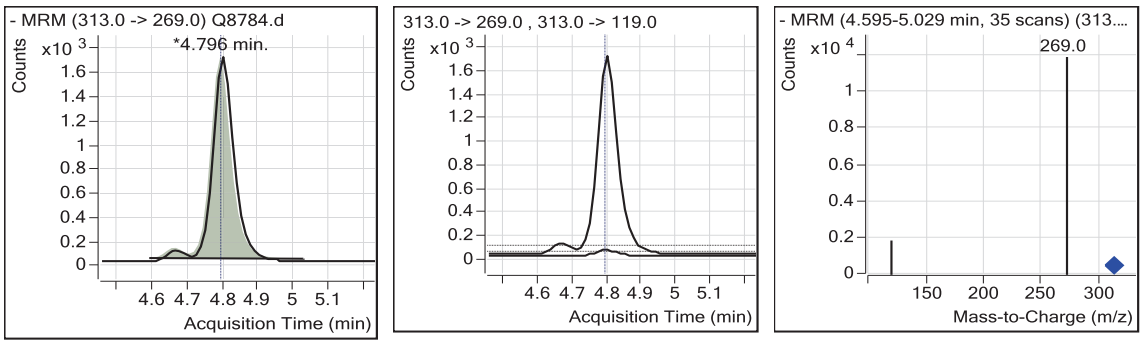


Perfluorinated Compounds by LC/MS/MS.

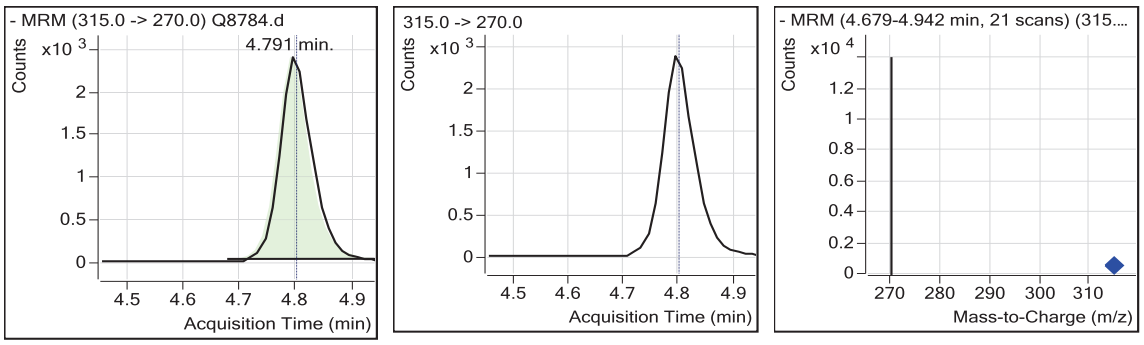
PFBS



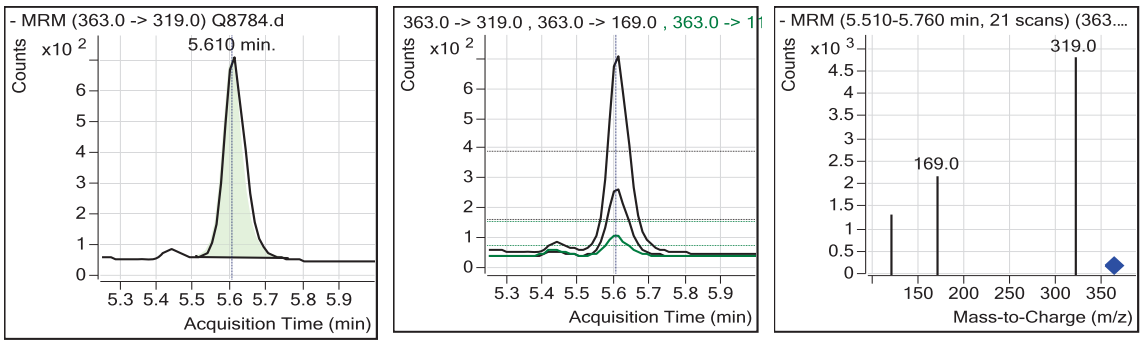
PFHxA



13C2-PFHxA



PFHpA

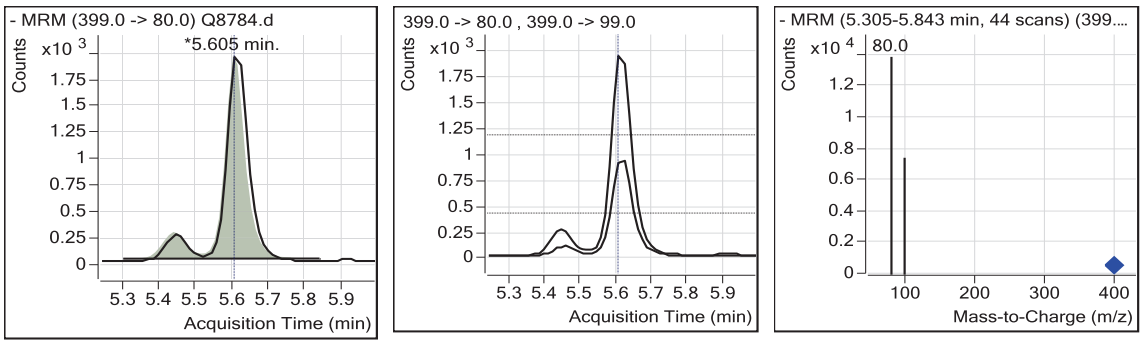


7.1.8

7

Perfluorinated Compounds by LC/MS/MS.

PFHxS



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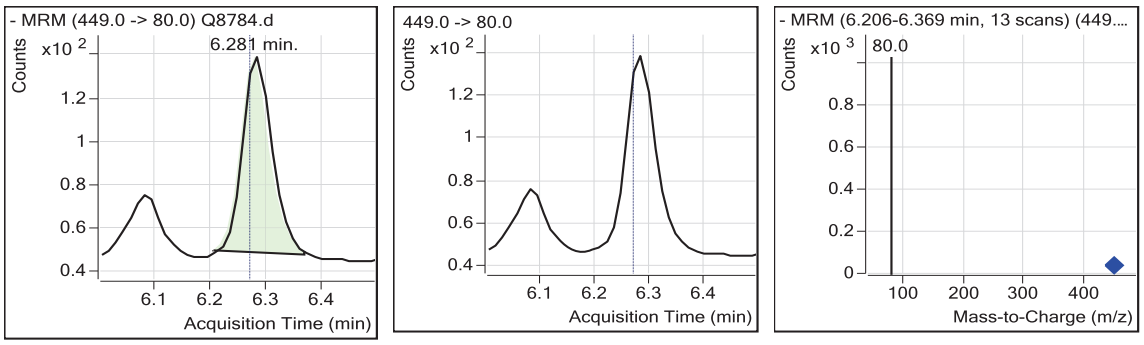
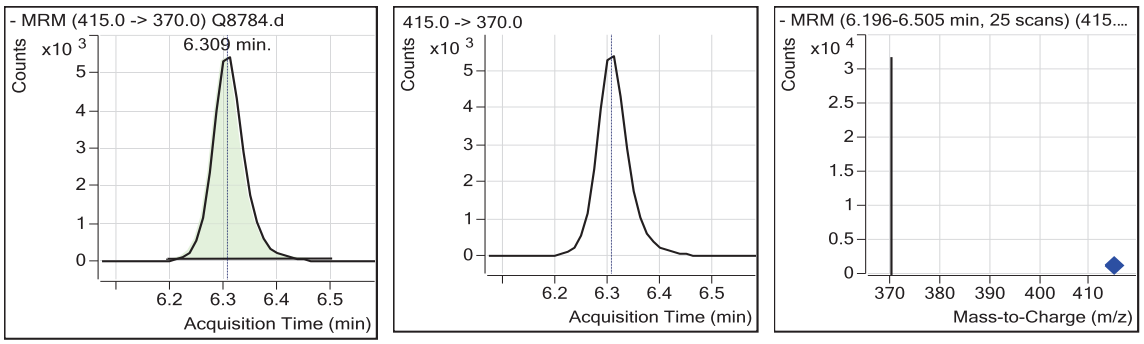
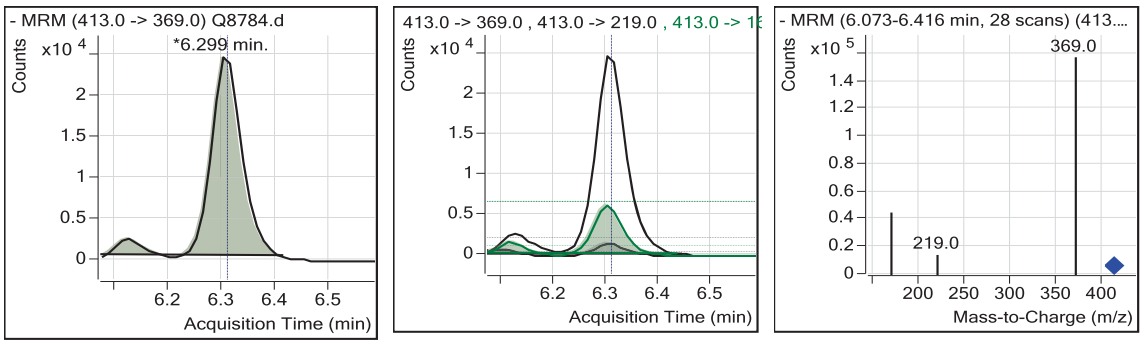


13C2-PFOA

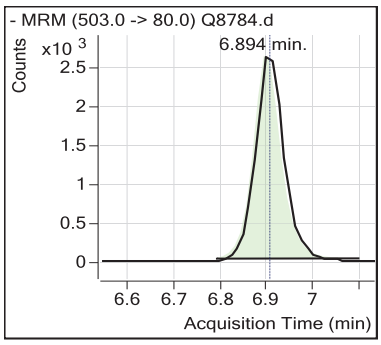


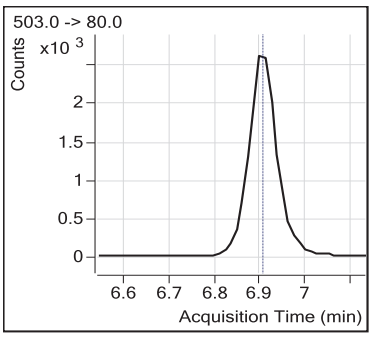
PFOA

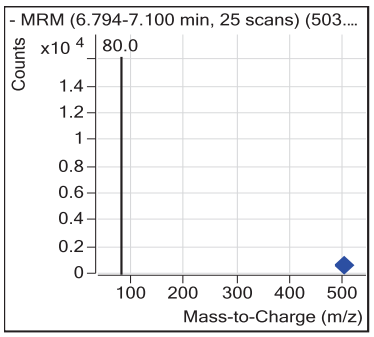


Perfluorinated Compounds by LC/MS/MS.

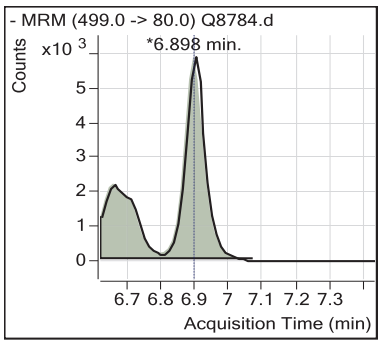
13C4-PFOS

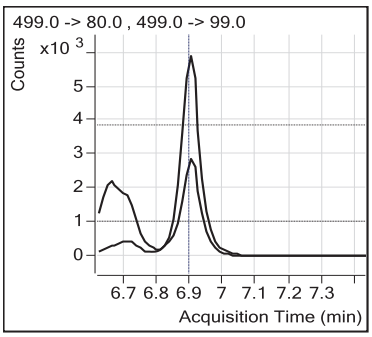


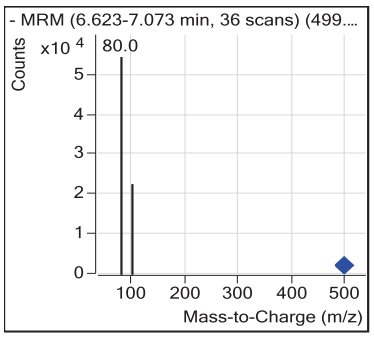




PFOS







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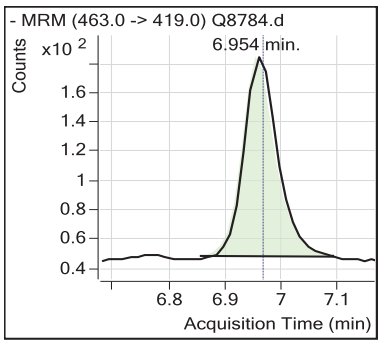

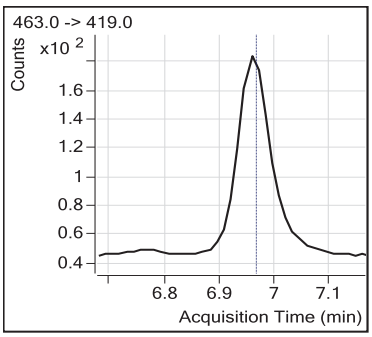

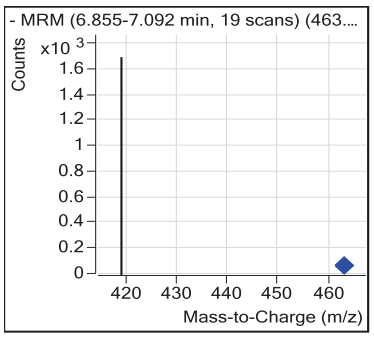

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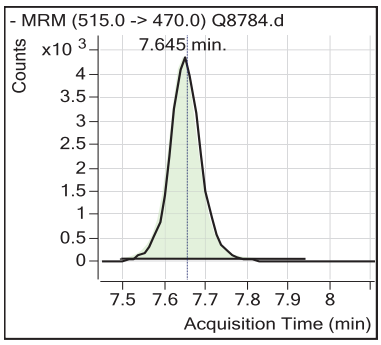
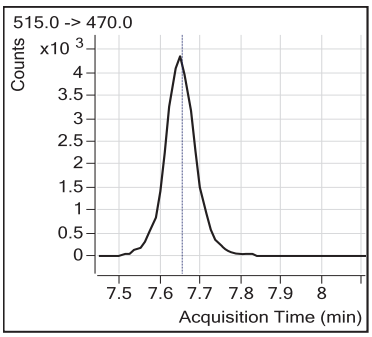
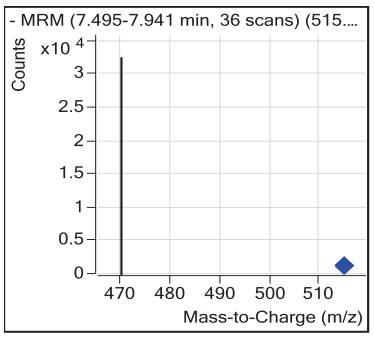
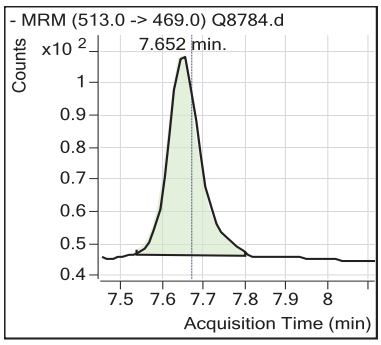


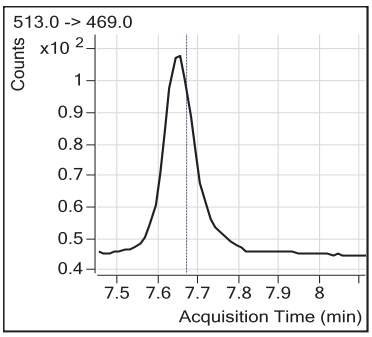


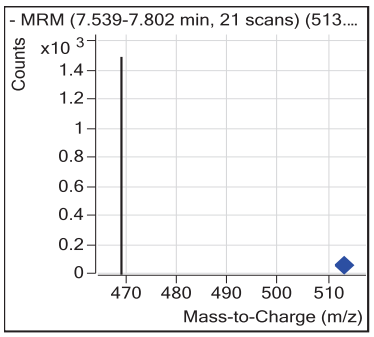


Perfluorinated Compounds by LC/MS/MS.

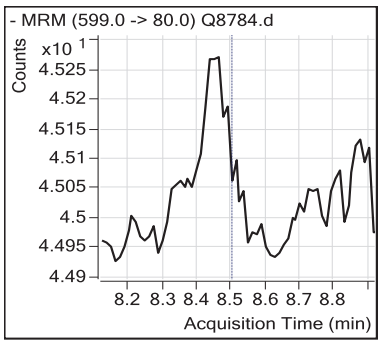
PFDA

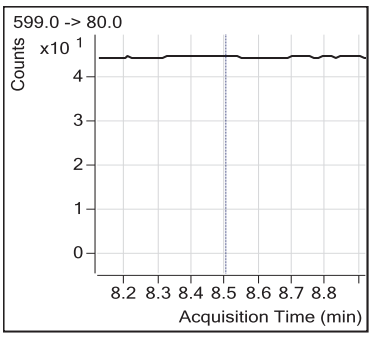


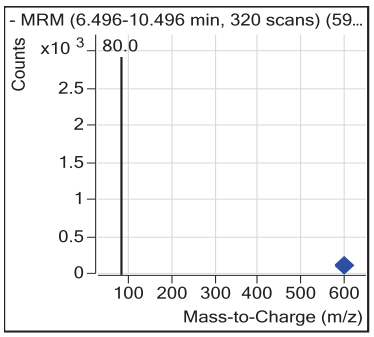




PFDS







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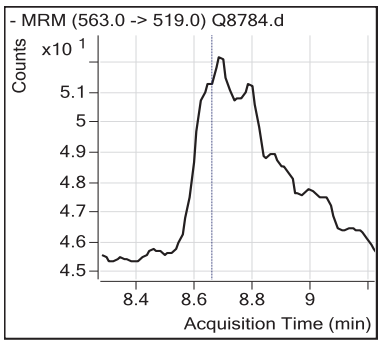
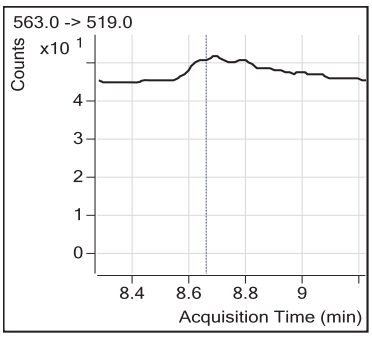
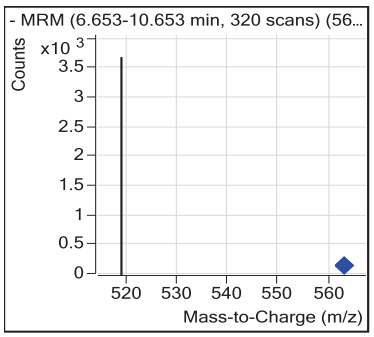
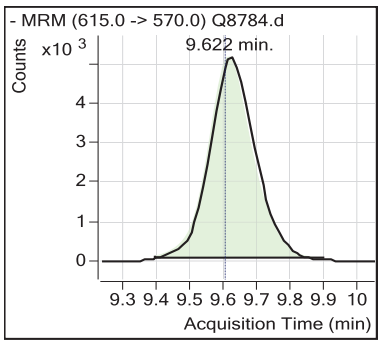
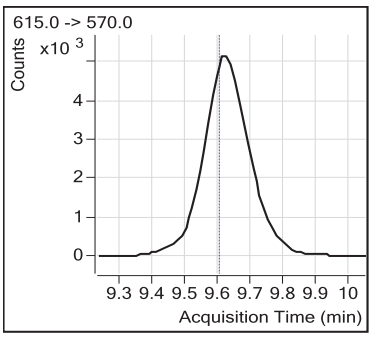


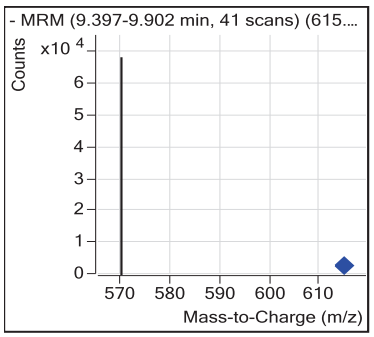




13C2-PFDoDA

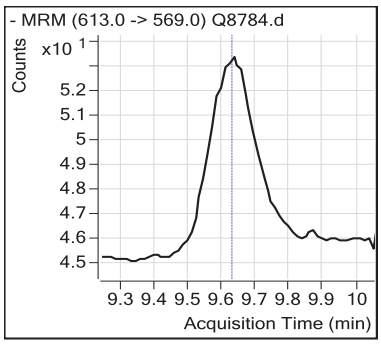


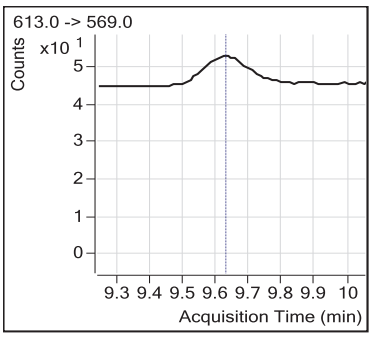


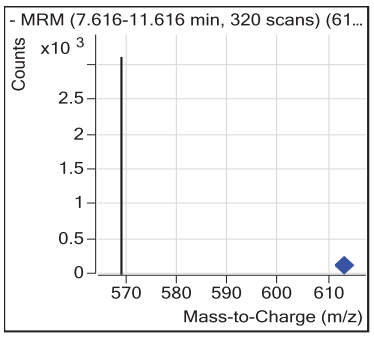


Perfluorinated Compounds by LC/MS/MS.

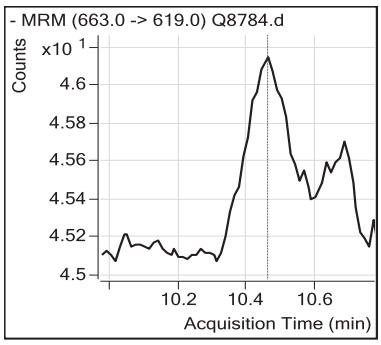
PFDoDA

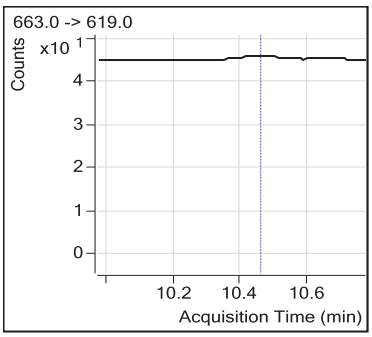


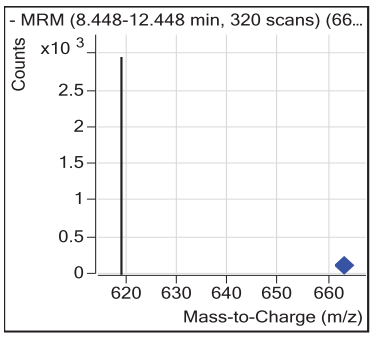




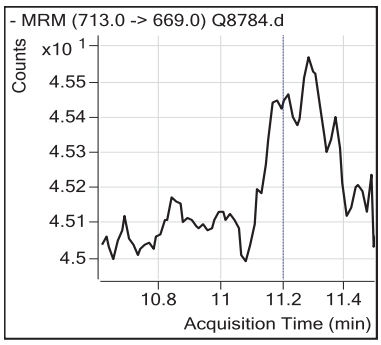
PFTrDA

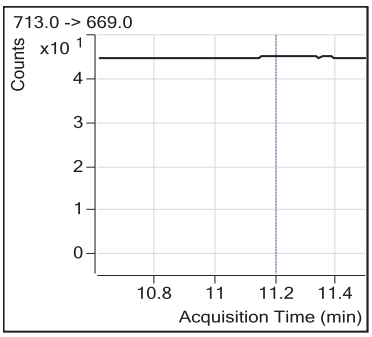


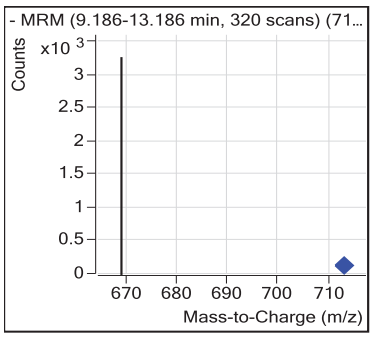




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-8
Lab FileID: Q8784.D
Injection Time: 12/15/14 20:18
Method: EPA 537 MOD
Analyst approved: 12/17/14 13:53 Mike Eger
Supervisor approved: 12/17/14 14:40 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanoic acid	307-24-4		4.80	Split peak
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanoic acid	335-67-1		6.30	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/17/14 14:40

Perfluorinated Compounds by LC/MS/MS.

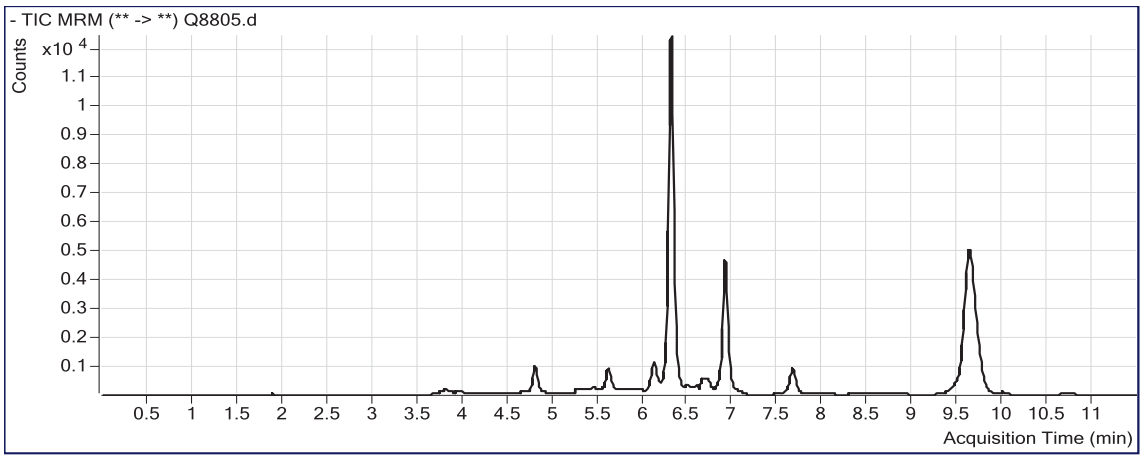
Data File	:	Q8805.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 12:12
Sample Name	:	FA20472-8
Vial	:	Vial 5
Sample Info	:	OP54204,SQ285,120,,,1,5,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.309	415.0 -> 370.0	24231	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	11875	20.000	µg/L		0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	47515	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	2159	5.42	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 27.09%				
13C2-PFDA	7.645	515.0 -> 470.0	4312	4.17	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 20.86%				
Target Compounds							**Qvalue**
PFPeA	3.811	263.0 -> 219.0	421	2.896	µg/L		100
PFHxA	4.796	313.0 -> 269.0	1580	3.776	µg/L		100
PFHxS	5.605	399.0 -> 80.0	1743	6.187	µg/L	m	88
PFHpA	5.610	363.0 -> 319.0	553	1.363	µg/L		97
PFOA	6.299	413.0 -> 369.0	23571	19.203	µg/L	m	73
PFOS	6.898	499.0 -> 80.0	7721	13.000	µg/L	m	98

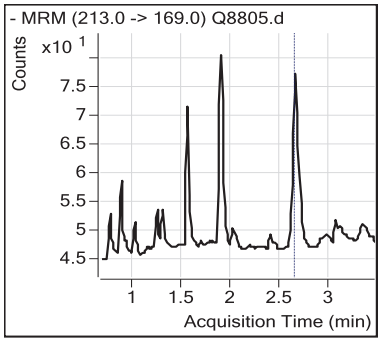
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

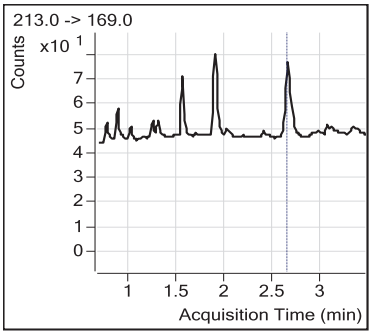
Perfluorinated Compounds by LC/MS/MS.

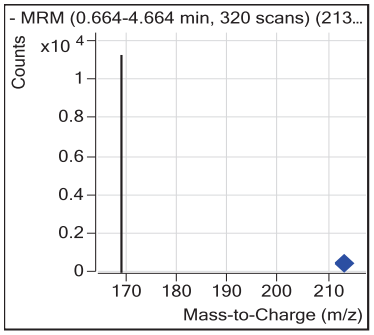
Data File	:	Q8805.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 12:12
Sample Name	:	FA20472-8
Vial	:	Vial 5
Sample Info	:	OP54204,SQ285,120,,,1,5,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24



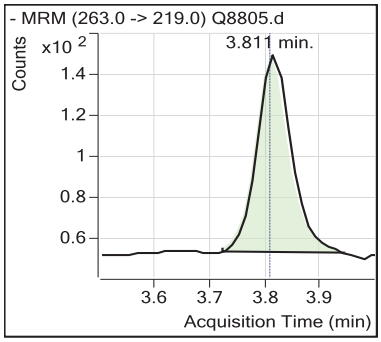
PFBA

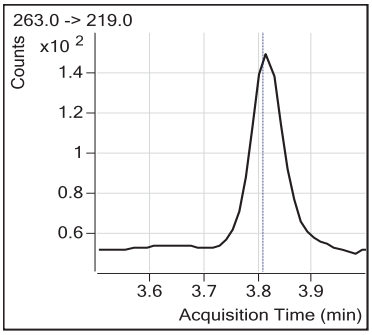


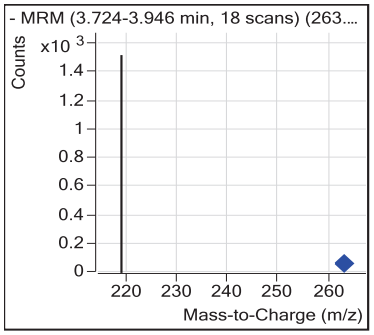




PFPeA

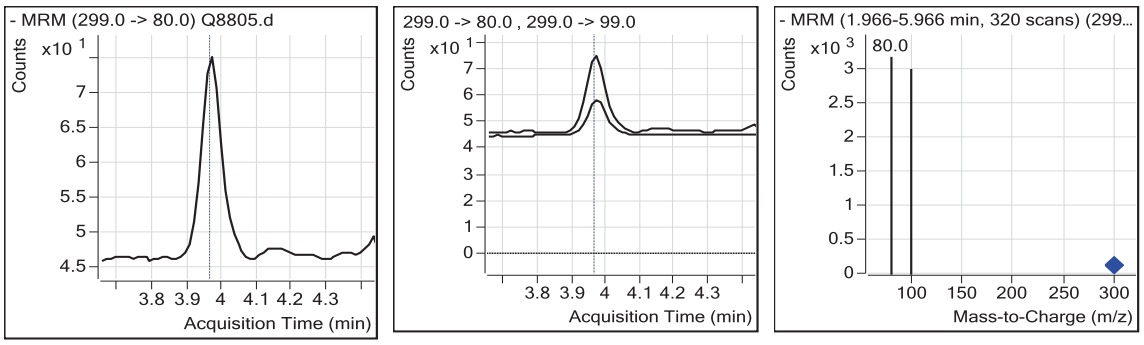




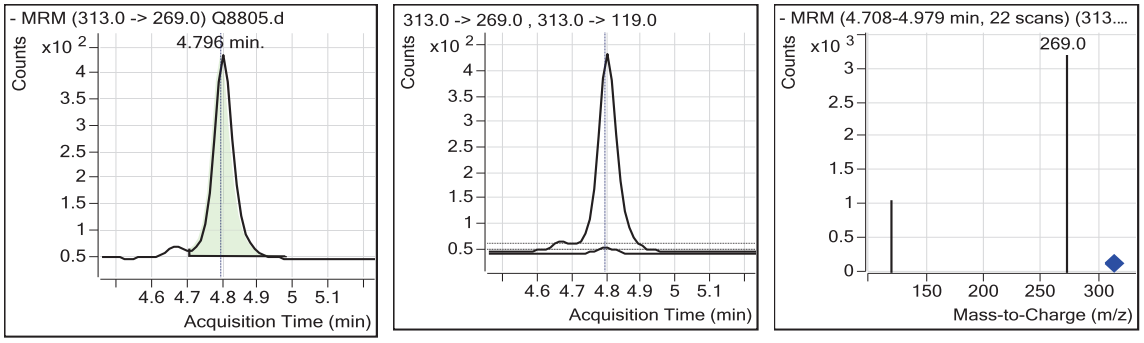


Perfluorinated Compounds by LC/MS/MS.

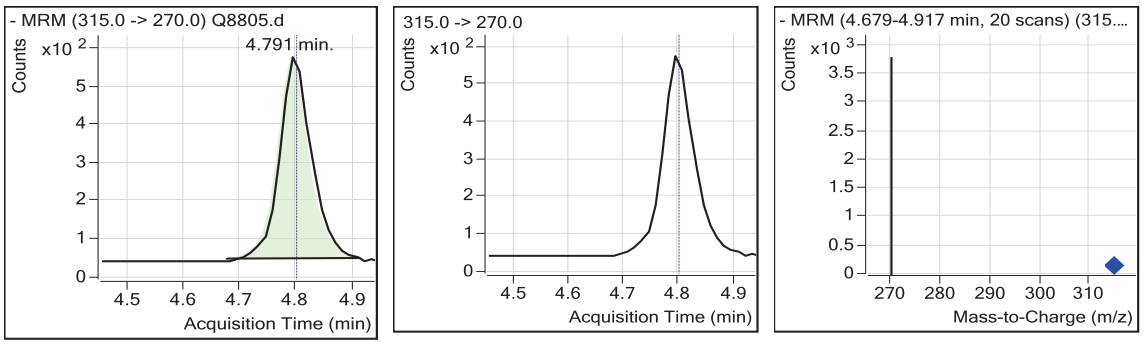
PFBS



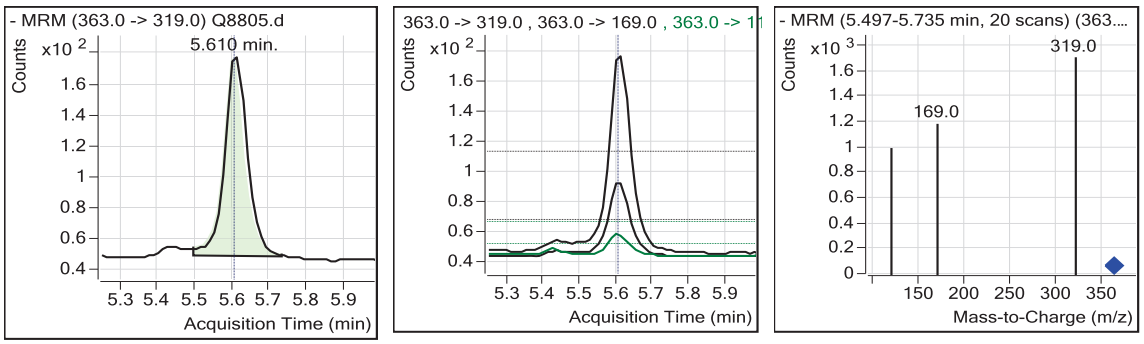
PFHxA



13C2-PFHxA

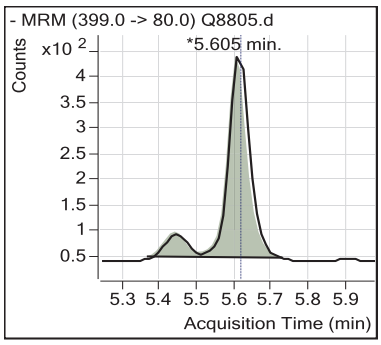


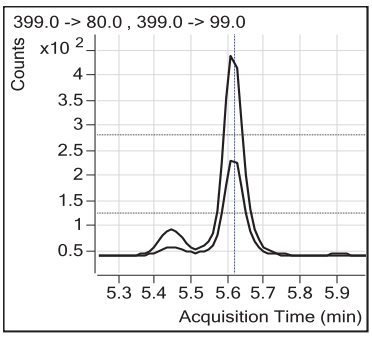
PFHpA

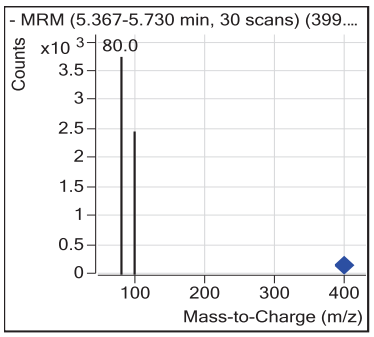


Perfluorinated Compounds by LC/MS/MS.

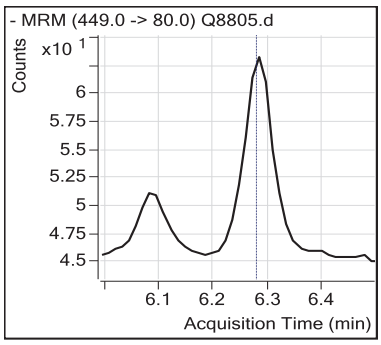
PFHxS

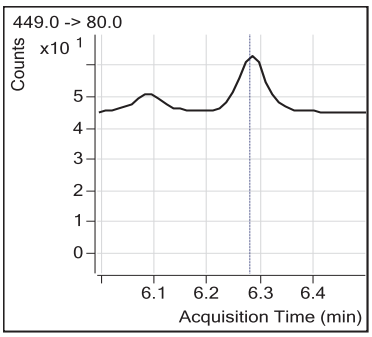


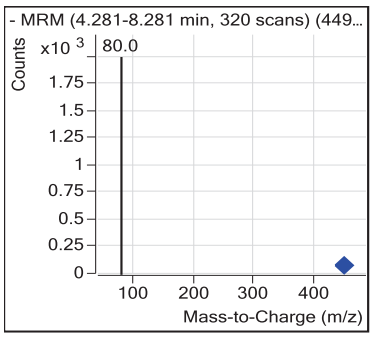




PFHpS







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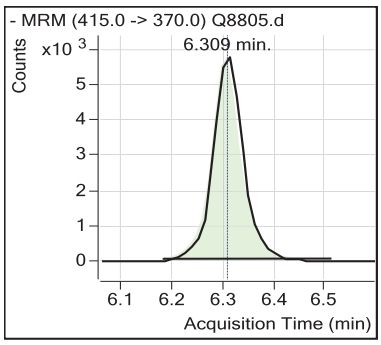
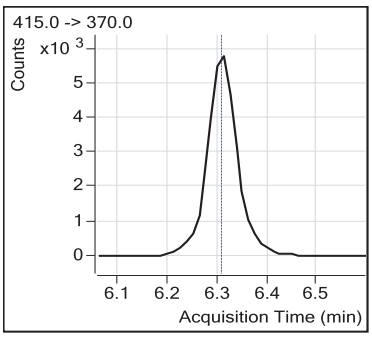
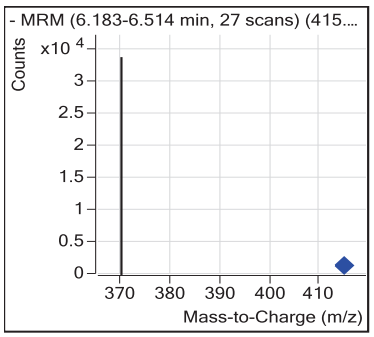
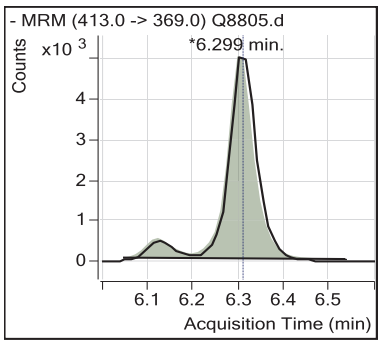
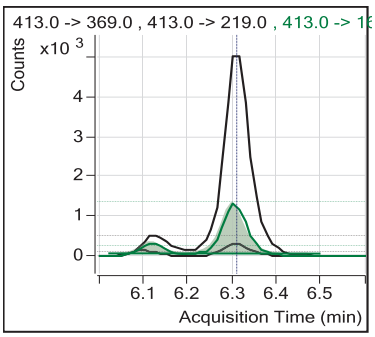


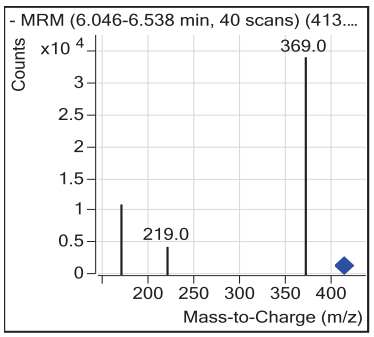




PFOA





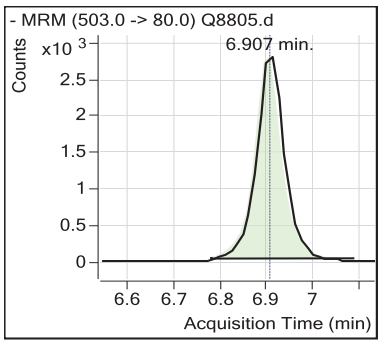


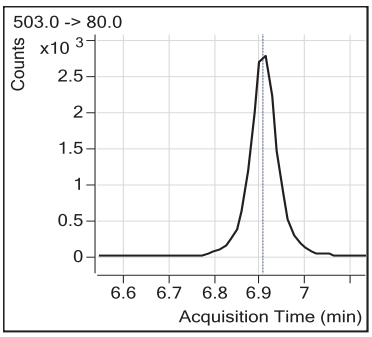
7.1.9

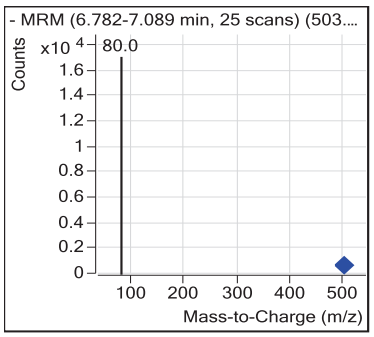
7

Perfluorinated Compounds by LC/MS/MS.

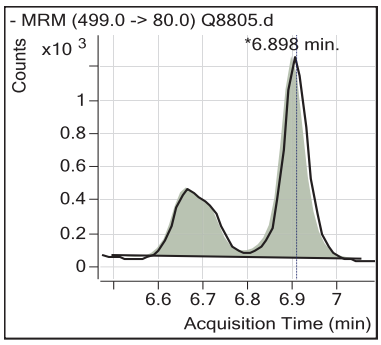
13C4-PFOS

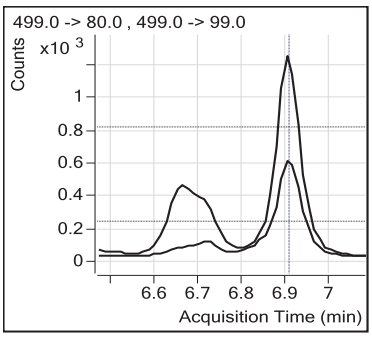


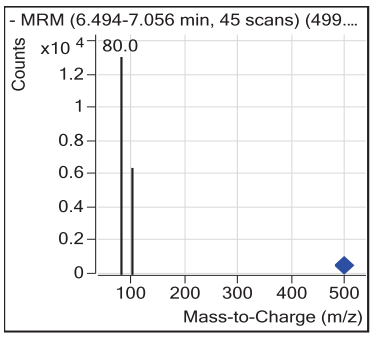




PFOS







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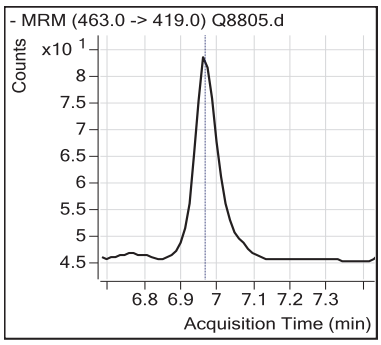
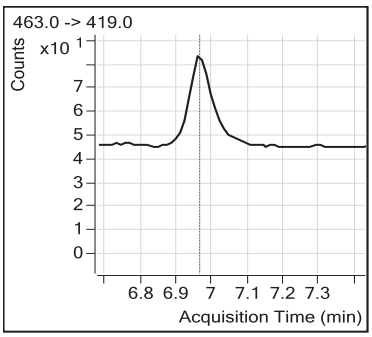
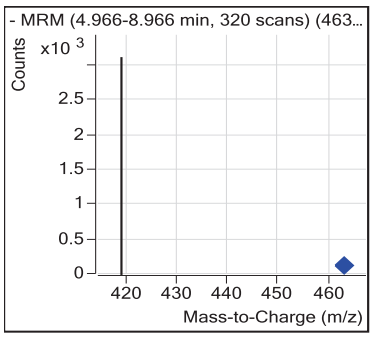
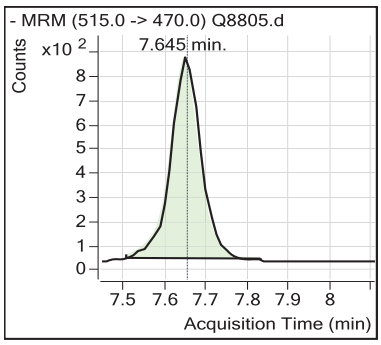
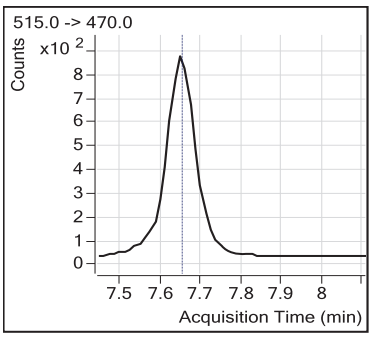


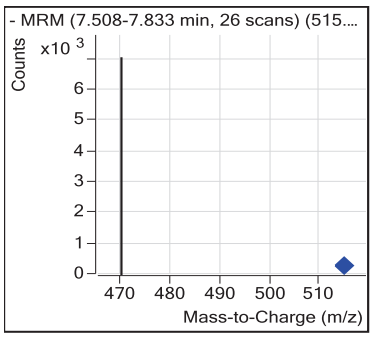




13C2-PFDA

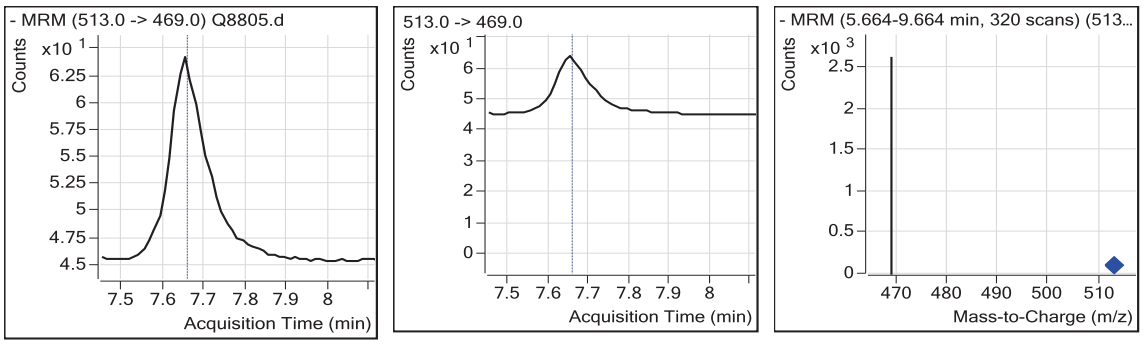




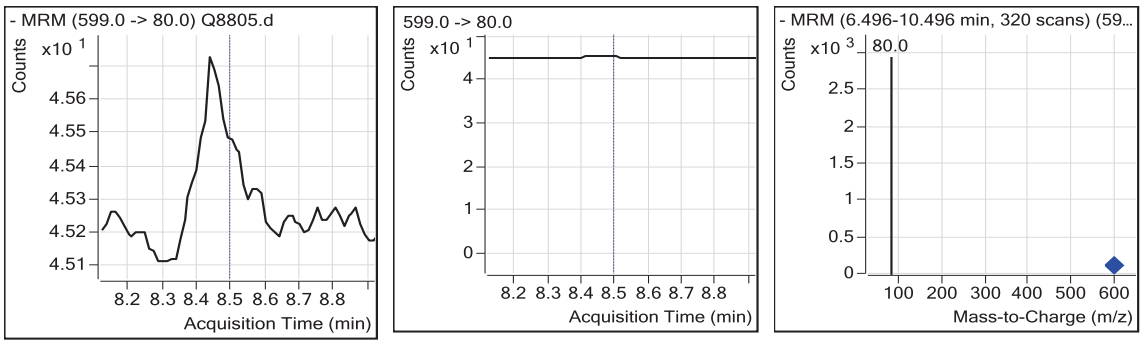


Perfluorinated Compounds by LC/MS/MS.

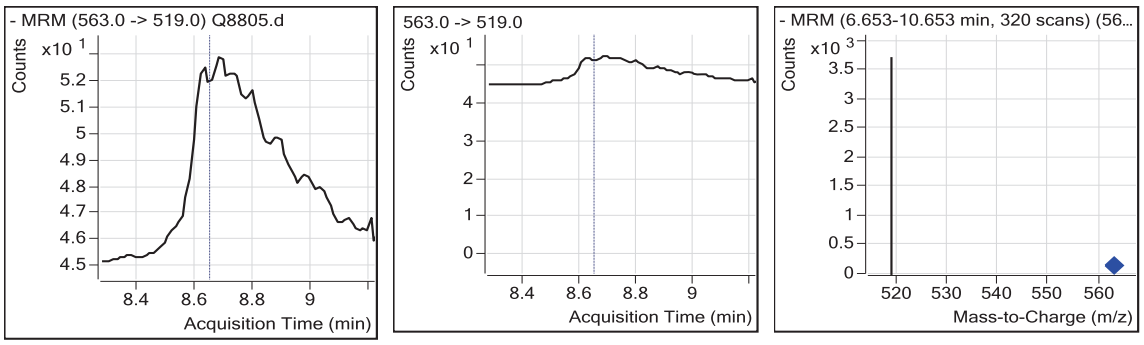
PFDA



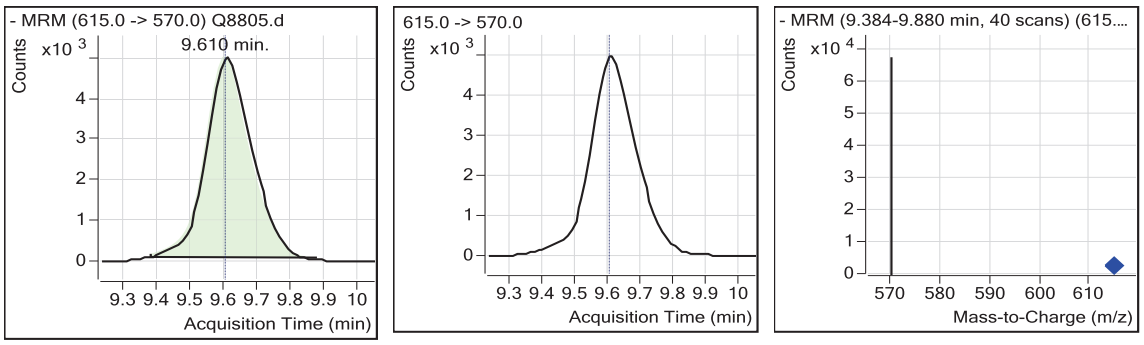
PFDS



PFUnDA

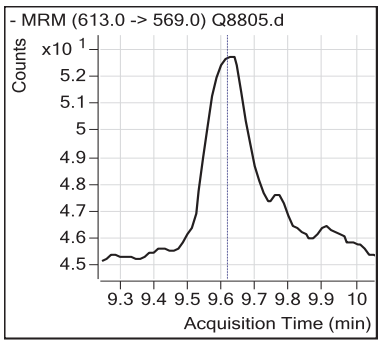


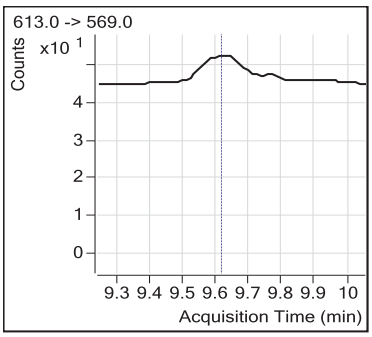
13C2-PFDoDA

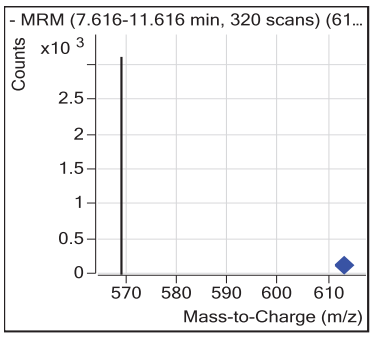


Perfluorinated Compounds by LC/MS/MS.

PFDoDA







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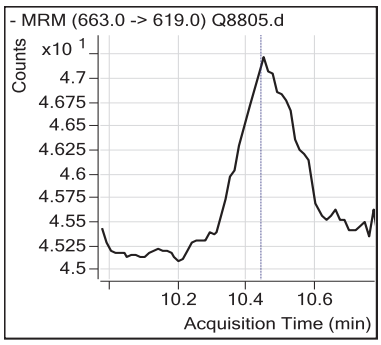

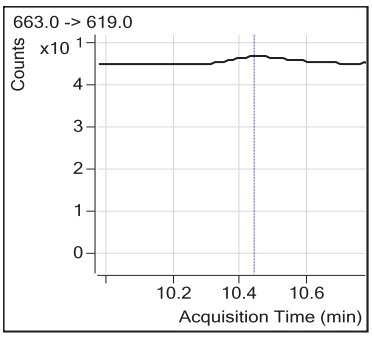

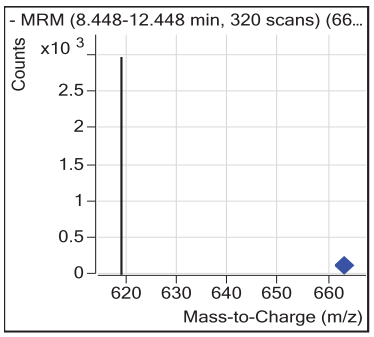

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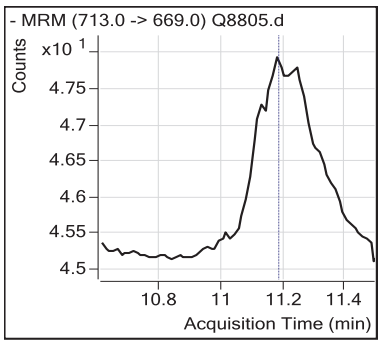
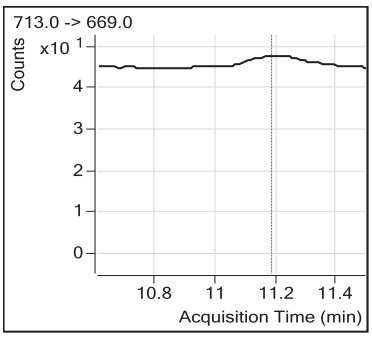
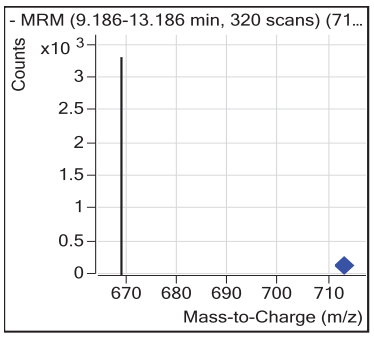






Manual Integration Approval Summary

Sample Number: FA20472-8
Lab FileID: Q8805.D
Injection Time: 12/16/14 12:12

Method: EPA 537 MOD
Analyst approved: 12/17/14 13:53 Mike Eger
Supervisor approved: 12/17/14 14:40 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanoic acid	335-67-1		6.30	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Perfluorinated Compounds by LC/MS/MS.

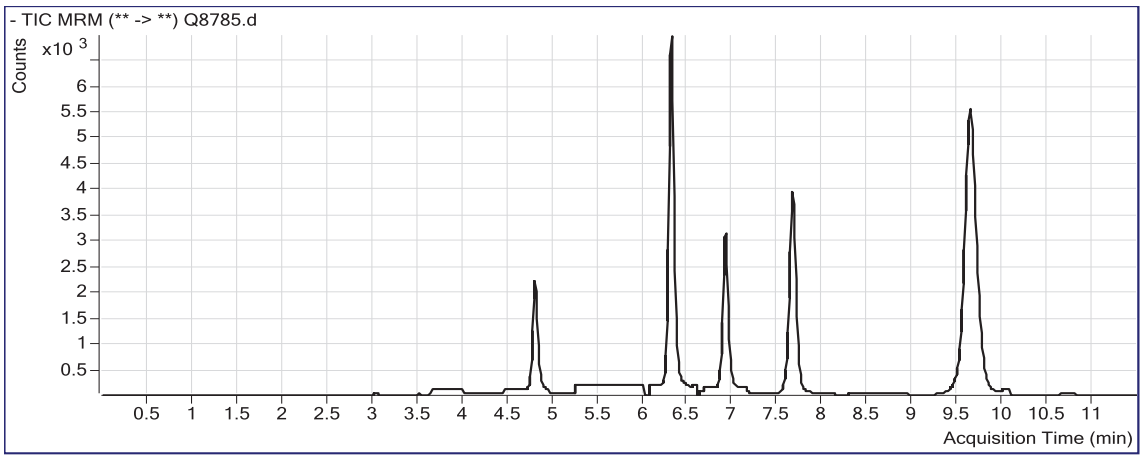
Data File	:	Q8785.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 20:39
Sample Name	:	FA20472-9
Vial	:	Vial 16
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	27320	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	12513	20.000	µg/L	0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	51145	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	8463	18.84	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 94.20%			
13C2-PFDA	7.645	515.0 -> 470.0	20440	17.54	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 87.69%			
Target Compounds						**Qvalue**
PFOA	6.299	413.0 -> 369.0	390	0.282	µg/L	69

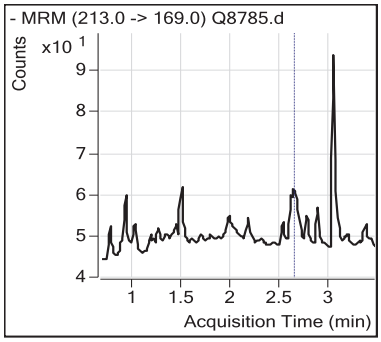
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

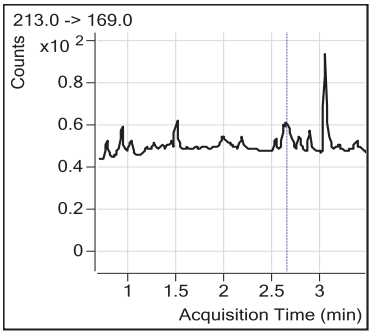
Perfluorinated Compounds by LC/MS/MS.

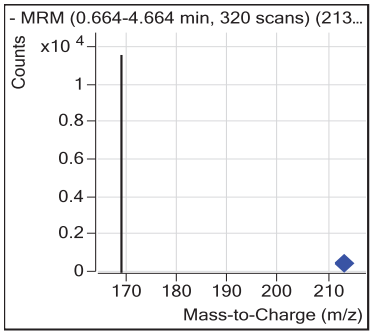
Data File	:	Q8785.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 20:39
Sample Name	:	FA20472-9
Vial	:	Vial 16
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



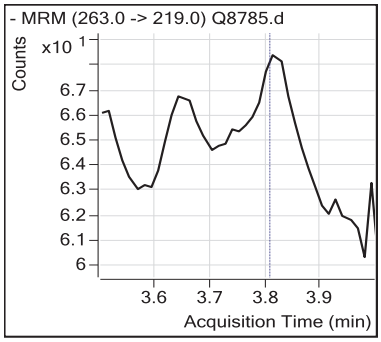
PFBA

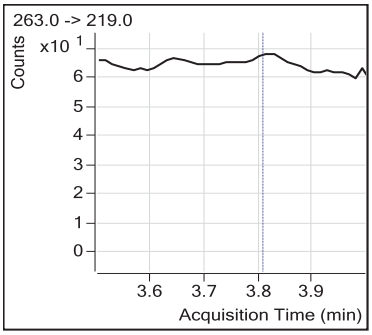


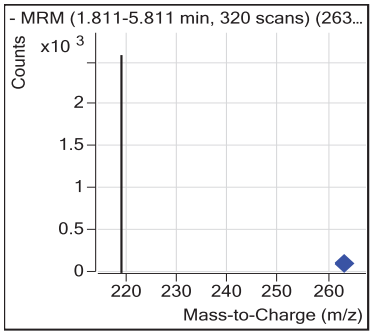




PFPeA

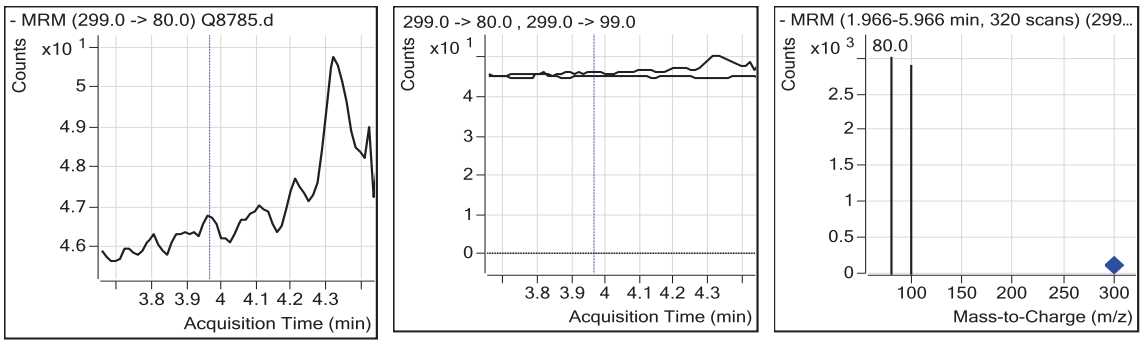




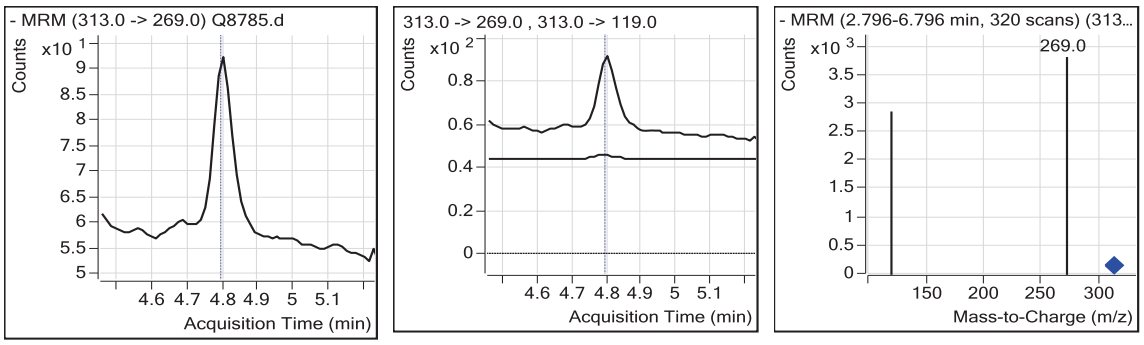


Perfluorinated Compounds by LC/MS/MS.

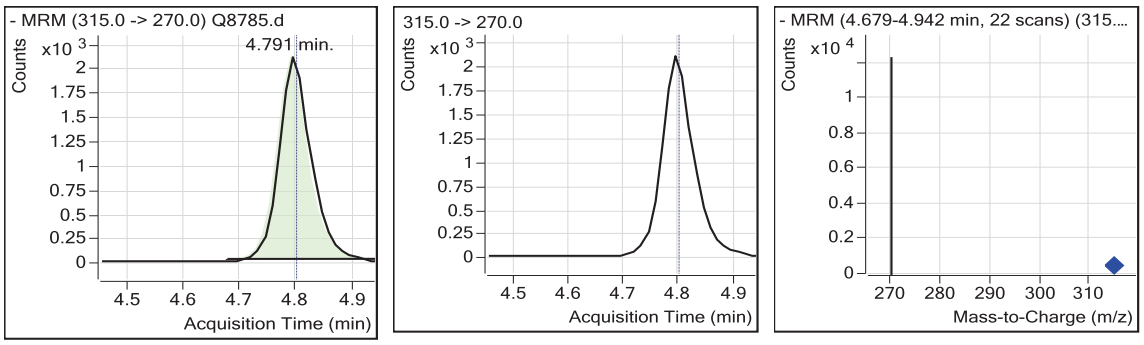
PFBS



PFHxA



13C2-PFHxA



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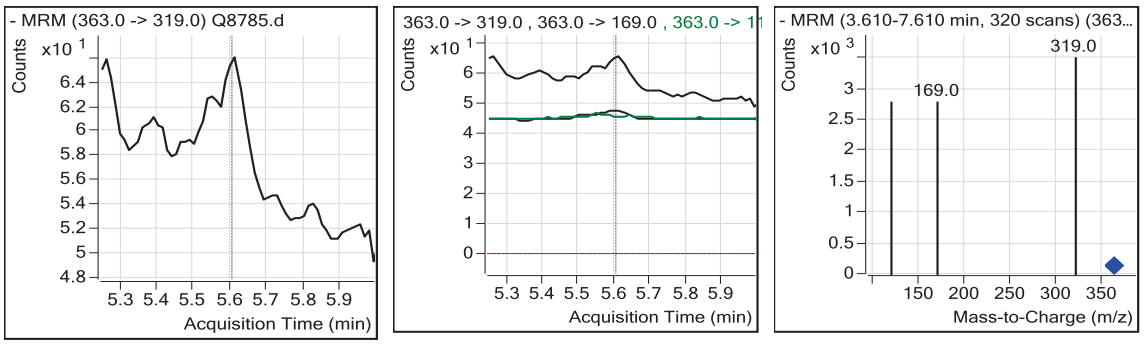
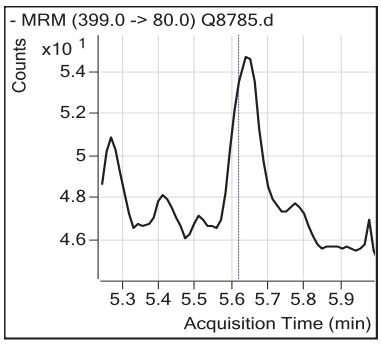
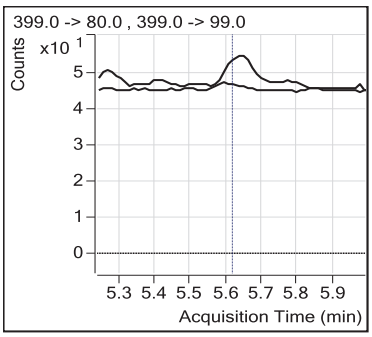
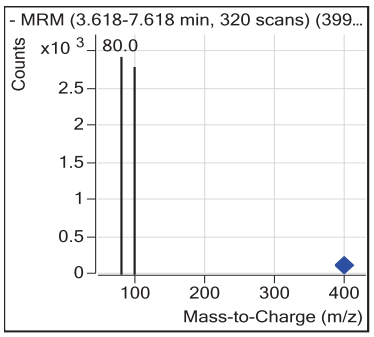


Perfluorinated Compounds by LC/MS/MS.

PFHxS







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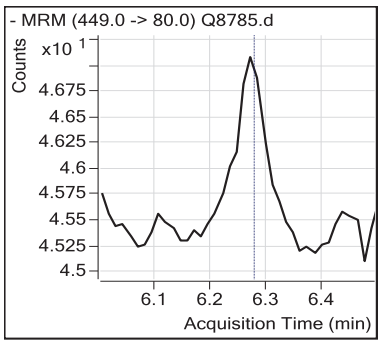

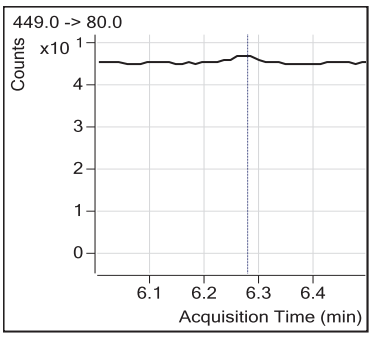

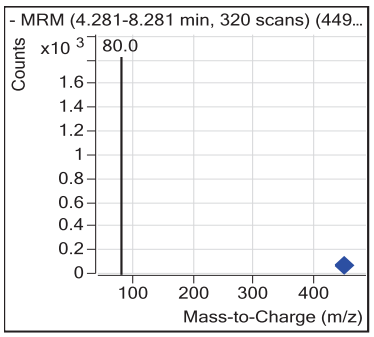

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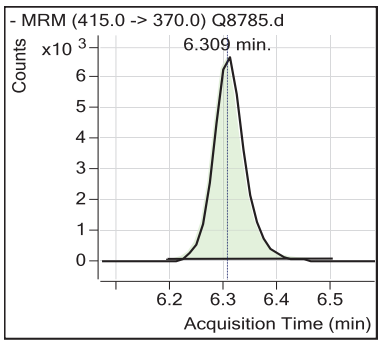
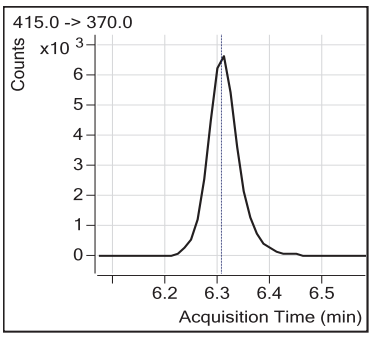
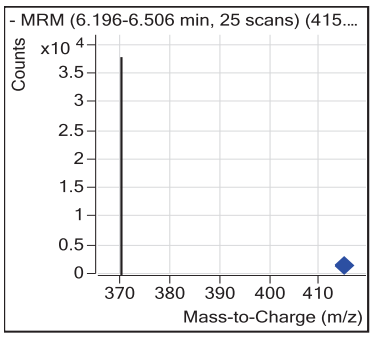
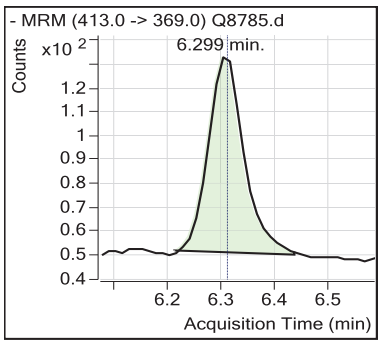
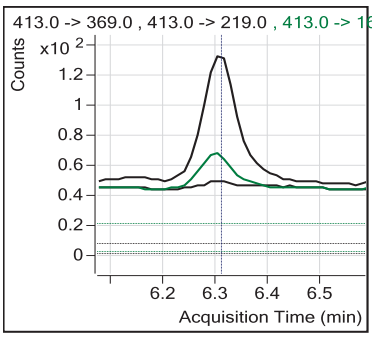


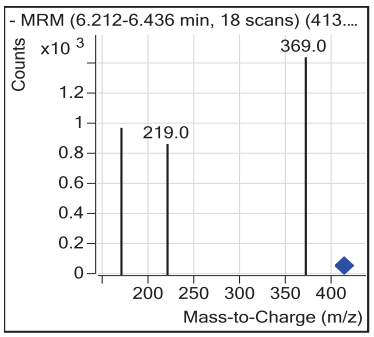




PFOA

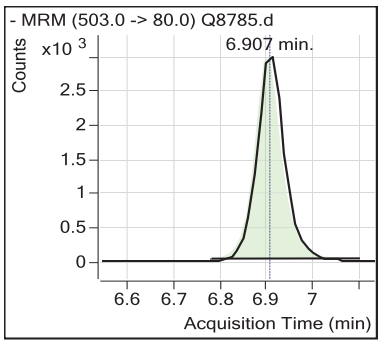


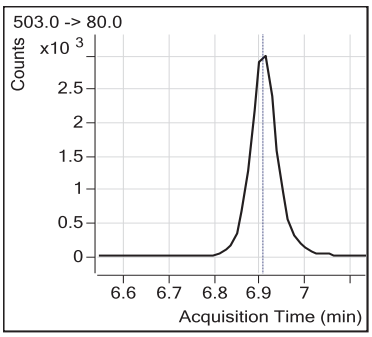


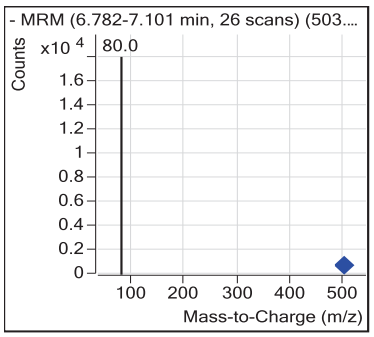


Perfluorinated Compounds by LC/MS/MS.

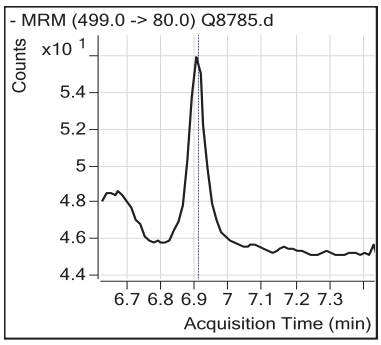
13C4-PFOS

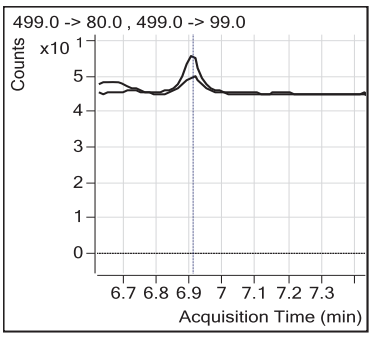


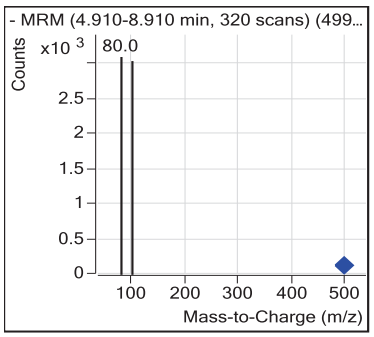




PFOS







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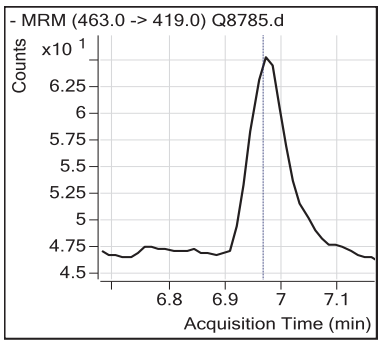
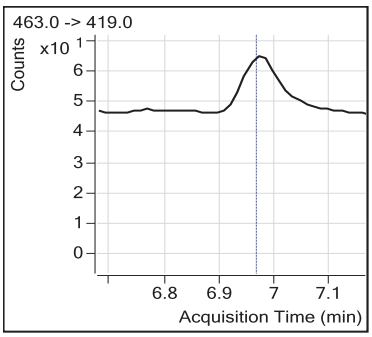
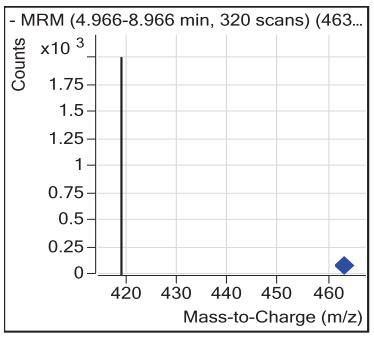
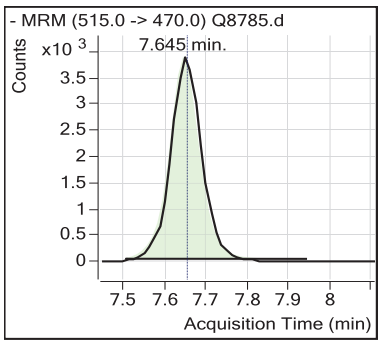
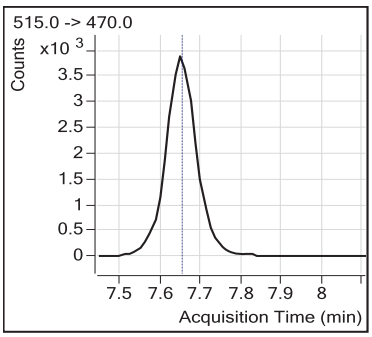


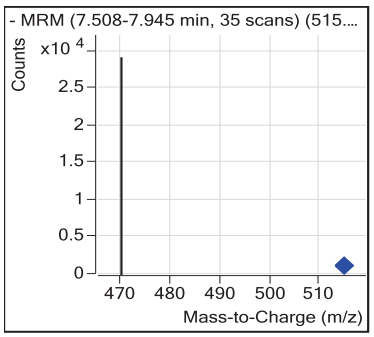




13C2-PFDA

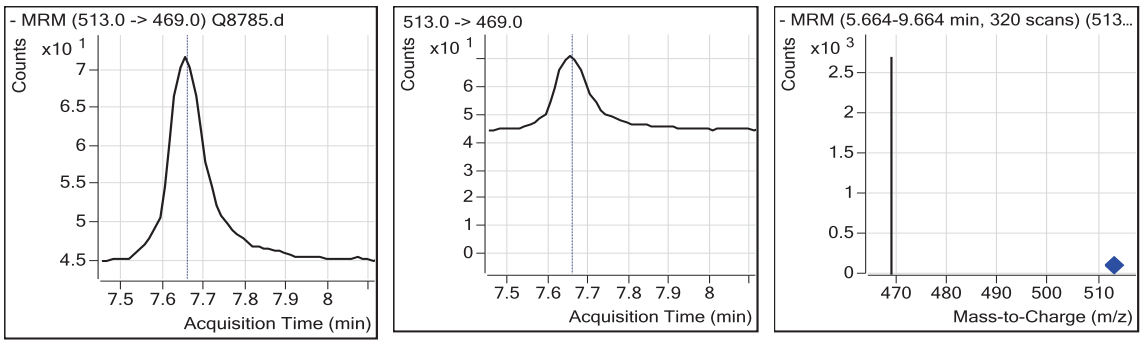






Perfluorinated Compounds by LC/MS/MS.

PFDA



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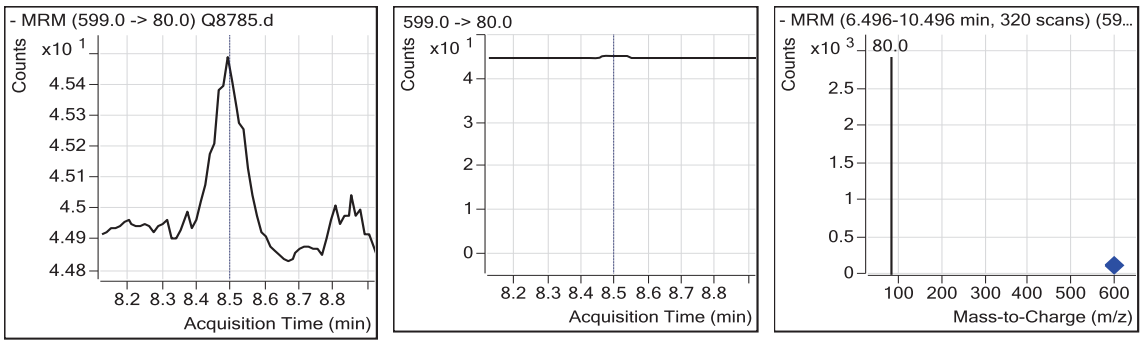
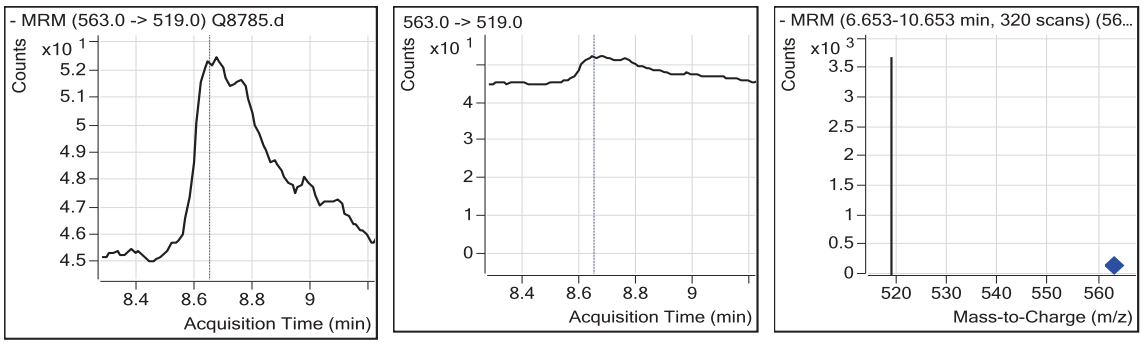


PFUnDA



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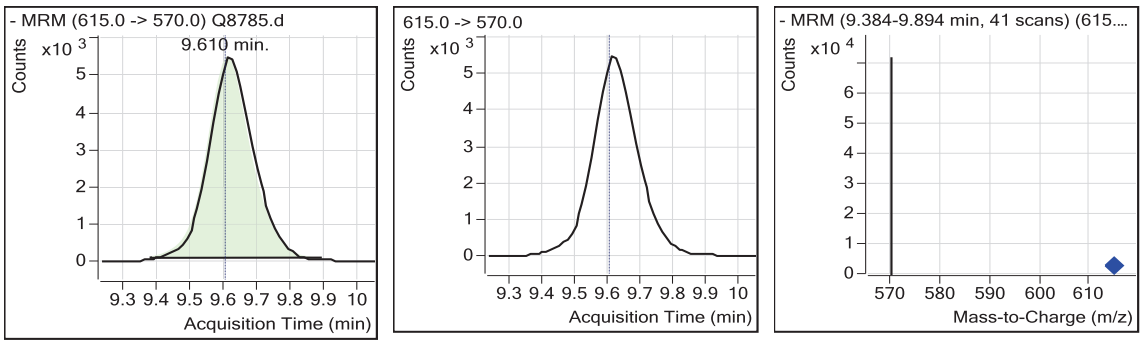
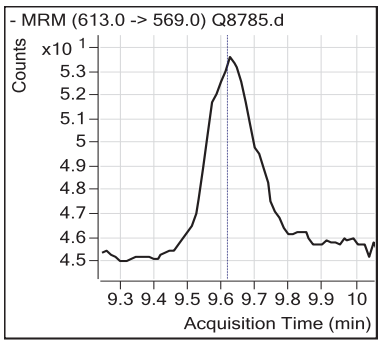
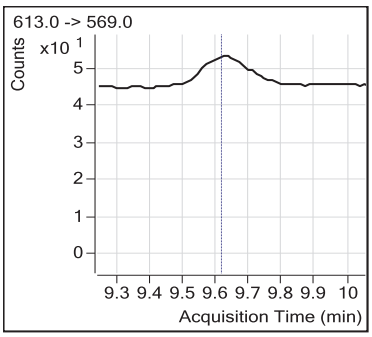
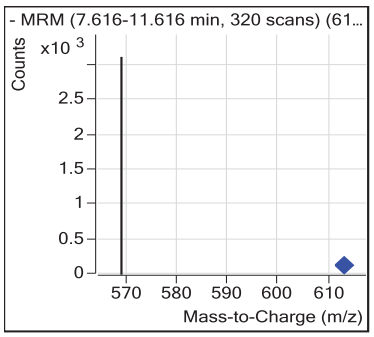


Perfluorinated Compounds by LC/MS/MS.

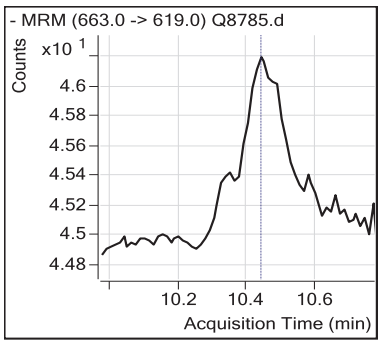
PFDoDA

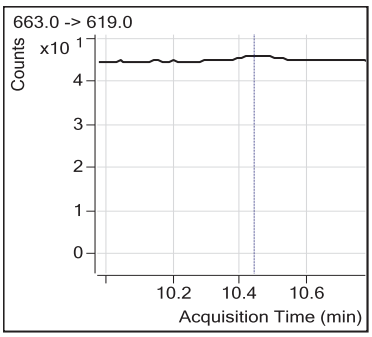


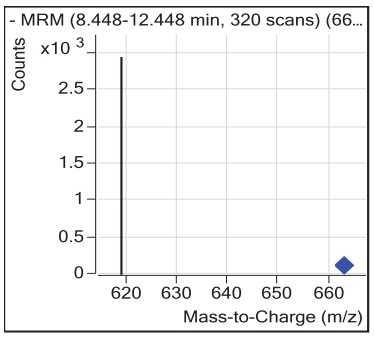




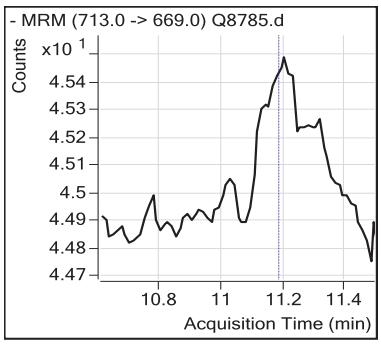
PFTrDA

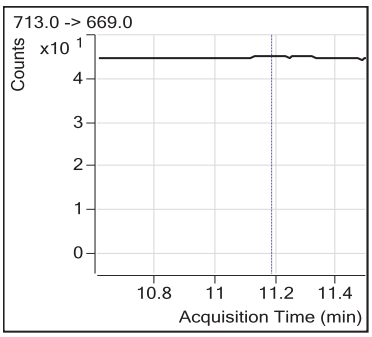


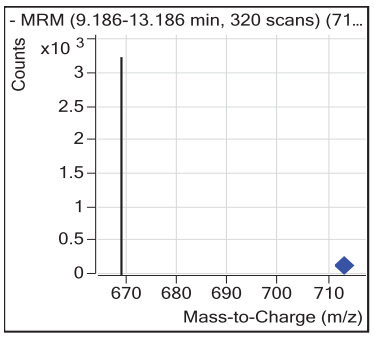




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

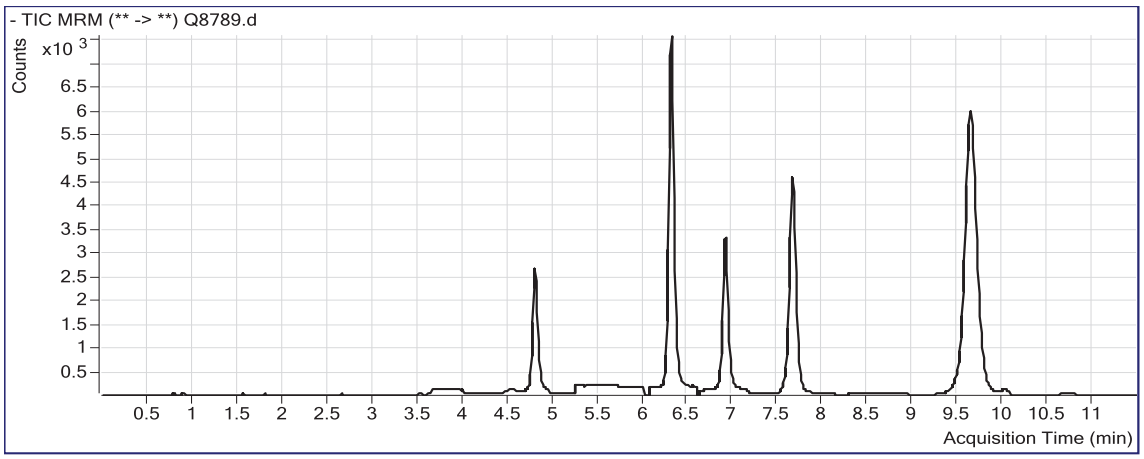
Data File	:	Q8789.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 22:02
Sample Name	:	FA20472-10
Vial	:	Vial 17
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	29823	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	13437	20.000	µg/L	0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	55102	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	10290	20.99	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 104.93%			
13C2-PFDA	7.645	515.0 -> 470.0	24004	18.87	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 94.34%			
Target Compounds						**Qvalue**
PFOA	6.299	413.0 -> 369.0	391	0.259	µg/L	69

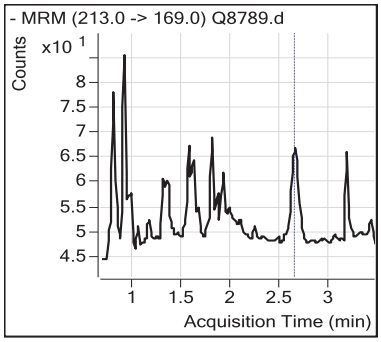
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

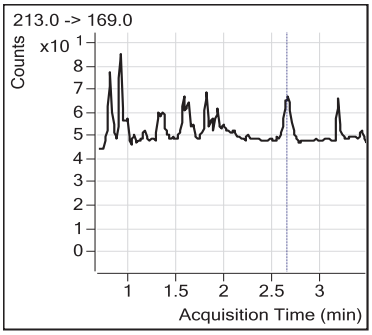
Perfluorinated Compounds by LC/MS/MS.

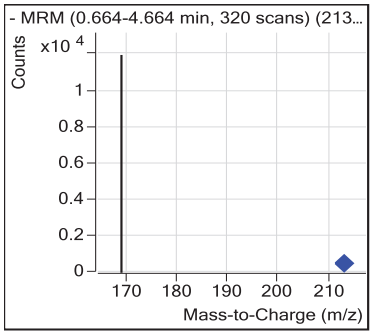
Data File	:	Q8789.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 22:02
Sample Name	:	FA20472-10
Vial	:	Vial 17
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



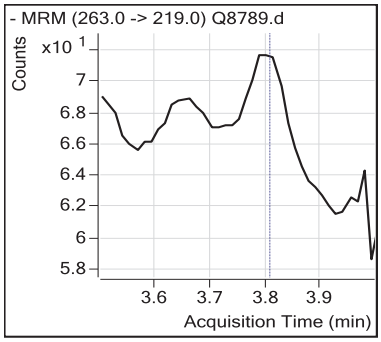
PFBA

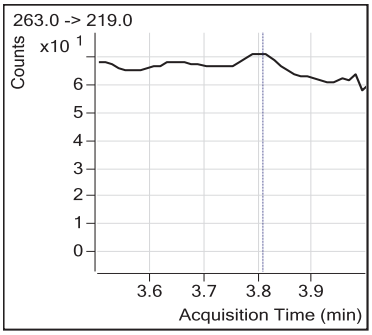


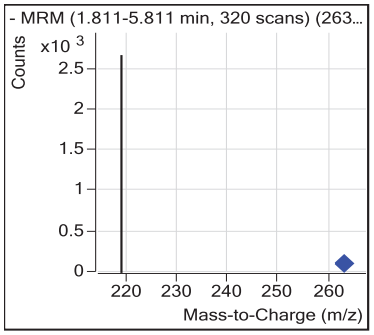




PFPeA

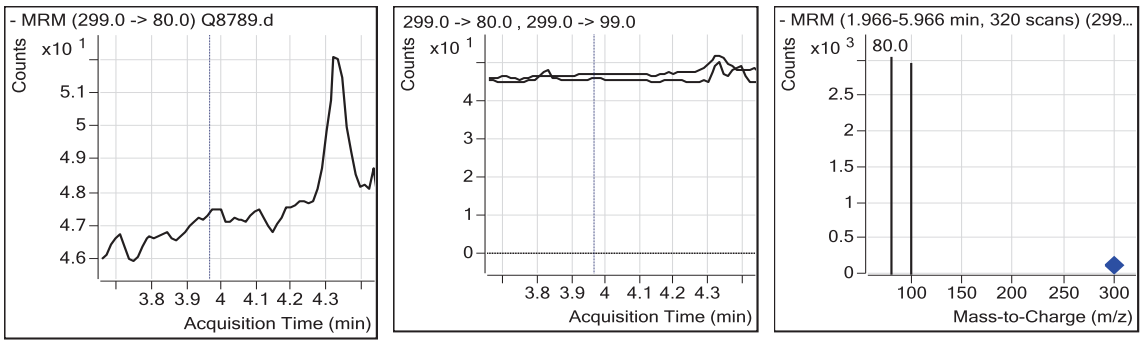




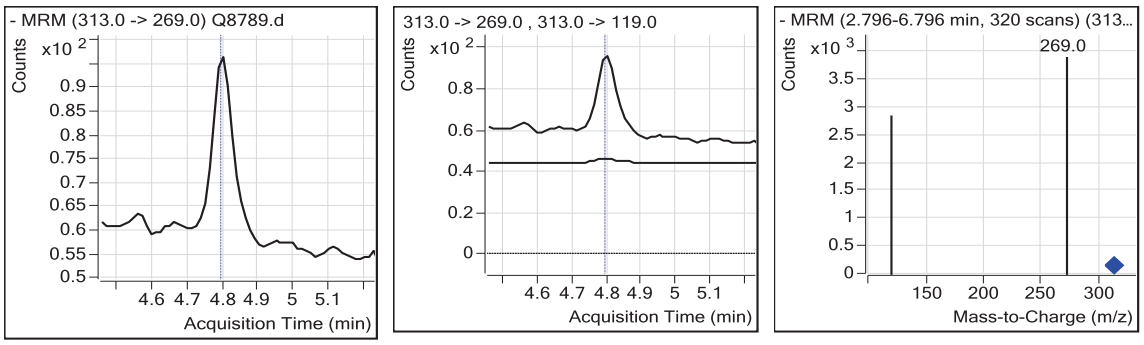


Perfluorinated Compounds by LC/MS/MS.

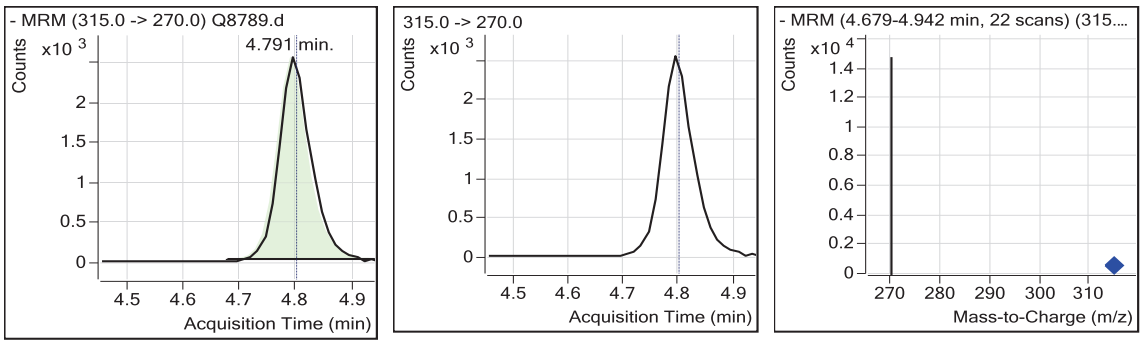
PFBS



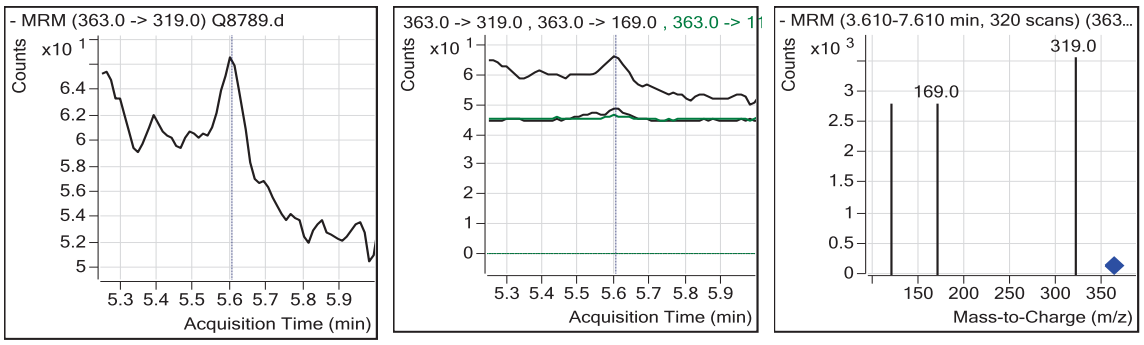
PFHxA



13C2-PFHxA

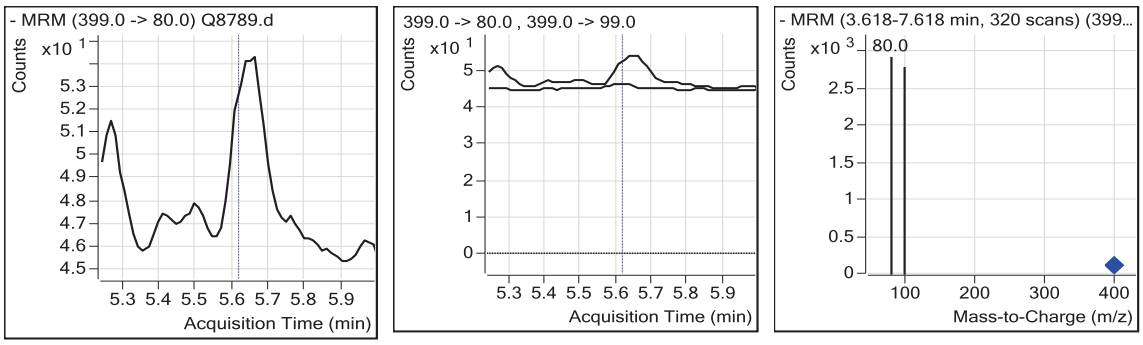


PFHpA

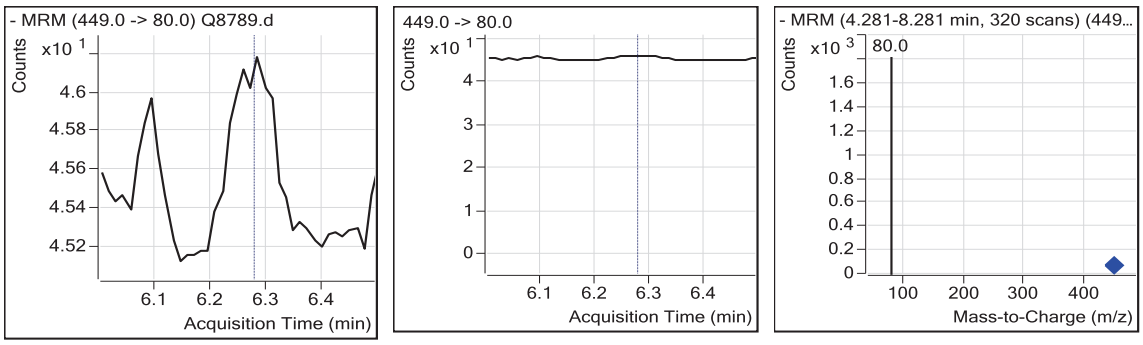


Perfluorinated Compounds by LC/MS/MS.

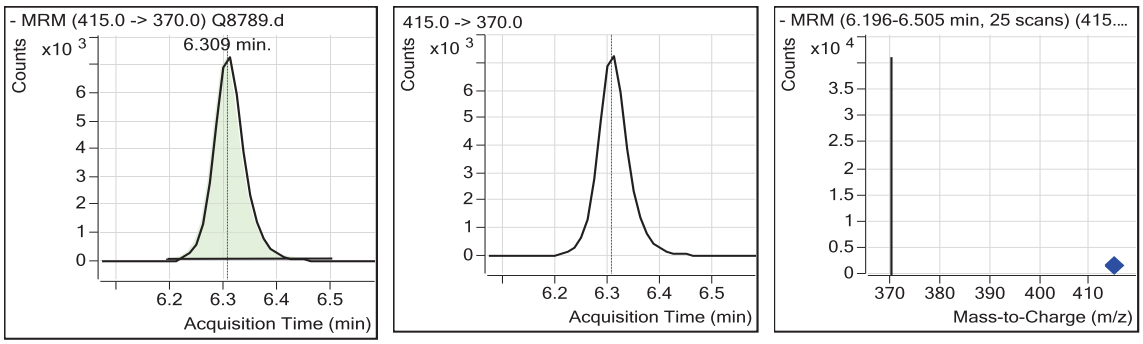
PFHxS



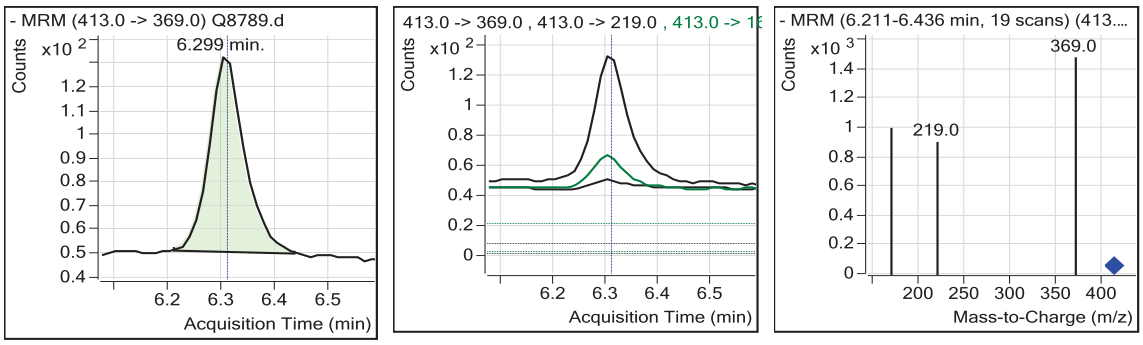
PFHpS



13C2-PFOA

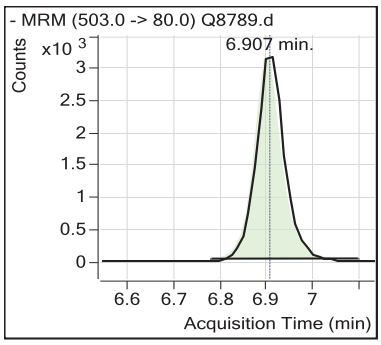


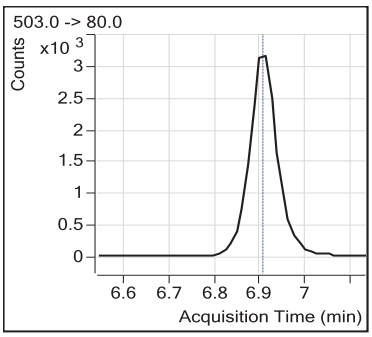
PFOA

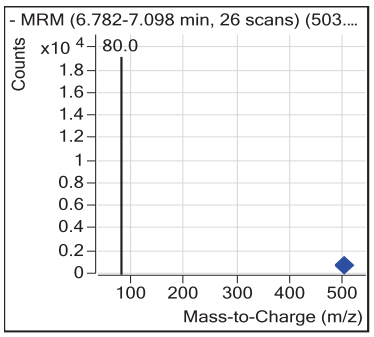


Perfluorinated Compounds by LC/MS/MS.

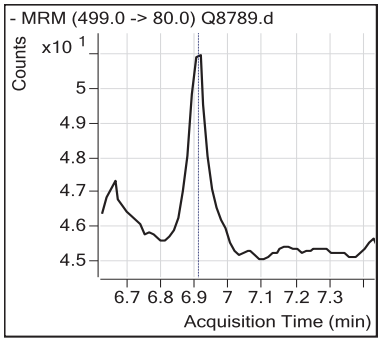
13C4-PFOS

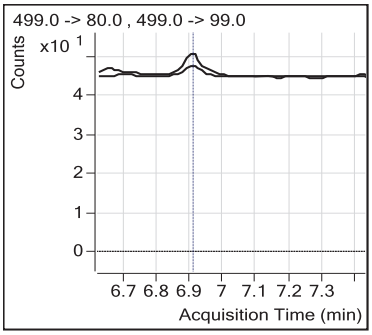


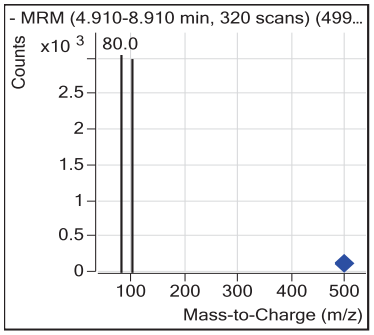




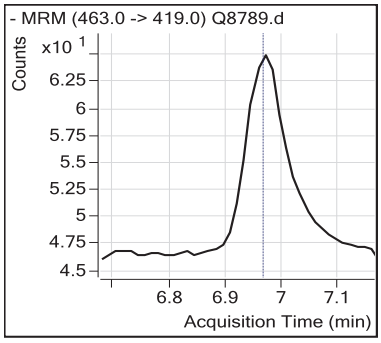
PFOS

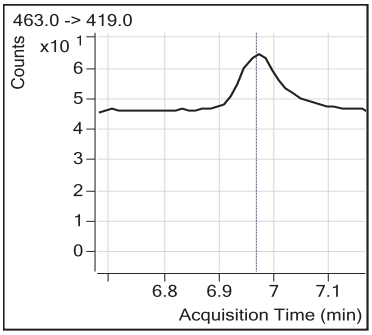


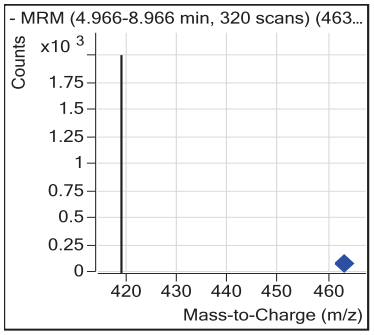




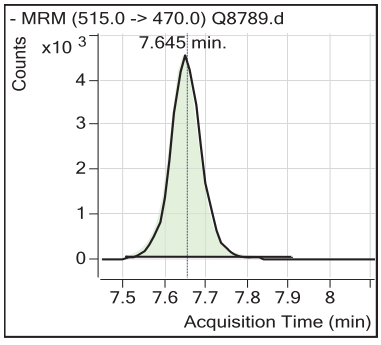
PFNA

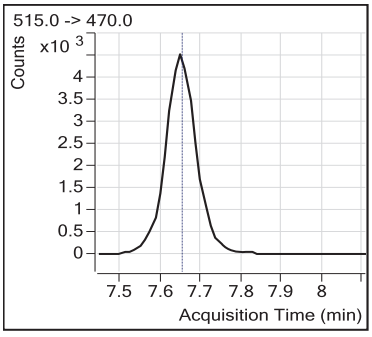


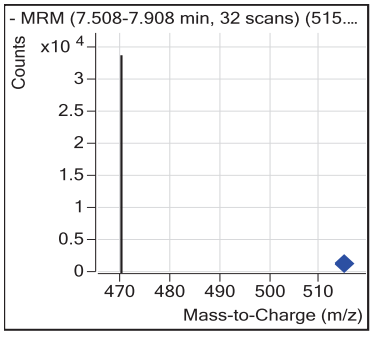




13C2-PFDA

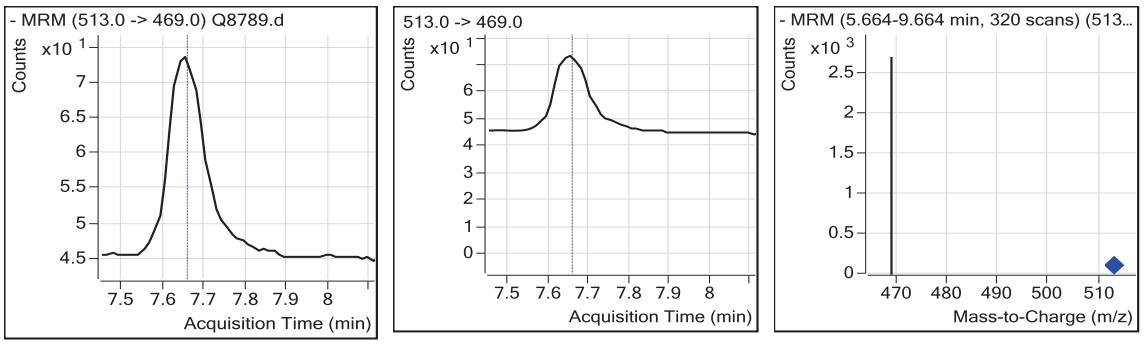




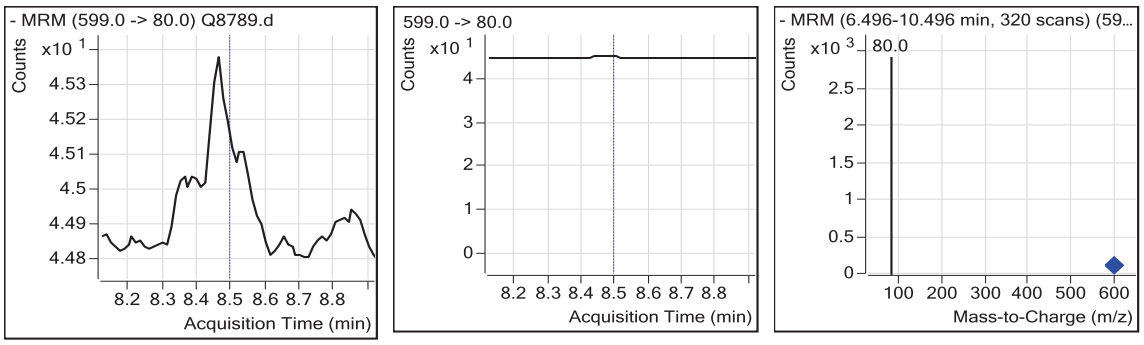


Perfluorinated Compounds by LC/MS/MS.

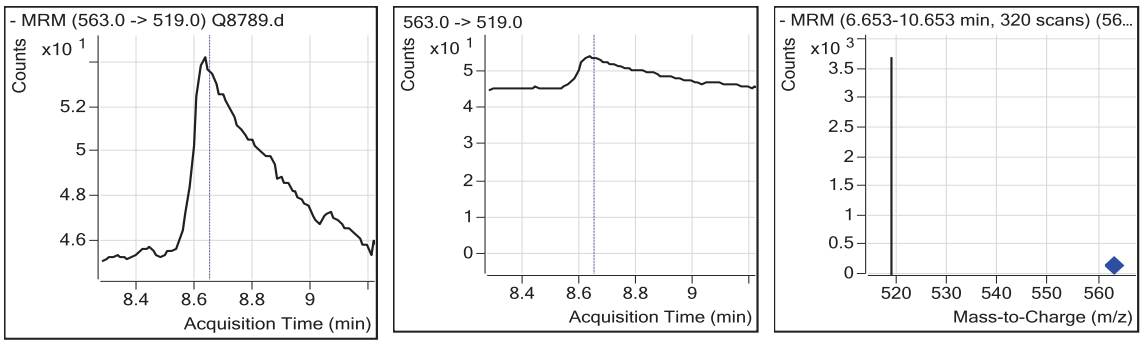
PFDA



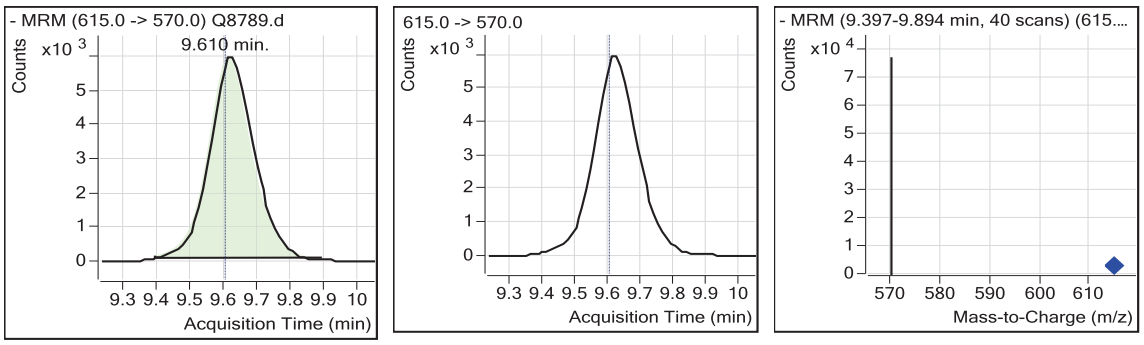
PFDS



PFUnDA

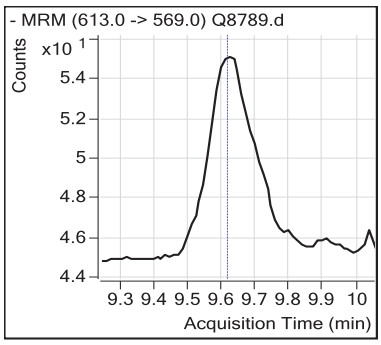


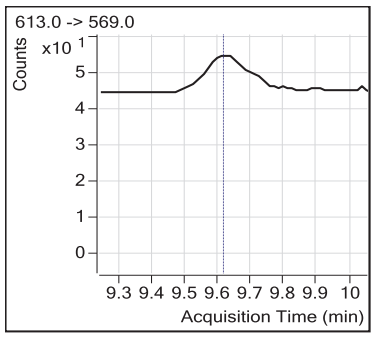
13C2-PFDoDA

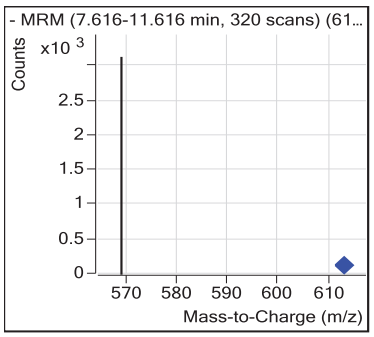


Perfluorinated Compounds by LC/MS/MS.

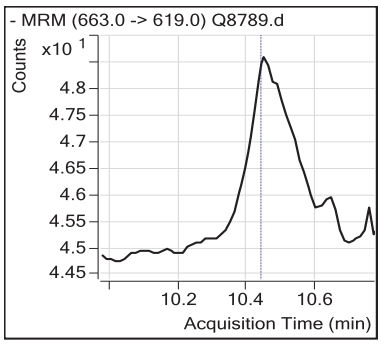
PFDoDA

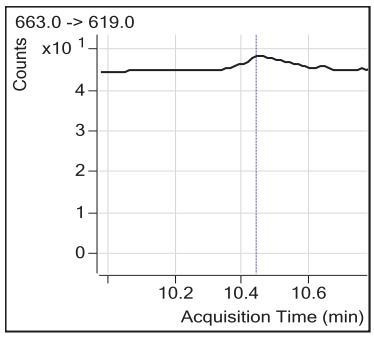


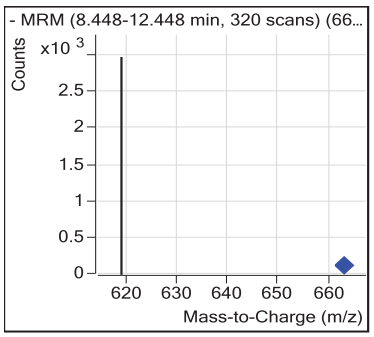




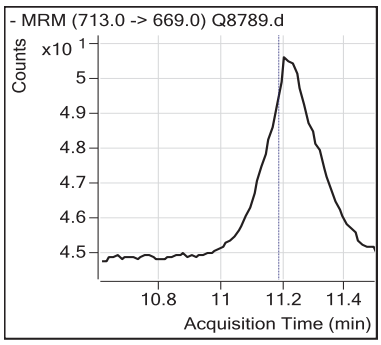
PFTrDA

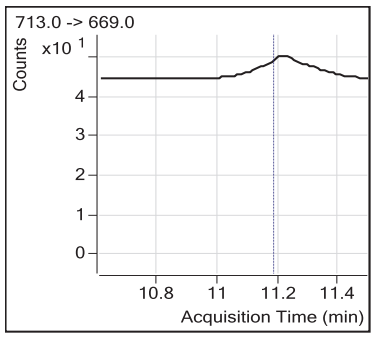


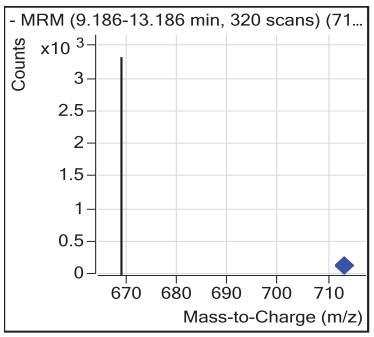




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

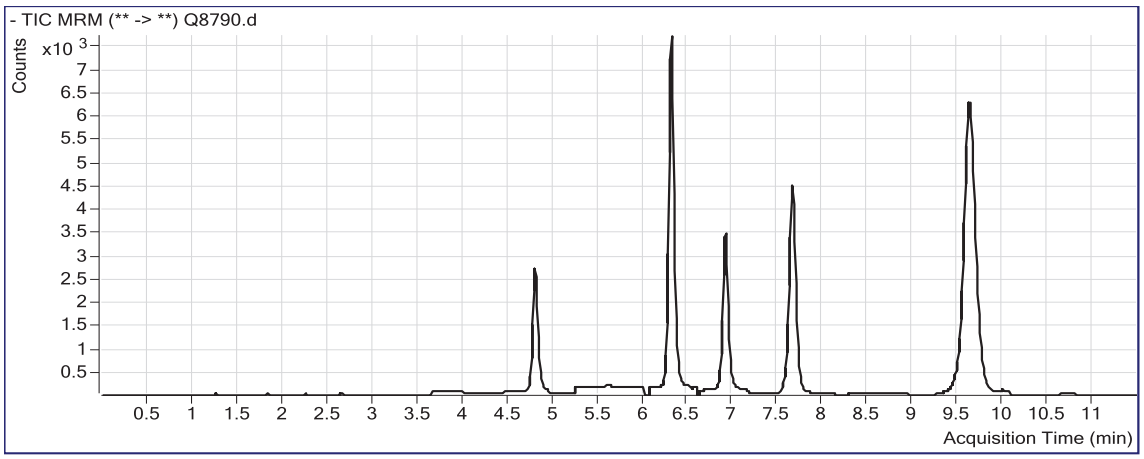
Data File	:	Q8790.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 22:23
Sample Name	:	FA20472-11
Vial	:	Vial 18
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	30238	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	13921	20.000	µg/L	0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	57099	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	10720	21.56	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 107.80%			
13C2-PFDA	7.645	515.0 -> 470.0	23430	18.16	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 90.82%			
Target Compounds						**Qvalue**
PFOA	6.299	413.0 -> 369.0	438	0.286	µg/L	69

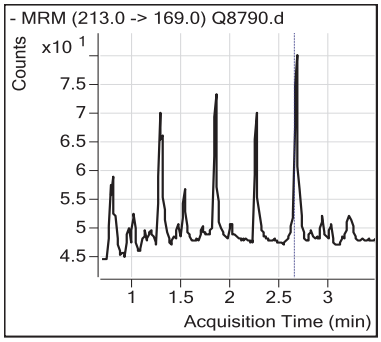
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

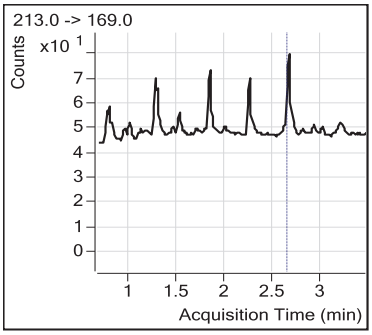
Perfluorinated Compounds by LC/MS/MS.

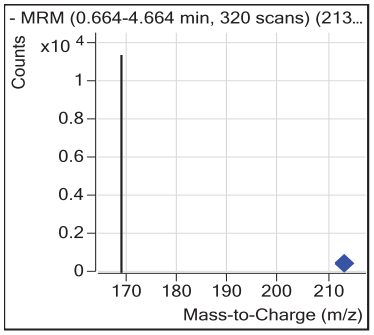
Data File	:	Q8790.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 22:23
Sample Name	:	FA20472-11
Vial	:	Vial 18
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



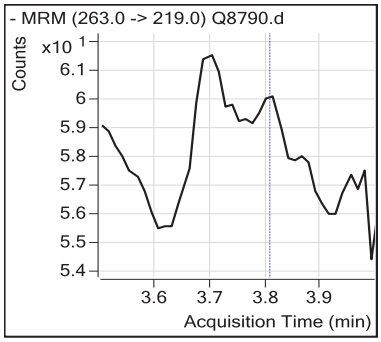
PFBA

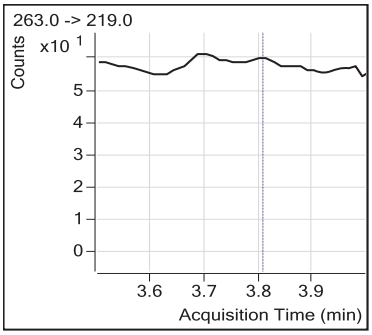


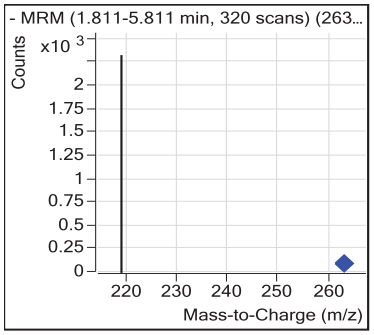




PFPeA

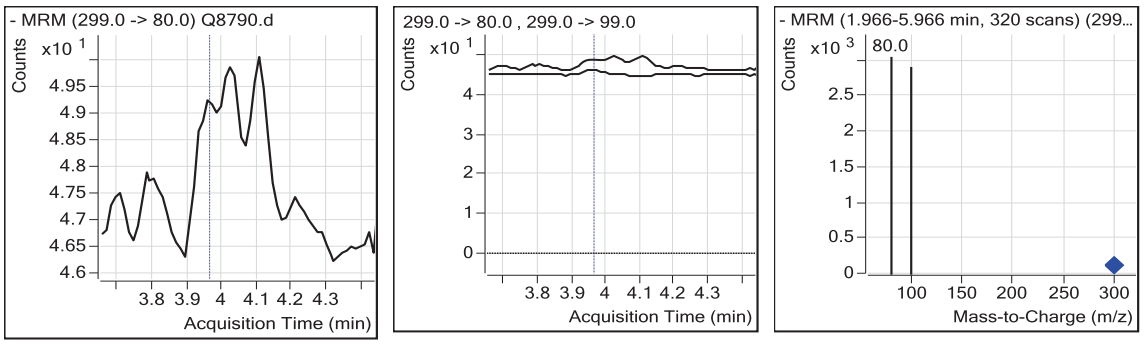




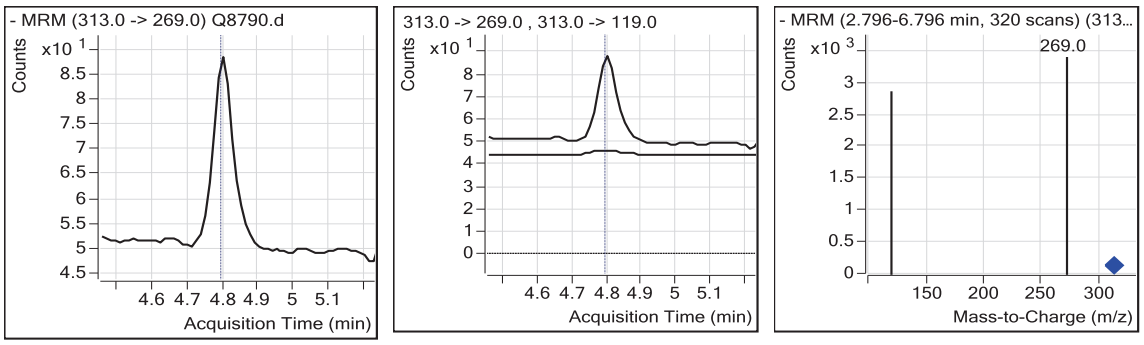


Perfluorinated Compounds by LC/MS/MS.

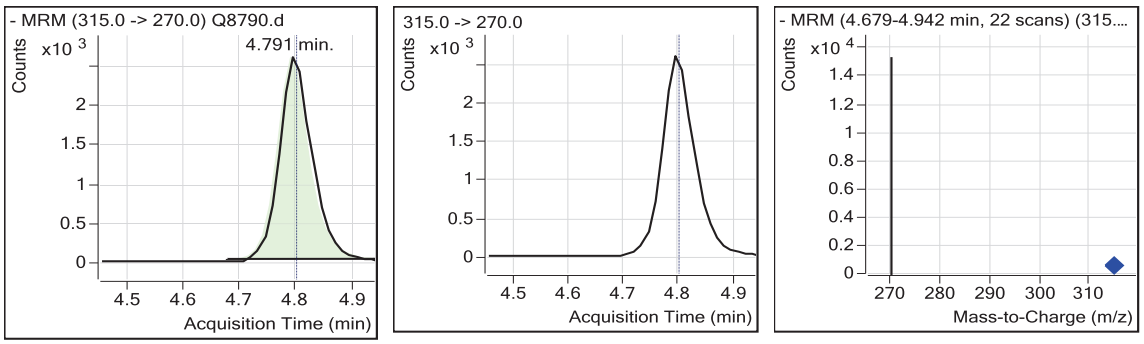
PFBS



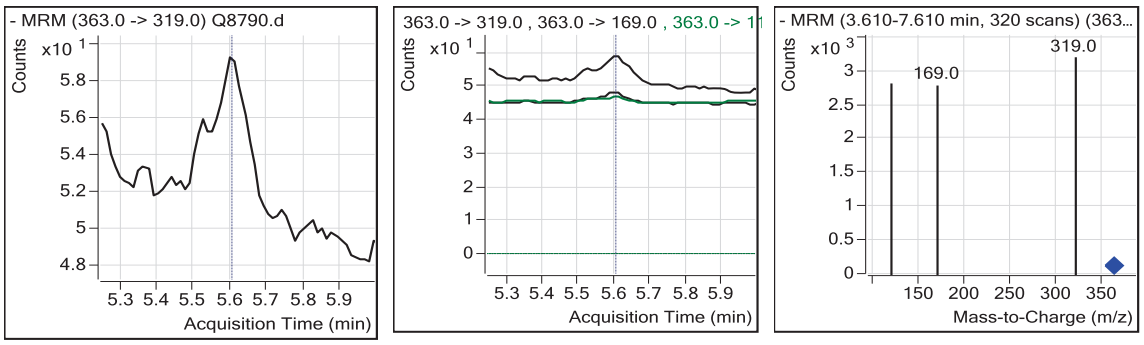
PFHxA



13C2-PFHxA

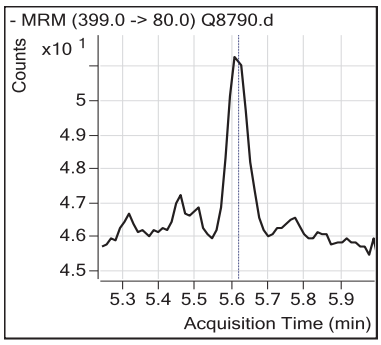


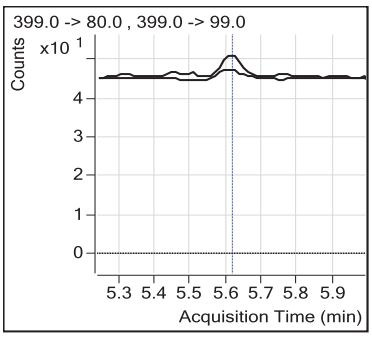
PFHpA

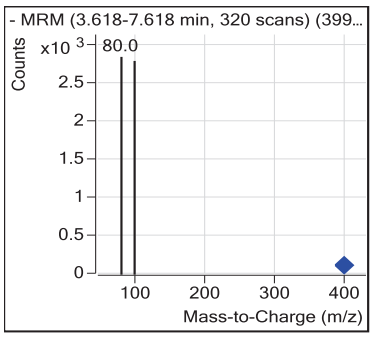


Perfluorinated Compounds by LC/MS/MS.

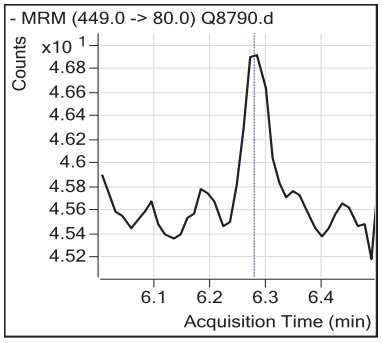
PFHxS

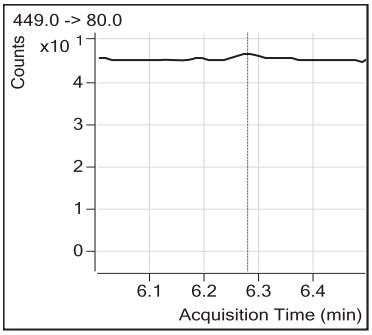


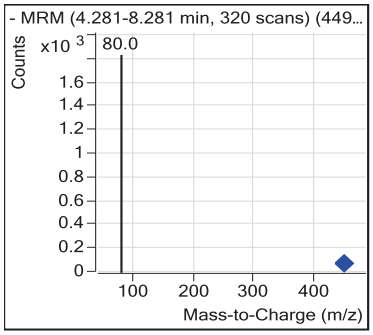




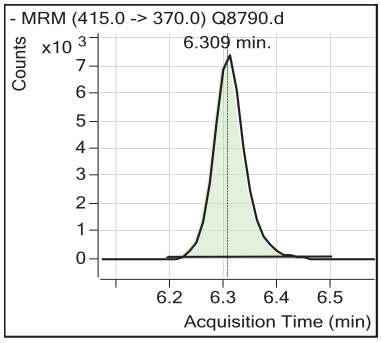
PFHpS

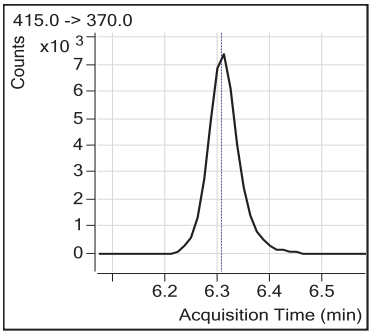


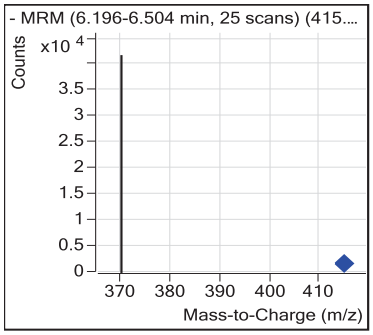




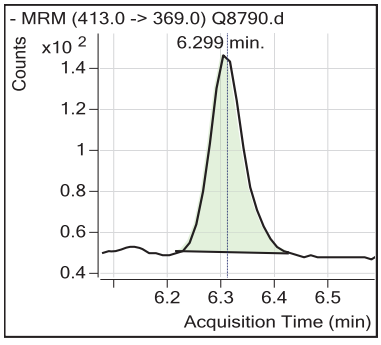
13C2-PFOA

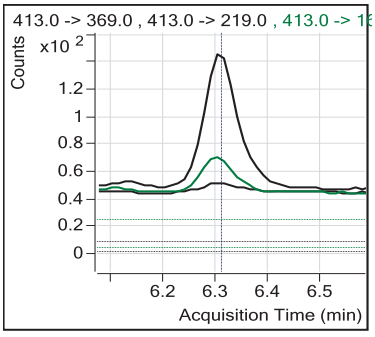


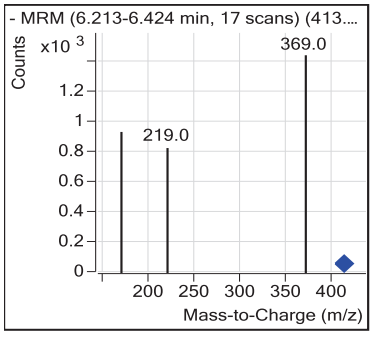




PFOA

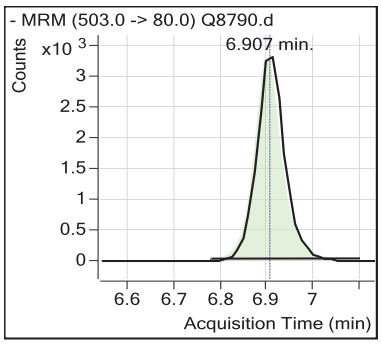


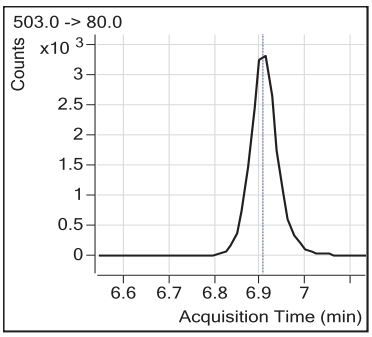


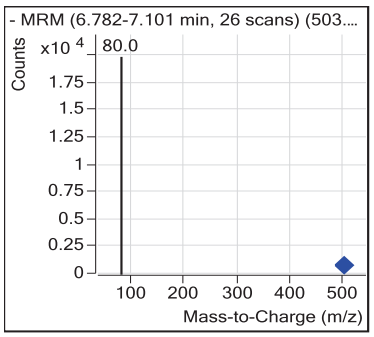


Perfluorinated Compounds by LC/MS/MS.

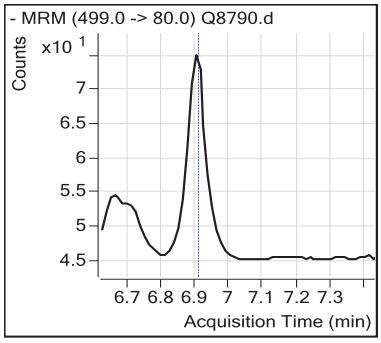
13C4-PFOS

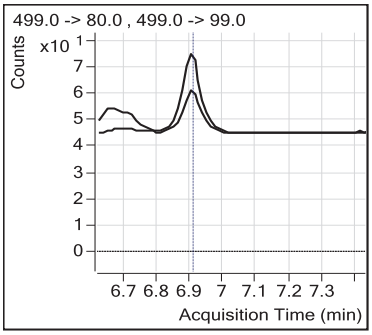


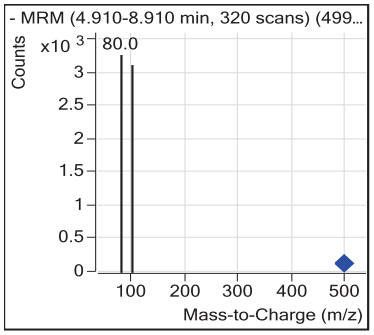




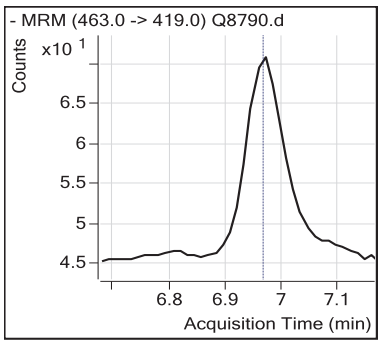
PFOS

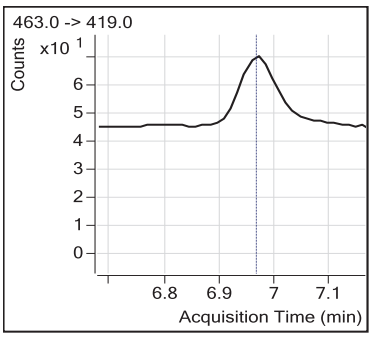


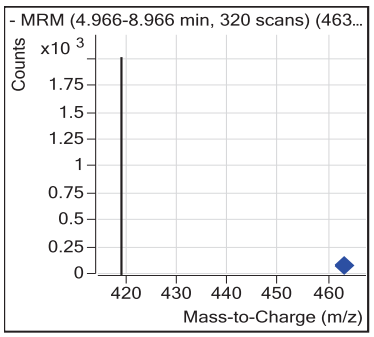




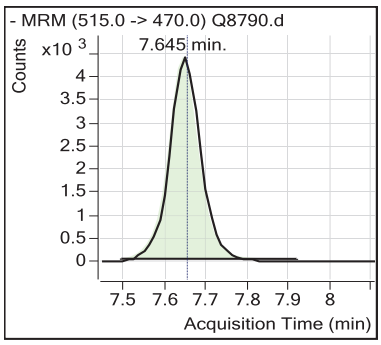
PFNA

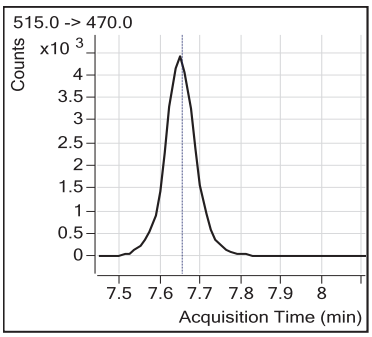


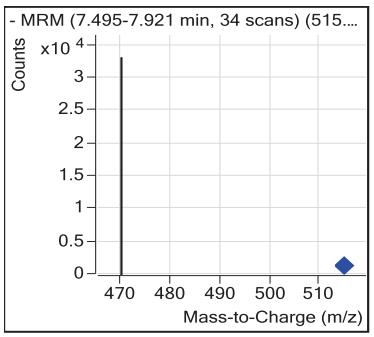




13C2-PFDA

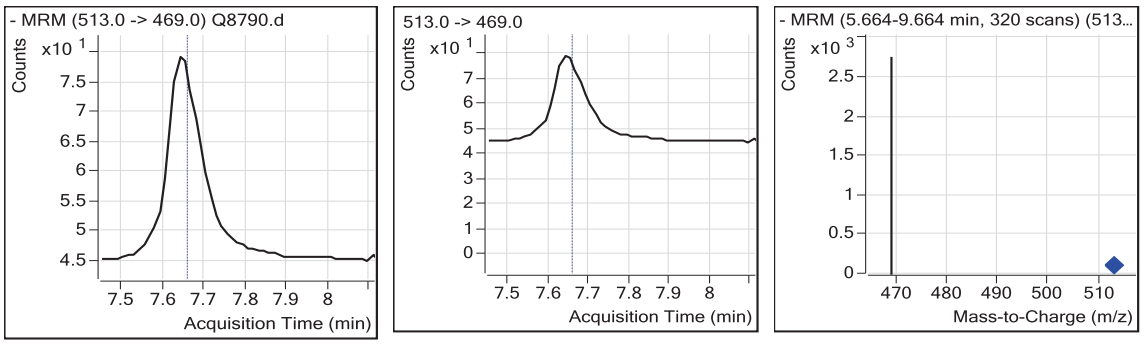






Perfluorinated Compounds by LC/MS/MS.

PFDA



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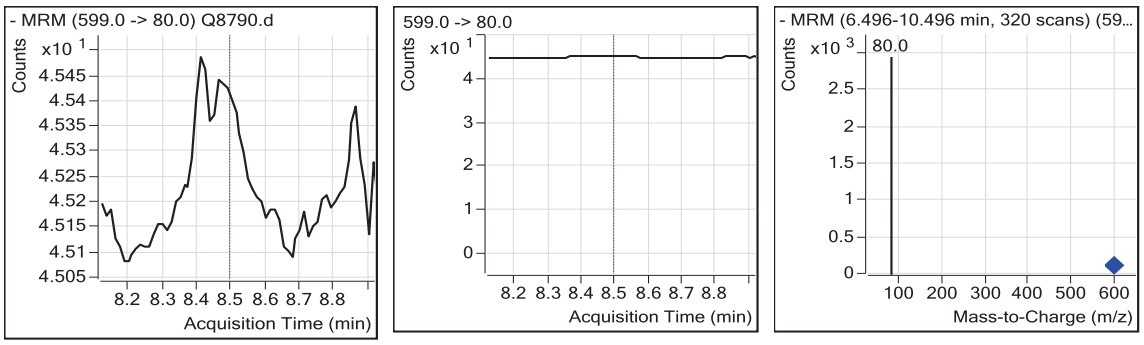
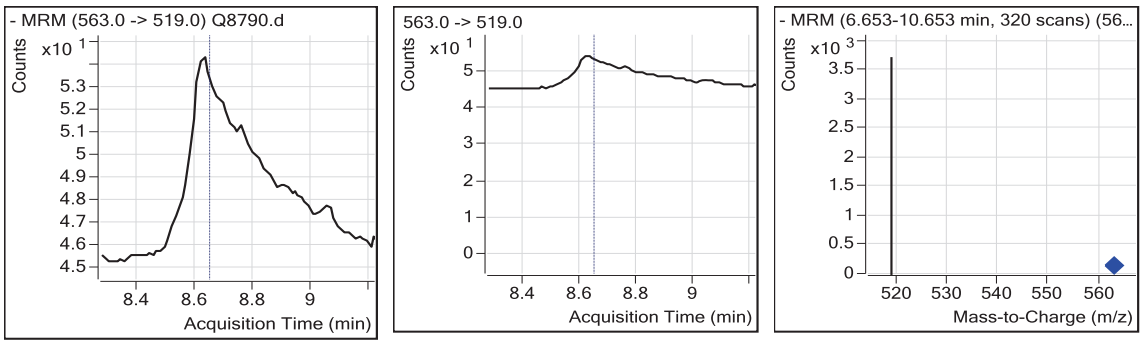
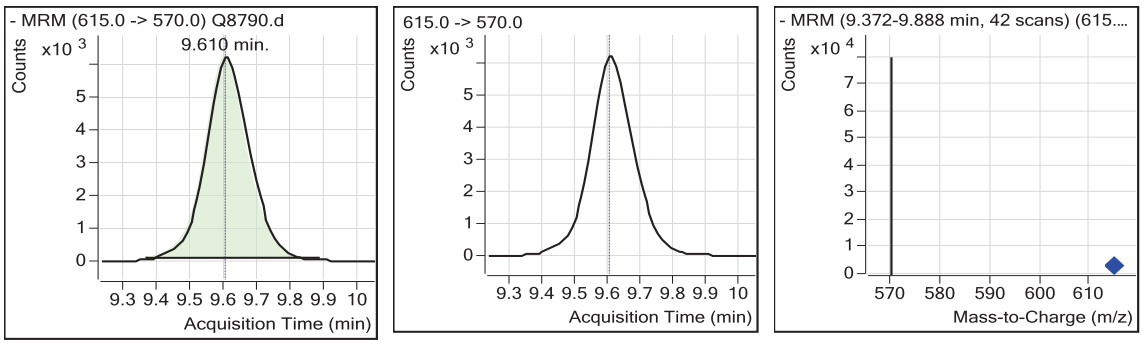


PFUnDA



13C2-PFDoDA

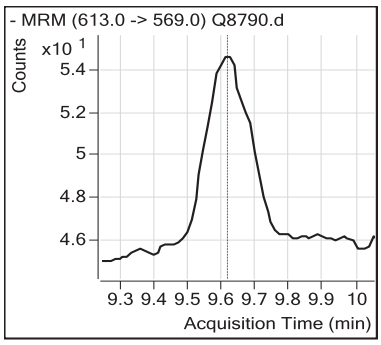


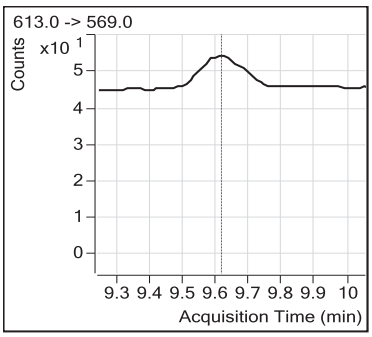
7.1.12

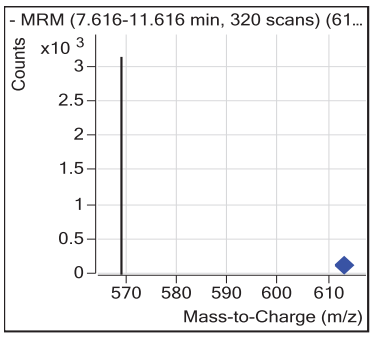
7

Perfluorinated Compounds by LC/MS/MS.

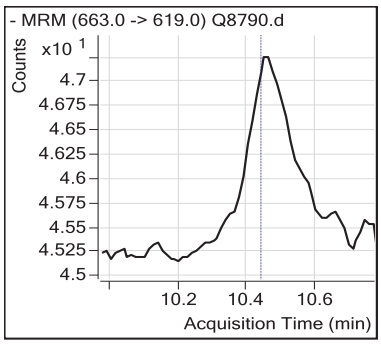
PFDoDA

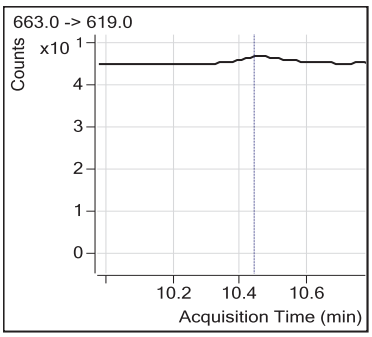


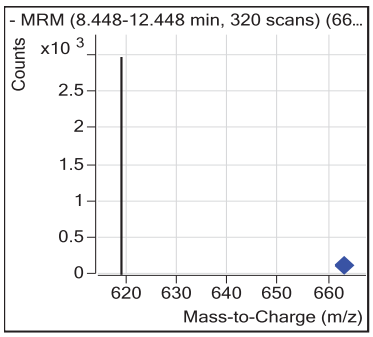




PFTrDA







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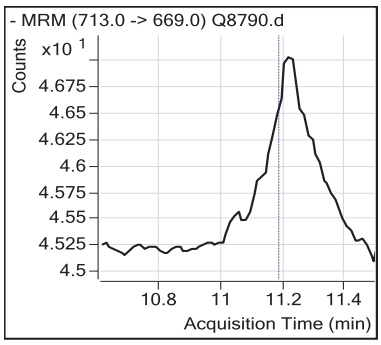
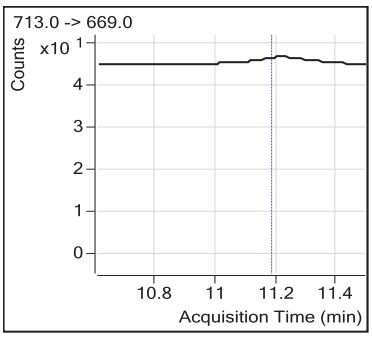
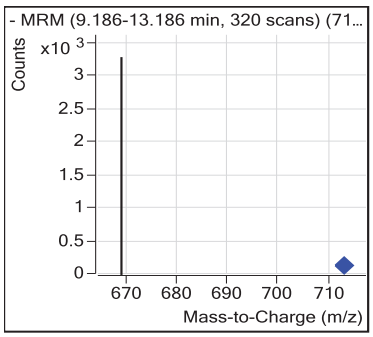






Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/17/14 14:40

Perfluorinated Compounds by LC/MS/MS.

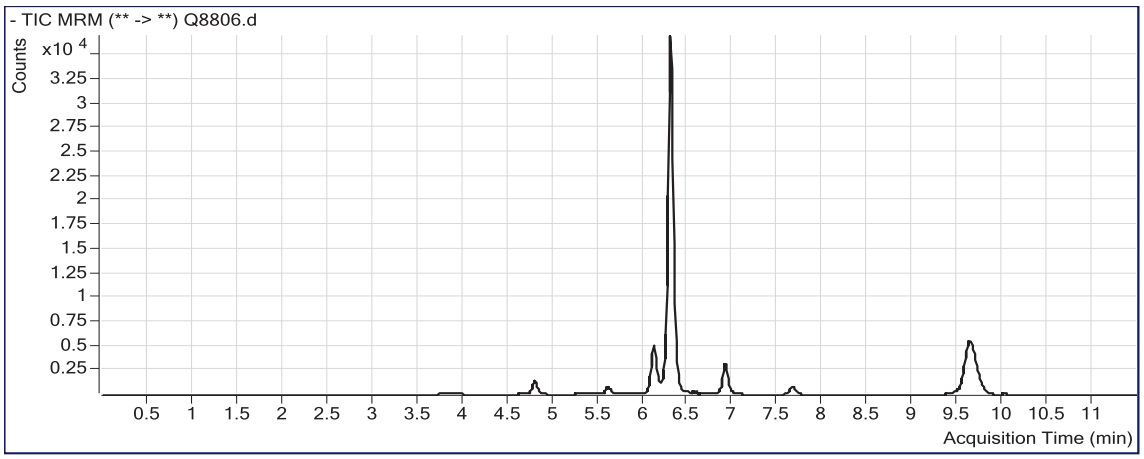
Data File	:	Q8806.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 12:33
Sample Name	:	FA20472-12
Vial	:	Vial 6
Sample Info	:	OP54204,SQ285,120,,,1,5,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.296	415.0 -> 370.0	25666	20.000	µg/L		-0.012
13C4-PFOS	6.895	503.0 -> 80.0	13172	20.000	µg/L		-0.012
13C2-PFDoDA	9.610	615.0 -> 570.0	53648	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	2151	5.10	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 25.49%				
13C2-PFDA	7.645	515.0 -> 470.0	4629	4.23	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 21.14%				
Target Compounds							**Qvalue**
PFBA	2.639	213.0 -> 169.0	253	0.822	µg/L	m	100
PFPeA	3.811	263.0 -> 219.0	578	3.759	µg/L		100
PFBS	3.966	299.0 -> 80.0	92	0.471	µg/L	m	76
PFHxA	4.796	313.0 -> 269.0	3656	8.250	µg/L	m	100
PFHpA	5.597	363.0 -> 319.0	1075	2.502	µg/L	m	95
PFHxS	5.605	399.0 -> 80.0	974	3.116	µg/L	m	86
PFOA	6.299	413.0 -> 369.0	99643	76.638	µg/L		82
PFOS	6.661	499.0 -> 80.0	225	0.341	µg/L	m	80

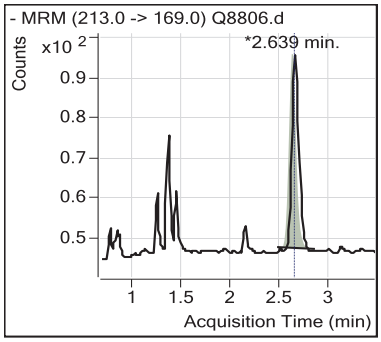
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

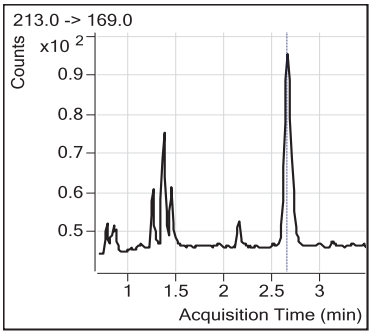
Perfluorinated Compounds by LC/MS/MS.

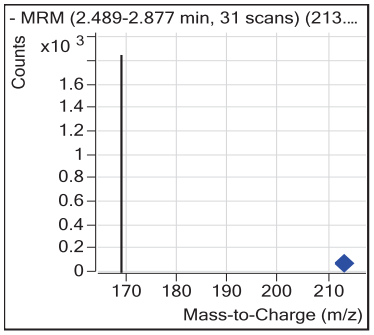
Data File	:	Q8806.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 12:33
Sample Name	:	FA20472-12
Vial	:	Vial 6
Sample Info	:	OP54204,SQ285,120,,,1,5,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24



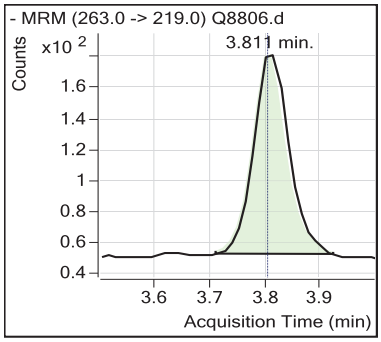
PFBA

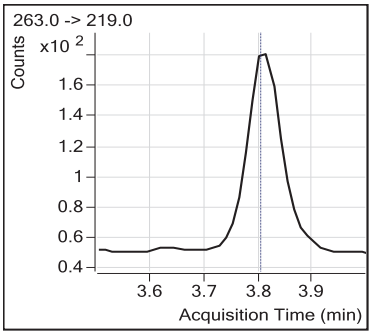


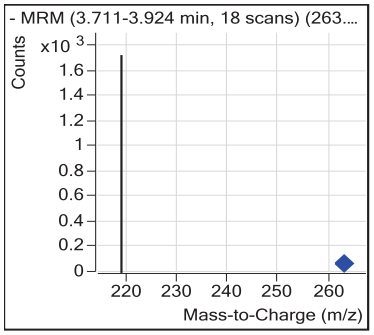




PFPeA

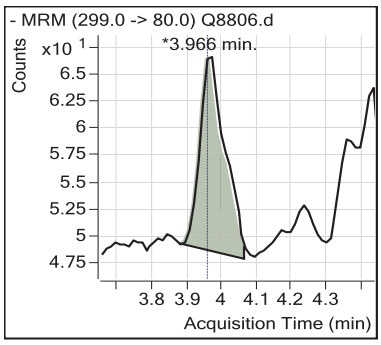


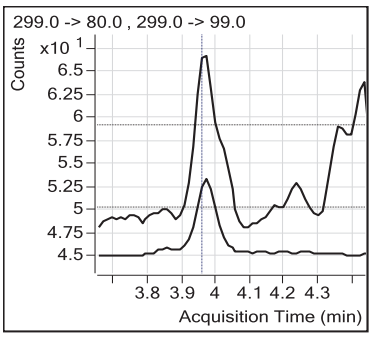


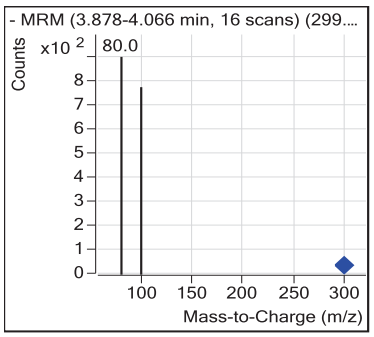


Perfluorinated Compounds by LC/MS/MS.

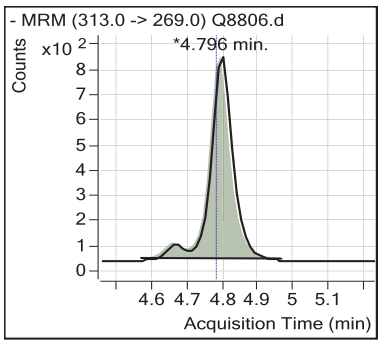
PFBS

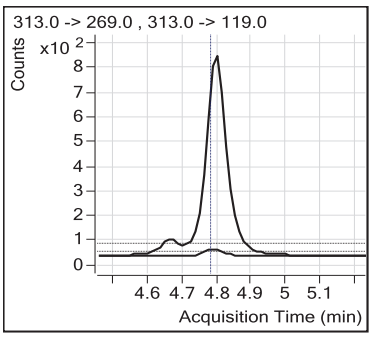


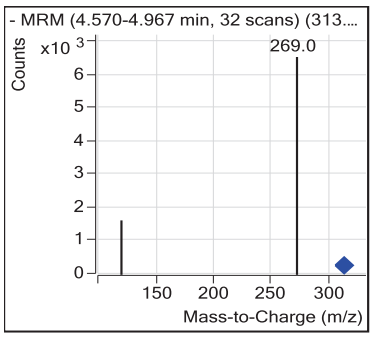




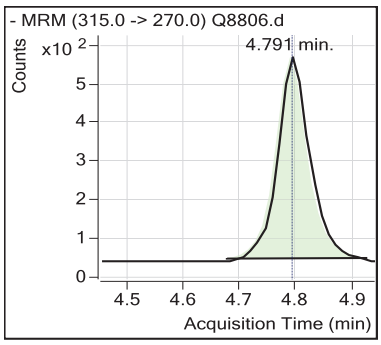
PFHxA

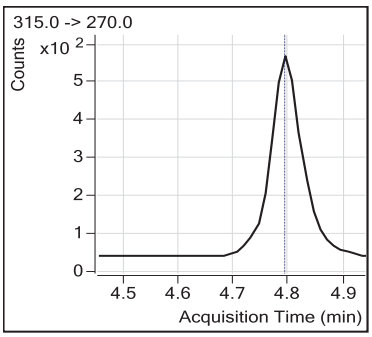


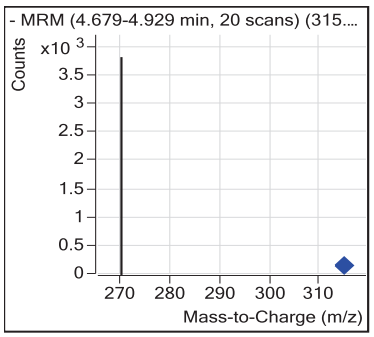




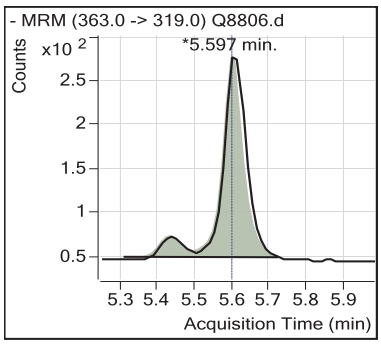
13C2-PFHxA

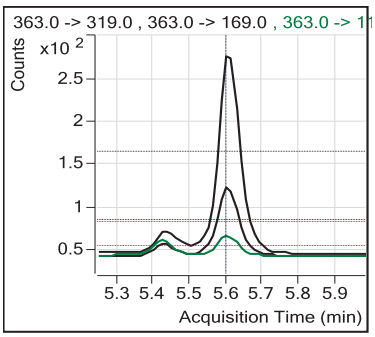


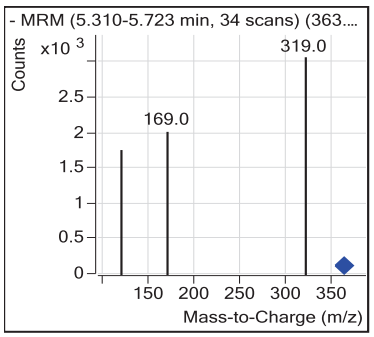




PFHpA

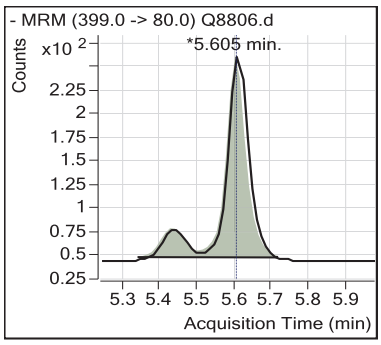


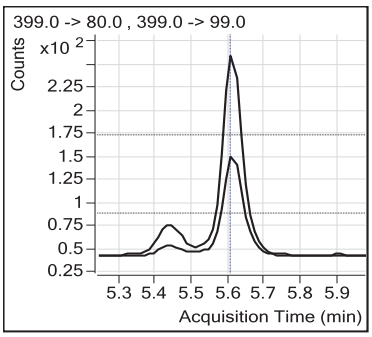


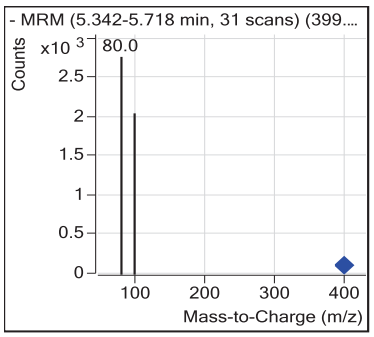


Perfluorinated Compounds by LC/MS/MS.

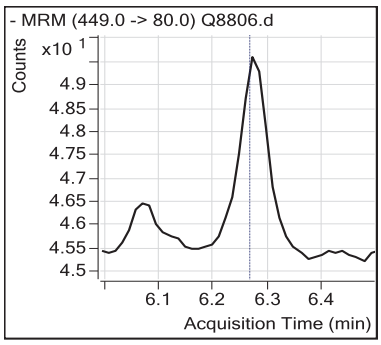
PFHxS

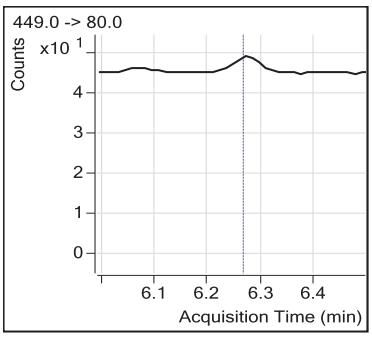


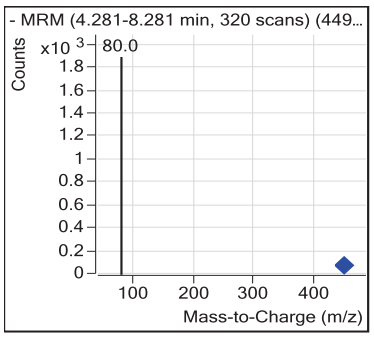




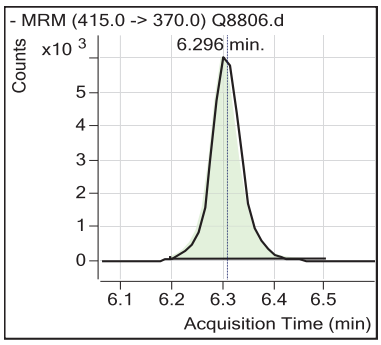
PFHpS

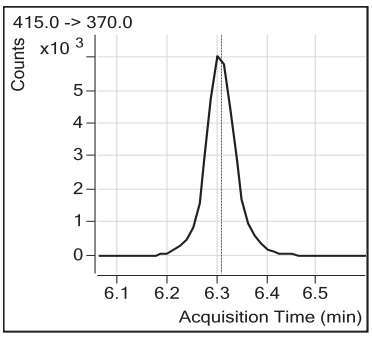


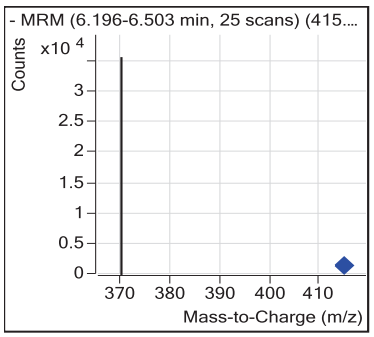




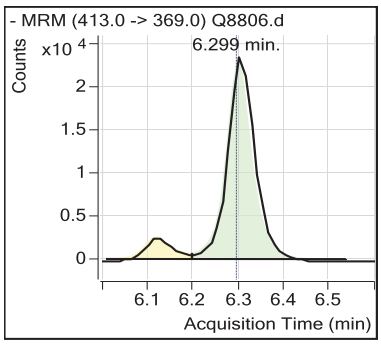
13C2-PFOA

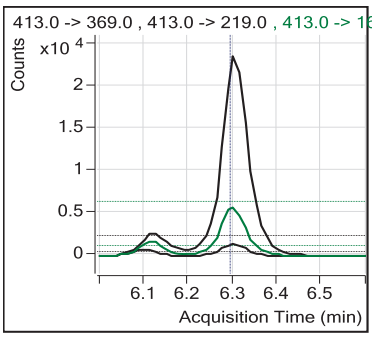


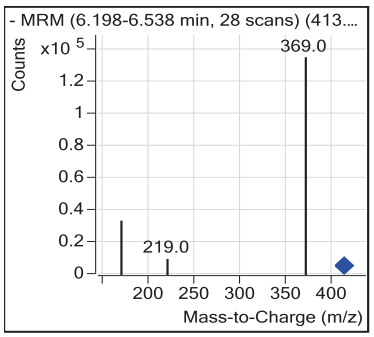




PFOA

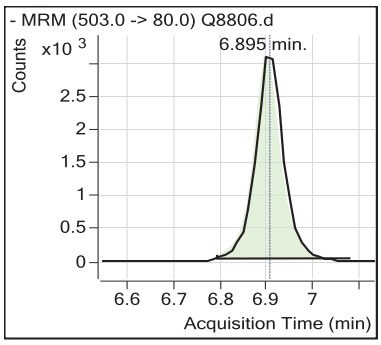


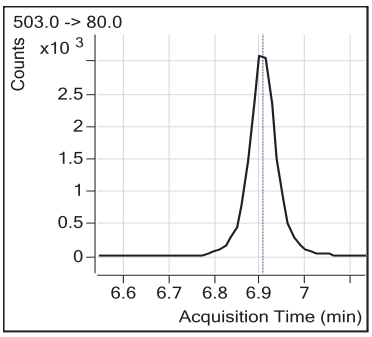


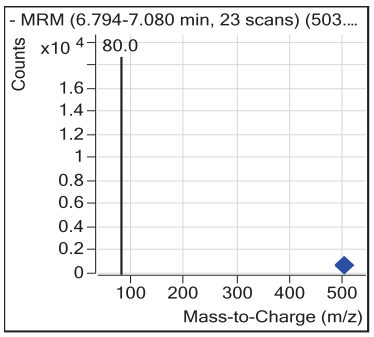


Perfluorinated Compounds by LC/MS/MS.

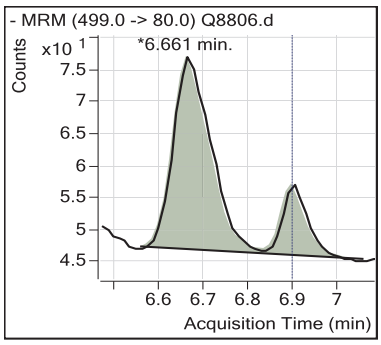
13C4-PFOS

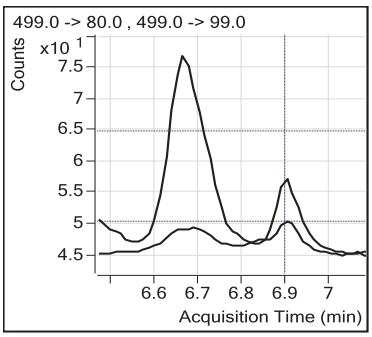


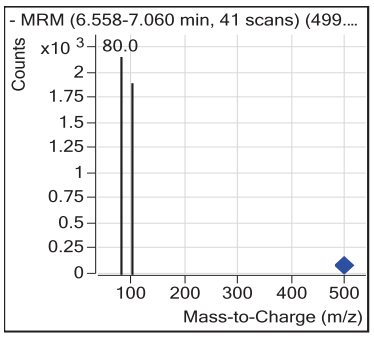




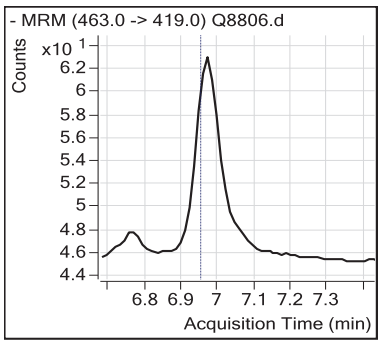
PFOS

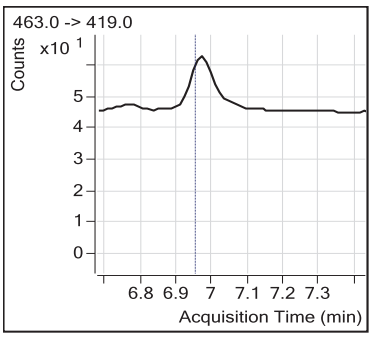


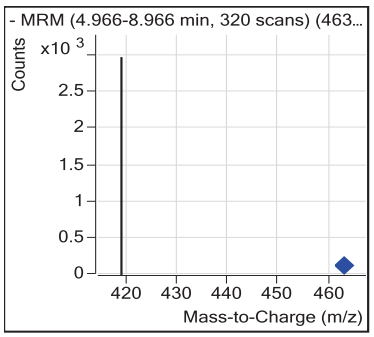




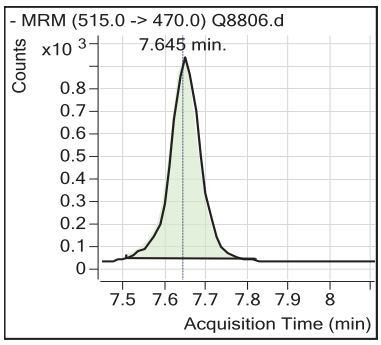
PFNA

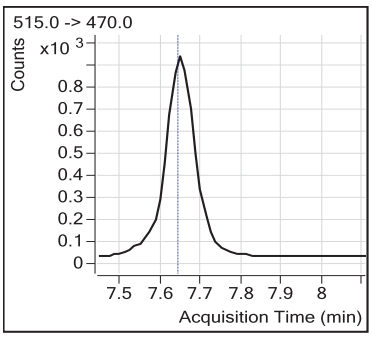


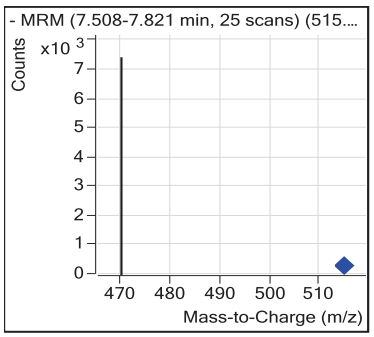




13C2-PFDA

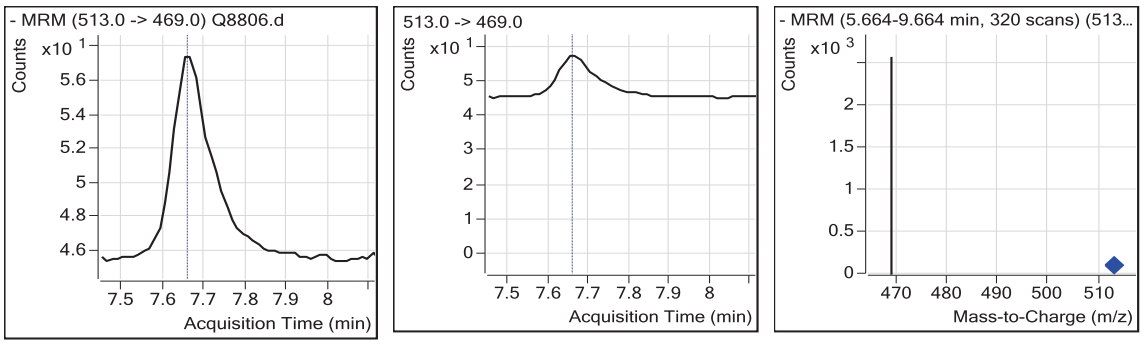




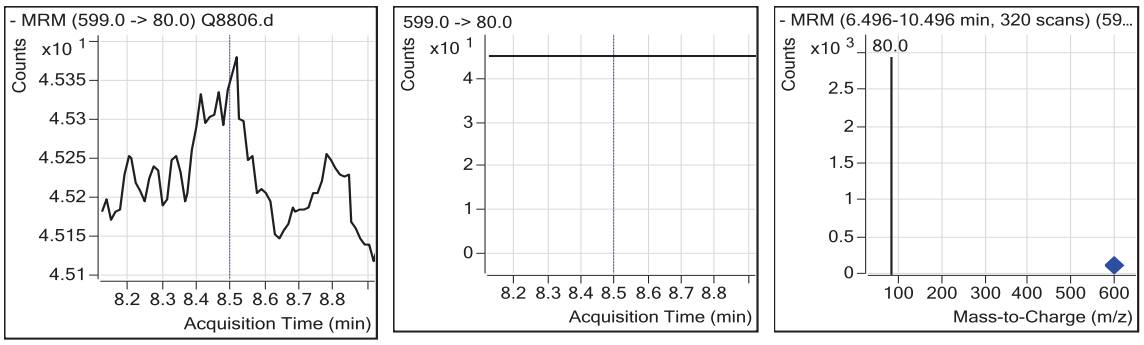


Perfluorinated Compounds by LC/MS/MS.

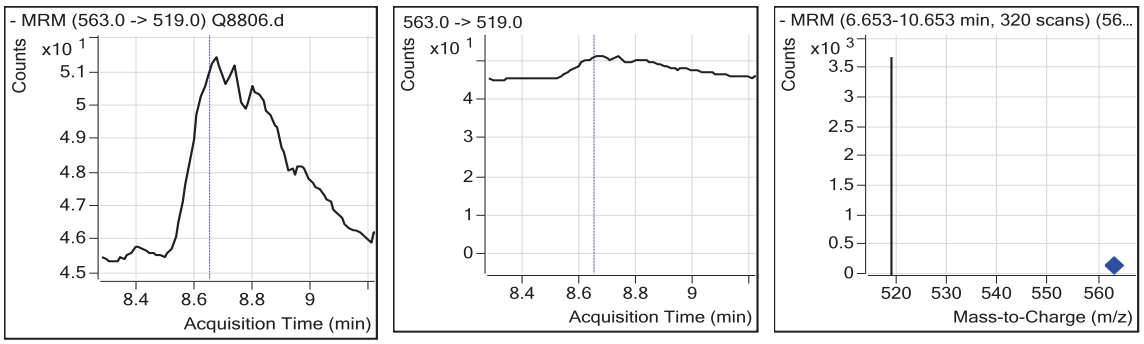
PFDA



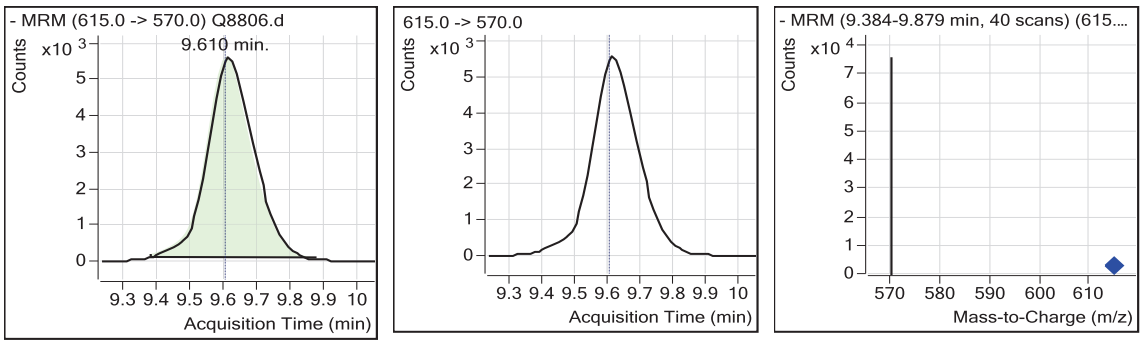
PFDS



PFUnDA



13C2-PFDoDA

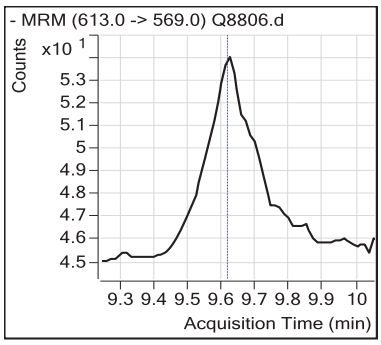


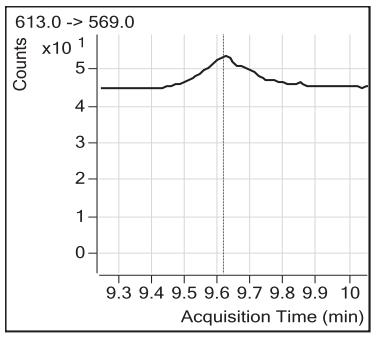
7.1.13

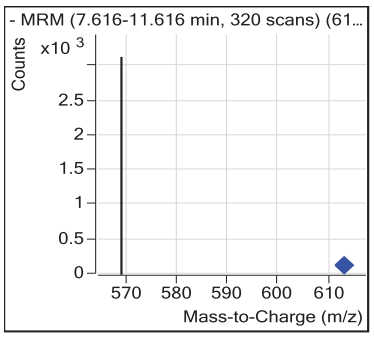
7

Perfluorinated Compounds by LC/MS/MS.

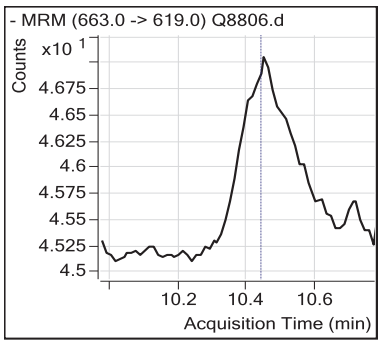
PFDoDA

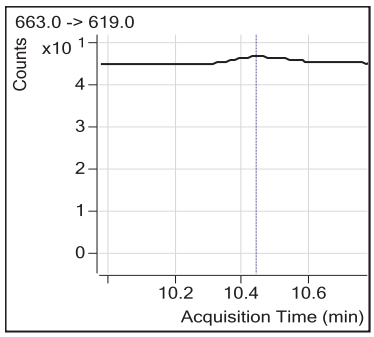


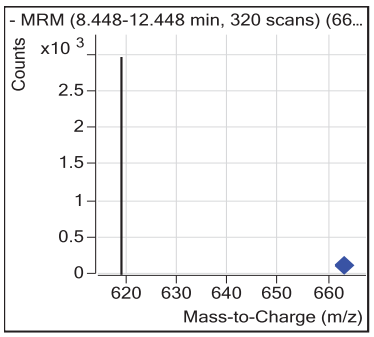




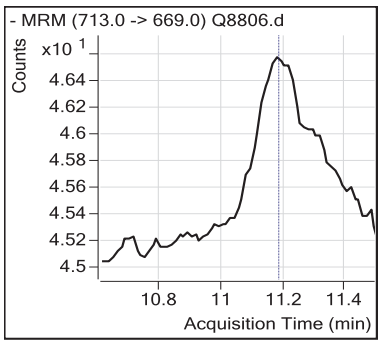
PFTrDA

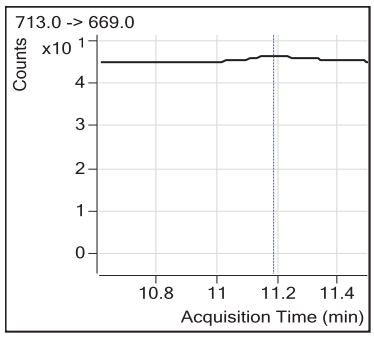


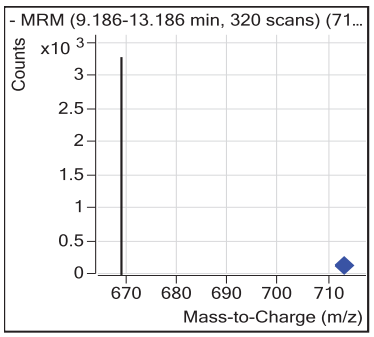




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-12
Lab FileID: Q8806.D
Injection Time: 12/16/14 12:33
Method: EPA 537 MOD
Analyst approved: 12/17/14 13:53 Mike Eger
Supervisor approved: 12/17/14 14:40 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		2.64	Split peak
Perfluorobutanesulfonic acid	375-73-5		3.97	Split peak
Perfluorohexanoic acid	307-24-4		4.80	Split peak
Perfluoroheptanoic acid	375-85-9		5.60	Split peak
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.66	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/17/14 14:40

Perfluorinated Compounds by LC/MS/MS.

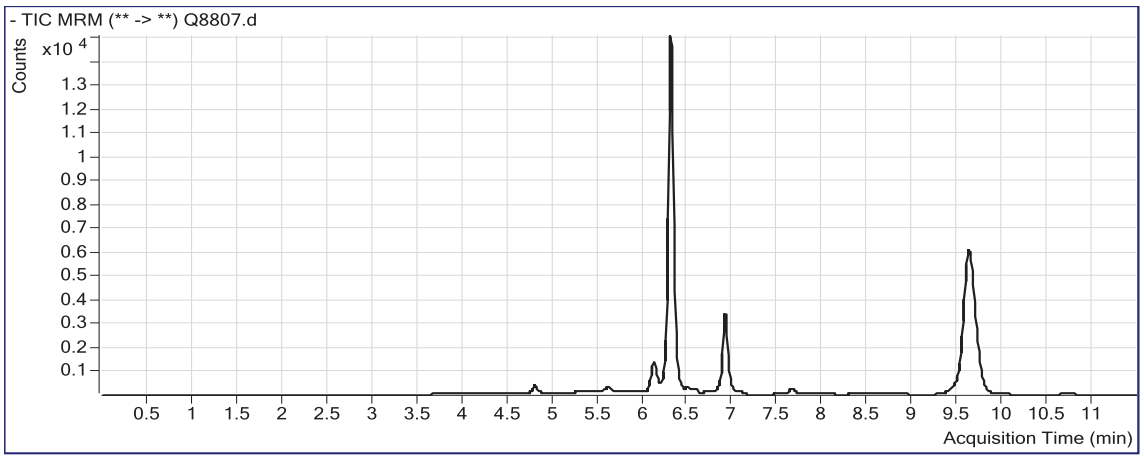
Data File	:	Q8807.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 12:54
Sample Name	:	FA20472-12
Vial	:	Vial 7
Sample Info	:	OP54204,SQ285,120,,,1,20,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.309	415.0 -> 370.0	29064	20.000	µg/L		0.000
13C4-PFOS	6.895	503.0 -> 80.0	13941	20.000	µg/L		-0.012
13C2-PFDoDA	9.597	615.0 -> 570.0	57417	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	0	0.00	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 0.00%				
13C2-PFDA	7.645	515.0 -> 470.0	0	0.00	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 0.00%				
Target Compounds							**Qvalue**
PFHxA	4.796	313.0 -> 269.0	886	1.766	µg/L	m	98
PFOA	6.299	413.0 -> 369.0	29179	19.818	µg/L	m	74

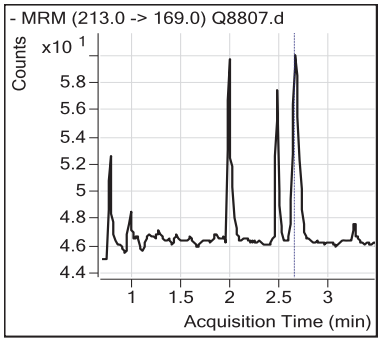
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

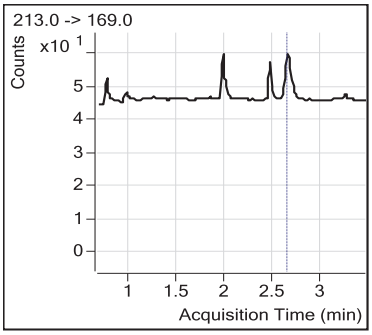
Perfluorinated Compounds by LC/MS/MS.

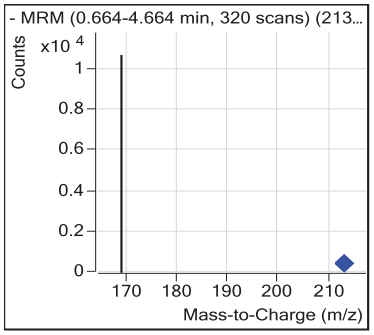
Data File	:	Q8807.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 12:54
Sample Name	:	FA20472-12
Vial	:	Vial 7
Sample Info	:	OP54204,SQ285,120,,,1,20,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24



PFBA







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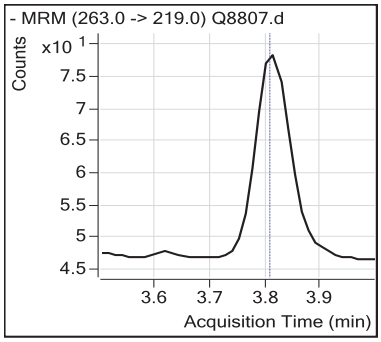
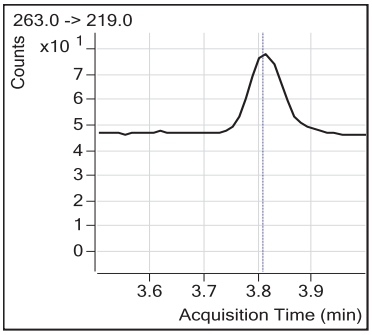
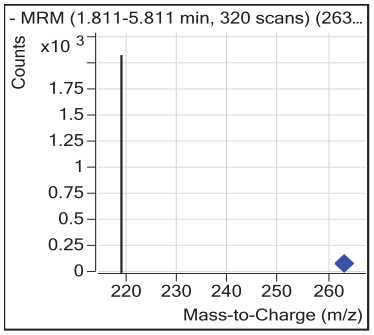
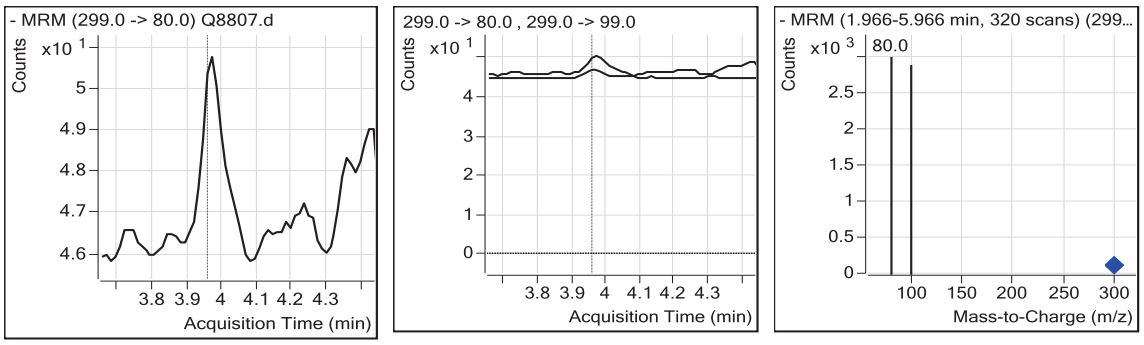




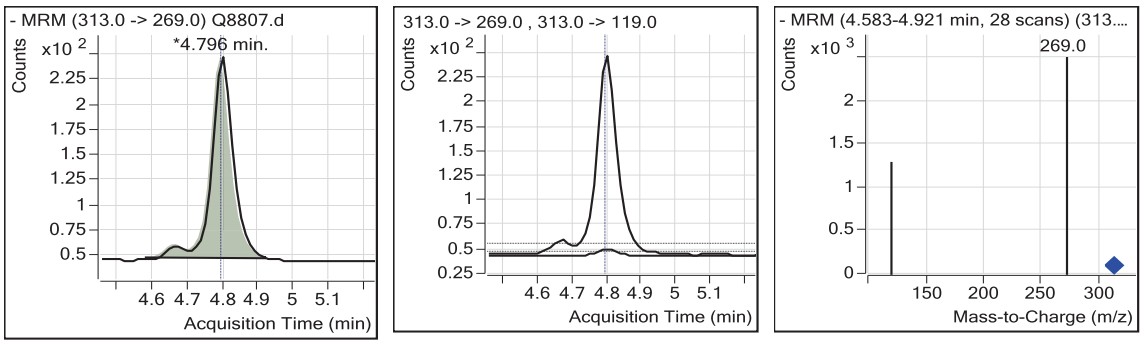


Perfluorinated Compounds by LC/MS/MS.

PFBS



PFHxA



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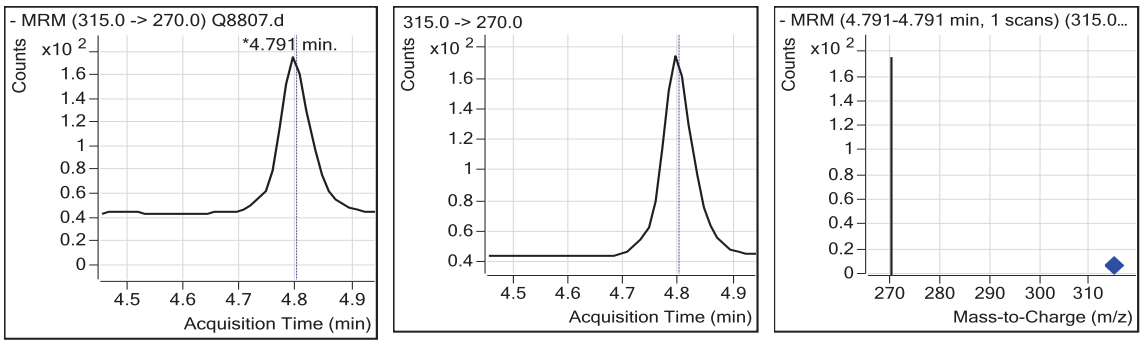

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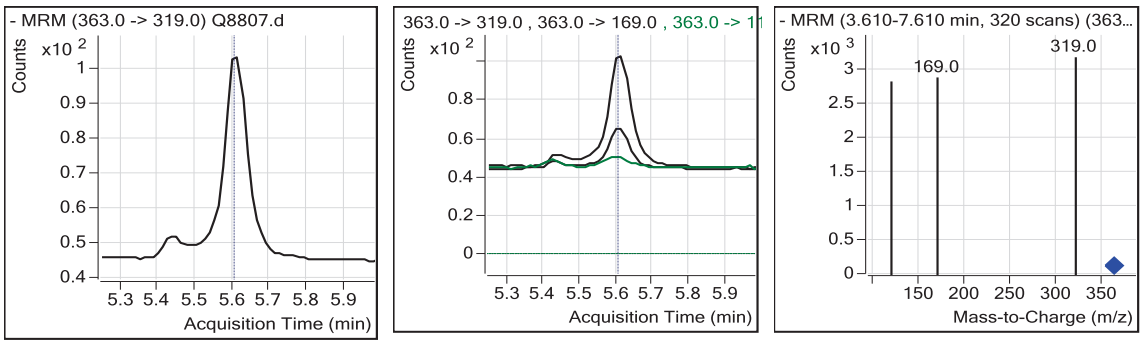

Perfluorinated Compounds by LC/MS/MS.

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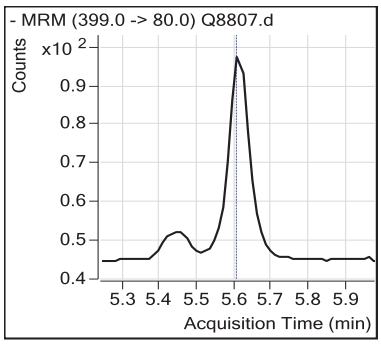

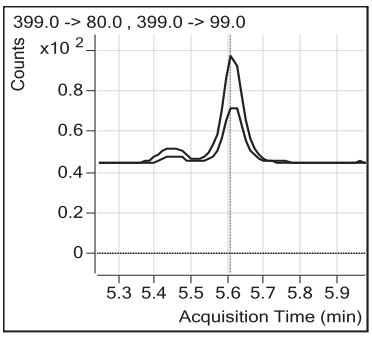

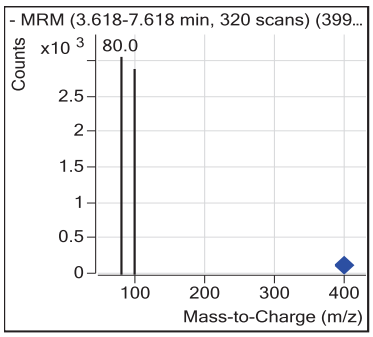

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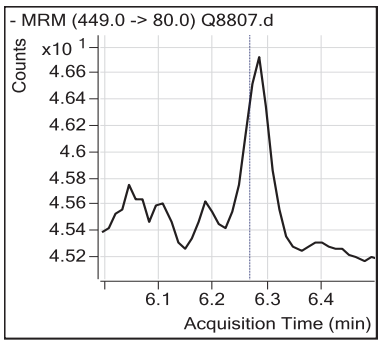
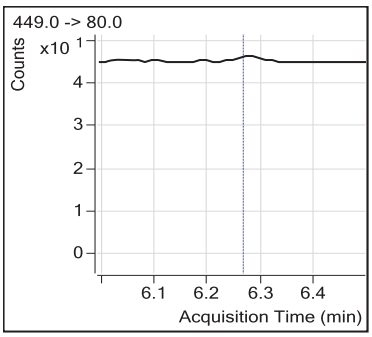
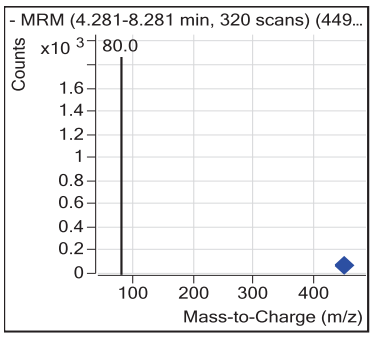
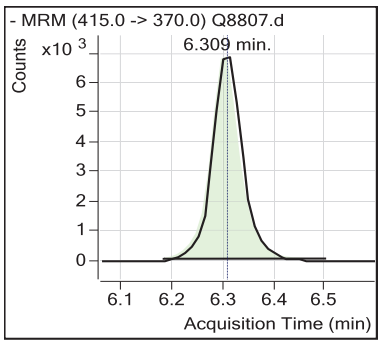
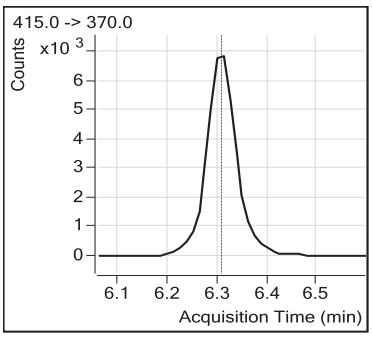


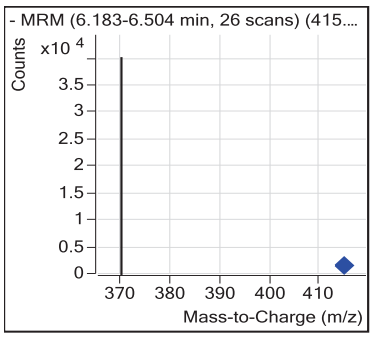




13C2-PFOA







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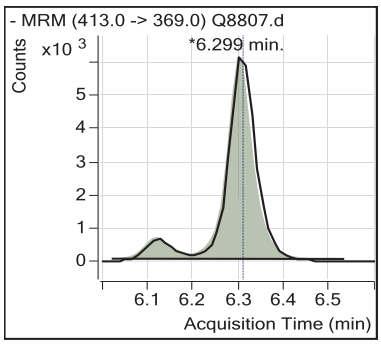
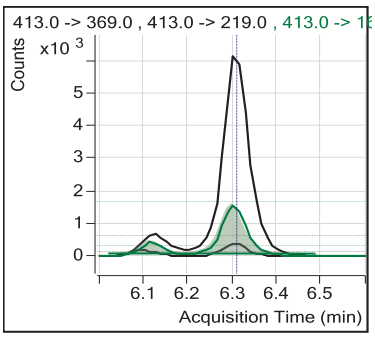
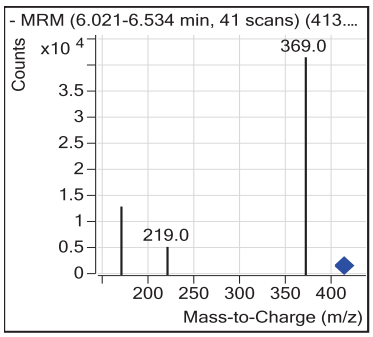
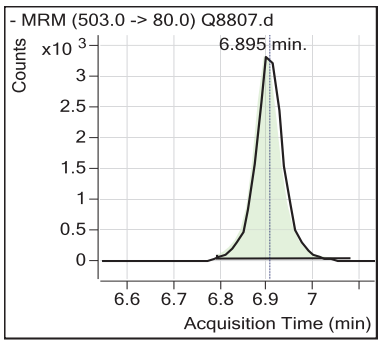


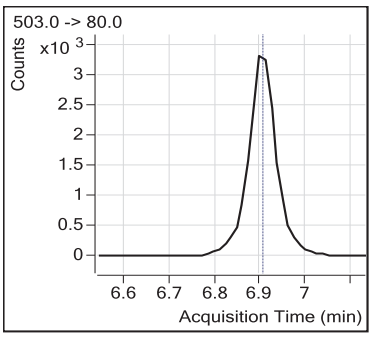


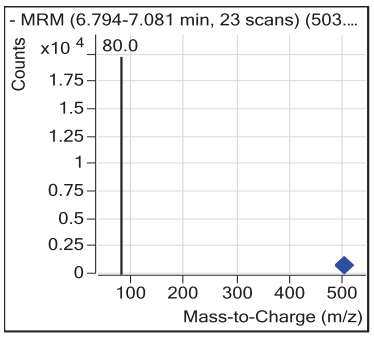


Perfluorinated Compounds by LC/MS/MS.

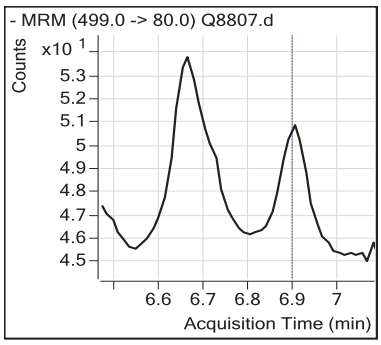
13C4-PFOS

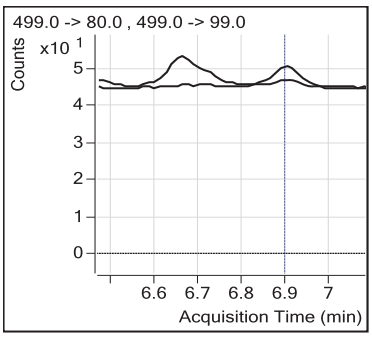


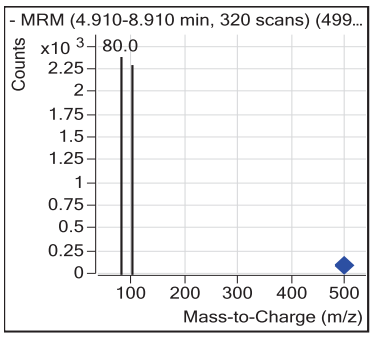




PFOS







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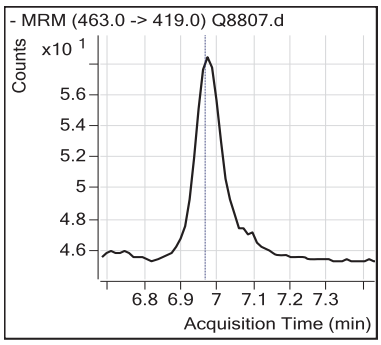
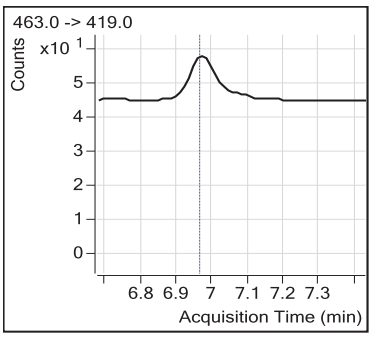
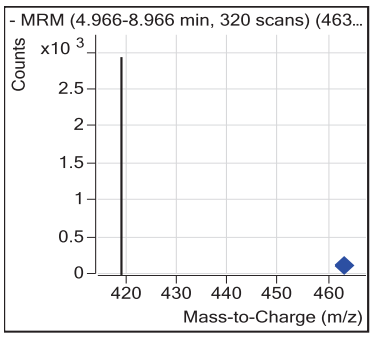
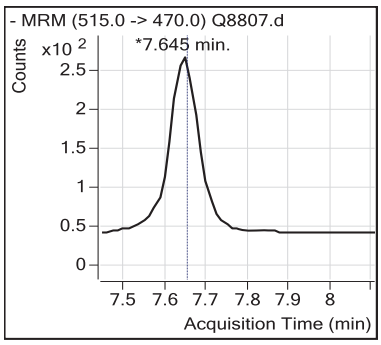
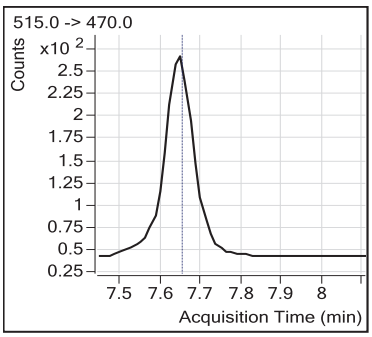


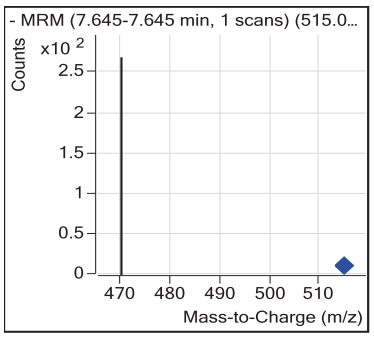




13C2-PFDA

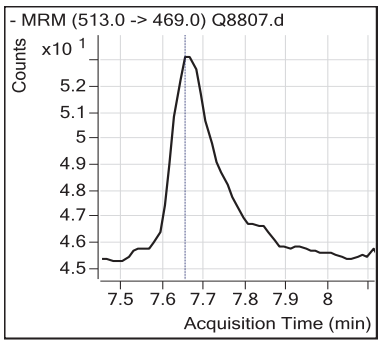


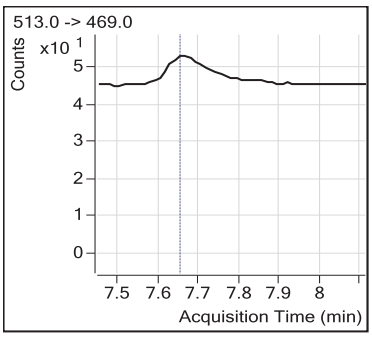


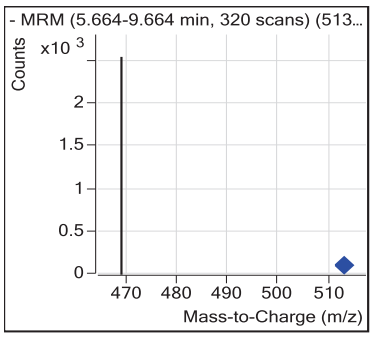


Perfluorinated Compounds by LC/MS/MS.

PFDA







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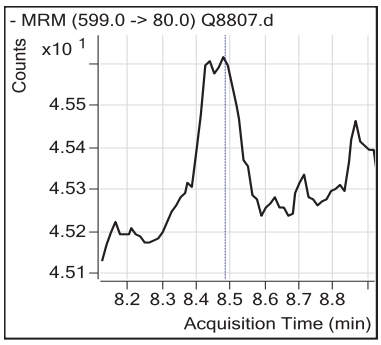

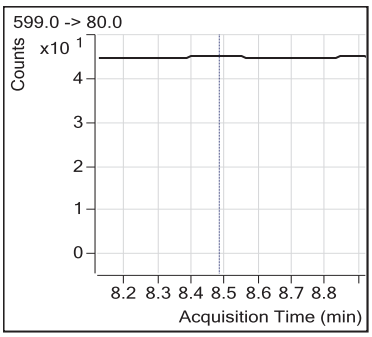

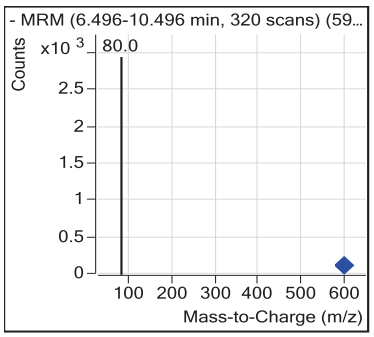

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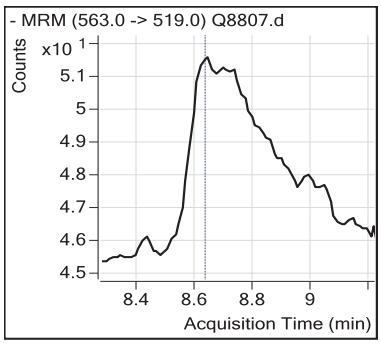
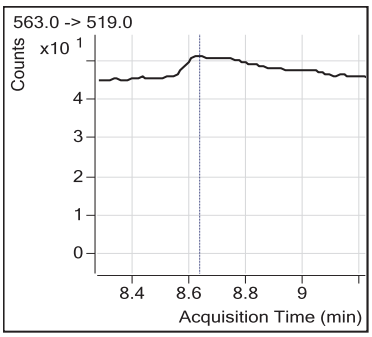
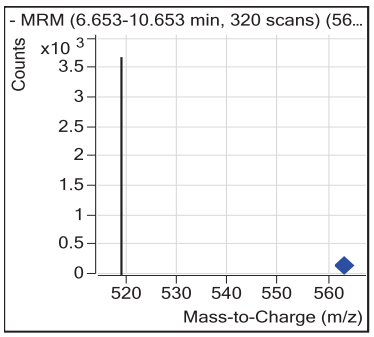
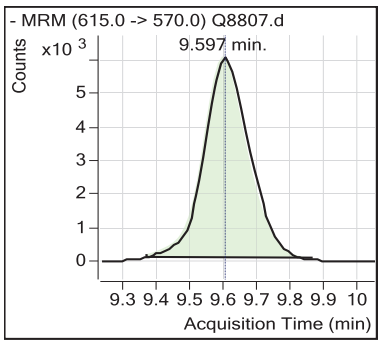
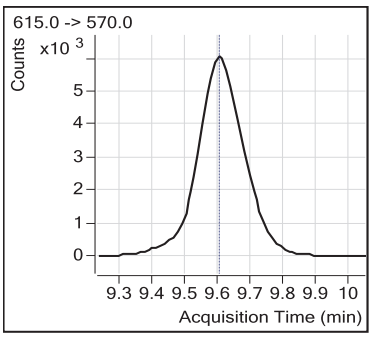


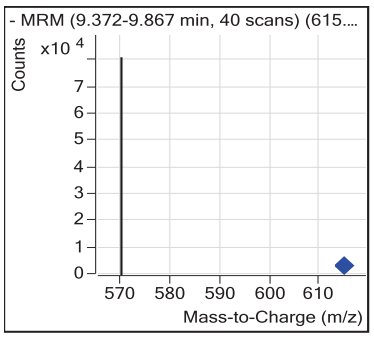




13C2-PFDoDA

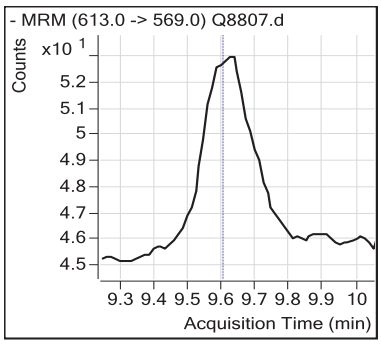


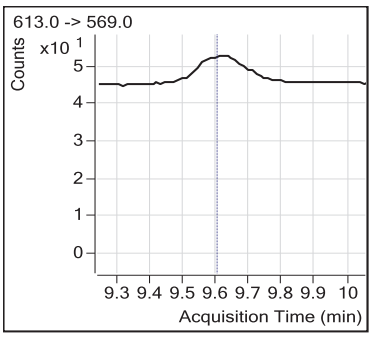


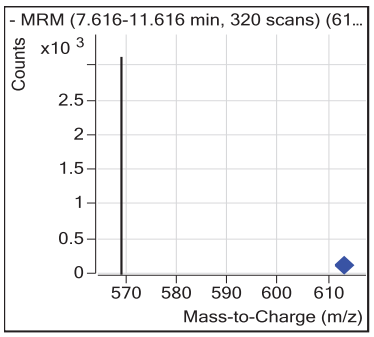


Perfluorinated Compounds by LC/MS/MS.

PFDoDA







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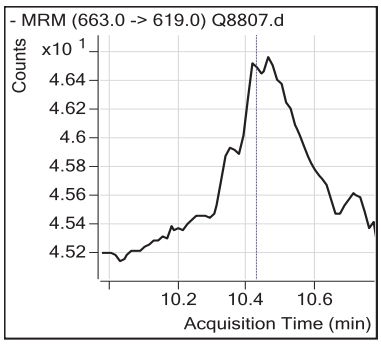
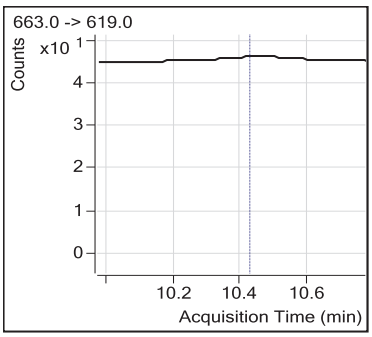
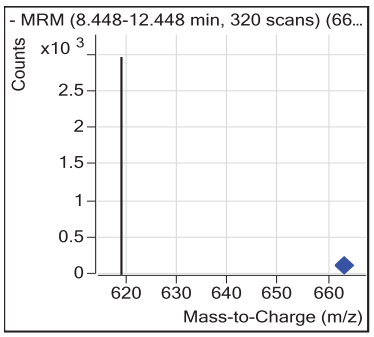
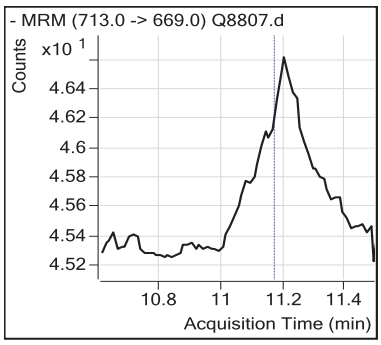
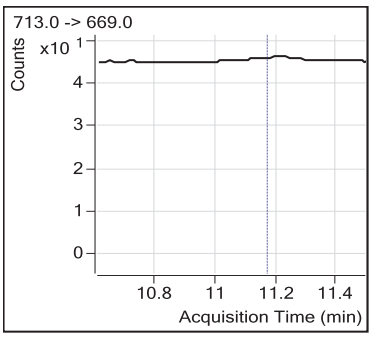


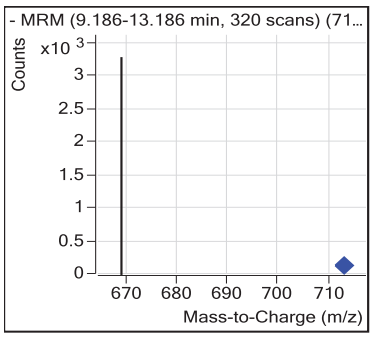




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-12
Lab FileID: Q8807.D
Injection Time: 12/16/14 12:54
Method: EPA 537 MOD
Analyst approved: 12/17/14 13:53 Mike Eger
Supervisor approved: 12/17/14 14:40 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
13C2-PFHxA			4.79	Split peak
Perfluorohexanoic acid	307-24-4		4.80	Split peak
Perfluorooctanoic acid	335-67-1		6.30	Split peak
13C2-PFDA			7.64	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/17/14 14:40

Perfluorinated Compounds by LC/MS/MS.

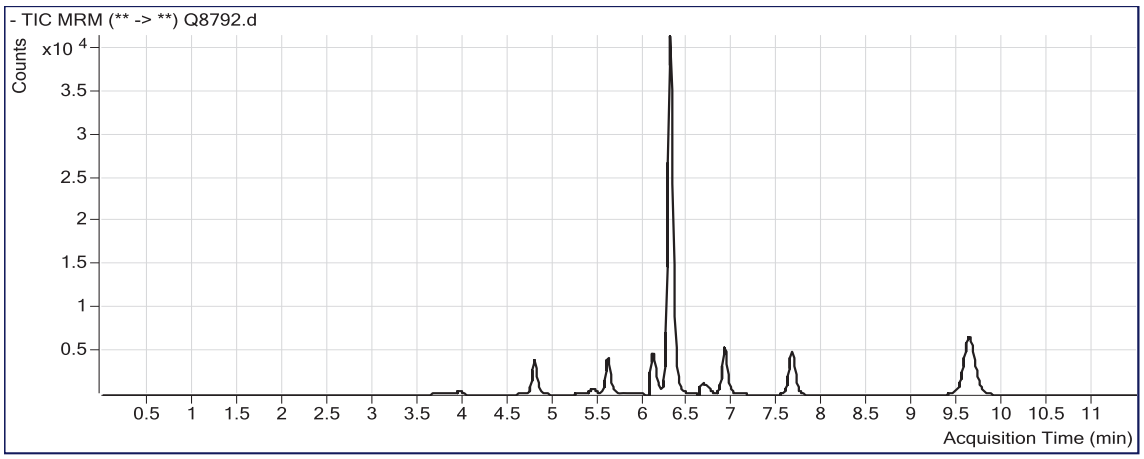
Data File	:	Q8792.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 23:04
Sample Name	:	FA20472-13
Vial	:	Vial 20
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.296	415.0 -> 370.0	28260	20.000	µg/L		-0.013
13C4-PFOS	6.894	503.0 -> 80.0	13776	20.000	µg/L		-0.013
13C2-PFDoDA	9.597	615.0 -> 570.0	60917	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	10396	22.37	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 111.87%				
13C2-PFDA	7.633	515.0 -> 470.0	26580	22.05	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 110.24%				
Target Compounds							**Qvalue**
PFBA	2.639	213.0 -> 169.0	478	1.410	µg/L		100
PFPeA	3.799	263.0 -> 219.0	693	4.090	µg/L		100
PFBS	3.953	299.0 -> 80.0	834	4.095	µg/L		99
PFHxA	4.783	313.0 -> 269.0	5858	12.006	µg/L	m	99
PFHpA	5.597	363.0 -> 319.0	1445	3.052	µg/L		98
PFHxS	5.605	399.0 -> 80.0	11340	34.692	µg/L	m	90
PFOA	6.299	413.0 -> 369.0	115304	80.541	µg/L	m	75
PFOS	6.898	499.0 -> 80.0	12486	18.121	µg/L	m	90

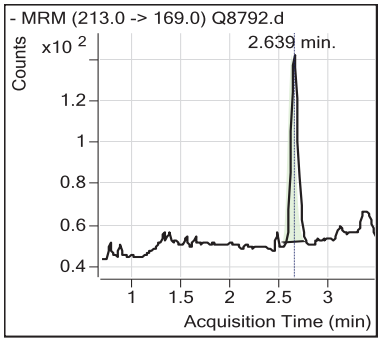
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

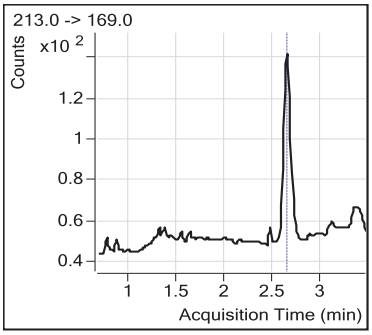
Perfluorinated Compounds by LC/MS/MS.

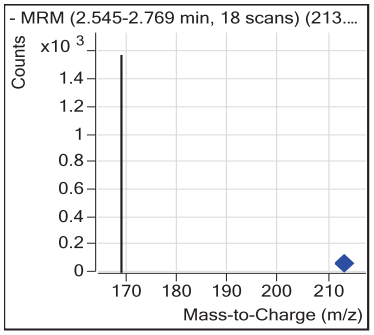
Data File	:	Q8792.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 23:04
Sample Name	:	FA20472-13
Vial	:	Vial 20
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



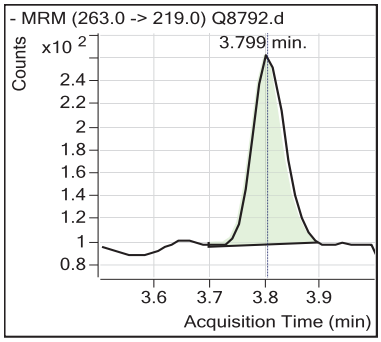
PFBA

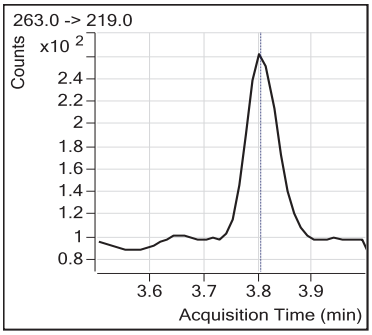


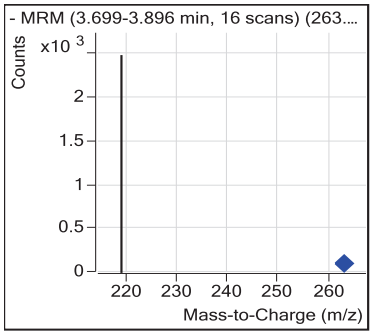




PFPeA

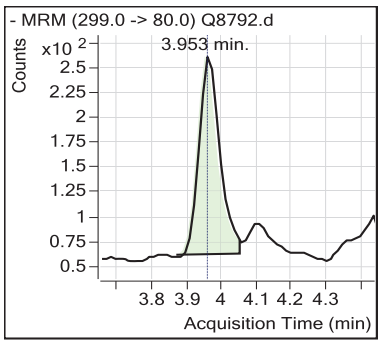


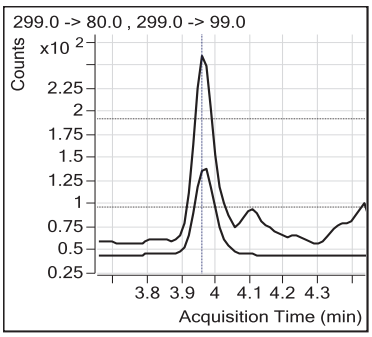


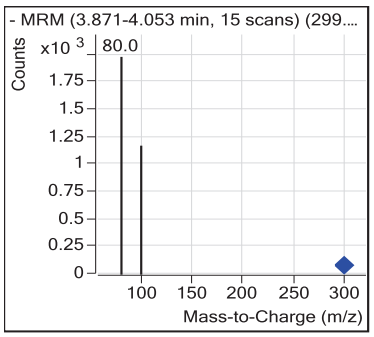


Perfluorinated Compounds by LC/MS/MS.

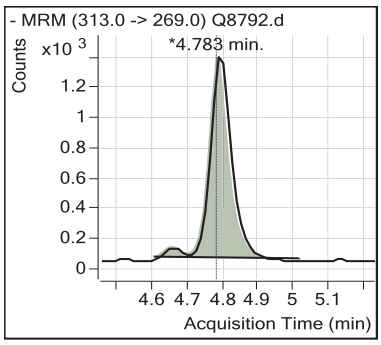
PFBS

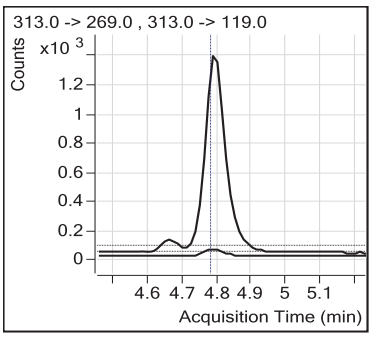


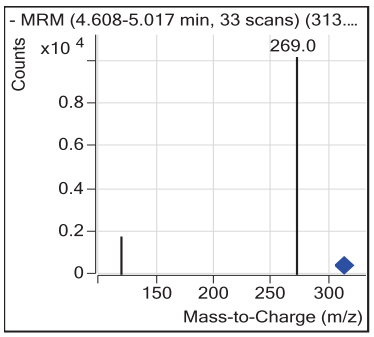




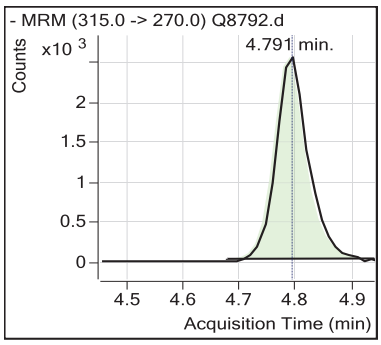
PFHxA

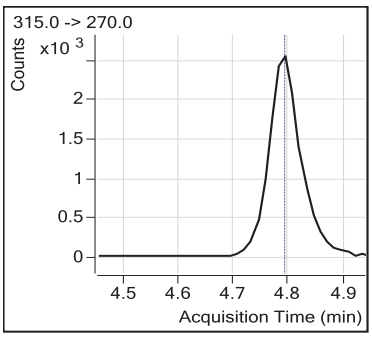


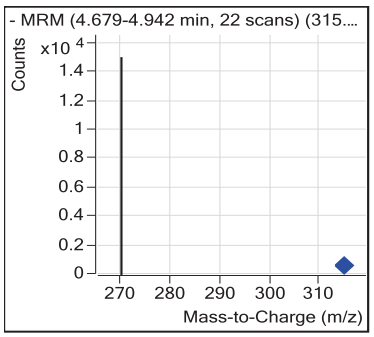




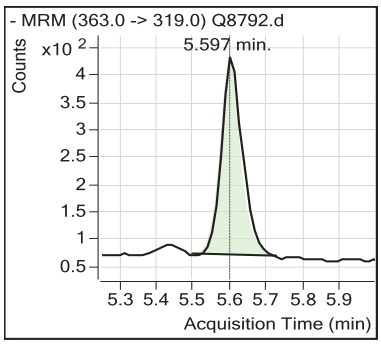
13C2-PFHxA

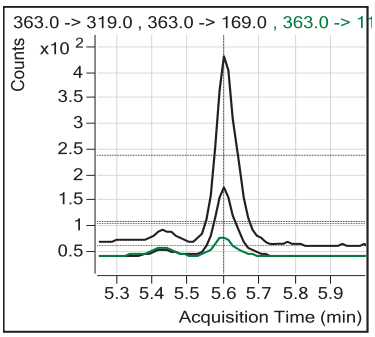


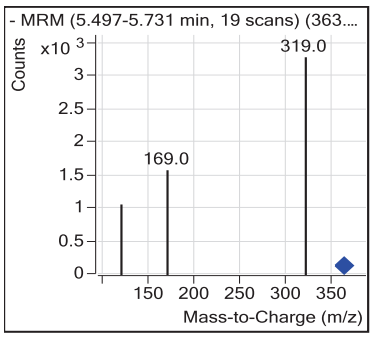




PFHpA

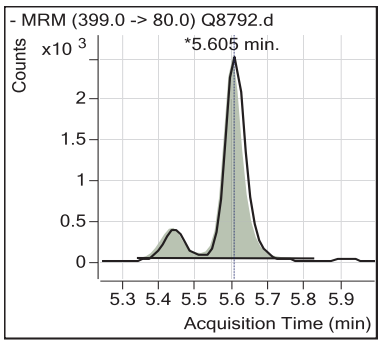


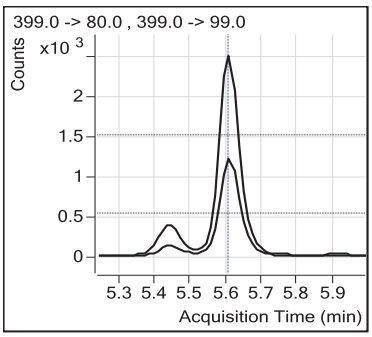


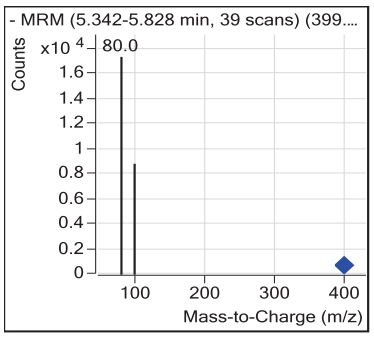


Perfluorinated Compounds by LC/MS/MS.

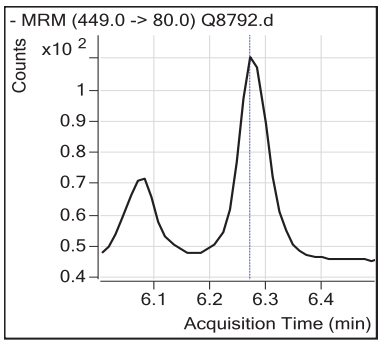
PFHxS

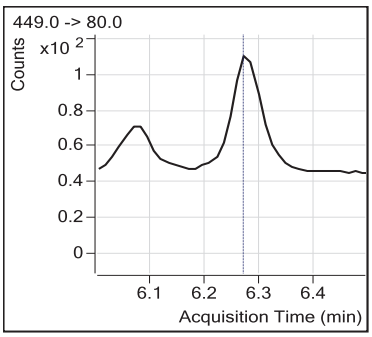


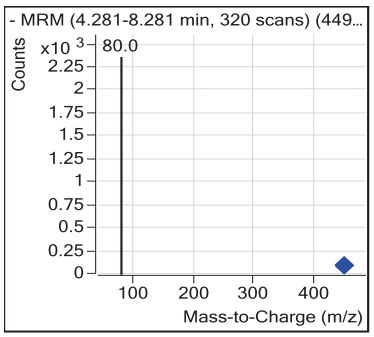




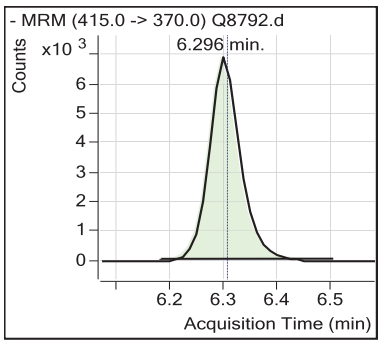
PFHpS

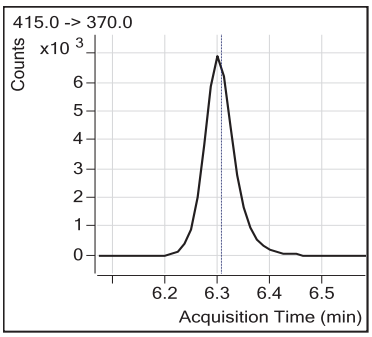


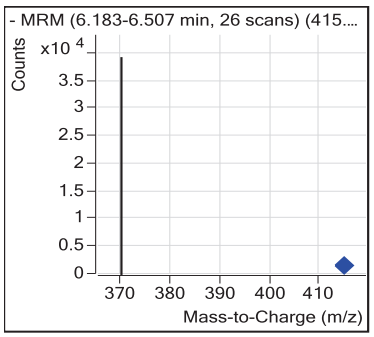




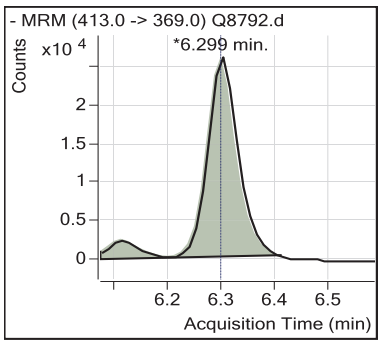
13C2-PFOA

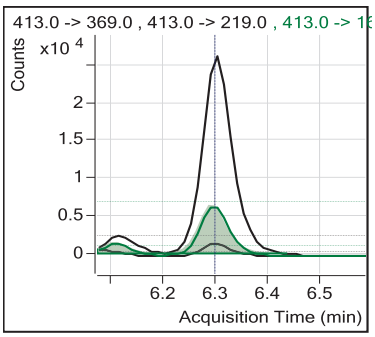


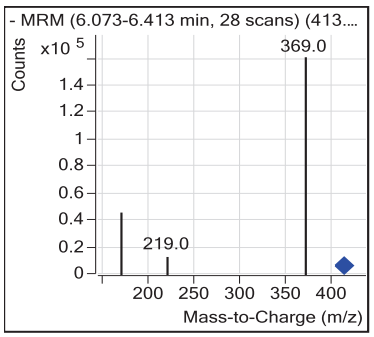




PFOA

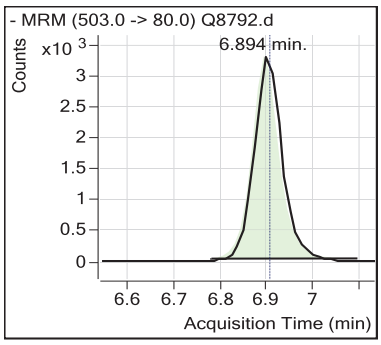


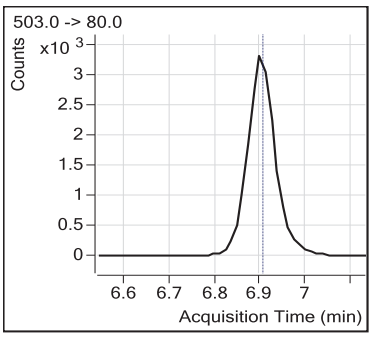


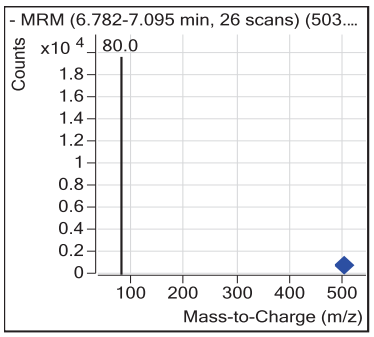


Perfluorinated Compounds by LC/MS/MS.

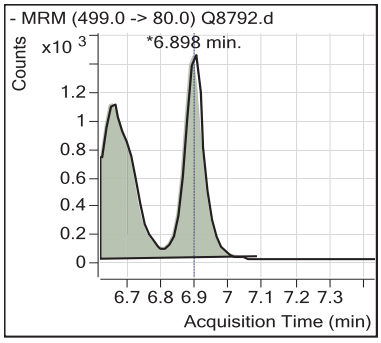
13C4-PFOS

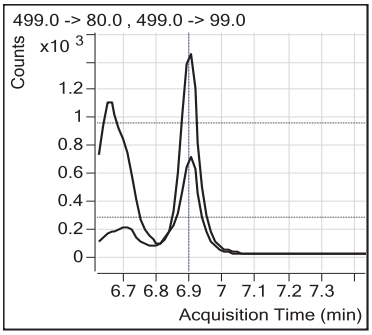


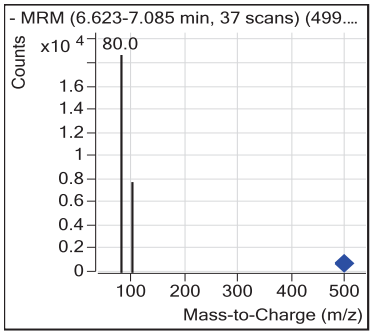




PFOS







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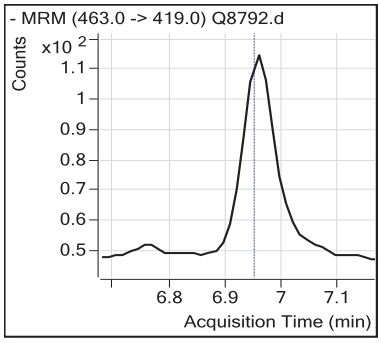
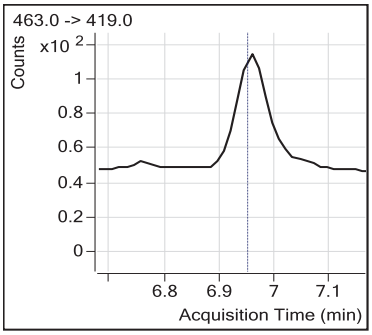
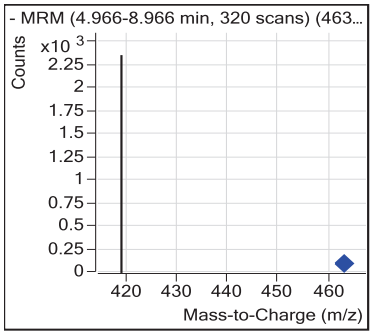
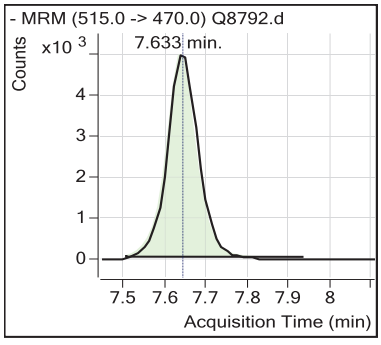
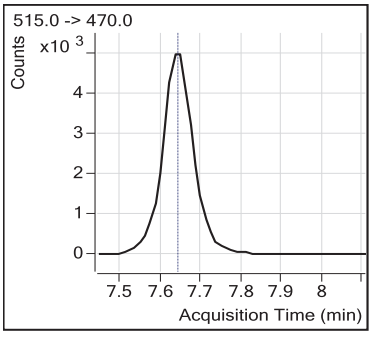


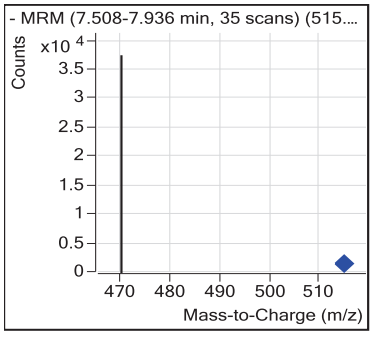




13C2-PFDA

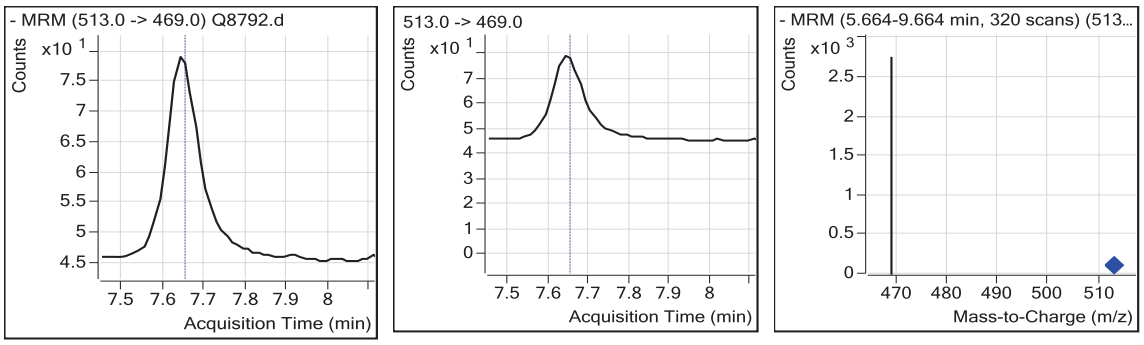




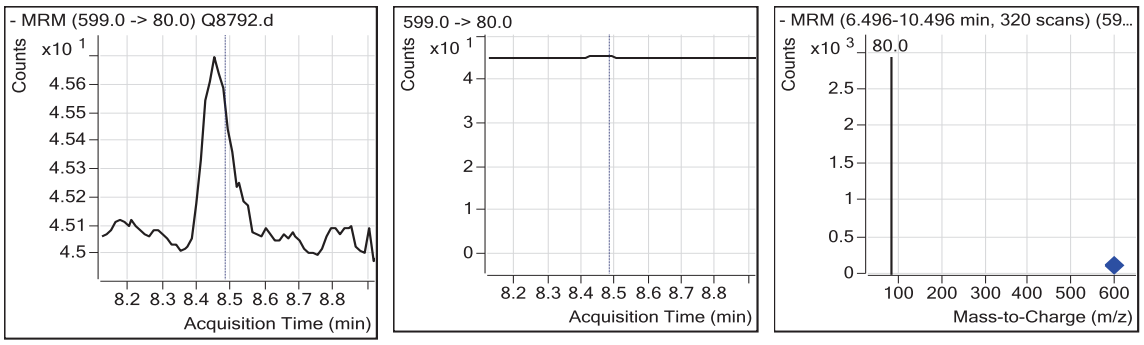


Perfluorinated Compounds by LC/MS/MS.

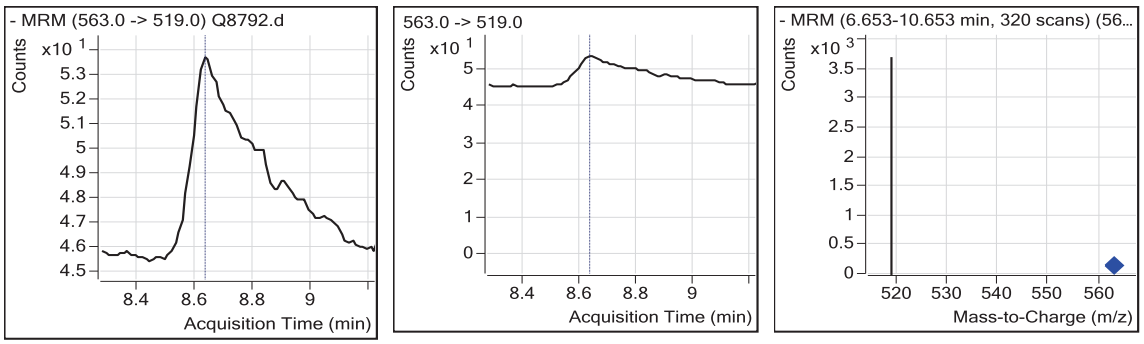
PFDA



PFDS



PFUnDA



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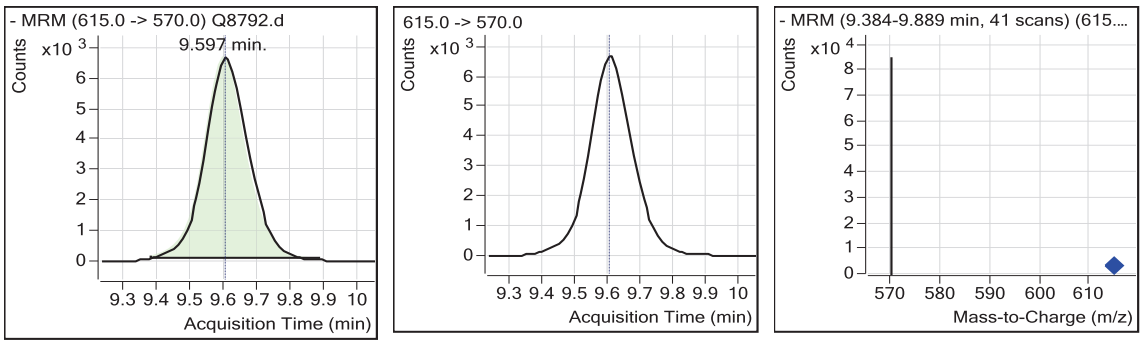
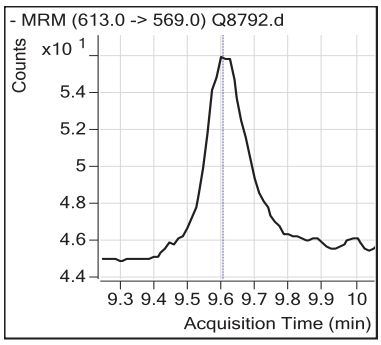
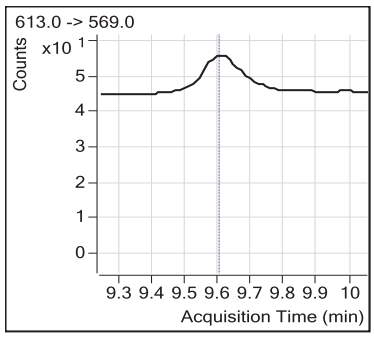
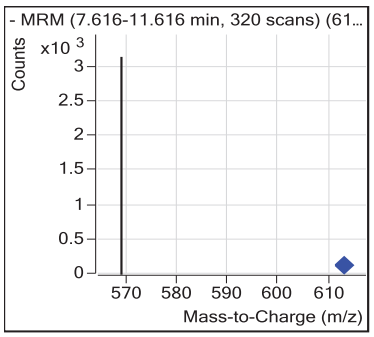


Perfluorinated Compounds by LC/MS/MS.

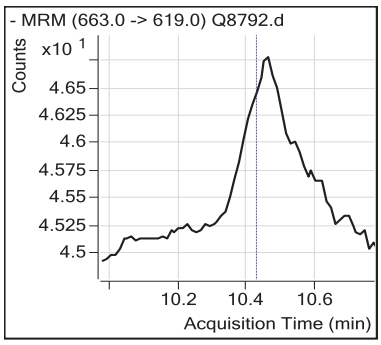
PFDoDA

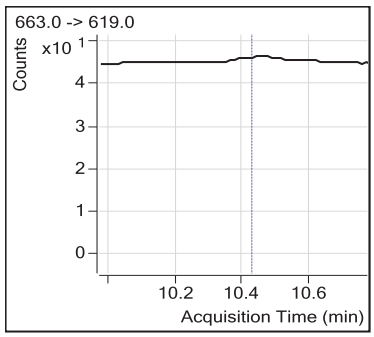


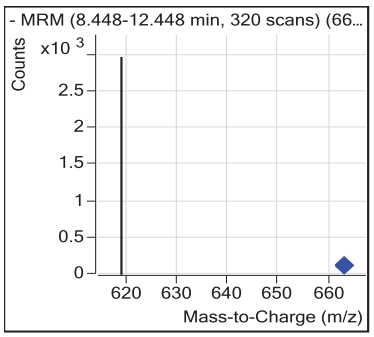




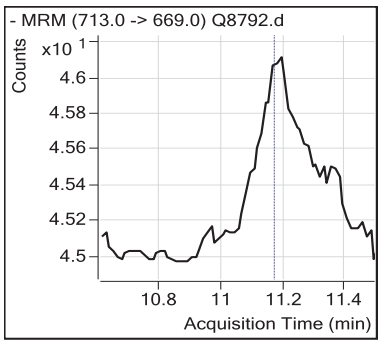
PFTrDA

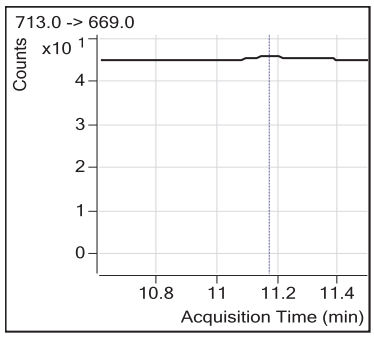


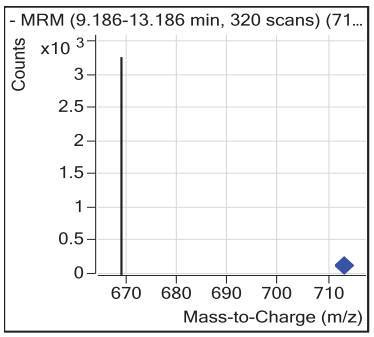




PFTeDA







Manual Integration Approval Summary

Sample Number: FA20472-13
Lab FileID: Q8792.D
Injection Time: 12/15/14 23:04
Method: EPA 537 MOD
Analyst approved: 12/17/14 13:53 Mike Eger
Supervisor approved: 12/17/14 14:40 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanoic acid	307-24-4		4.78	Split peak
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanoic acid	335-67-1		6.30	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/17/14 14:40

Perfluorinated Compounds by LC/MS/MS.

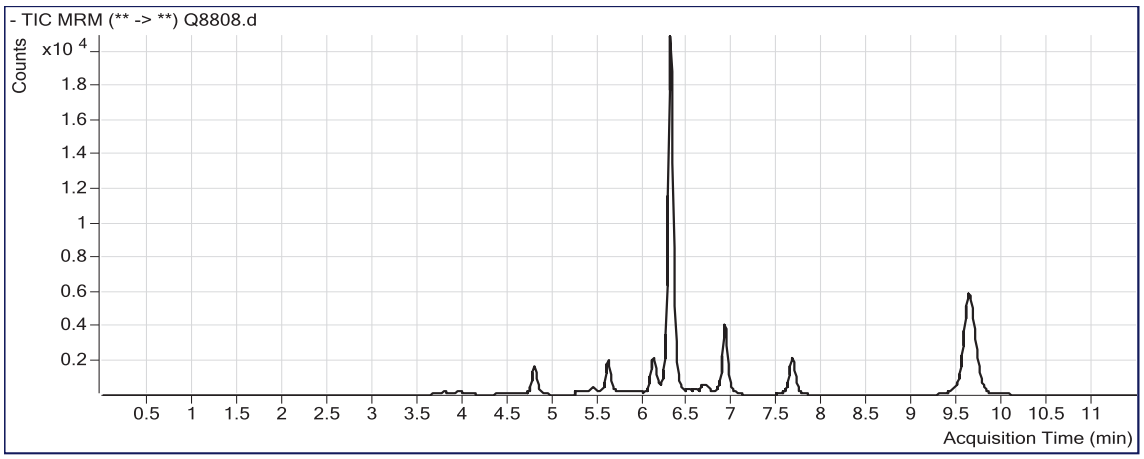
Data File	:	Q8808.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 13:15
Sample Name	:	FA20472-13
Vial	:	Vial 8
Sample Info	:	OP54204,SQ285,120,,,1,2,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.296	415.0 -> 370.0	26613	20.000	µg/L		-0.012
13C4-PFOS	6.895	503.0 -> 80.0	13003	20.000	µg/L		-0.012
13C2-PFDoDA	9.597	615.0 -> 570.0	54802	20.000	µg/L		-0.012
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	4387	10.03	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 50.13%				
13C2-PFDA	7.645	515.0 -> 470.0	11065	9.75	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 48.73%				
Target Compounds							**Qvalue**
PFPeA	3.799	263.0 -> 219.0	321	2.011	µg/L		100
PFBS	3.953	299.0 -> 80.0	447	2.326	µg/L		85
PFHxA	4.783	313.0 -> 269.0	2413	5.250	µg/L		99
PFHpA	5.597	363.0 -> 319.0	736	1.652	µg/L	m	96
PFHxS	5.605	399.0 -> 80.0	4947	16.036	µg/L	m	89
PFOA	6.299	413.0 -> 369.0	50576	37.515	µg/L	m	75
PFOS	6.898	499.0 -> 80.0	5394	8.294	µg/L	m	92

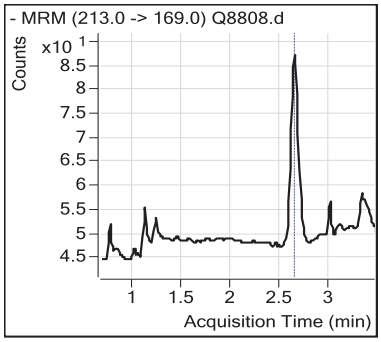
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

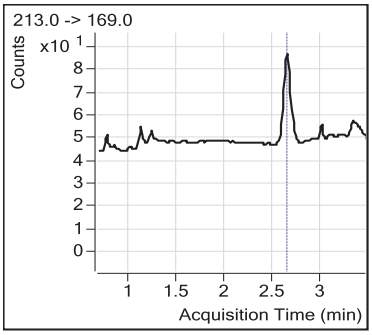
Perfluorinated Compounds by LC/MS/MS.

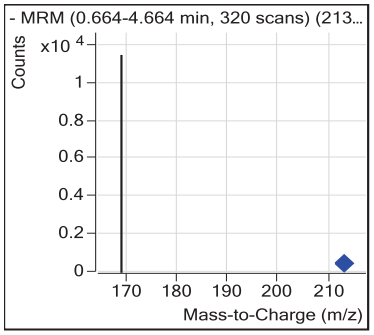
Data File	:	Q8808.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 13:15
Sample Name	:	FA20472-13
Vial	:	Vial 8
Sample Info	:	OP54204,SQ285,120,,,1,2,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24



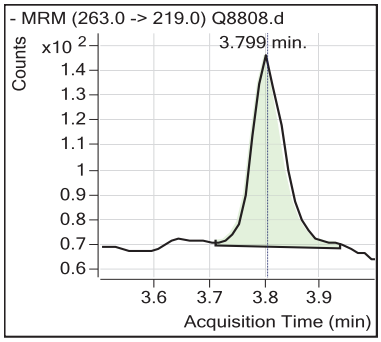
PFBA

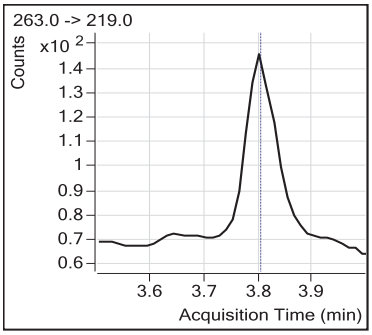


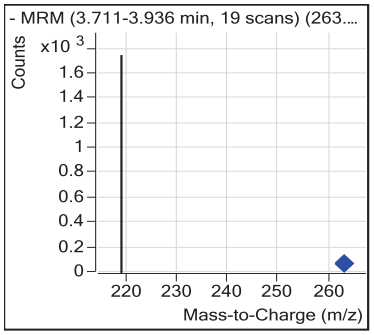




PFPeA

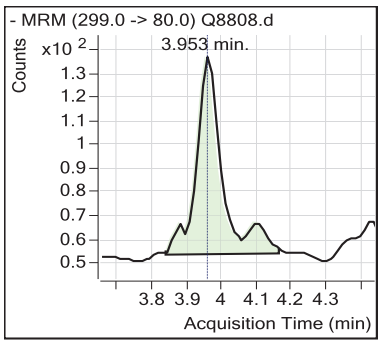


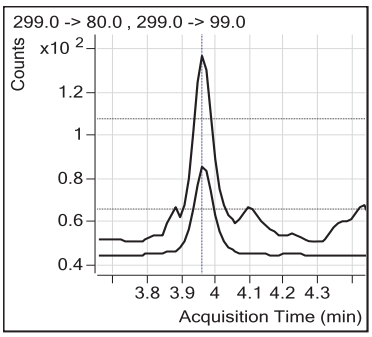


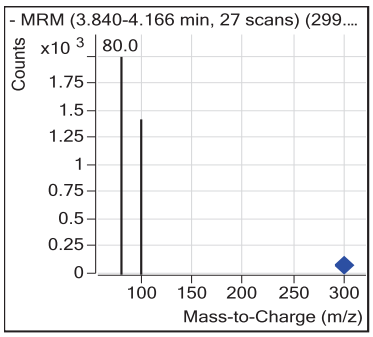


Perfluorinated Compounds by LC/MS/MS.

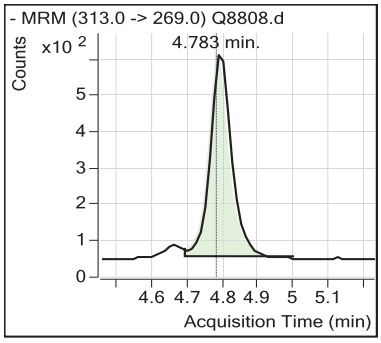
PFBS

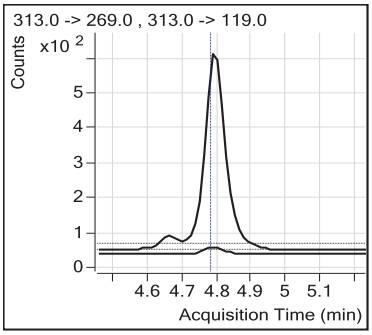


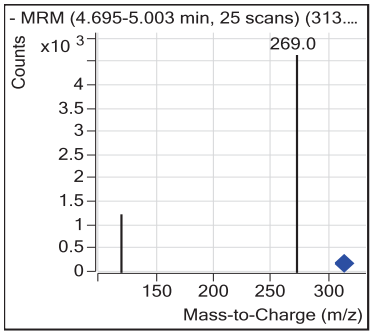




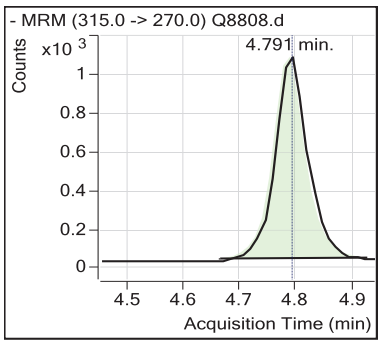
PFHxA

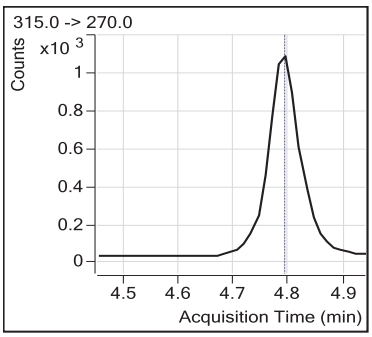


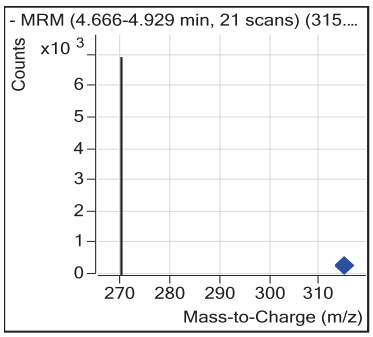




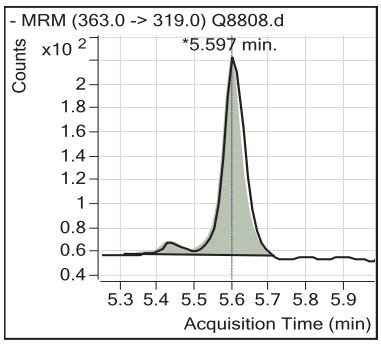
13C2-PFHxA

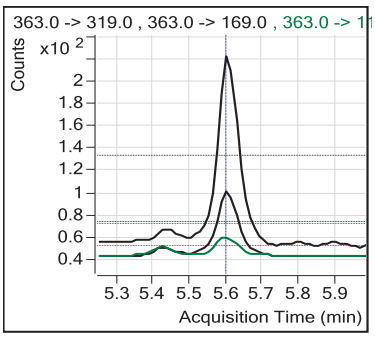


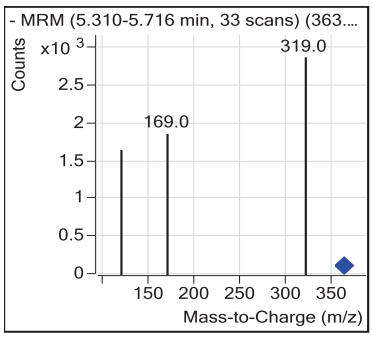




PFHpA





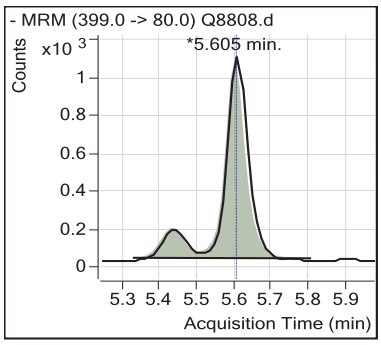


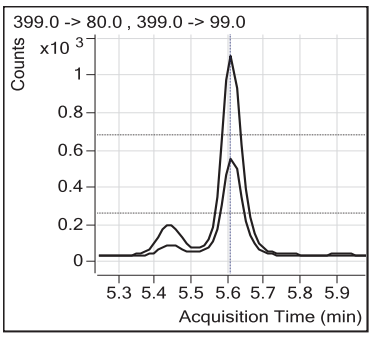
7.1.16

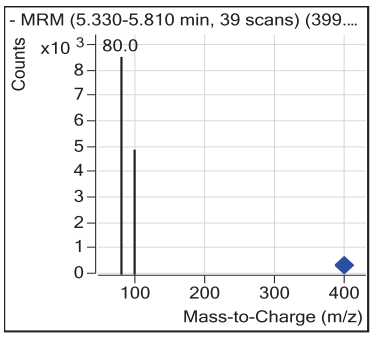
7

Perfluorinated Compounds by LC/MS/MS.

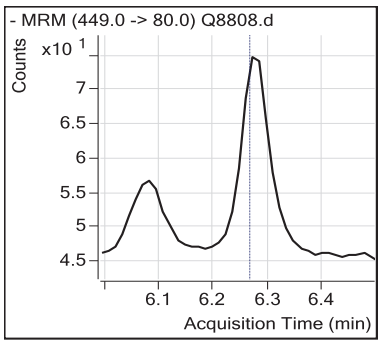
PFHxS

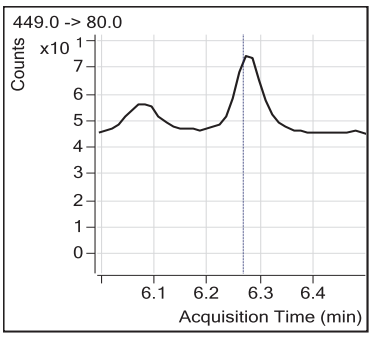


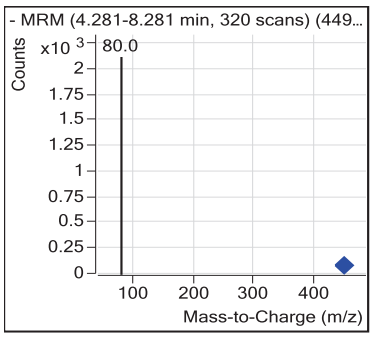




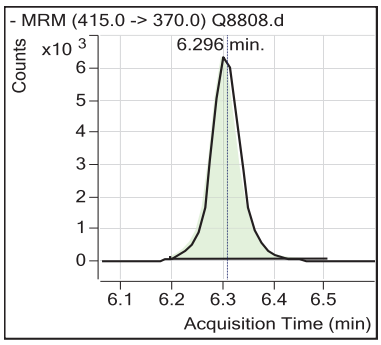
PFHpS

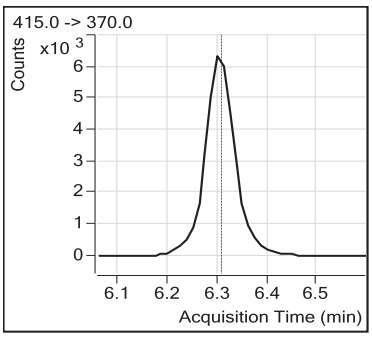


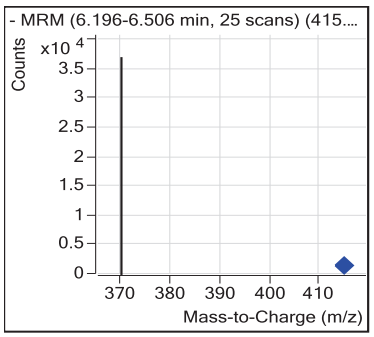




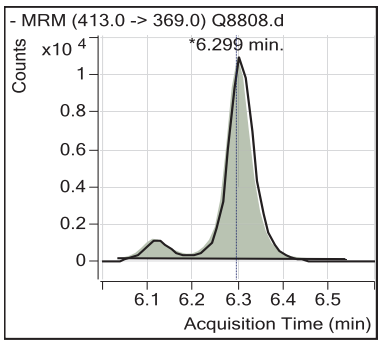
13C2-PFOA

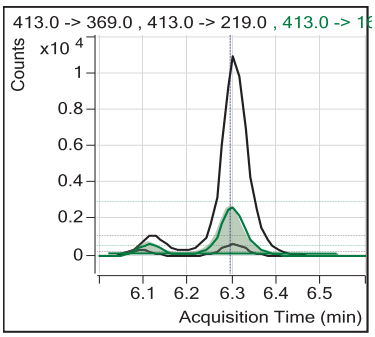


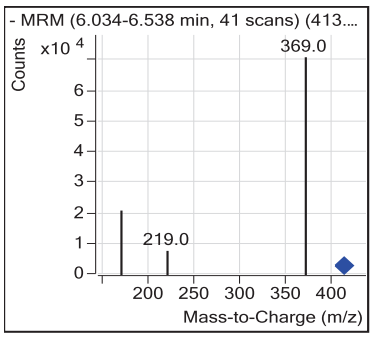




PFOA





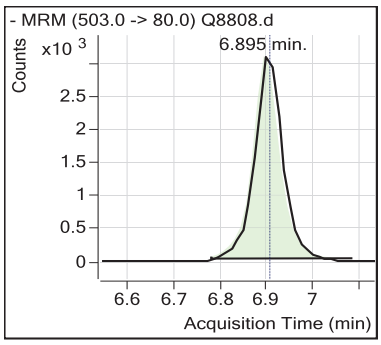


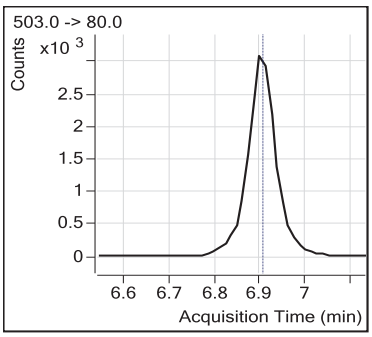
7.1.16

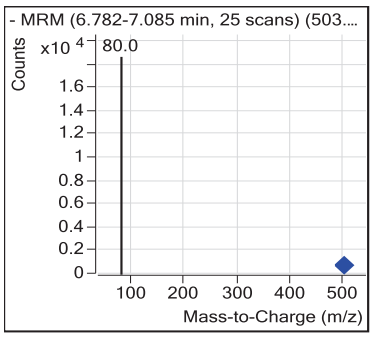
7

Perfluorinated Compounds by LC/MS/MS.

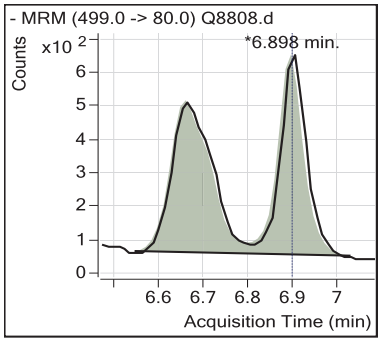
13C4-PFOS

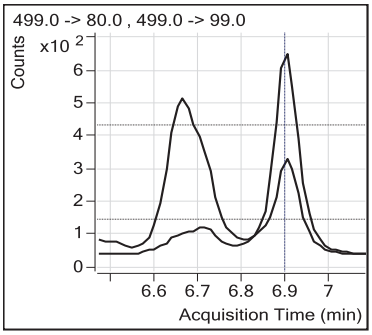


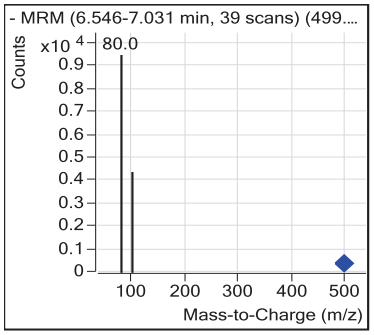




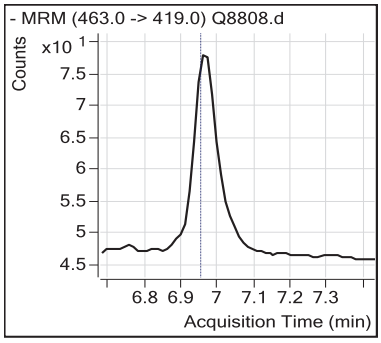
PFOS

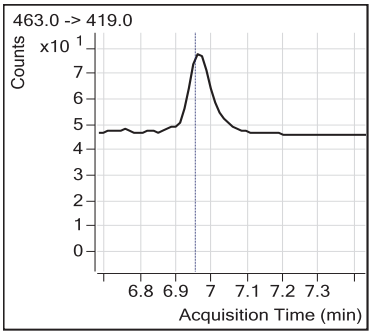


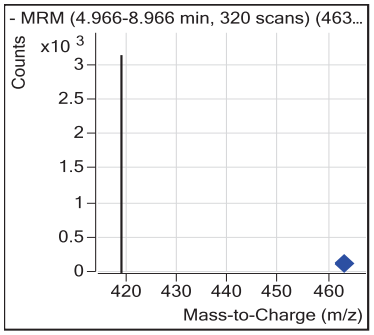




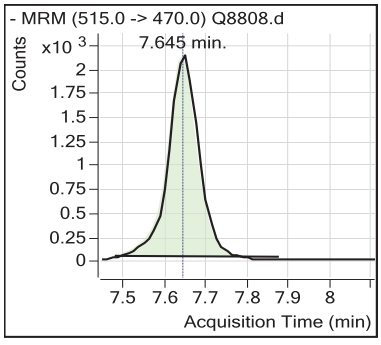
PFNA

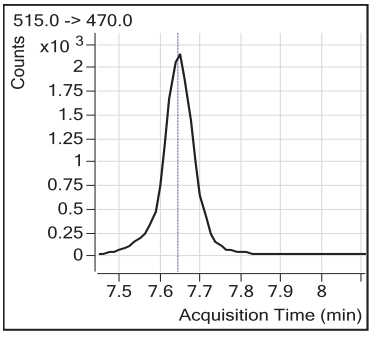


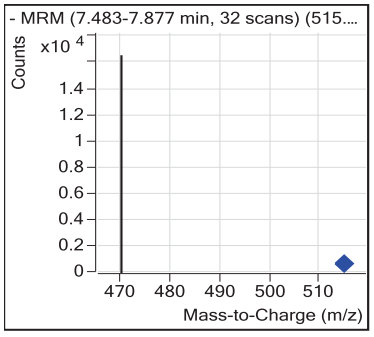




13C2-PFDA

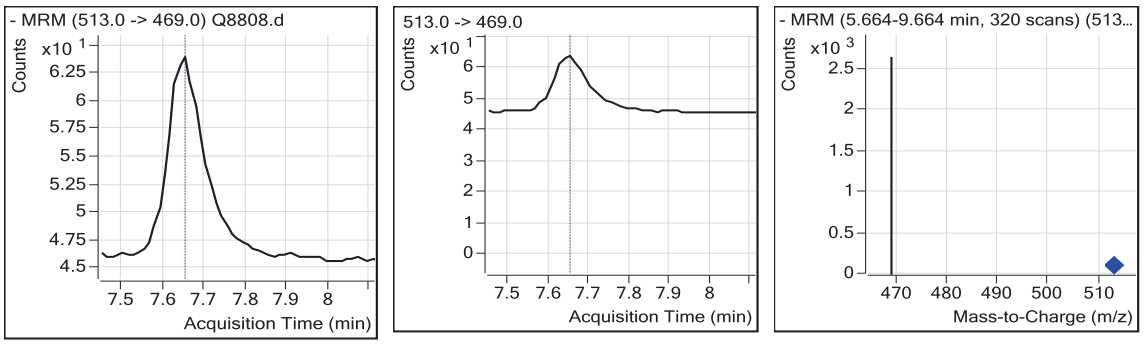






Perfluorinated Compounds by LC/MS/MS.

PFDA



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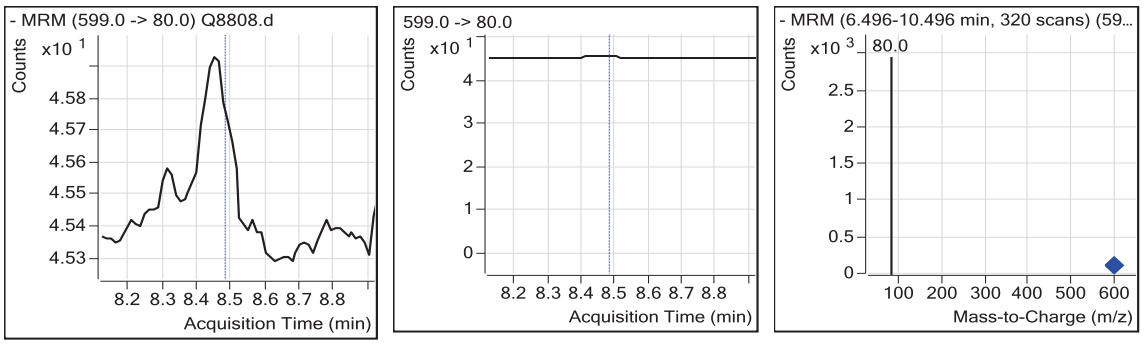
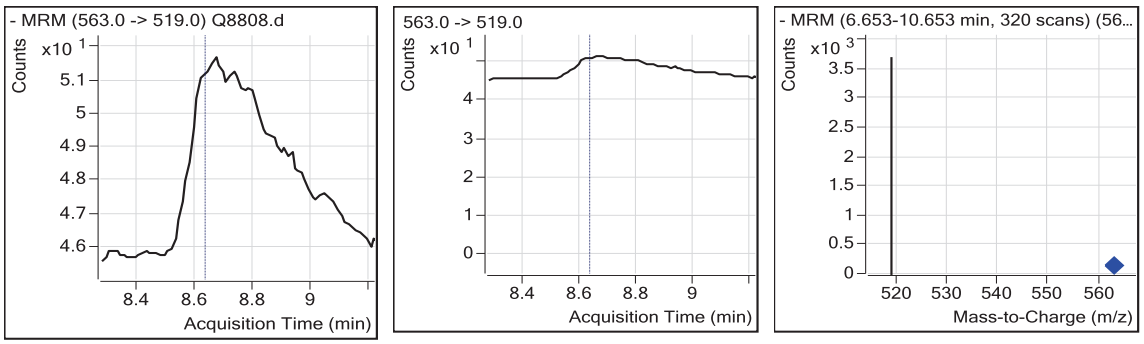
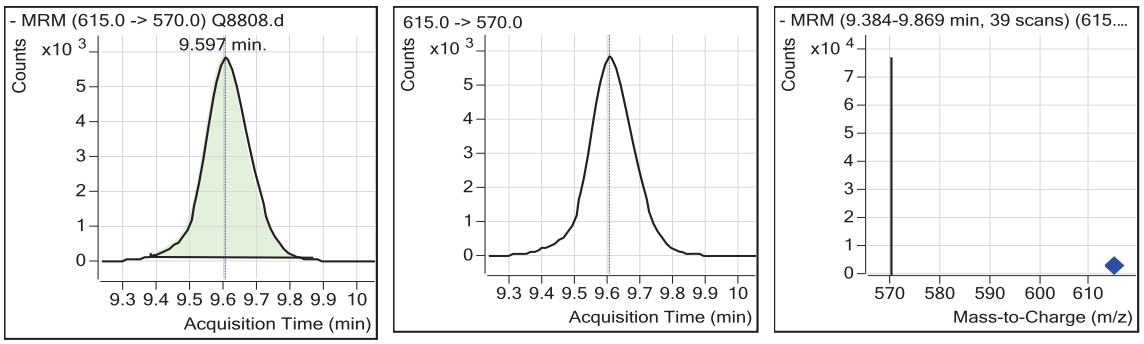


PFUnDA



13C2-PFDoDA

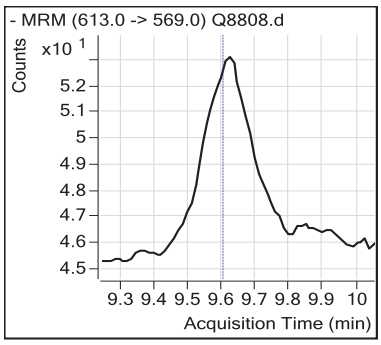


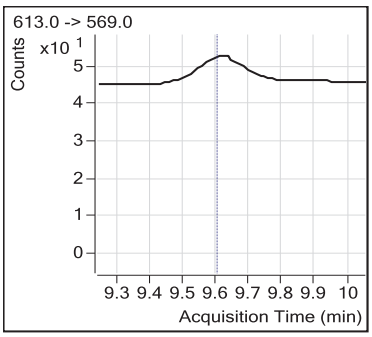
7.1.16

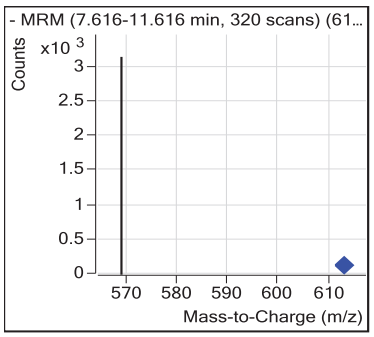
7

Perfluorinated Compounds by LC/MS/MS.

PFDoDA







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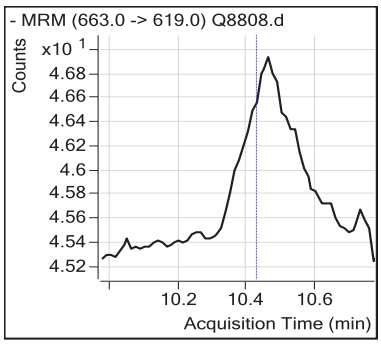

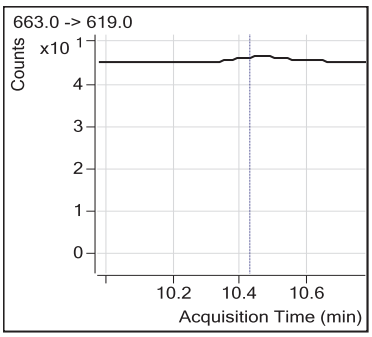

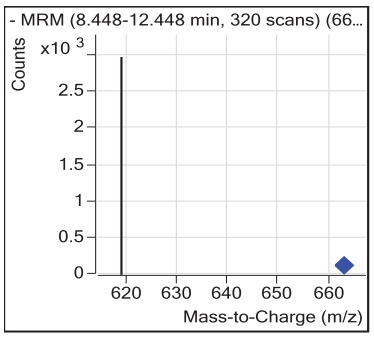

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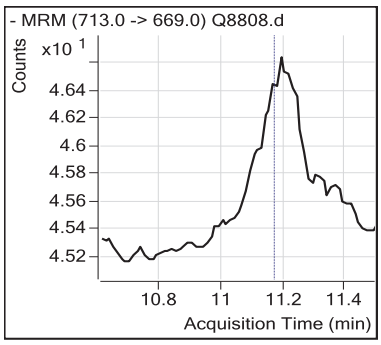
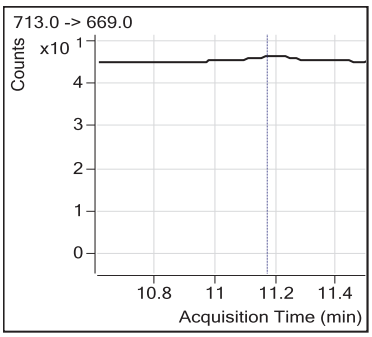
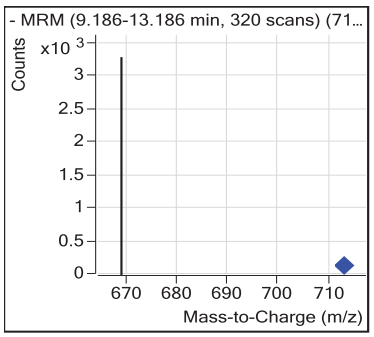






Manual Integration Approval Summary

Sample Number: FA20472-13
Lab FileID: Q8808.D
Injection Time: 12/16/14 13:15
Method: EPA 537 MOD
Analyst approved: 12/17/14 13:53 Mike Eger
Supervisor approved: 12/17/14 14:40 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluoroheptanoic acid	375-85-9		5.60	Split peak
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanoic acid	335-67-1		6.30	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Perfluorinated Compounds by LC/MS/MS.

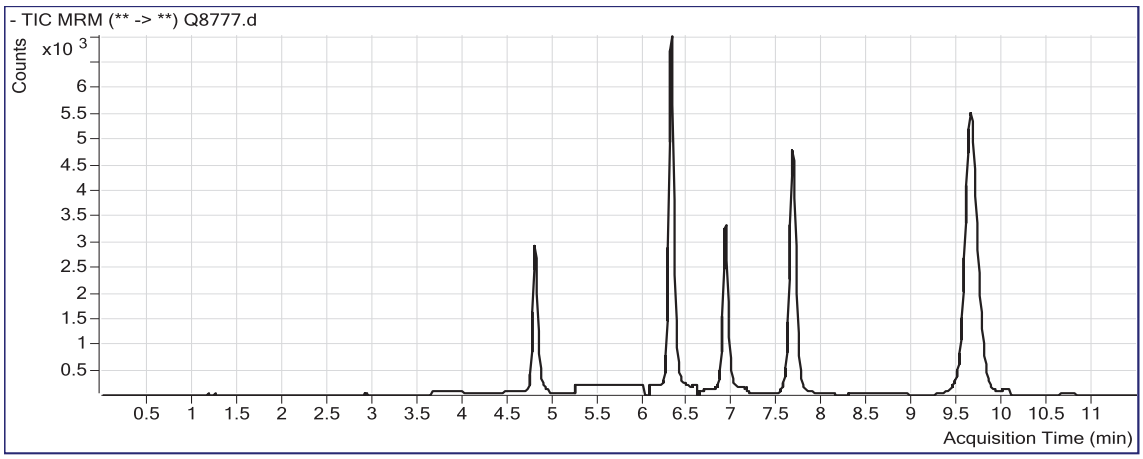
Data File	:	Q8777.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 17:53
Sample Name	:	OP54204-MB
Vial	:	Vial 8
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	27483	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	13252	20.000	µg/L	0.000
13C2-PFDoDA	9.622	615.0 -> 570.0	53360	20.000	µg/L	0.012
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	11357	25.13	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 125.66%			
13C2-PFDA	7.645	515.0 -> 470.0	25113	21.42	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 107.10%			
Target Compounds						**Qvalue**
PFOA	6.299	413.0 -> 369.0	304	0.218	µg/L	69

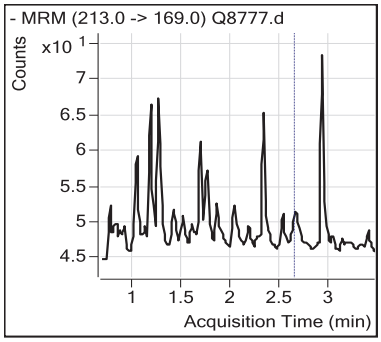
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

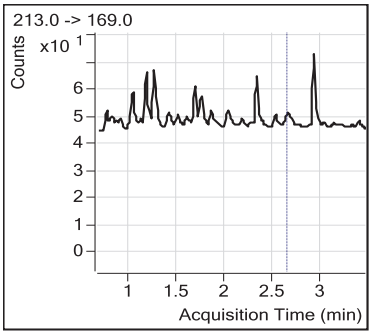
Perfluorinated Compounds by LC/MS/MS.

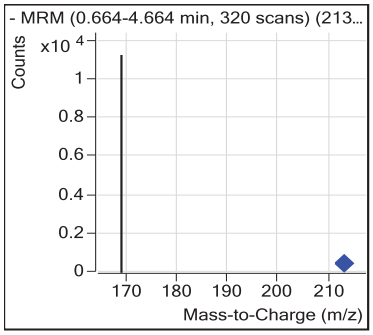
Data File	:	Q8777.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 17:53
Sample Name	:	OP54204-MB
Vial	:	Vial 8
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



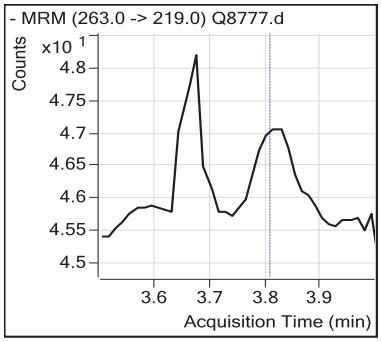
PFBA

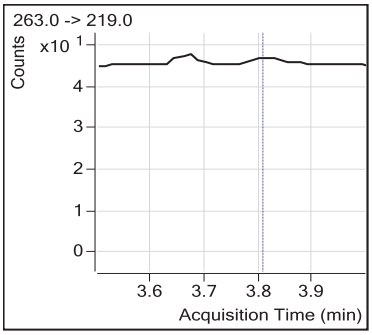


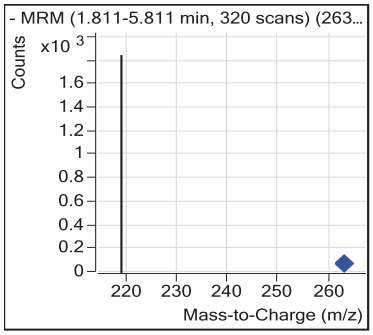




PFPeA

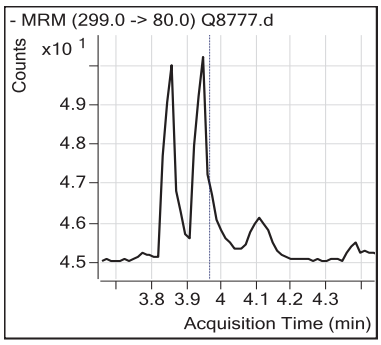


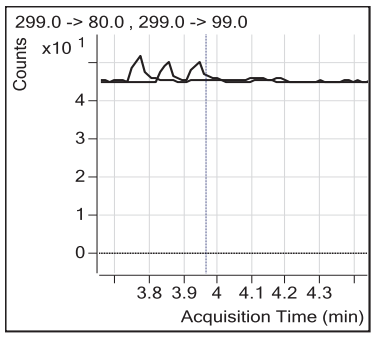


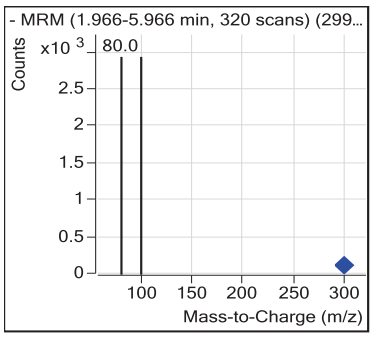


Perfluorinated Compounds by LC/MS/MS.

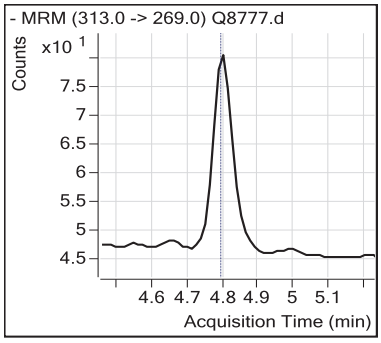
PFBS

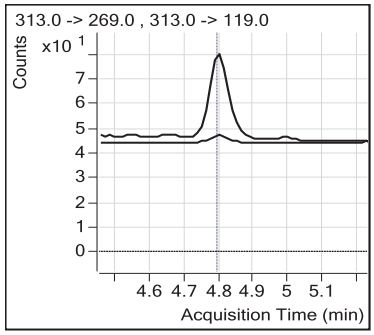


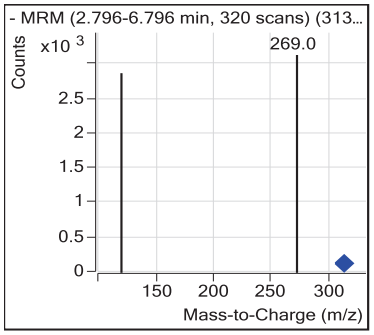




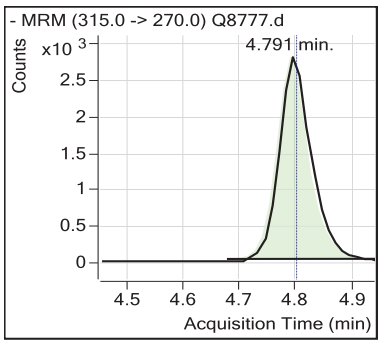
PFHxA

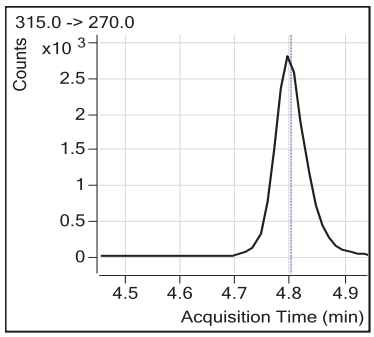


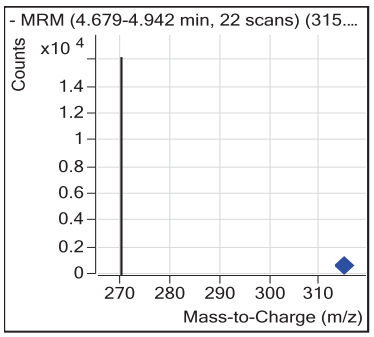




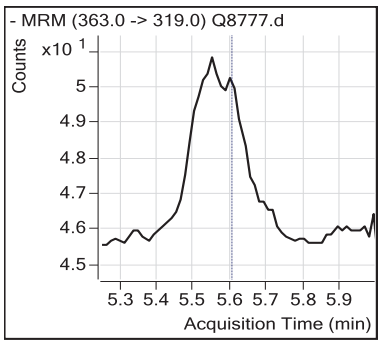
13C2-PFHxA

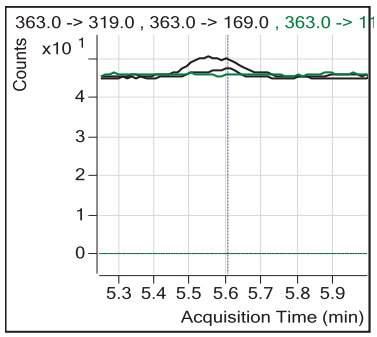


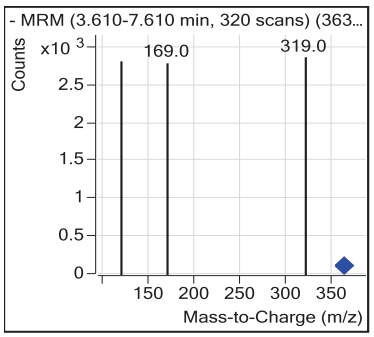




PFHpA

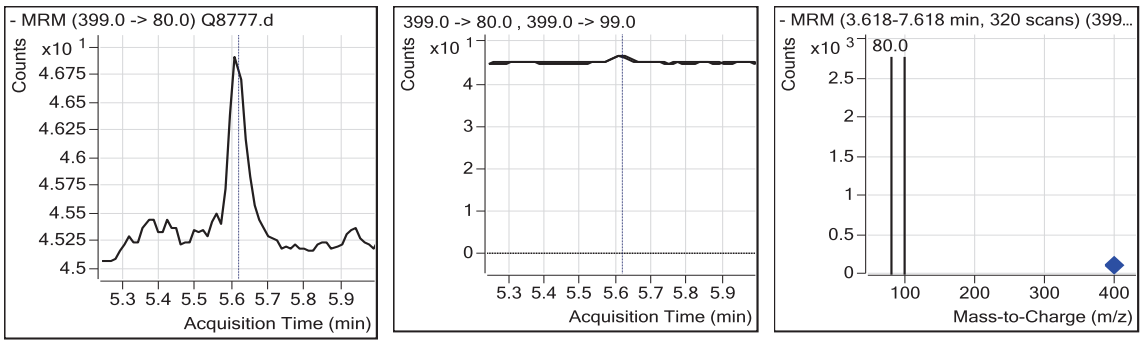






Perfluorinated Compounds by LC/MS/MS.

PFHxS



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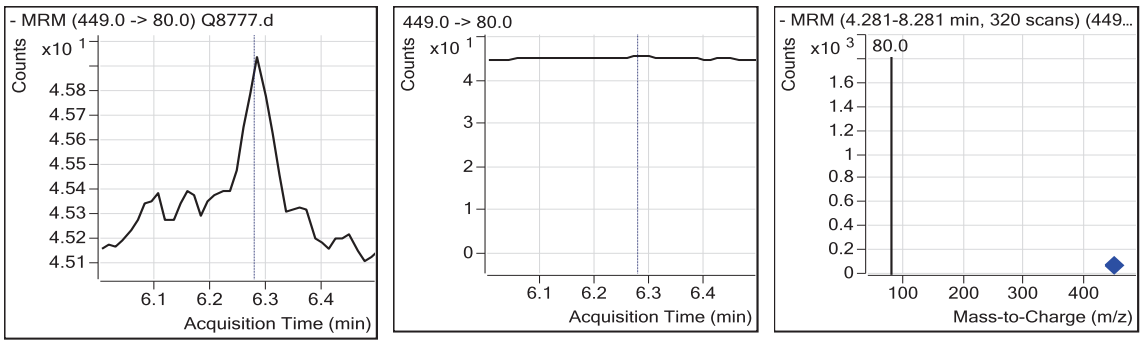

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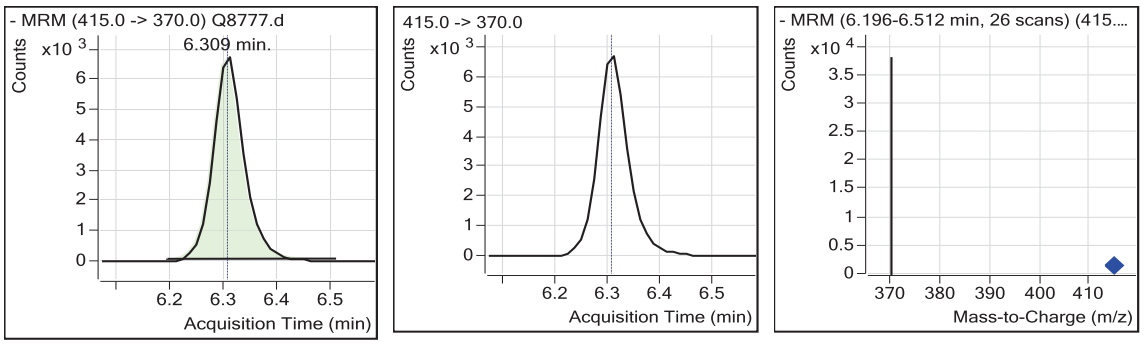
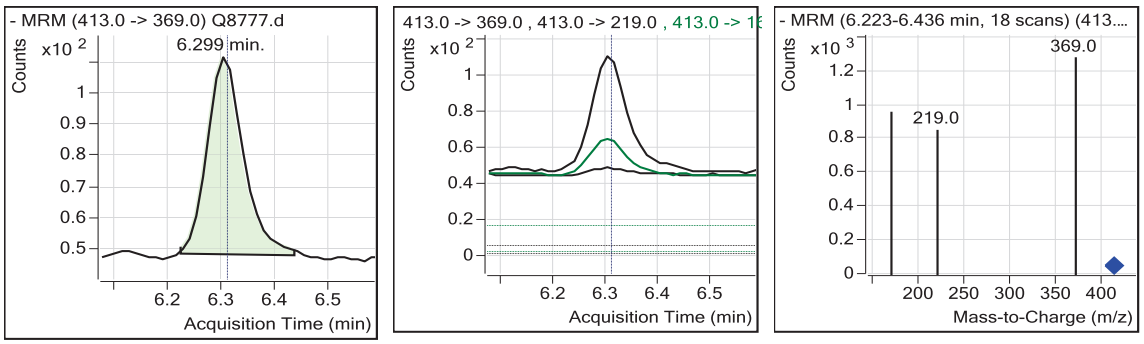
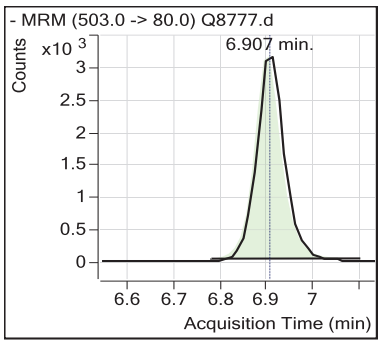


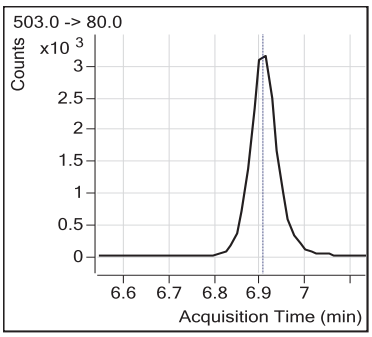
PFOA

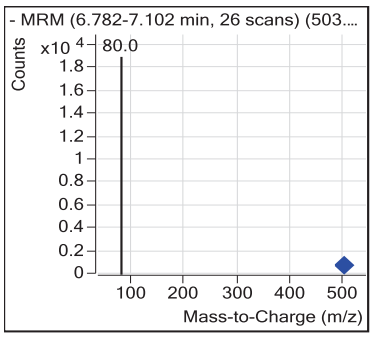


Perfluorinated Compounds by LC/MS/MS.

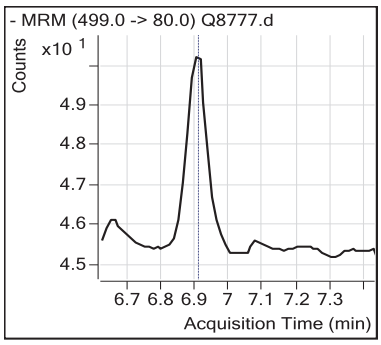
13C4-PFOS

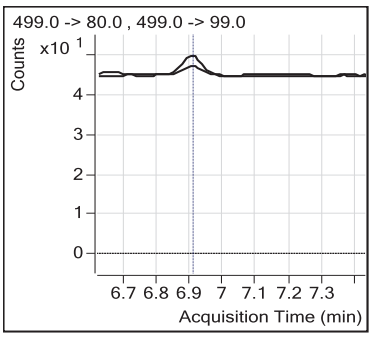


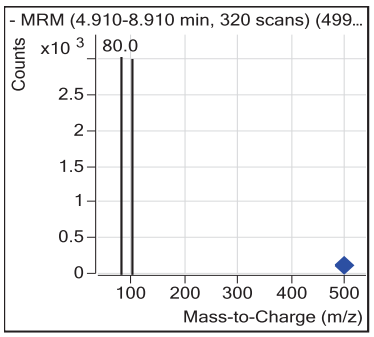




PFOS







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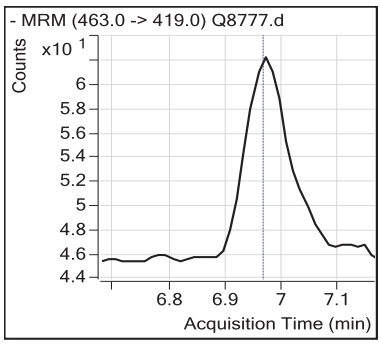
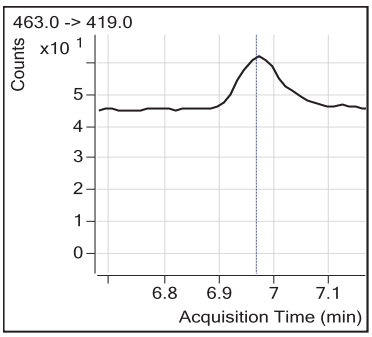
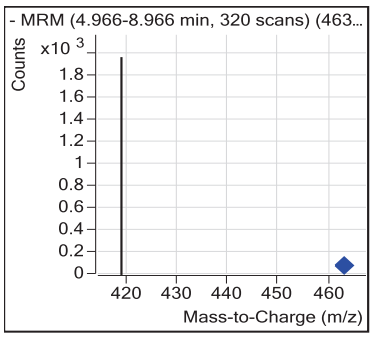
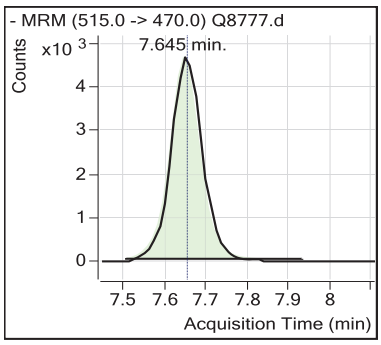
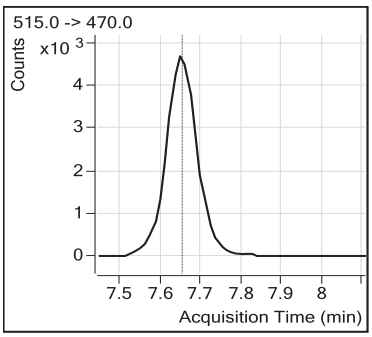


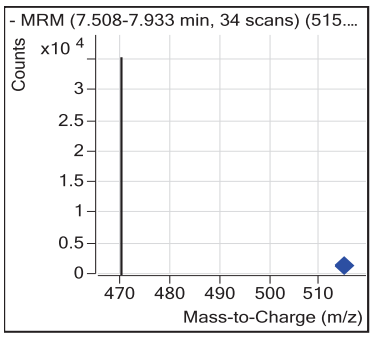




13C2-PFDA

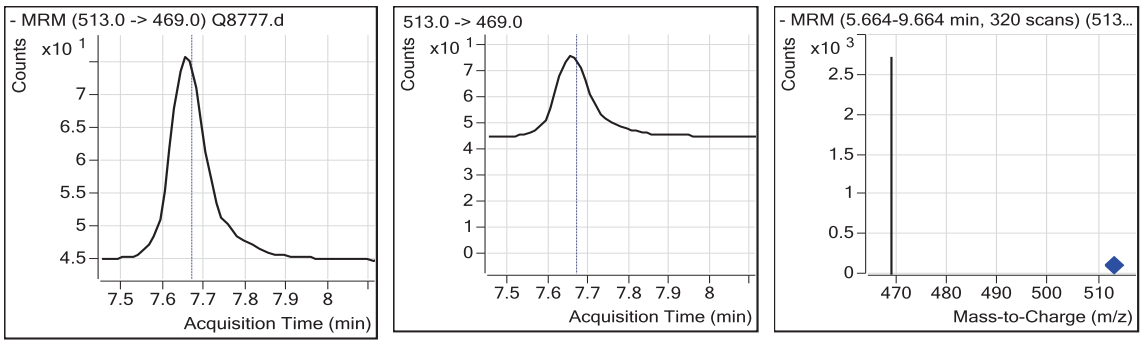




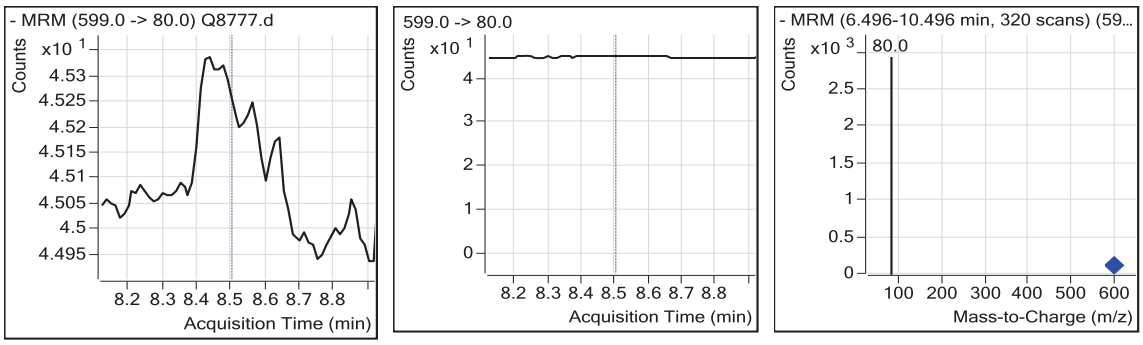


Perfluorinated Compounds by LC/MS/MS.

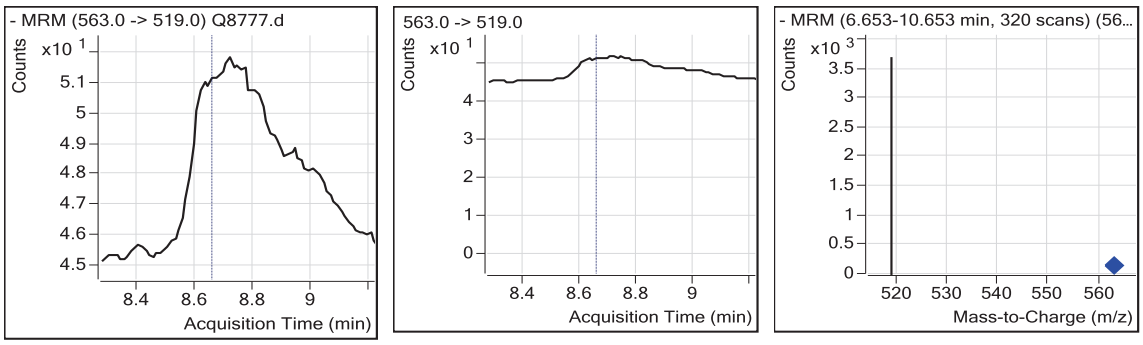
PFDA



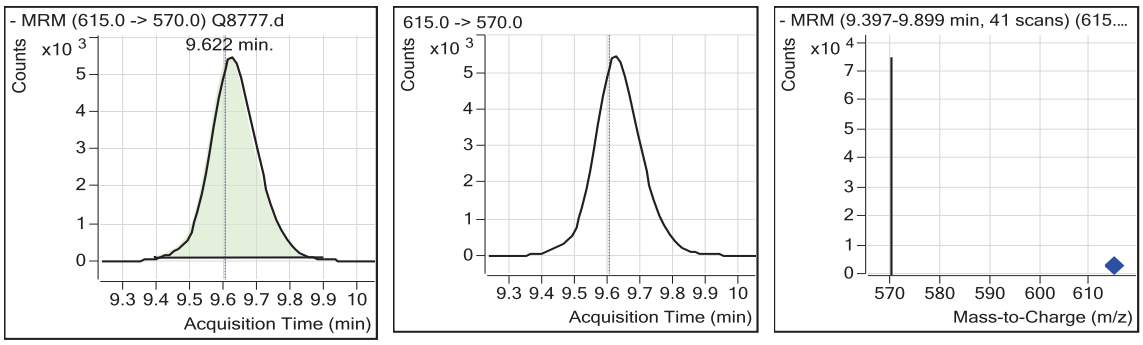
PFDS



PFUnDA

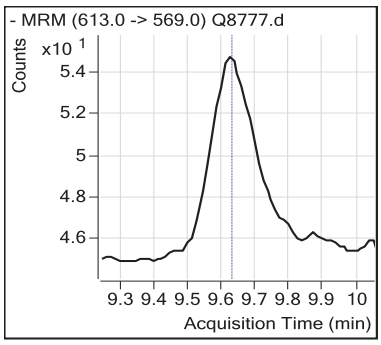


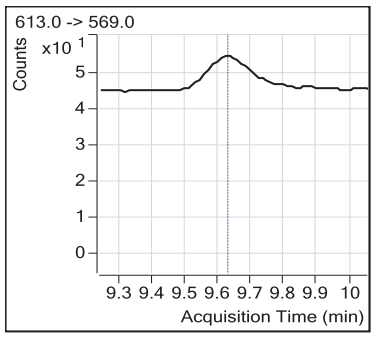
13C2-PFDoDA

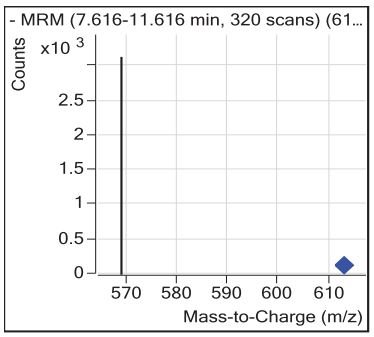


Perfluorinated Compounds by LC/MS/MS.

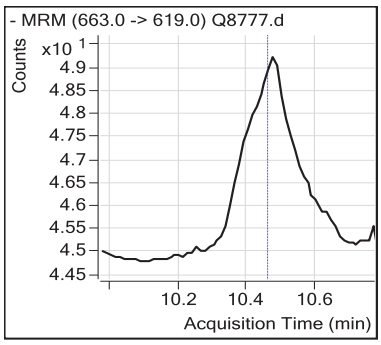
PFDoDA

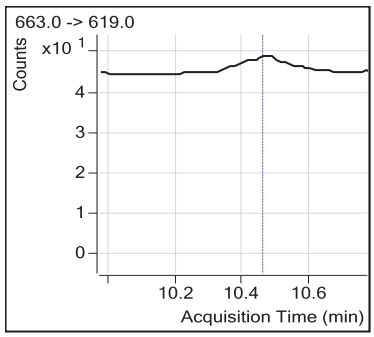


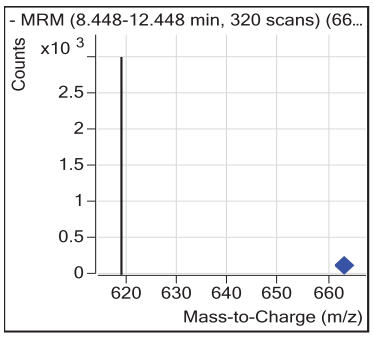




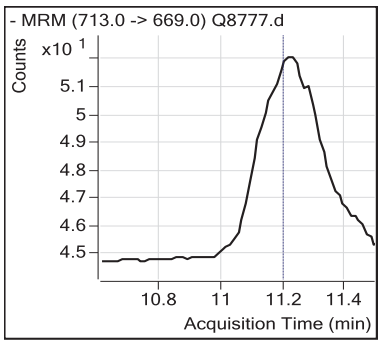
PFTrDA

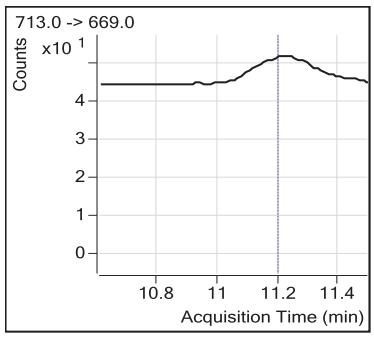


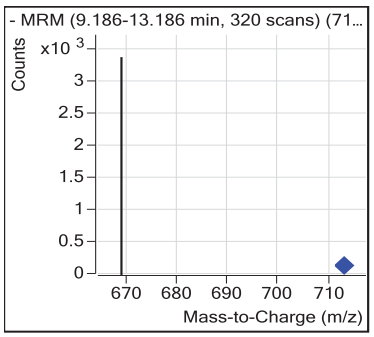




PFTeDA







Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/16/14 10:17

Perfluorinated Compounds by LC/MS/MS.

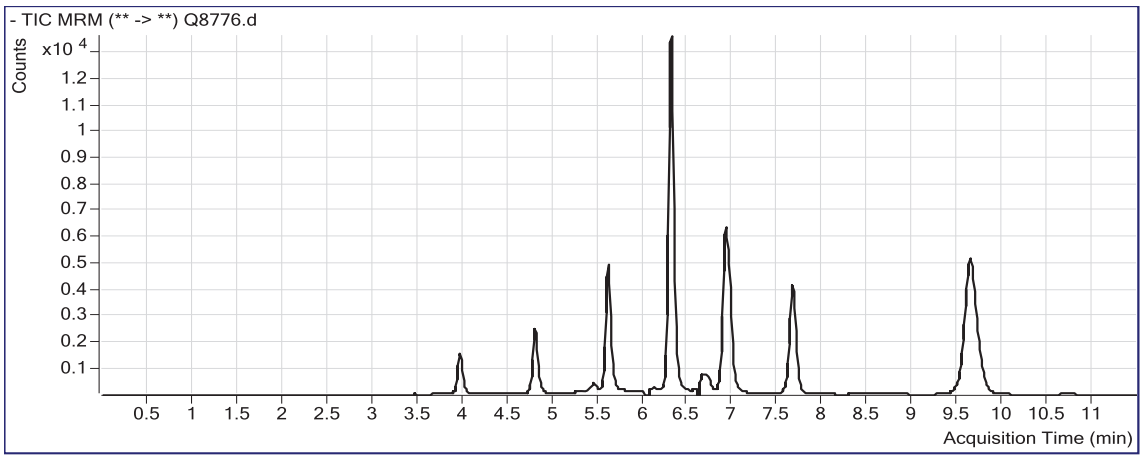
Data File	:	Q8776.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 17:33
Sample Name	:	OP54204-BS
Vial	:	Vial 7
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.309	415.0 -> 370.0	24201	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	11622	20.000	µg/L		0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	49693	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	9736	24.47	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 122.34%				
13C2-PFDA	7.645	515.0 -> 470.0	21495	20.82	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 104.10%				
Target Compounds							**Qvalue**
PFBS	3.966	299.0 -> 80.0	4115	23.968	µg/L		97
PFHxS	5.605	399.0 -> 80.0	6285	22.790	µg/L	m	88
PFHpA	5.610	363.0 -> 319.0	7796	19.233	µg/L		99
PFOA	6.311	413.0 -> 369.0	24252	19.782	µg/L		82
PFOS	6.898	499.0 -> 80.0	10739	18.475	µg/L	m	95
PFNA	6.954	463.0 -> 419.0	13710	18.809	µg/L		100

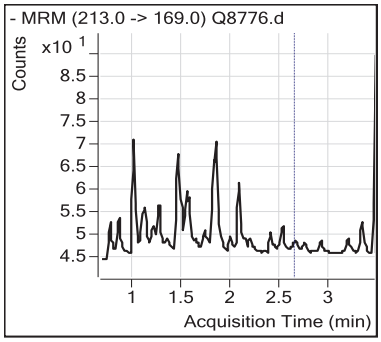
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

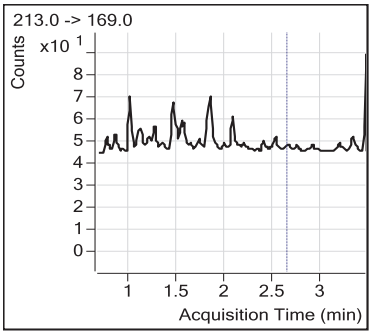
Perfluorinated Compounds by LC/MS/MS.

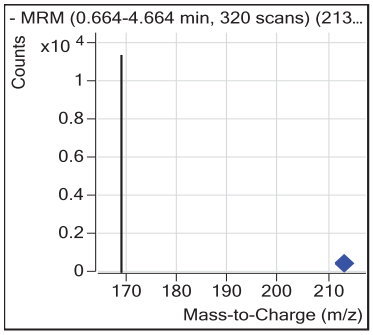
Data File	:	Q8776.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 17:33
Sample Name	:	OP54204-BS
Vial	:	Vial 7
Sample Info	:	OP54204,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



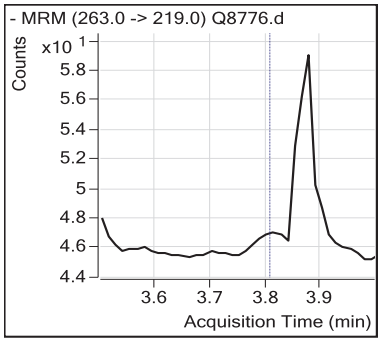
PFBA

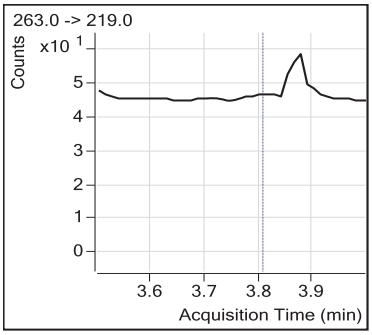


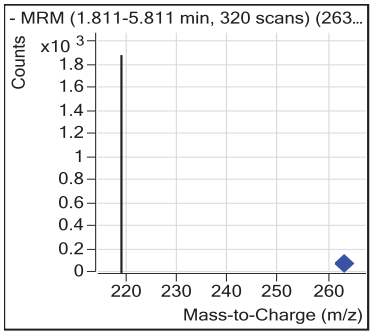




PFPeA

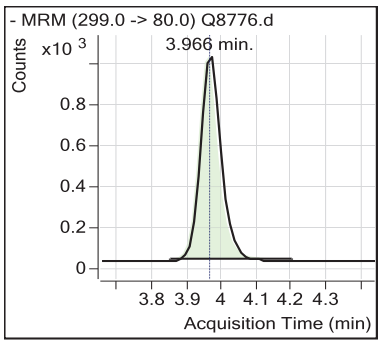


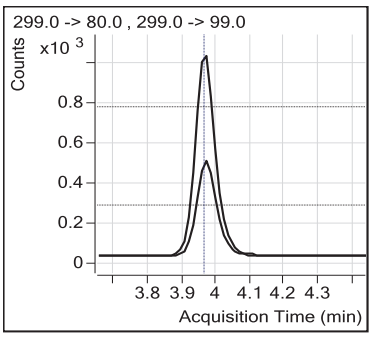


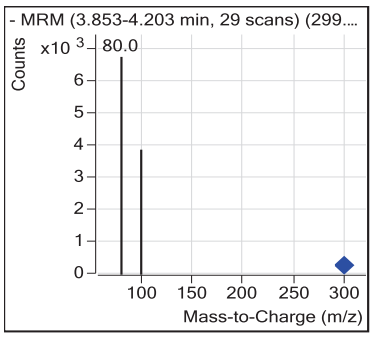


Perfluorinated Compounds by LC/MS/MS.

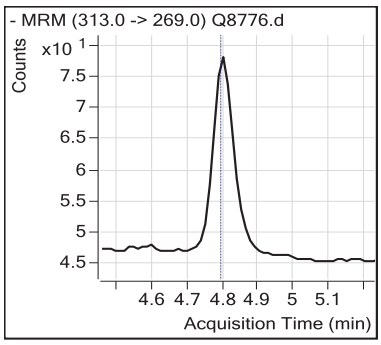
PFBS

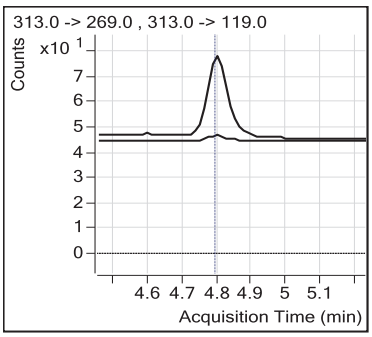


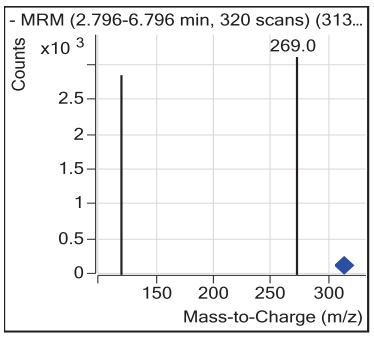




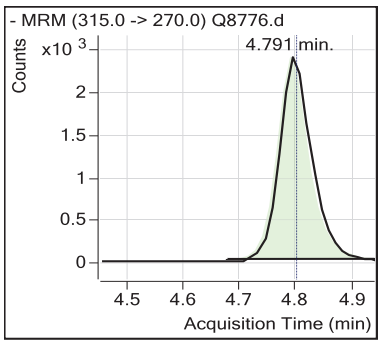
PFHxA

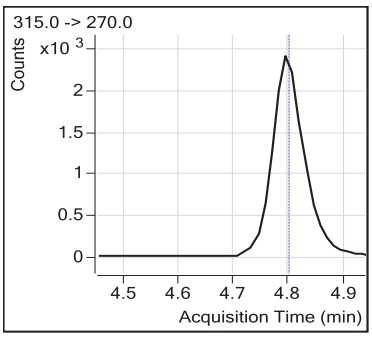


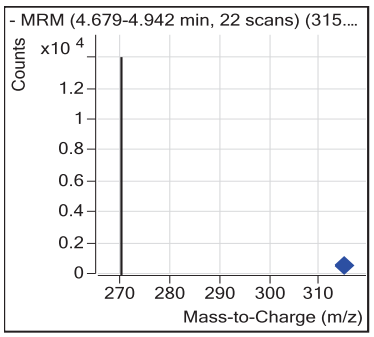




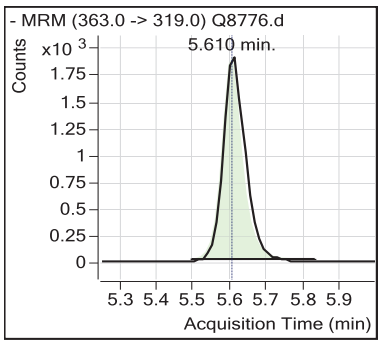
13C2-PFHxA

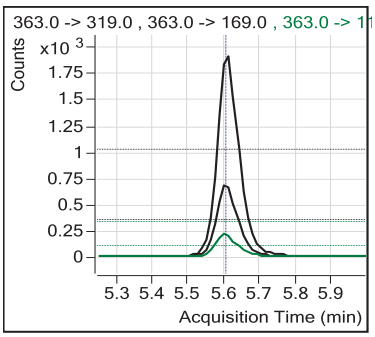


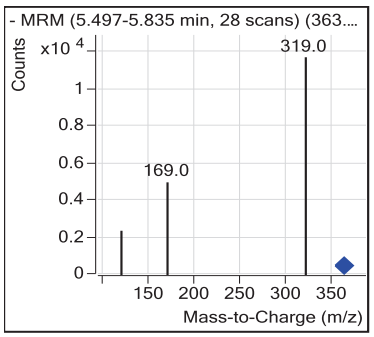




PFHpA

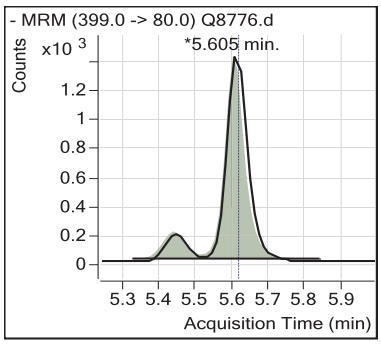


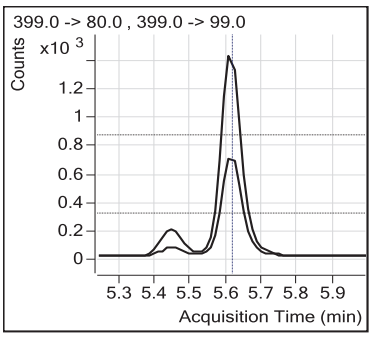


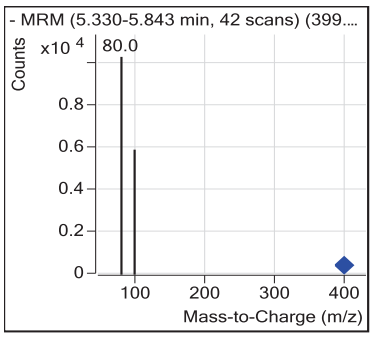


Perfluorinated Compounds by LC/MS/MS.

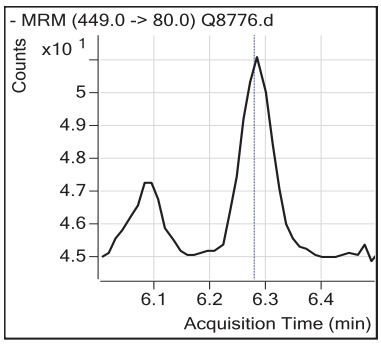
PFHxS

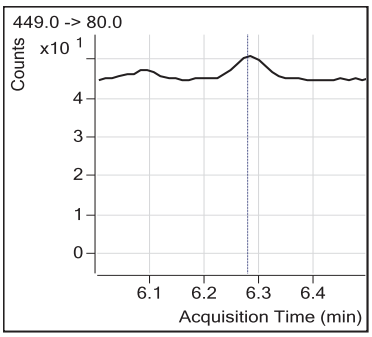


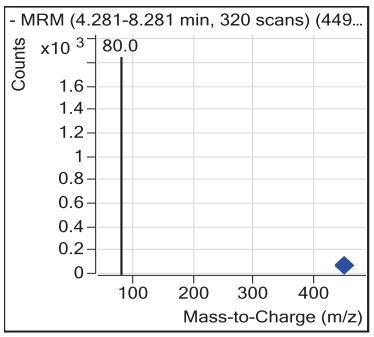




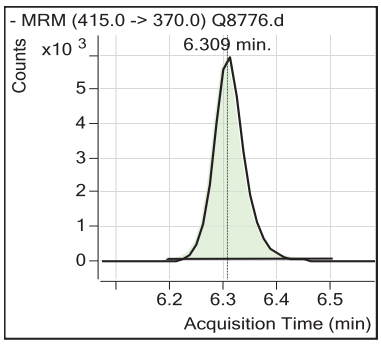
PFHpS

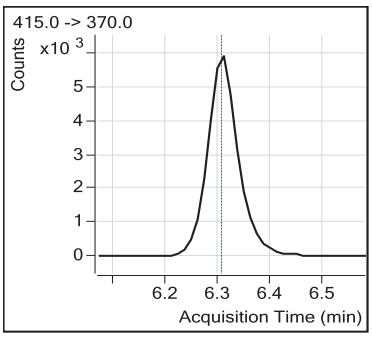


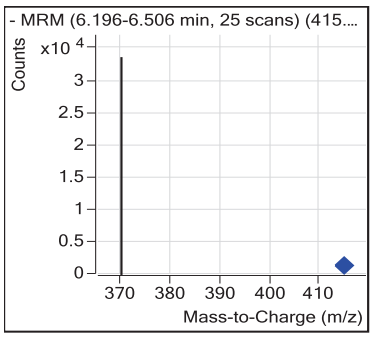




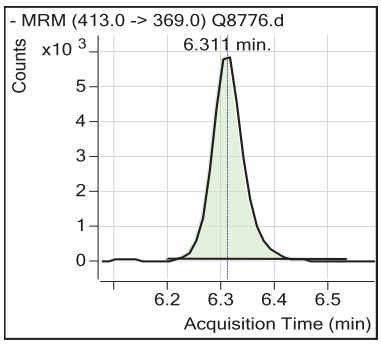
13C2-PFOA

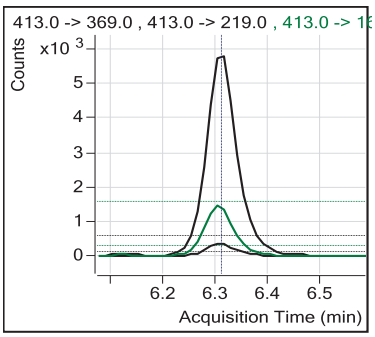


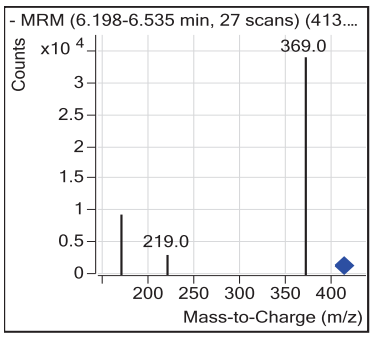




PFOA

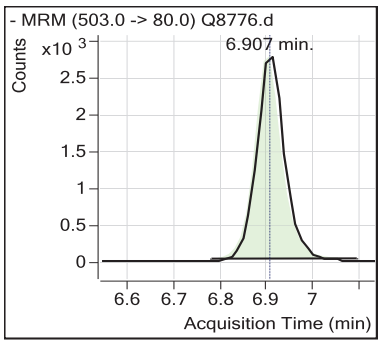


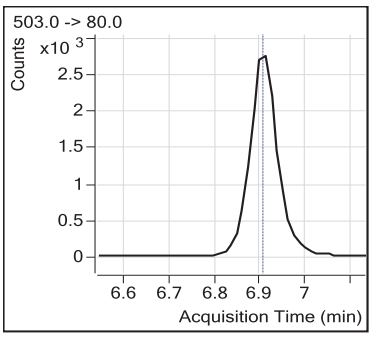


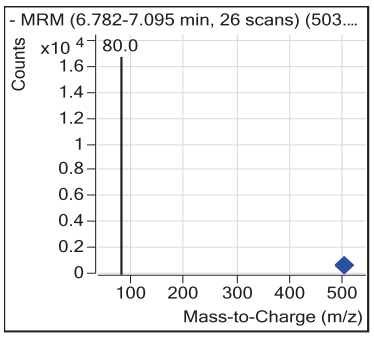


Perfluorinated Compounds by LC/MS/MS.

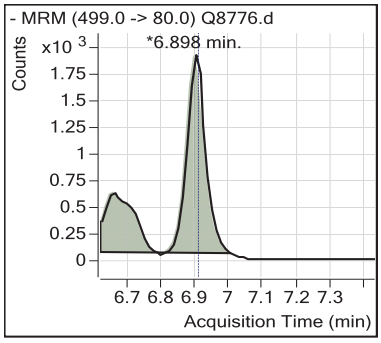
13C4-PFOS

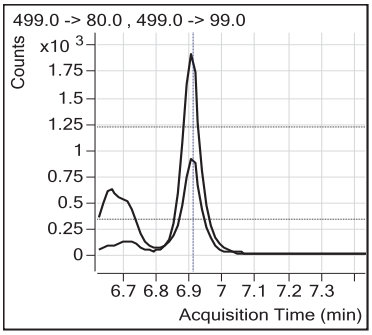


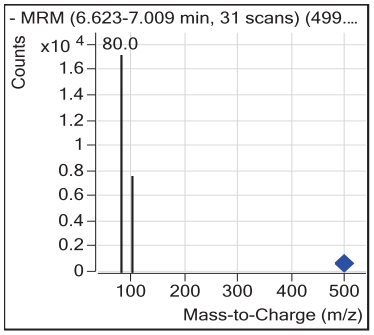




PFOS







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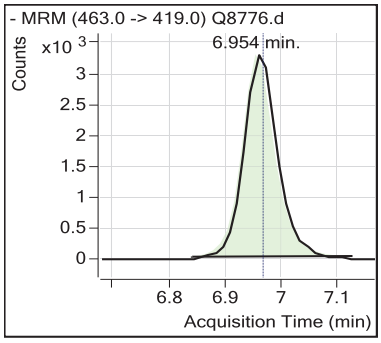
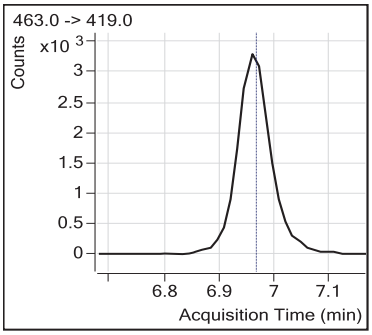
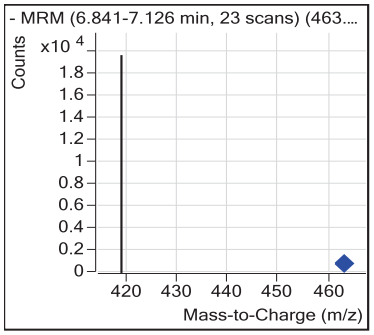
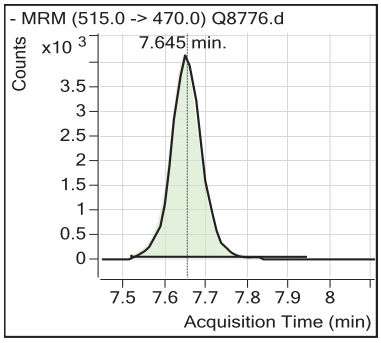
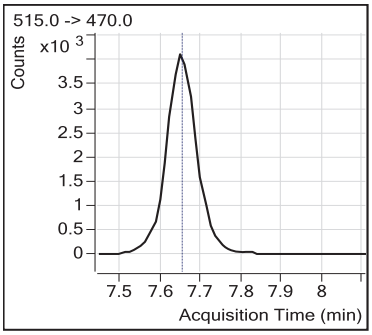


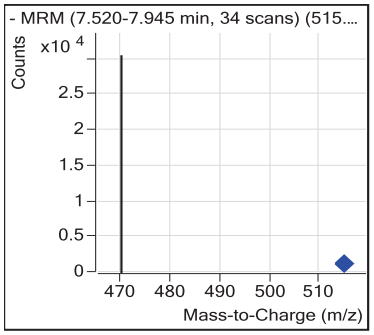




13C2-PFDA

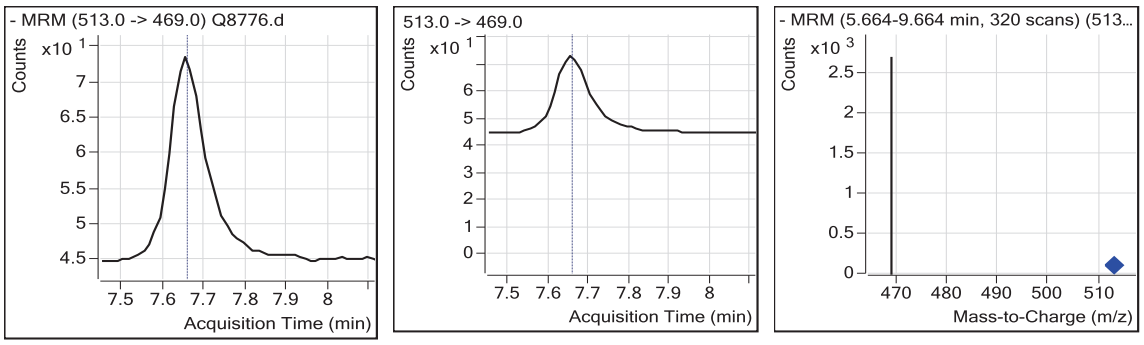




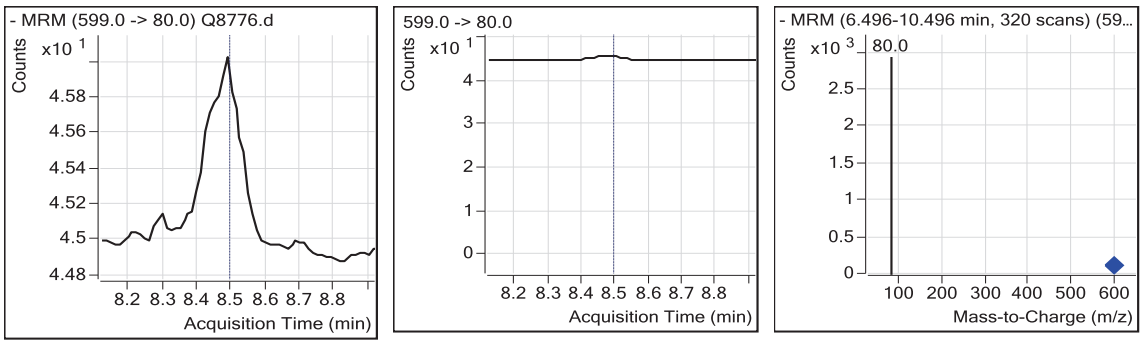


Perfluorinated Compounds by LC/MS/MS.

PFDA



PFDS



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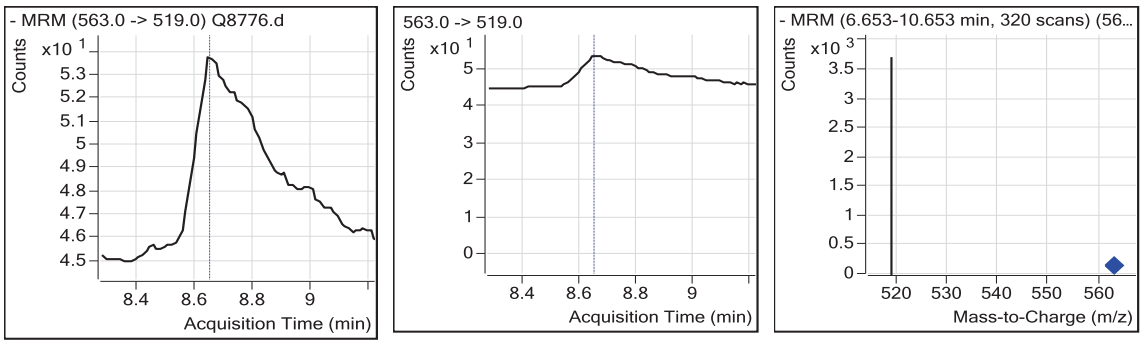
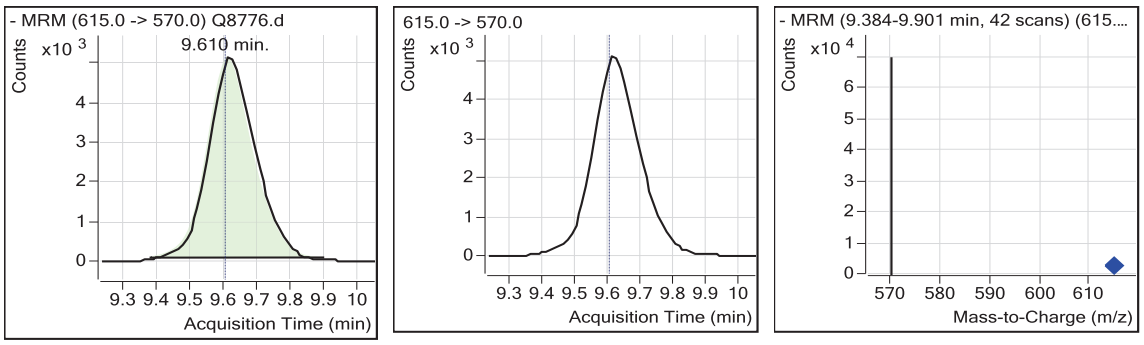
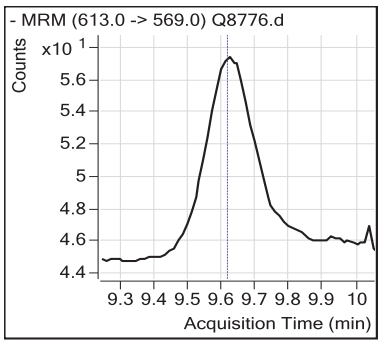


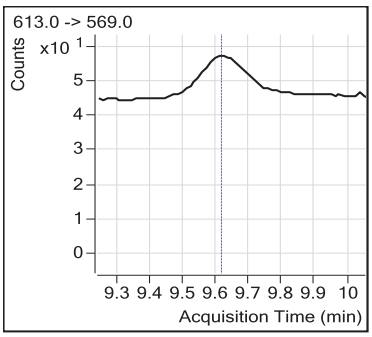
13C2-PFDoDA

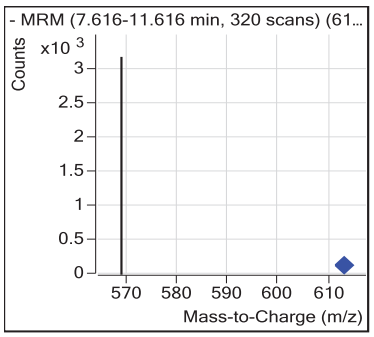


Perfluorinated Compounds by LC/MS/MS.

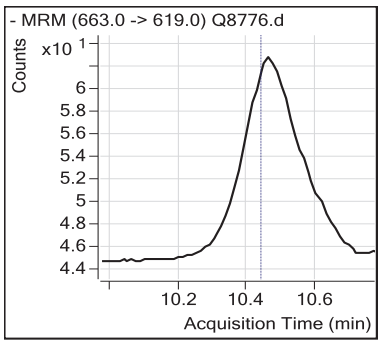
PFDoDA

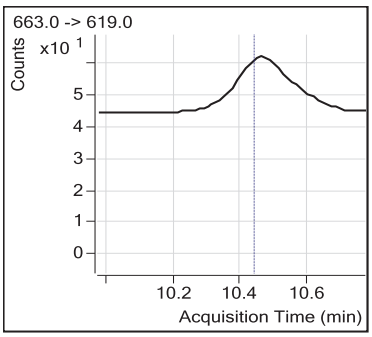


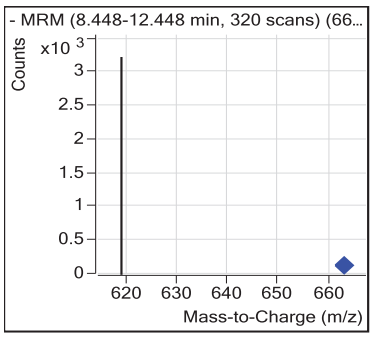




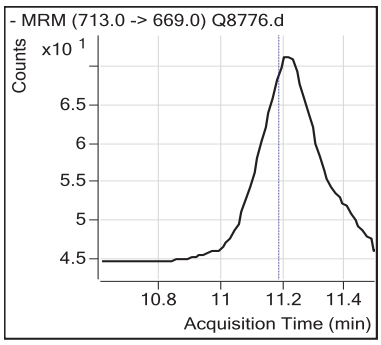
PFTrDA

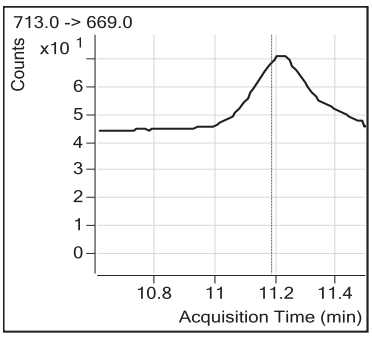


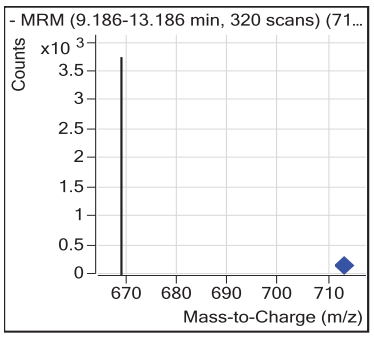




PFTeDA







Manual Integration Approval Summary

Sample Number: OP54204-BS
Lab FileID: Q8776.D
Injection Time: 12/15/14 17:33

Method: EPA 537 MOD
Analyst approved: 12/16/14 09:33 Nancy Saunders
Supervisor approved: 12/16/14 10:17 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		5.61	Split peak
Perfluorooctanesulfonic acid	1763-23-1		6.90	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 12/16/14 10:17

Perfluorinated Compounds by LC/MS/MS.

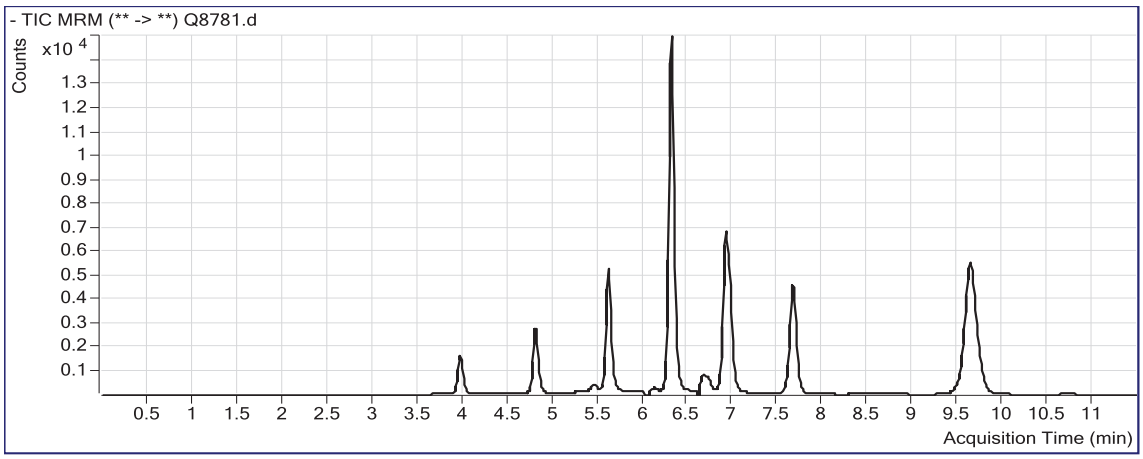
Data File	:	Q8781.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 19:16
Sample Name	:	OP54204-MS
Vial	:	Vial 12
Sample Info	:	OP54204,SQ284,60,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.309	415.0 -> 370.0	26200	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	12479	20.000	µg/L		0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	51800	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.791	315.0 -> 270.0	11170	25.93	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 129.65%				
13C2-PFDA	7.645	515.0 -> 470.0	24360	21.79	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 108.97%				
Target Compounds							**Qvalue**
PFBS	3.966	299.0 -> 80.0	4365	23.674	µg/L		98
PFHpA	5.610	363.0 -> 319.0	8303	18.922	µg/L		98
PFHxS	5.618	399.0 -> 80.0	6672	22.532	µg/L	m	88
PFOA	6.311	413.0 -> 369.0	26605	20.045	µg/L		81
PFOS	6.898	499.0 -> 80.0	12623	20.223	µg/L	m	97
PFNA	6.954	463.0 -> 419.0	14760	18.704	µg/L		100

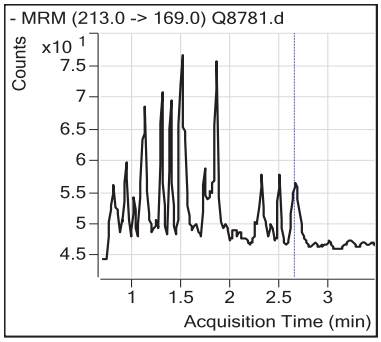
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

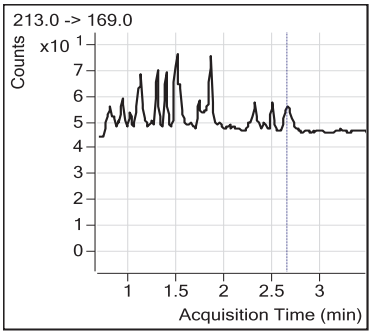
Perfluorinated Compounds by LC/MS/MS.

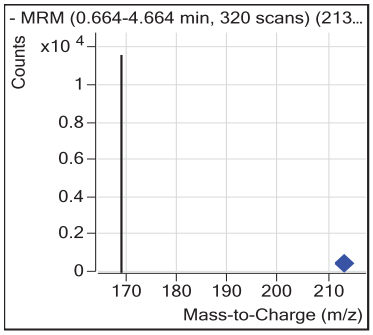
Data File	:	Q8781.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 19:16
Sample Name	:	OP54204-MS
Vial	:	Vial 12
Sample Info	:	OP54204,SQ284,60,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



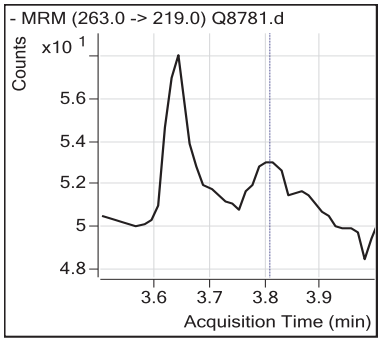
PFBA

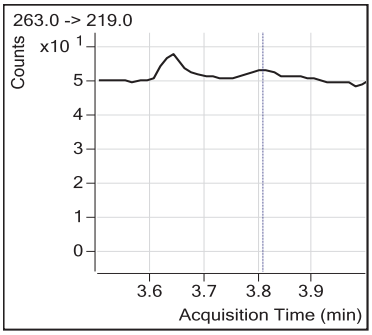


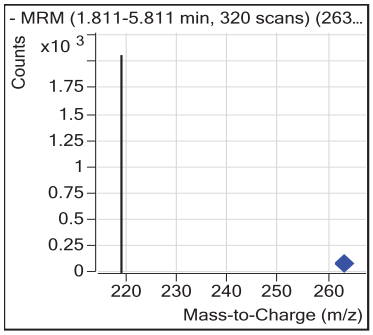




PFPeA

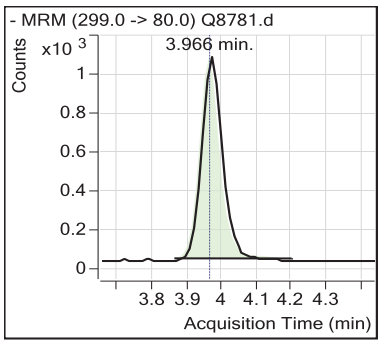


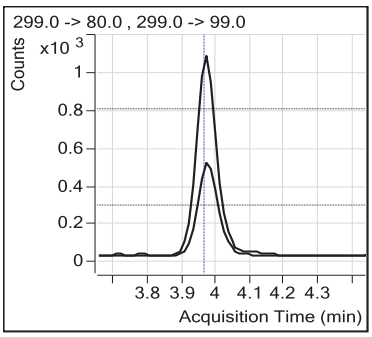


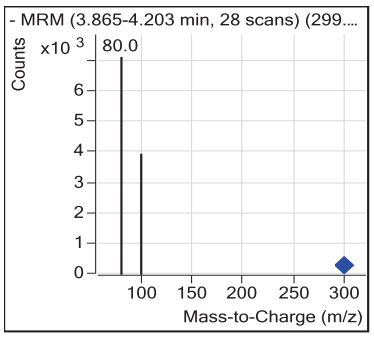


Perfluorinated Compounds by LC/MS/MS.

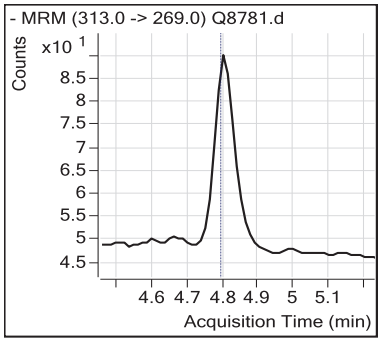
PFBS

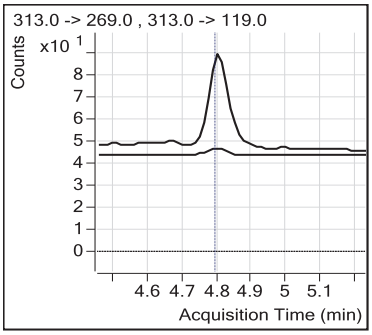


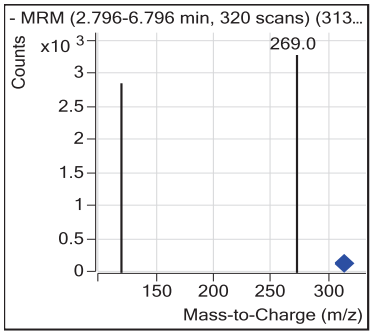




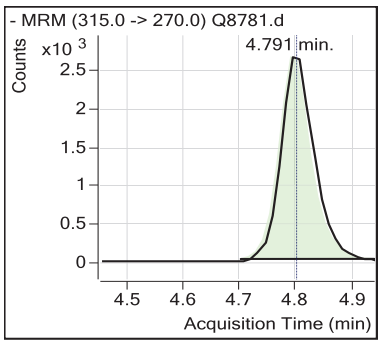
PFHxA

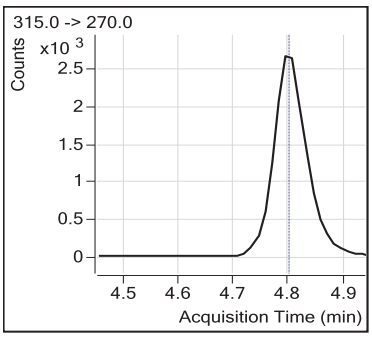


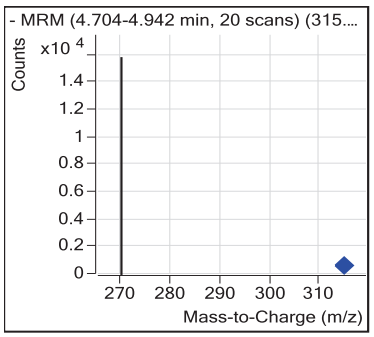




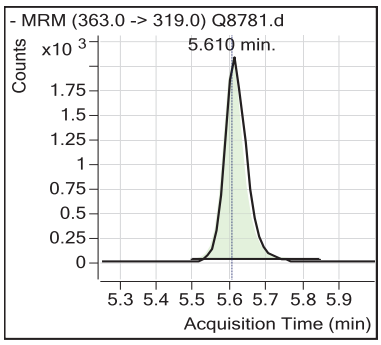
13C2-PFHxA

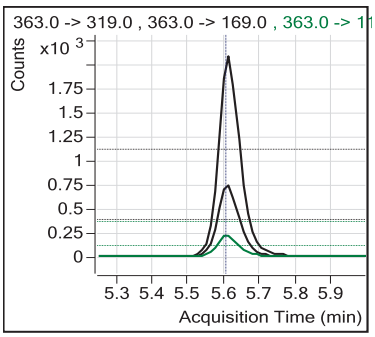


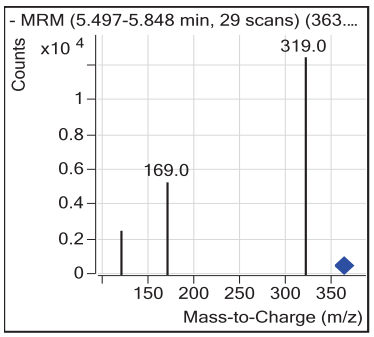




PFHpA

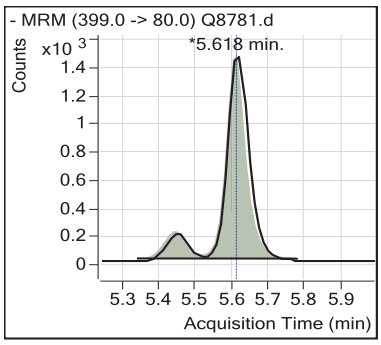


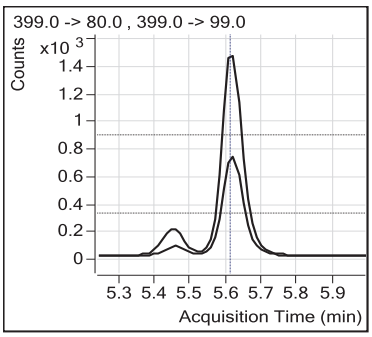


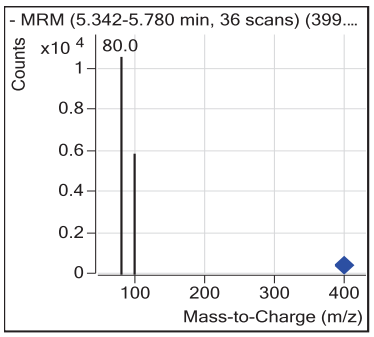


Perfluorinated Compounds by LC/MS/MS.

PFHxS







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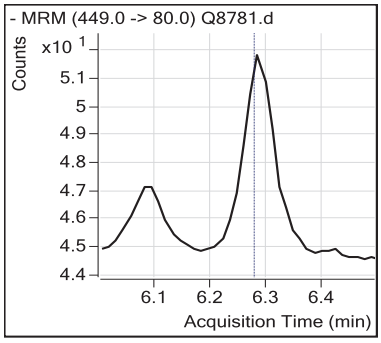
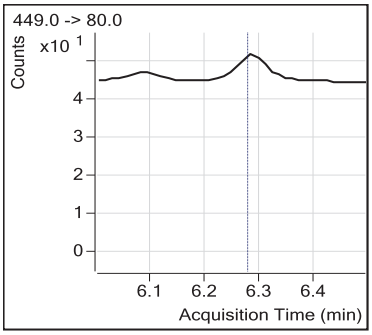
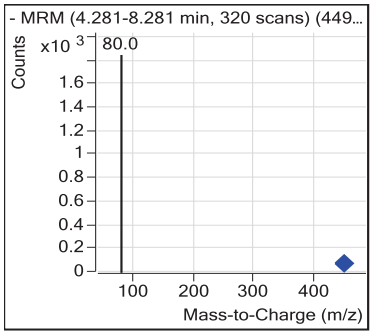
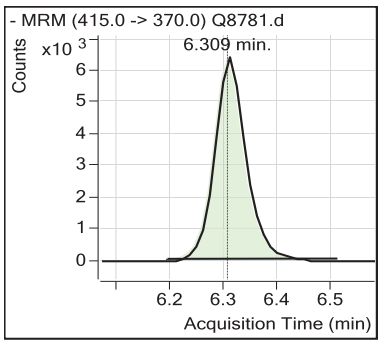
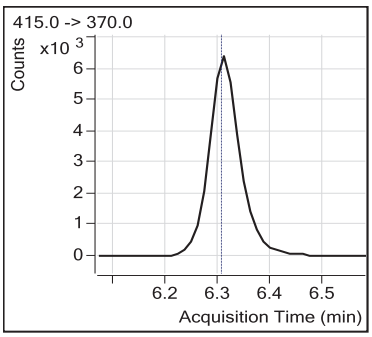


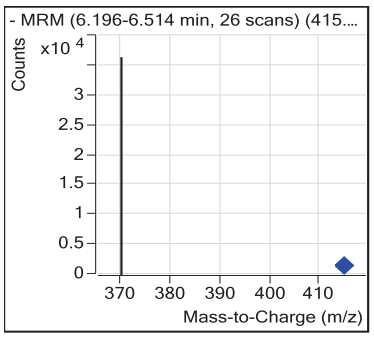




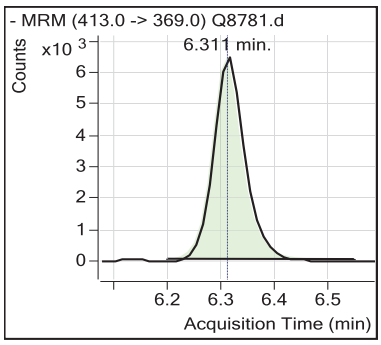
13C2-PFOA

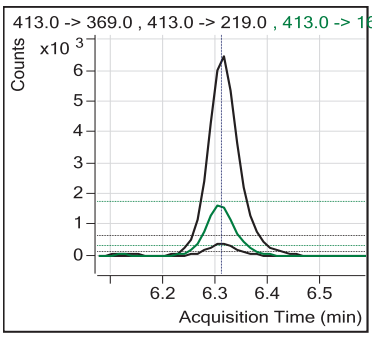


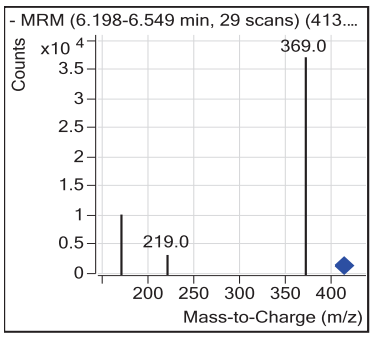




PFOA

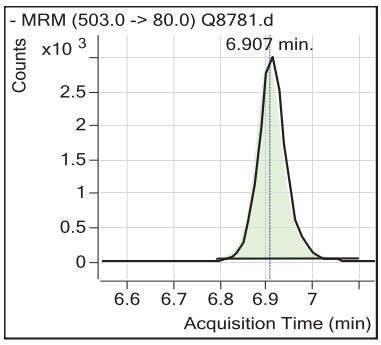


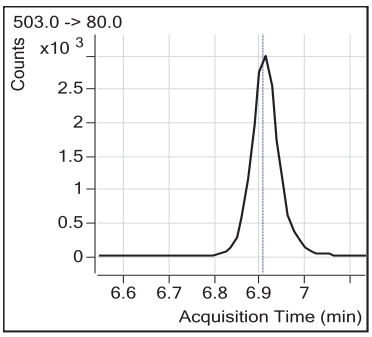


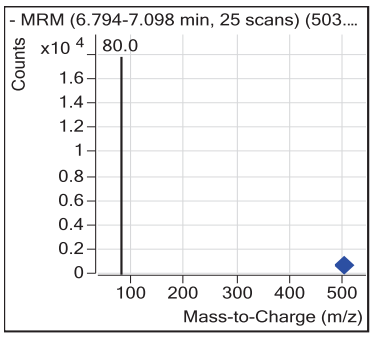


Perfluorinated Compounds by LC/MS/MS.

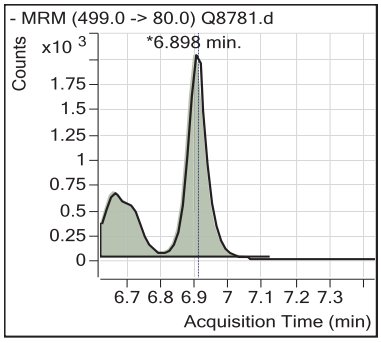
13C4-PFOS

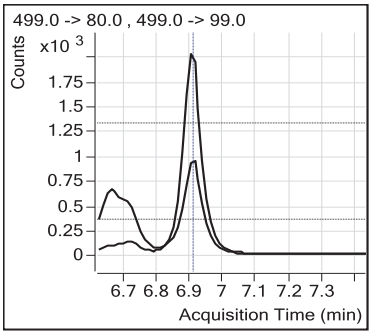


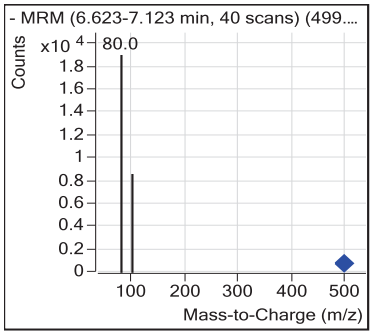




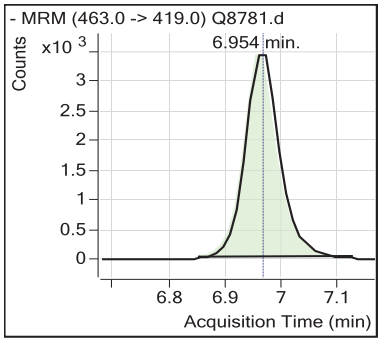
PFOS

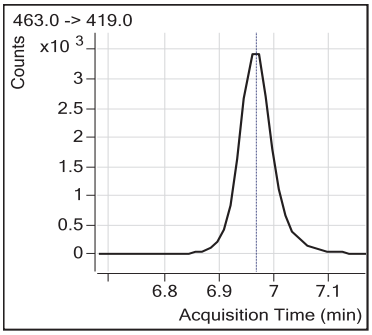


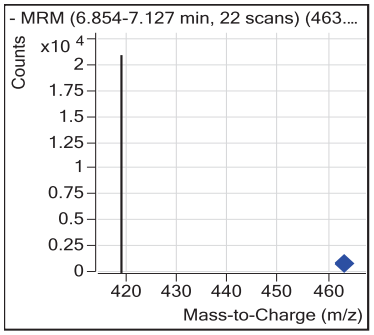




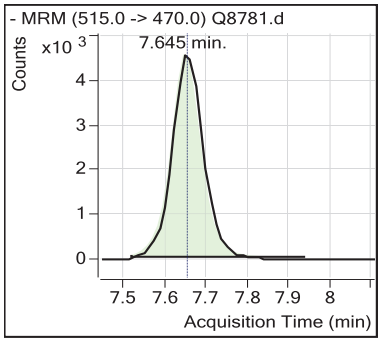
PFNA

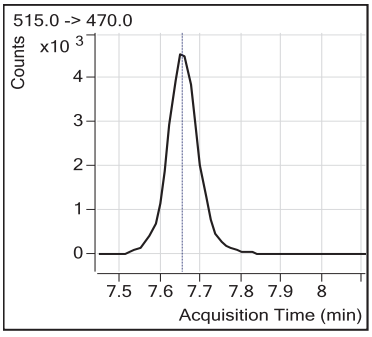


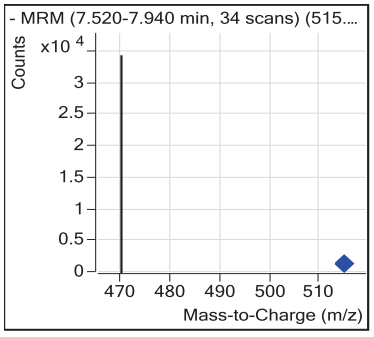




13C2-PFDA

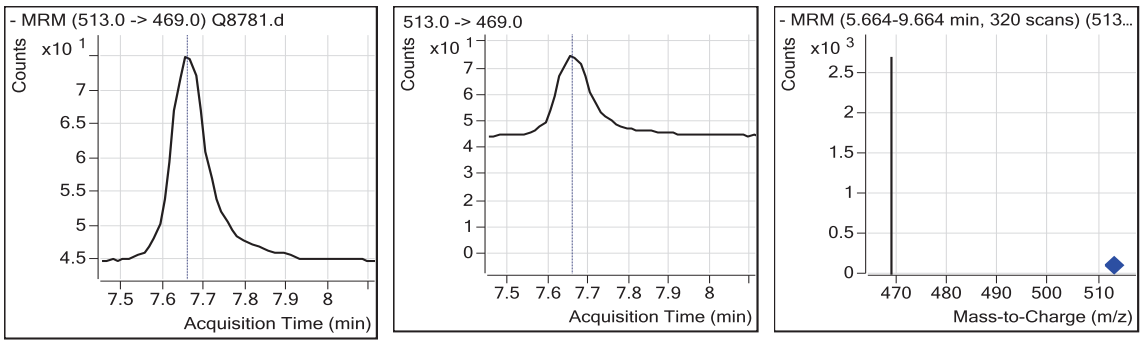






Perfluorinated Compounds by LC/MS/MS.

PFDA



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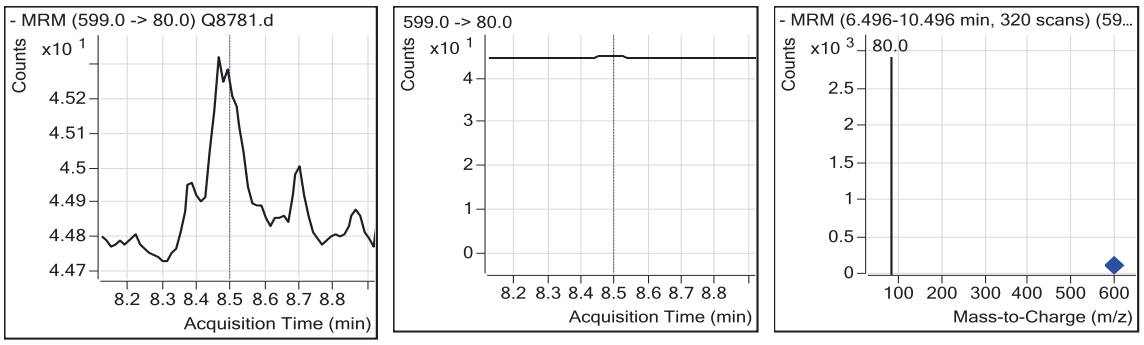

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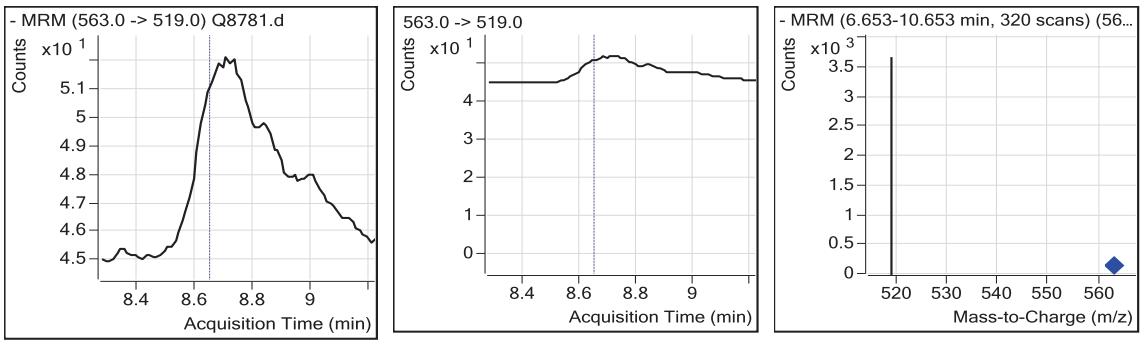
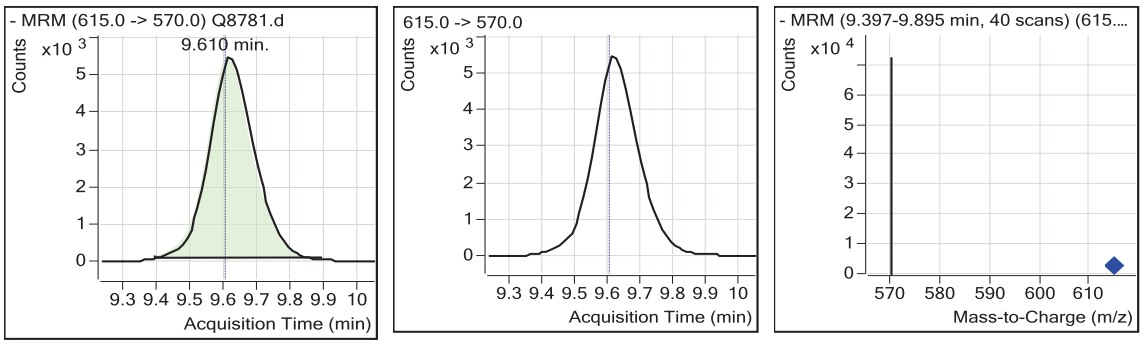
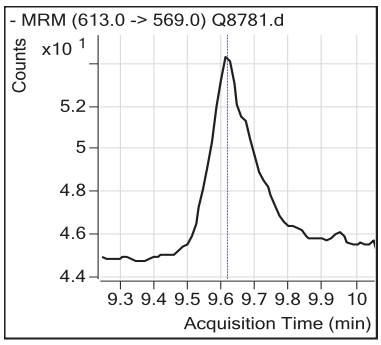


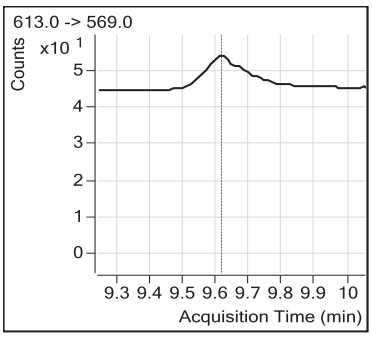
13C2-PFDoDA

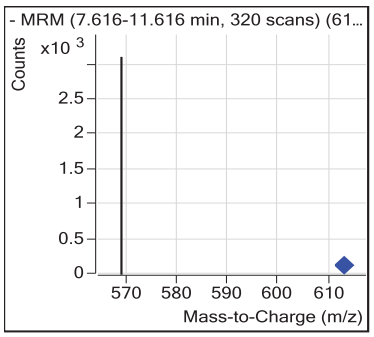


Perfluorinated Compounds by LC/MS/MS.

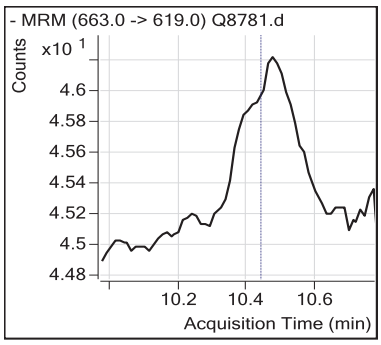
PFDoDA

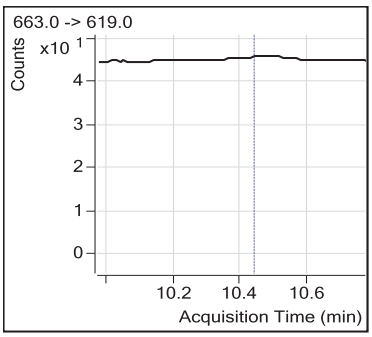


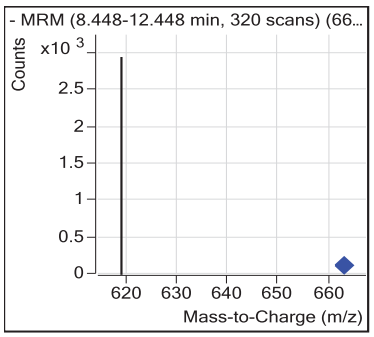




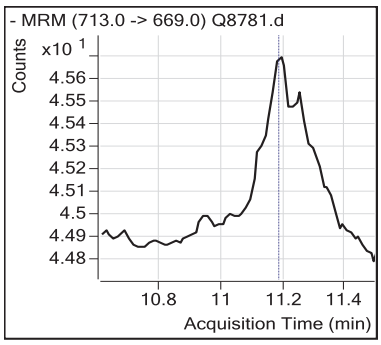
PFTrDA

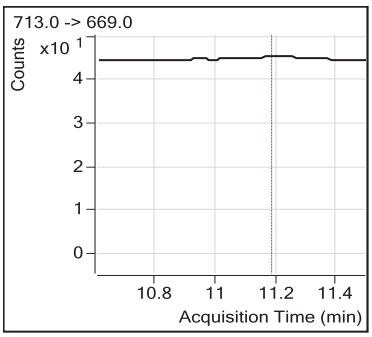


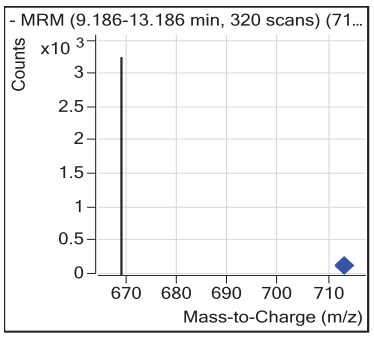




PFTeDA







Manual Integration Approval Summary

Sample Number: OP54204-MS
Lab FileID: Q8781.D
Injection Time: 12/15/14 19:16

Method: EPA 537 MOD
Analyst approved: 12/16/14 09:33 Nancy Saunders
Supervisor approved: 12/16/14 10:17 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 12/16/14 10:17

Perfluorinated Compounds by LC/MS/MS.

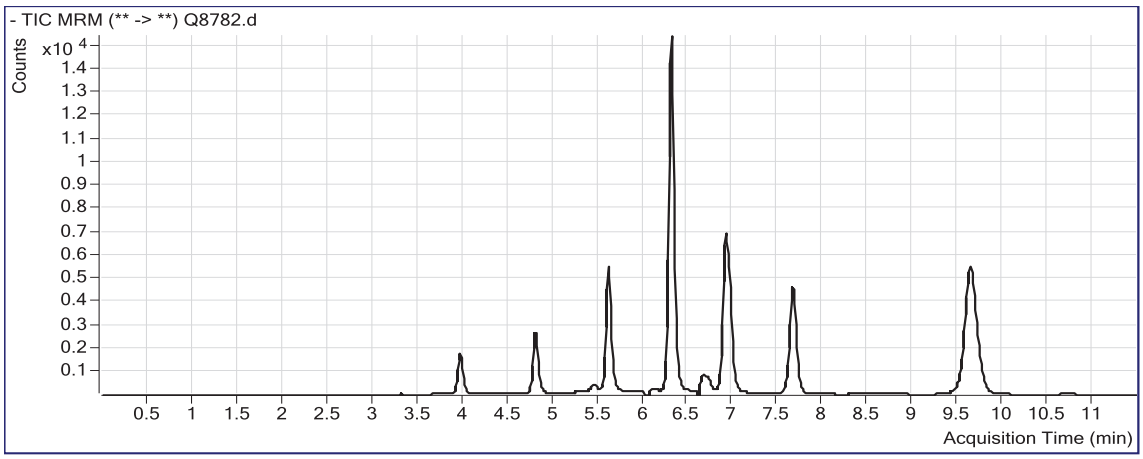
Data File	:	Q8782.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 19:37
Sample Name	:	OP54204-MSD
Vial	:	Vial 13
Sample Info	:	OP54204,SQ284,60,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C2-PFOA	6.309	415.0 -> 370.0	26459	20.000	µg/L		0.000
13C4-PFOS	6.907	503.0 -> 80.0	12459	20.000	µg/L		0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	51924	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	4.804	315.0 -> 270.0	10831	24.90	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 124.48%				
13C2-PFDA	7.645	515.0 -> 470.0	24545	21.75	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 108.73%				
Target Compounds							**Qvalue**
PFBS	3.966	299.0 -> 80.0	4639	25.200	µg/L		97
PFHpA	5.610	363.0 -> 319.0	8655	19.529	µg/L		99
PFHxS	5.618	399.0 -> 80.0	7019	23.744	µg/L	m	89
PFOA	6.311	413.0 -> 369.0	27187	20.283	µg/L		80
PFOS	6.898	499.0 -> 80.0	13027	20.906	µg/L	m	95
PFNA	6.954	463.0 -> 419.0	14978	18.794	µg/L		100

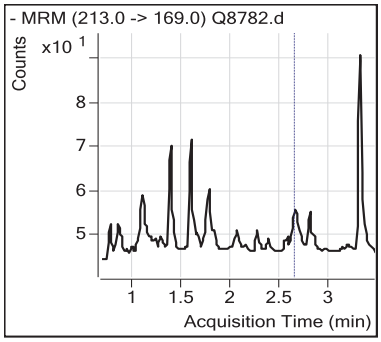
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

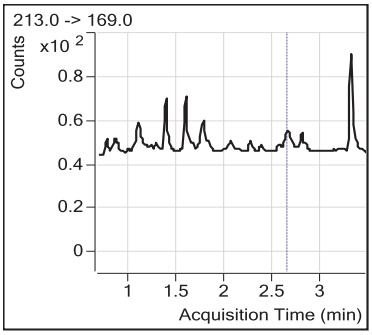
Perfluorinated Compounds by LC/MS/MS.

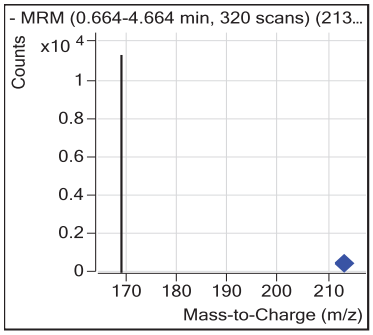
Data File	:	Q8782.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 19:37
Sample Name	:	OP54204-MSD
Vial	:	Vial 13
Sample Info	:	OP54204,SQ284,60,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



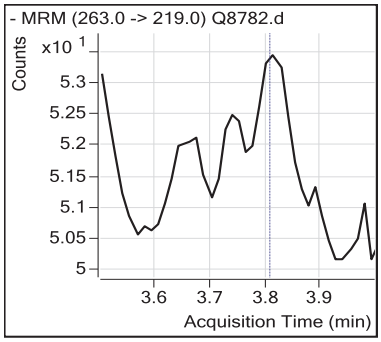
PFBA

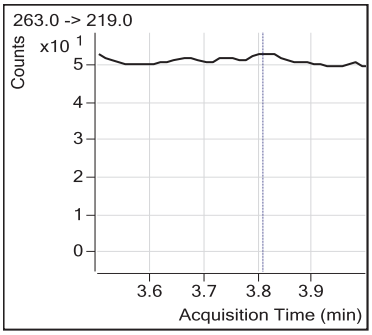


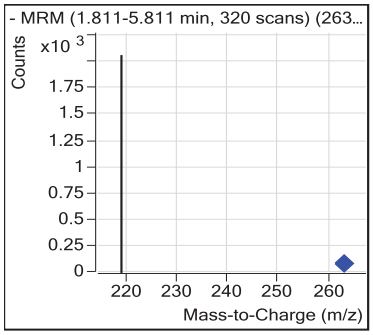




PFPeA

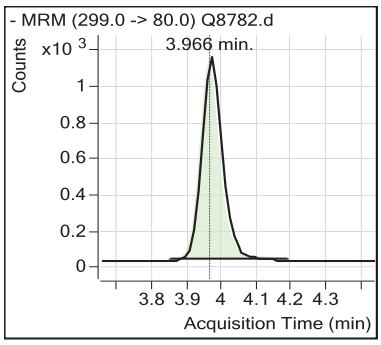


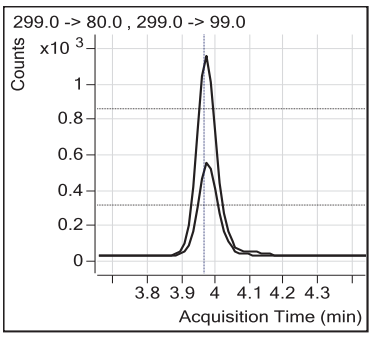


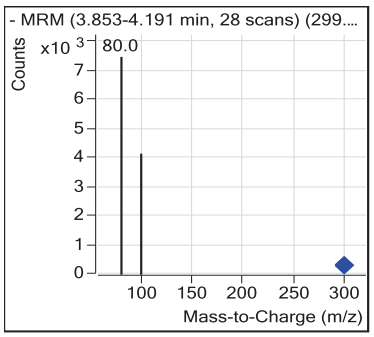


Perfluorinated Compounds by LC/MS/MS.

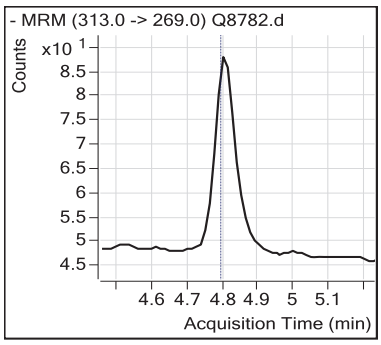
PFBS

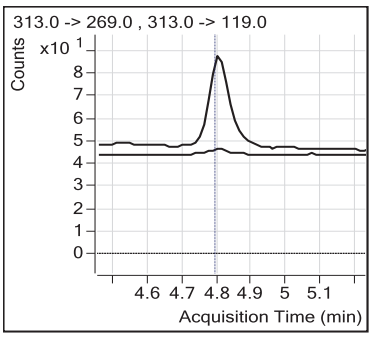


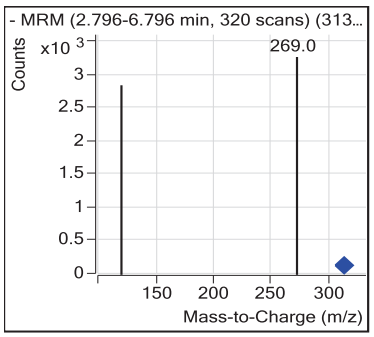




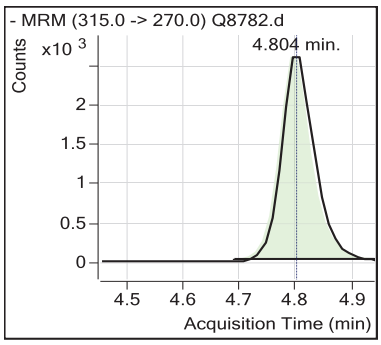
PFHxA

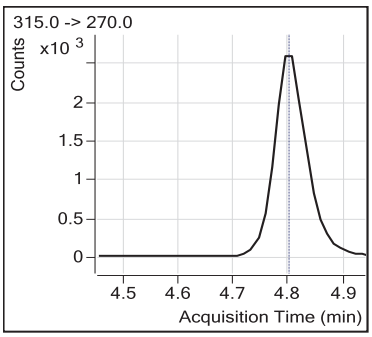


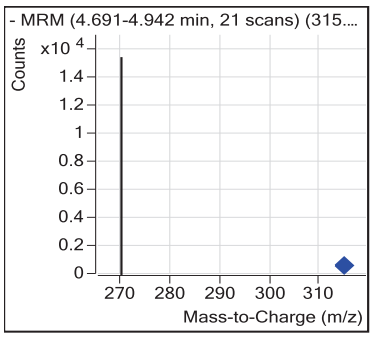




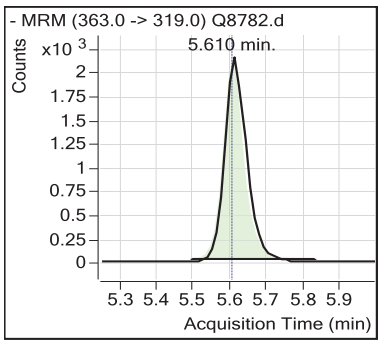
13C2-PFHxA

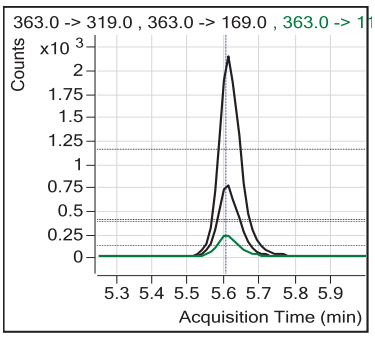


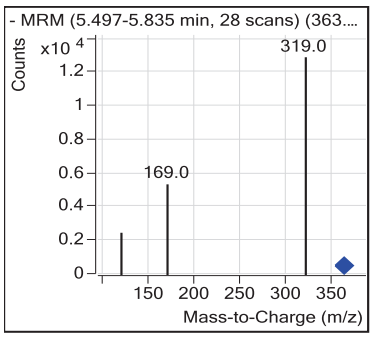




PFHpA

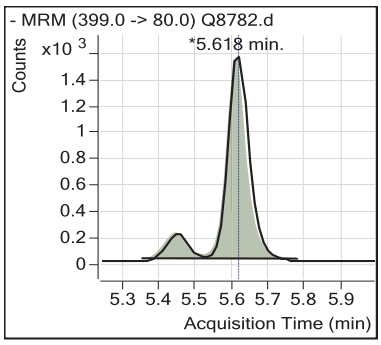


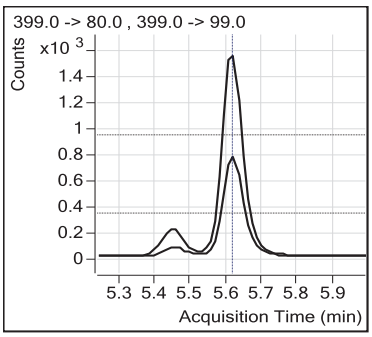


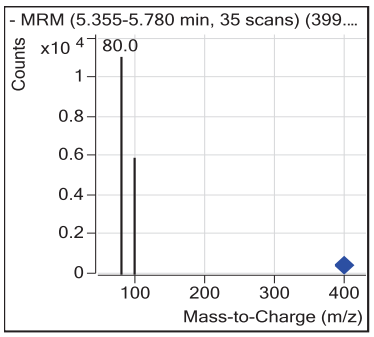


Perfluorinated Compounds by LC/MS/MS.

PFHxS







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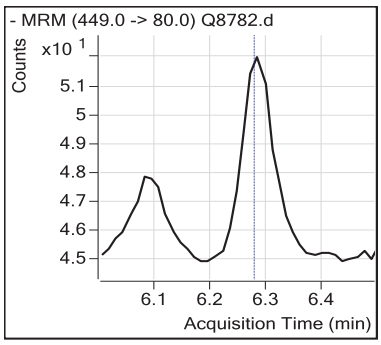
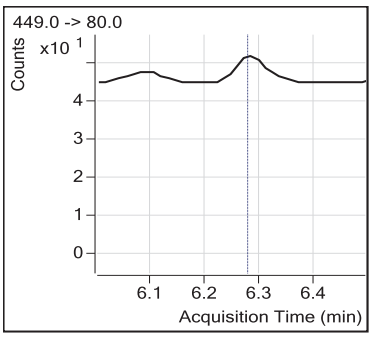
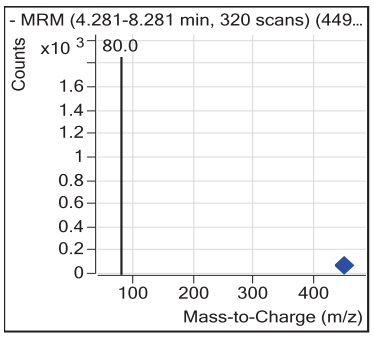
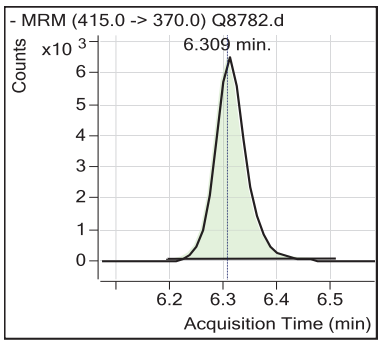
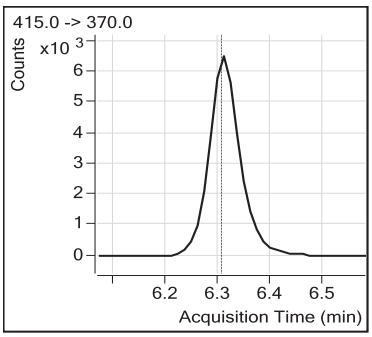


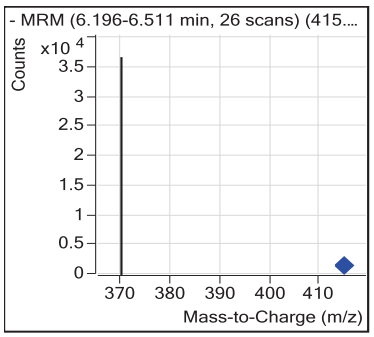




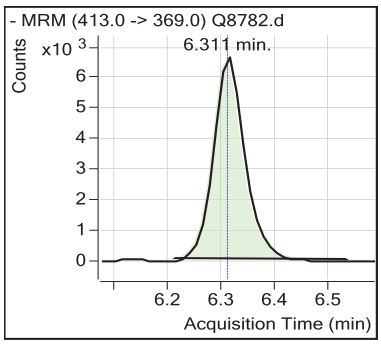
13C2-PFOA

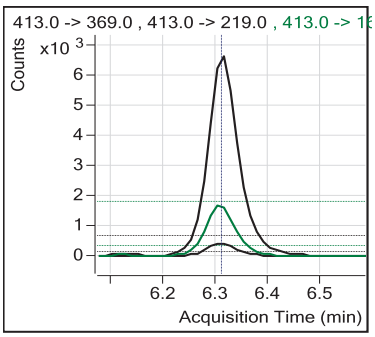


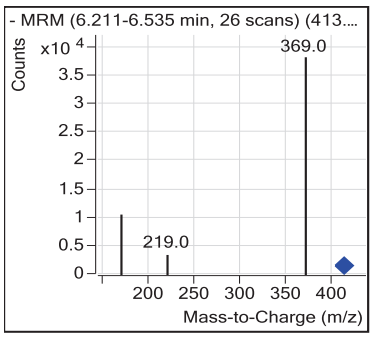




PFOA

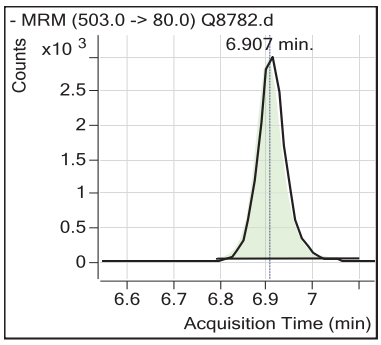


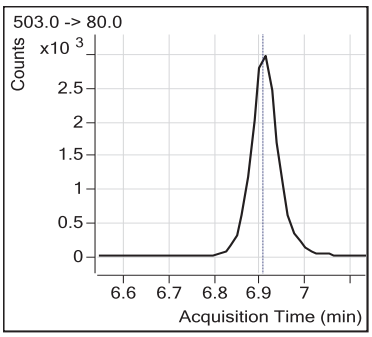


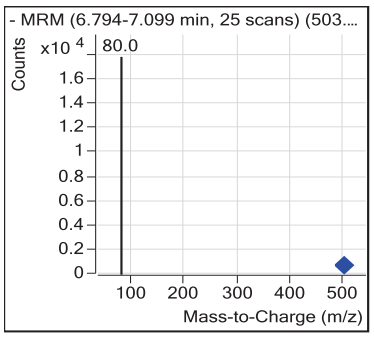


Perfluorinated Compounds by LC/MS/MS.

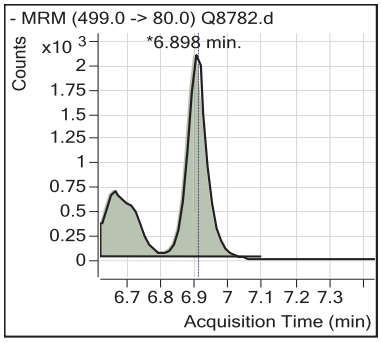
13C4-PFOS

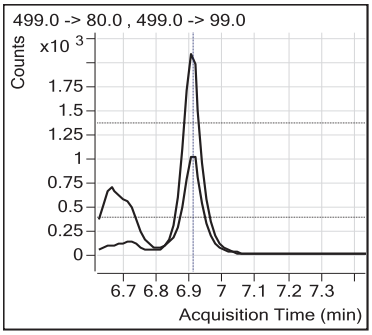


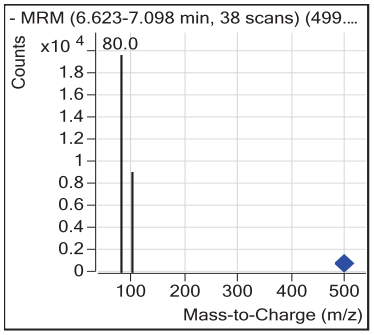




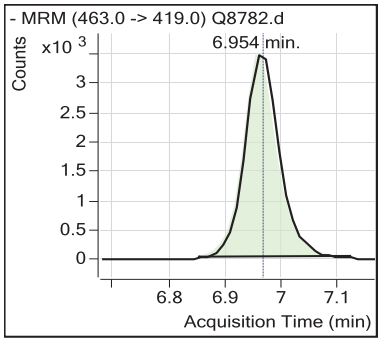
PFOS

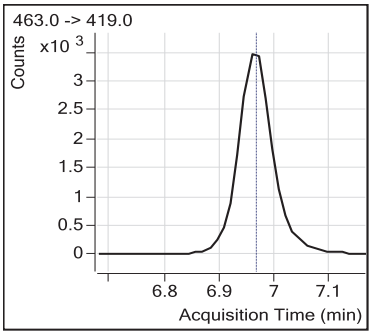


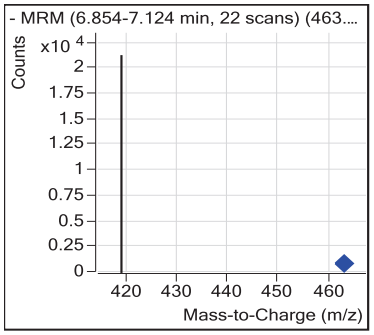




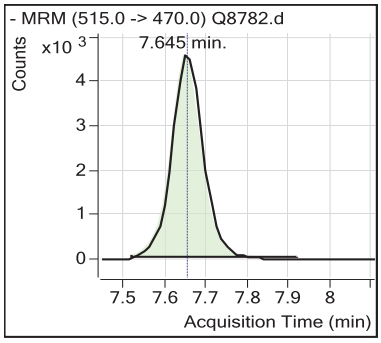
PFNA

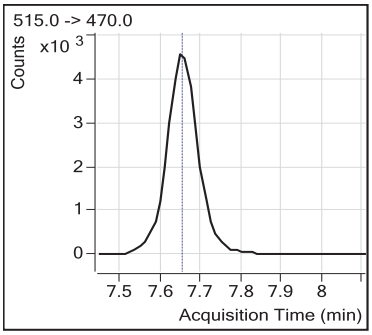


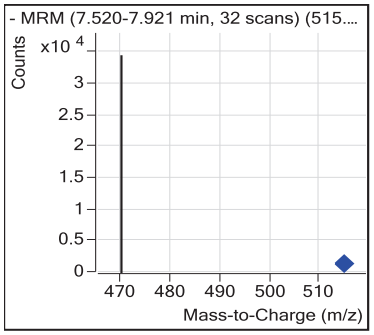




13C2-PFDA

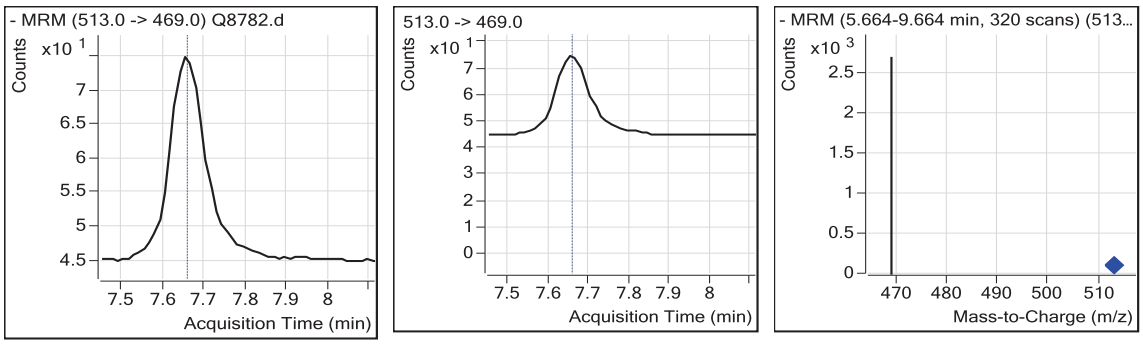




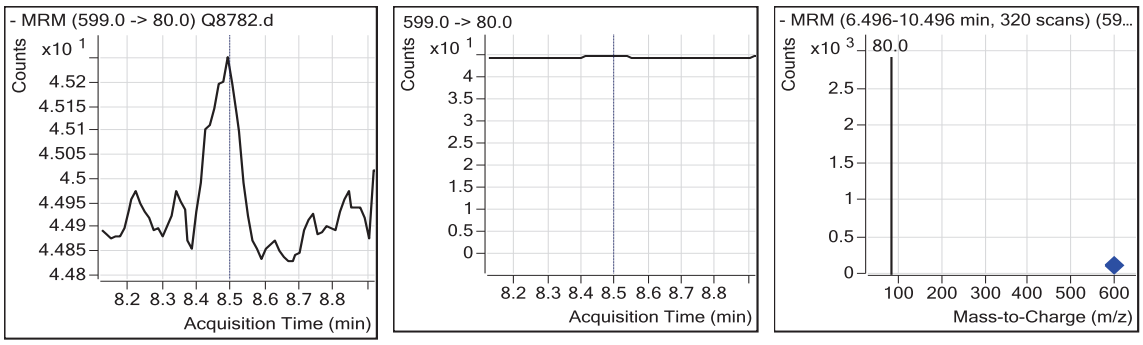


Perfluorinated Compounds by LC/MS/MS.

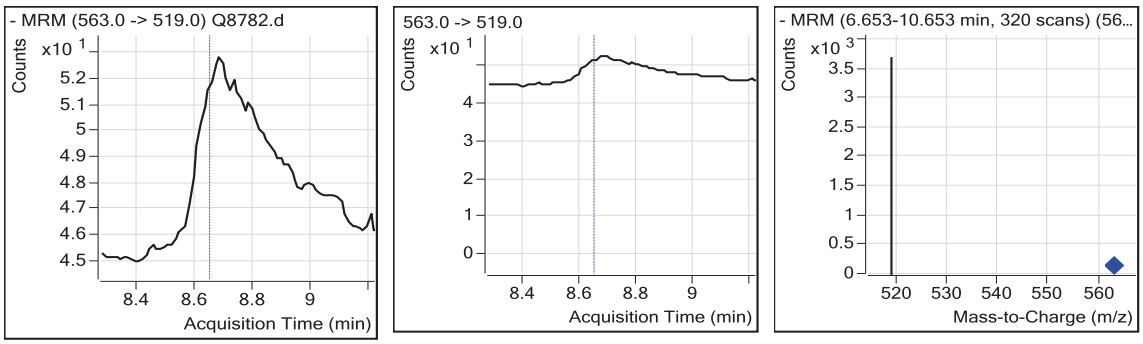
PFDA



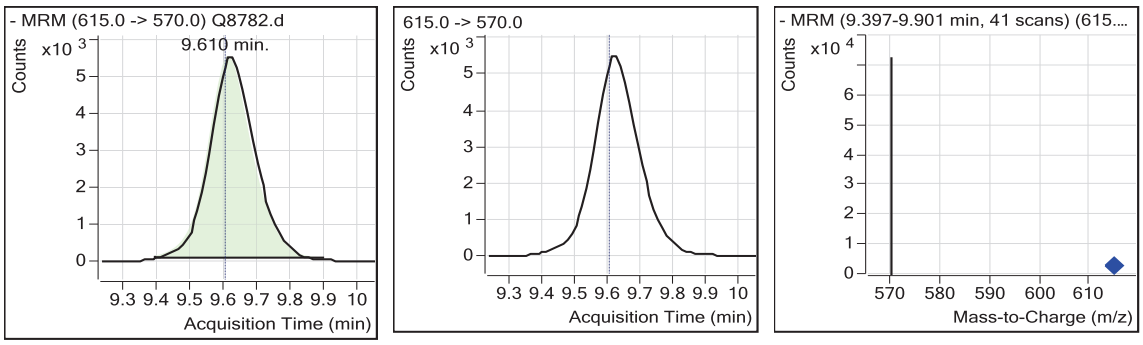
PFDS



PFUnDA

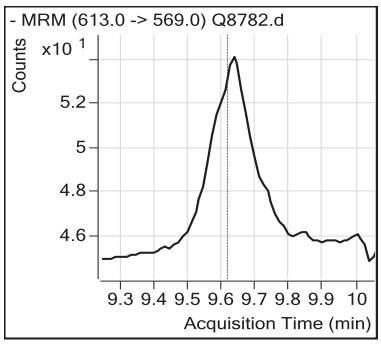


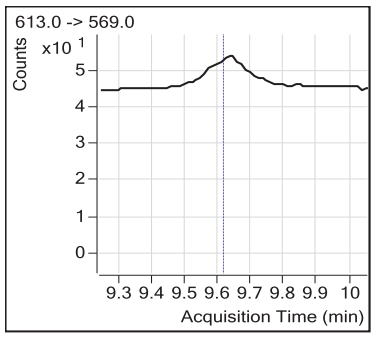
13C2-PFDoDA

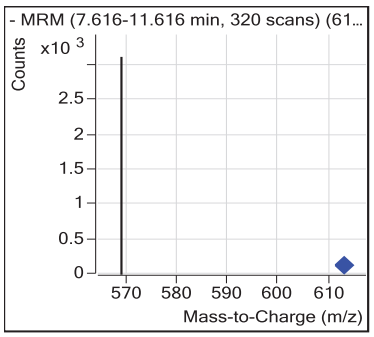


Perfluorinated Compounds by LC/MS/MS.

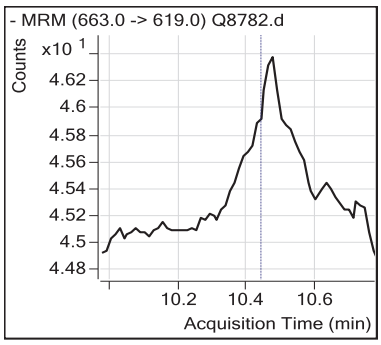
PFDoDA

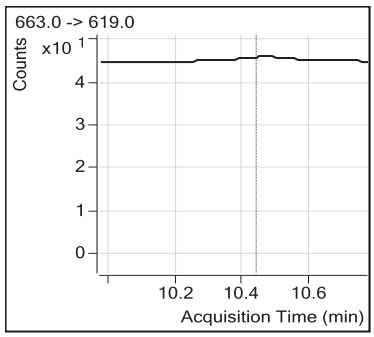


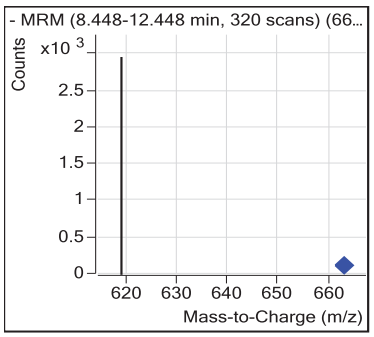




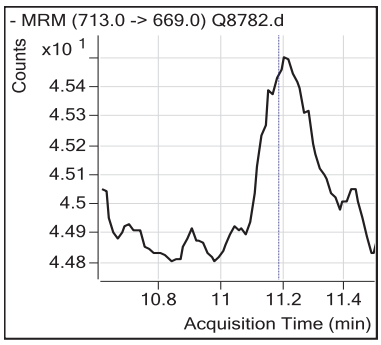
PFTrDA

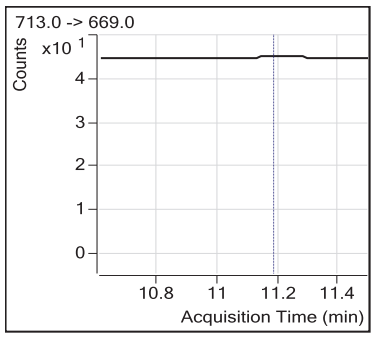


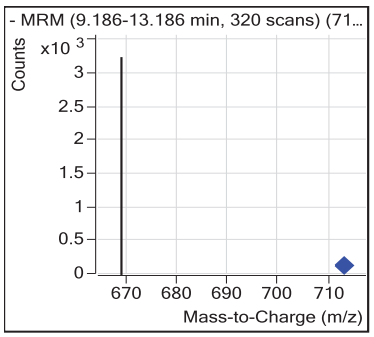




PFTeDA







Manual Integration Approval Summary

Sample Number: OP54204-MSD
Lab FileID: Q8782.D
Injection Time: 12/15/14 19:37
Method: EPA 537 MOD
Analyst approved: 12/16/14 09:33 Nancy Saunders
Supervisor approved: 12/16/14 10:17 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.

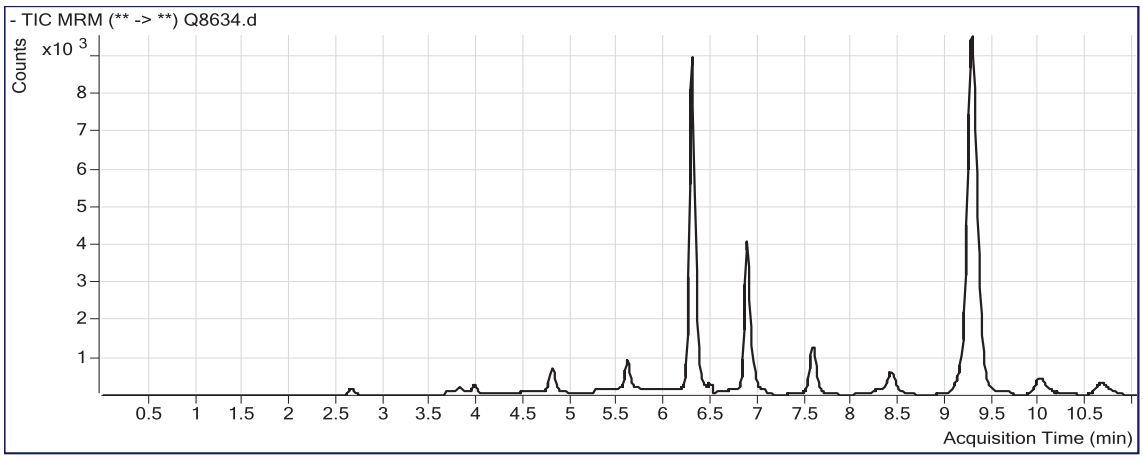
Data File	:	Q8634.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 13:34
Sample Name	:	IC280-2.5
Vial	:	Vial 2
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

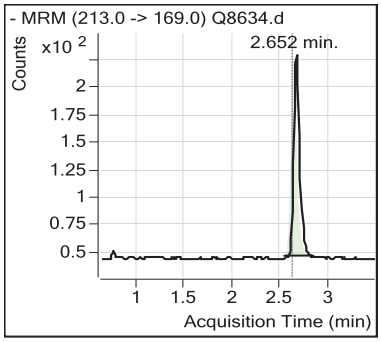
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

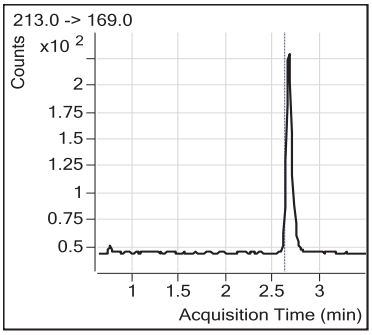
Perfluorinated Compounds by LC/MS/MS.

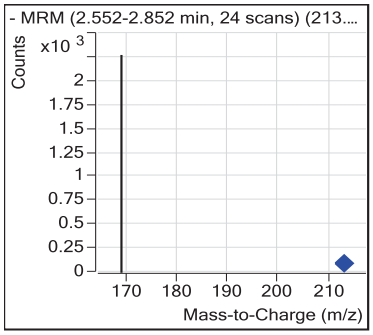
Data File	:	Q8634.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 13:34
Sample Name	:	IC280-2.5
Vial	:	Vial 2
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



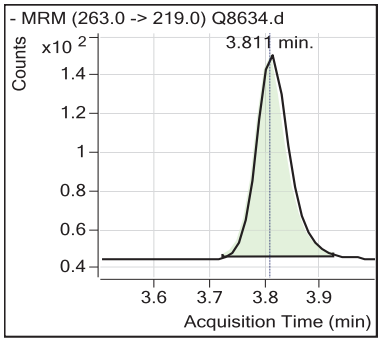
PFBA

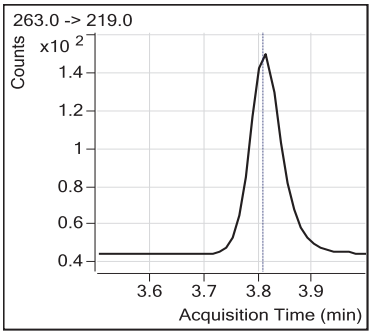


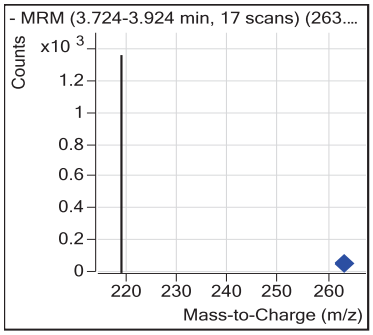




PFPeA

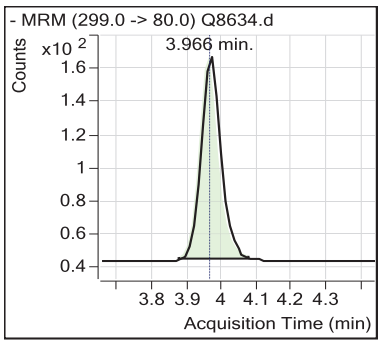


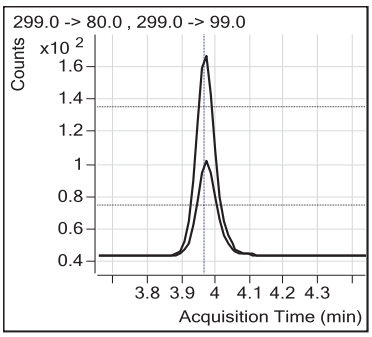


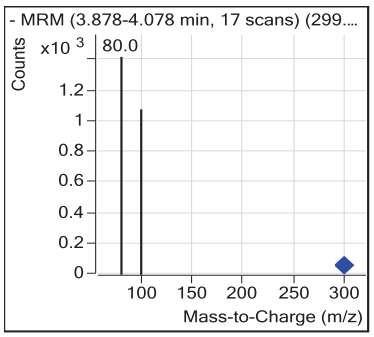


Perfluorinated Compounds by LC/MS/MS.

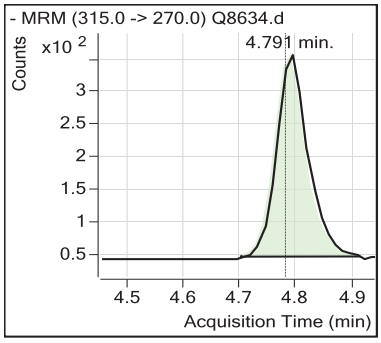
PFBS

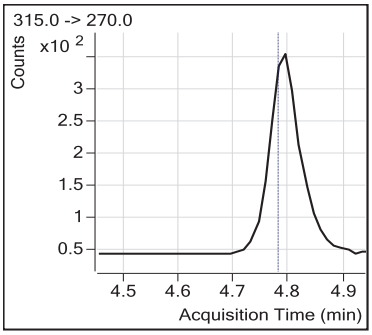


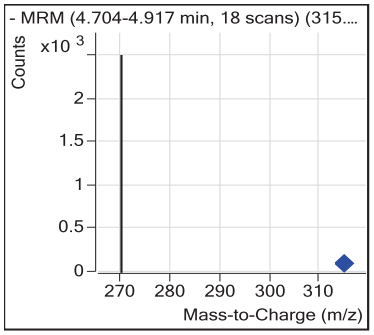




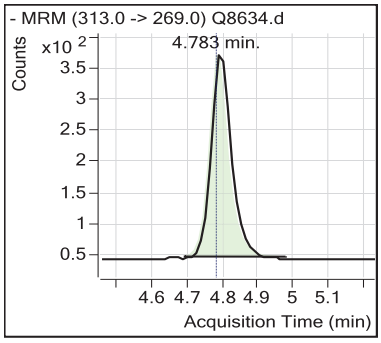
13C2-PFHxA

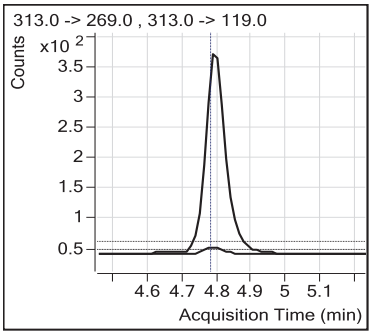


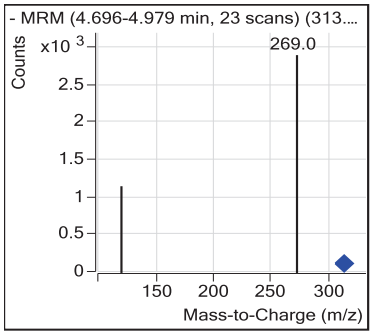




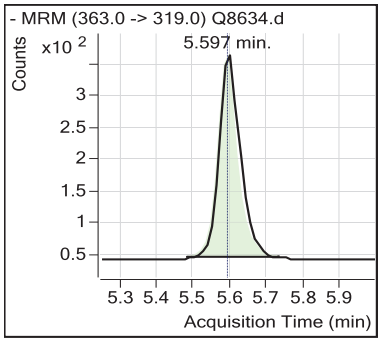
PFHxA

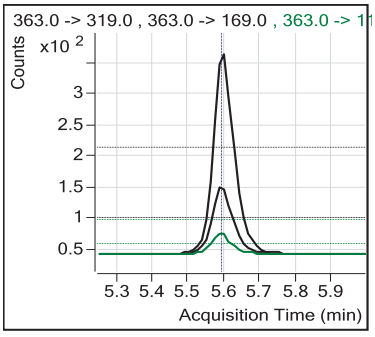


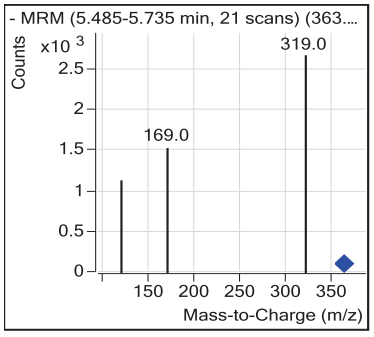




PFHpA

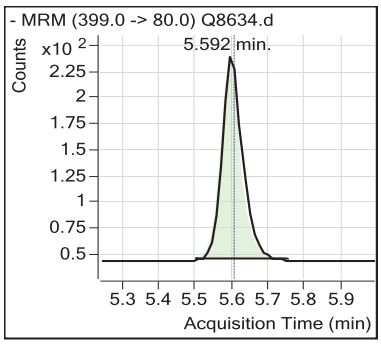


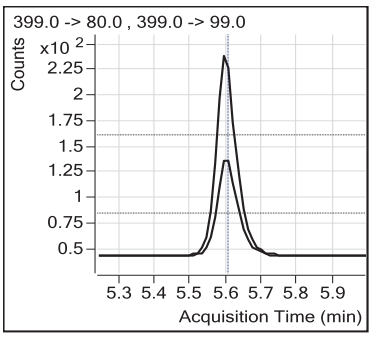


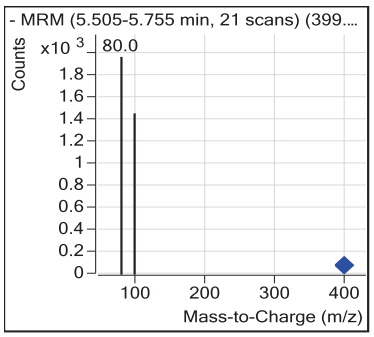


Perfluorinated Compounds by LC/MS/MS.

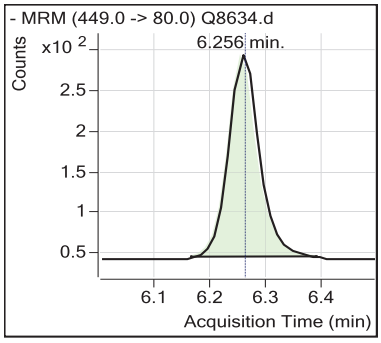
PFHxS

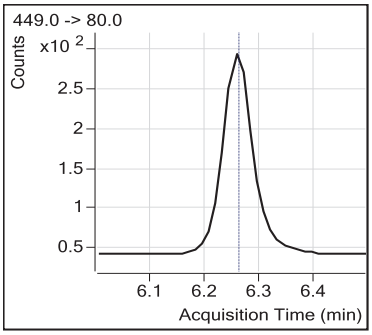


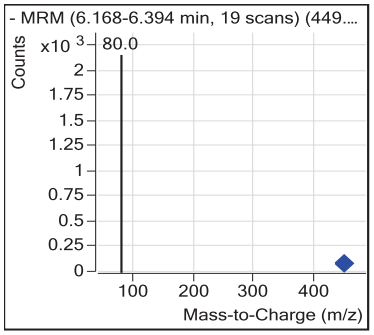




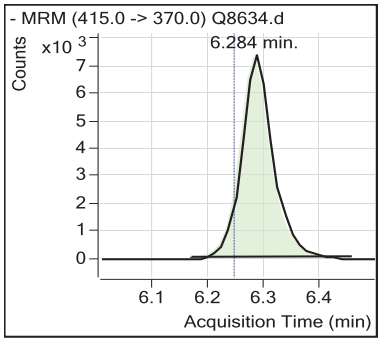
PFHpS

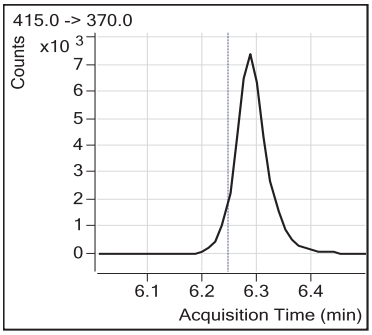


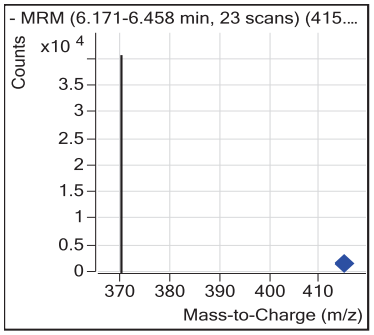




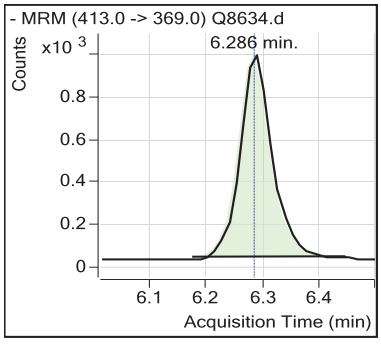
13C2-PFOA

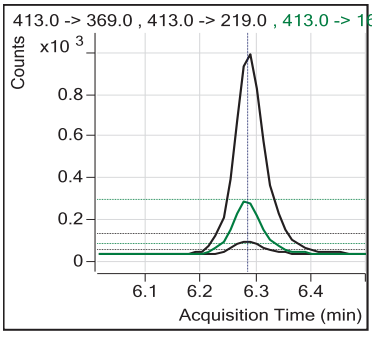


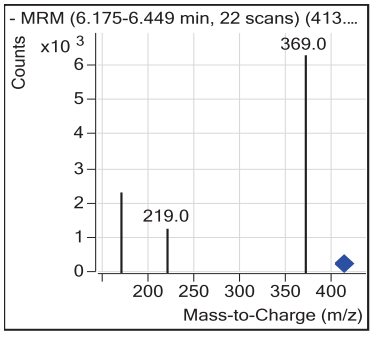




PFOA

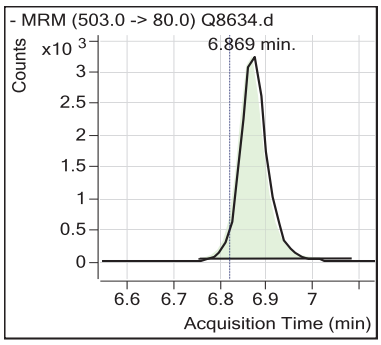


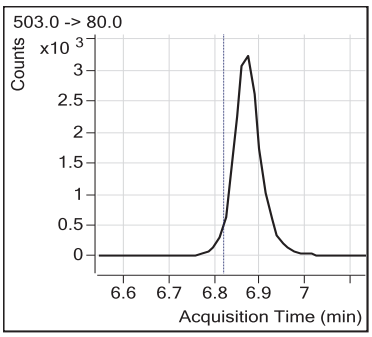


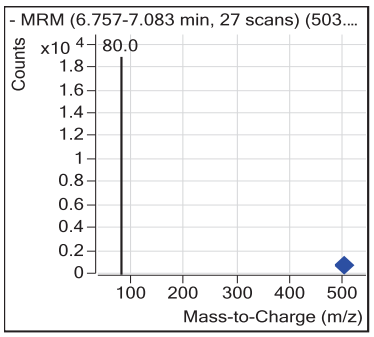


Perfluorinated Compounds by LC/MS/MS.

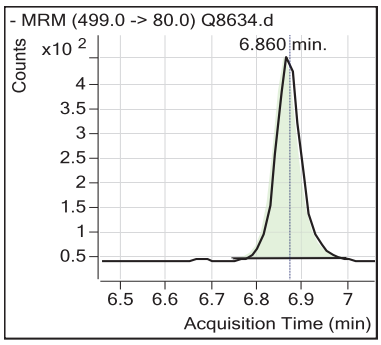
13C4-PFOS

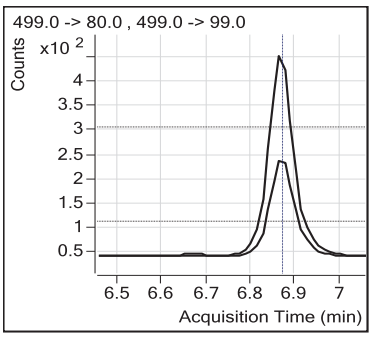


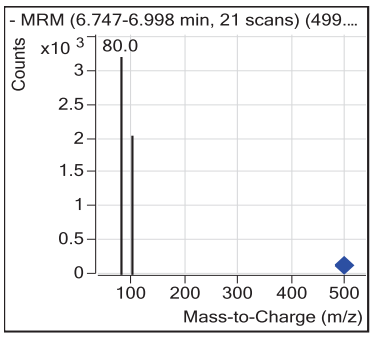




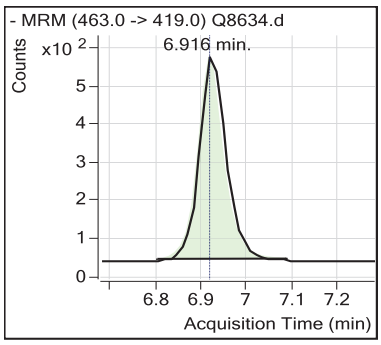
PFOS

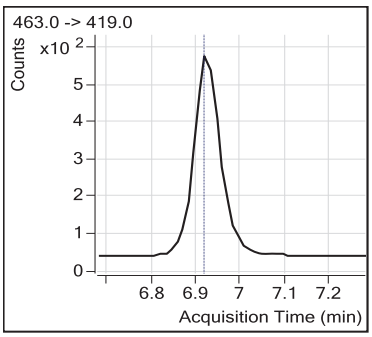


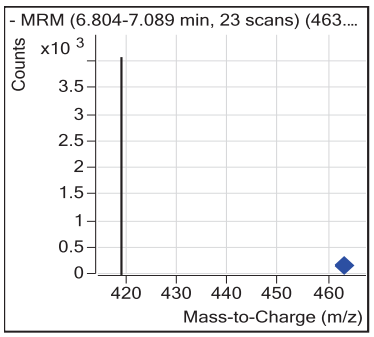




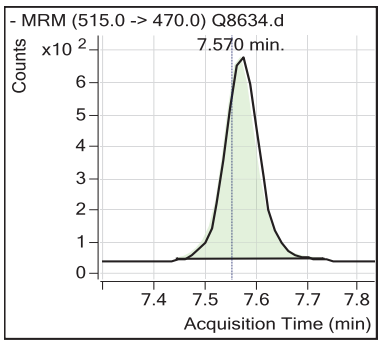
PFNA

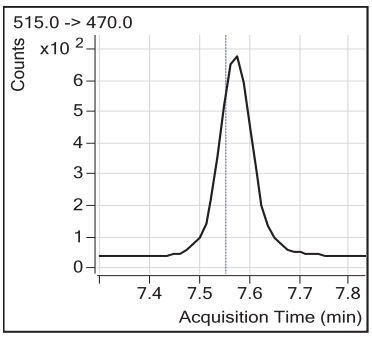


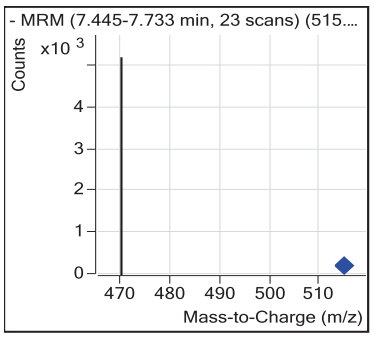




13C2-PFDA

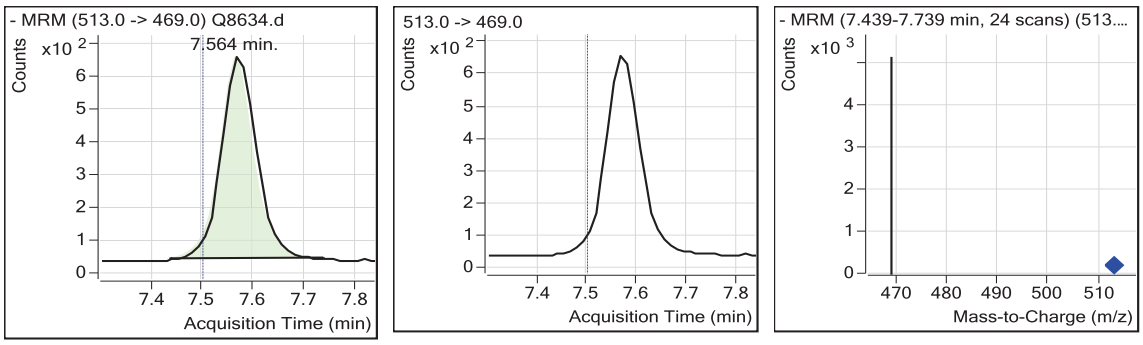




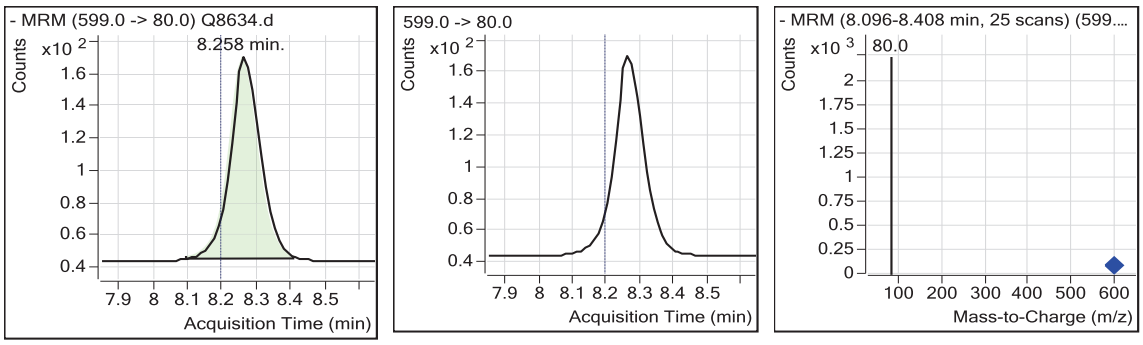


Perfluorinated Compounds by LC/MS/MS.

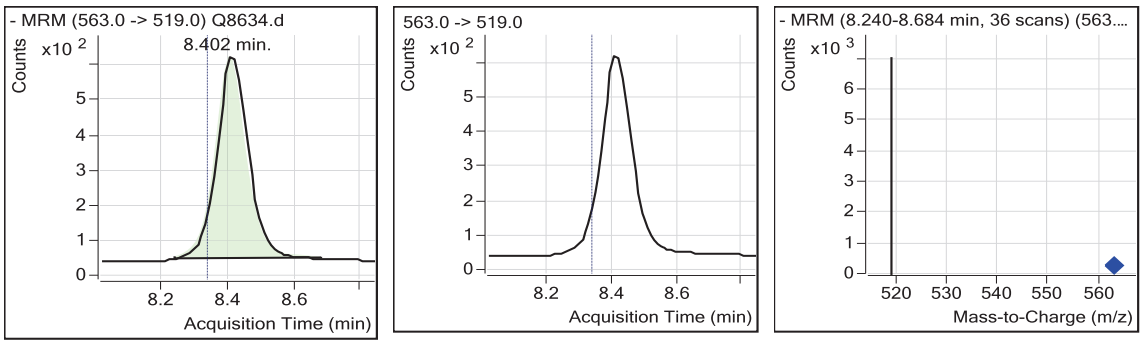
PFDA



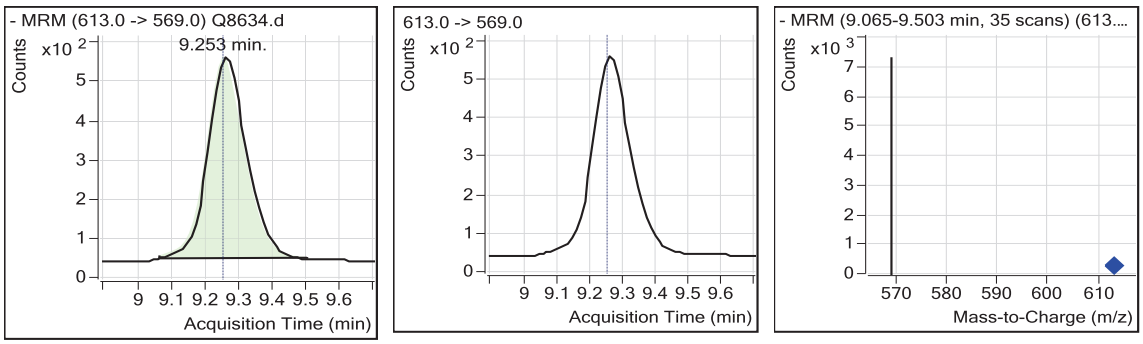
PFDS



PFUnDA

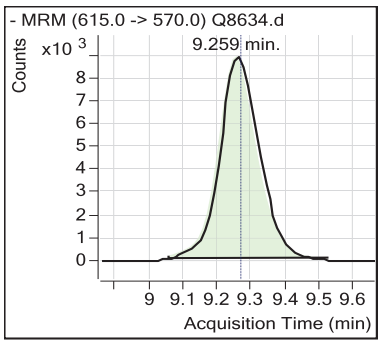


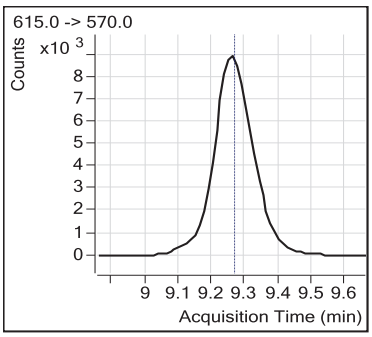
PFDoDA

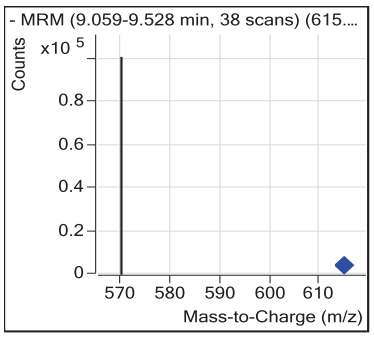


Perfluorinated Compounds by LC/MS/MS.

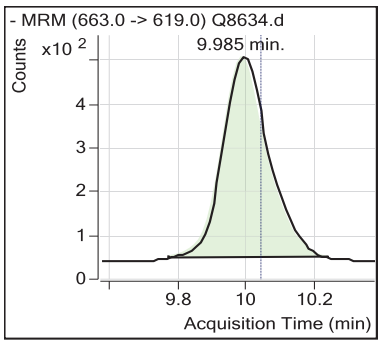
13C2-PFDoDA

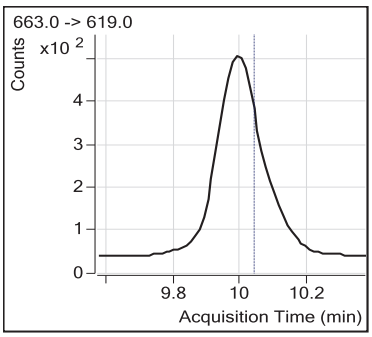


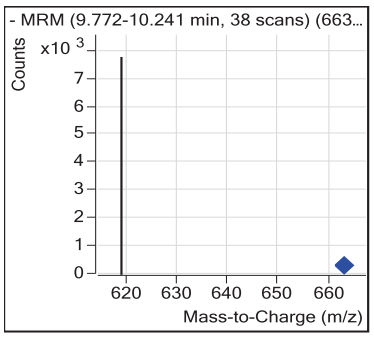




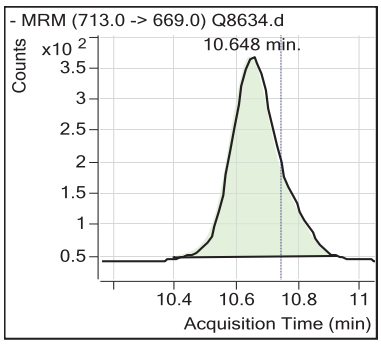
PFTrDA

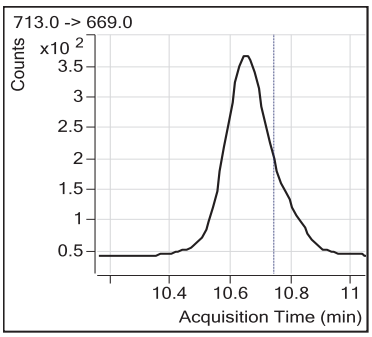


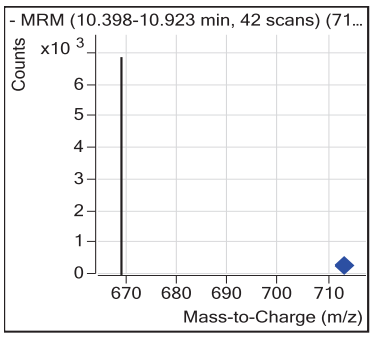




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

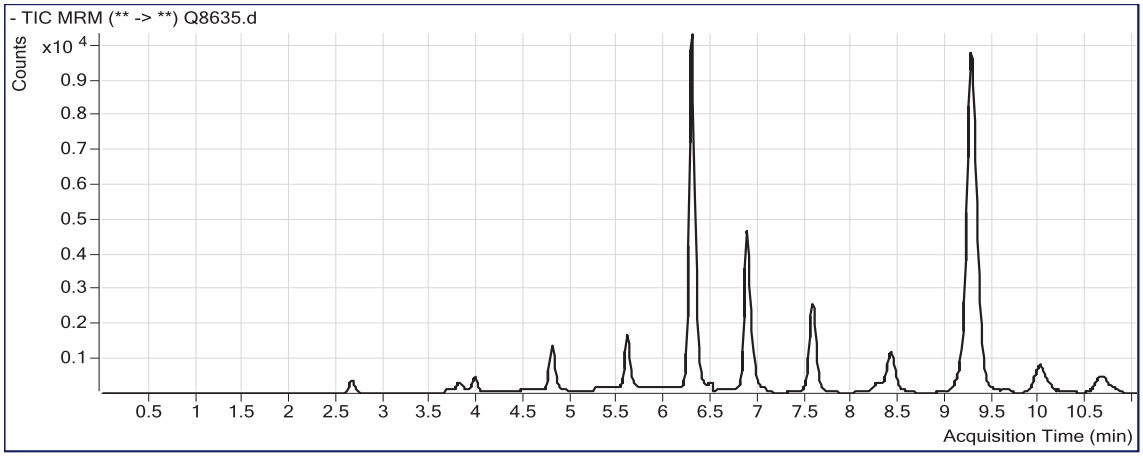
Data File	:	Q8635.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 13:53
Sample Name	:	IC280-5.0
Vial	:	Vial 3
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

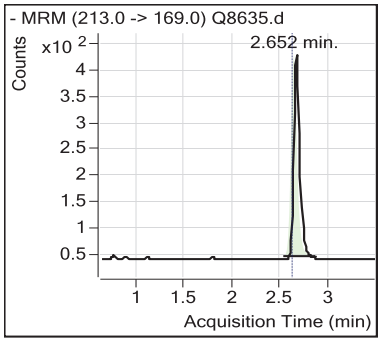
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

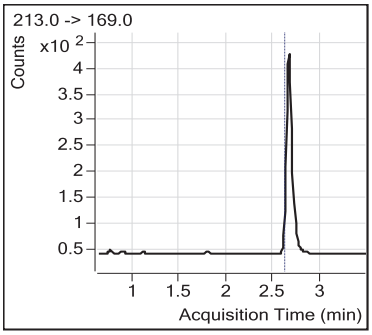
Perfluorinated Compounds by LC/MS/MS.

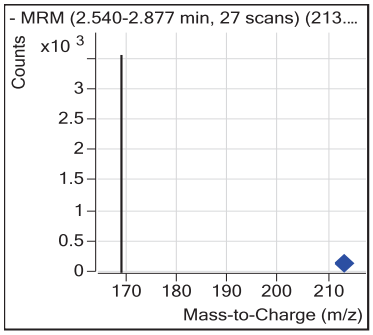
Data File	:	Q8635.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 13:53
Sample Name	:	IC280-5.0
Vial	:	Vial 3
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



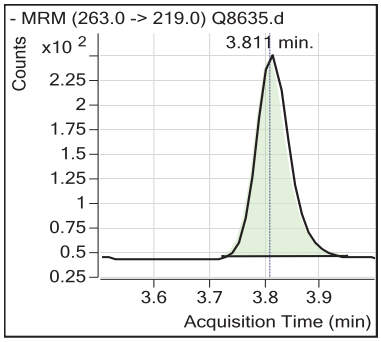
PFBA

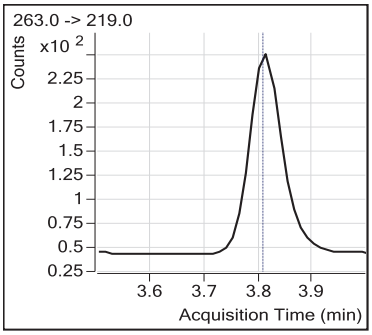


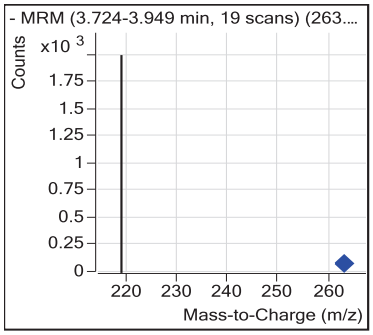




PFPeA

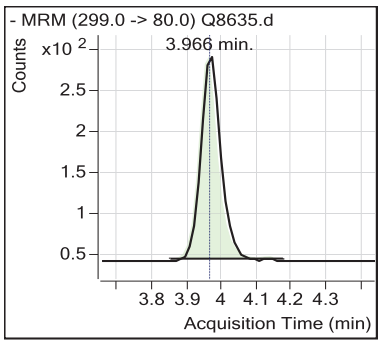


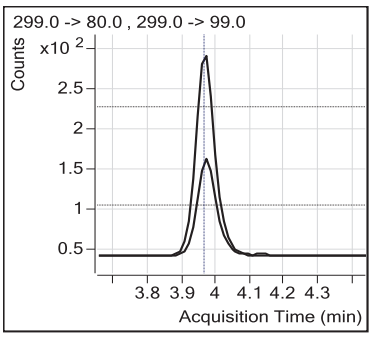


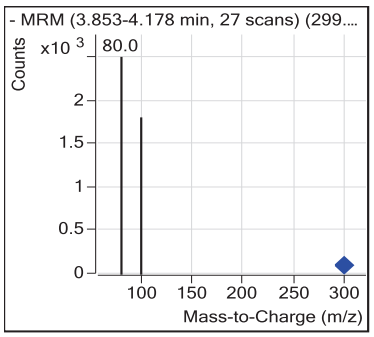


Perfluorinated Compounds by LC/MS/MS.

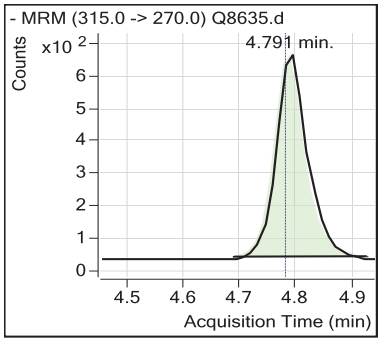
PFBS

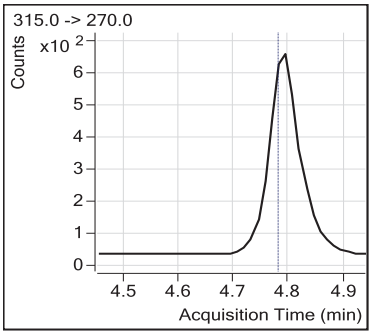


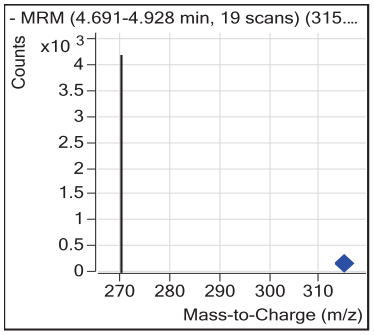




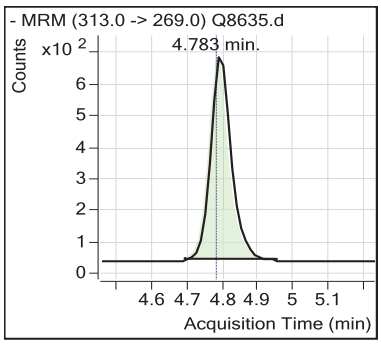
13C2-PFHxA

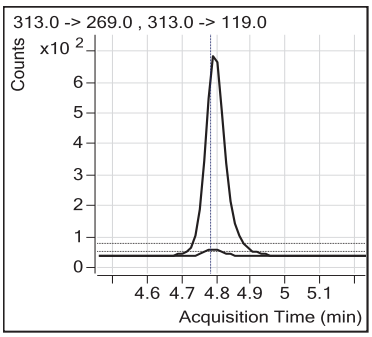


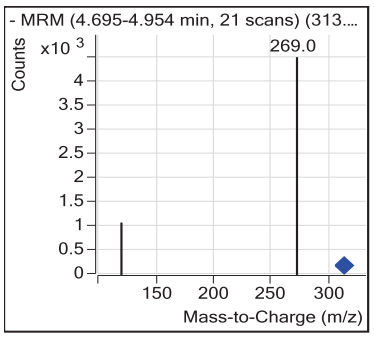




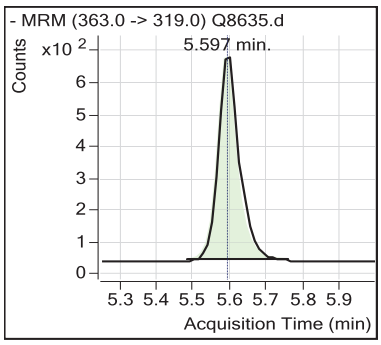
PFHxA

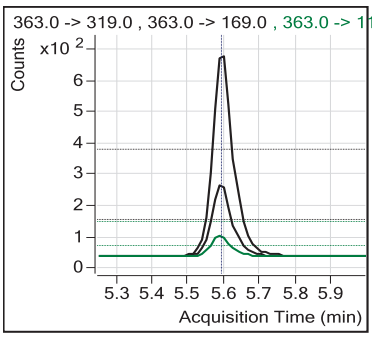


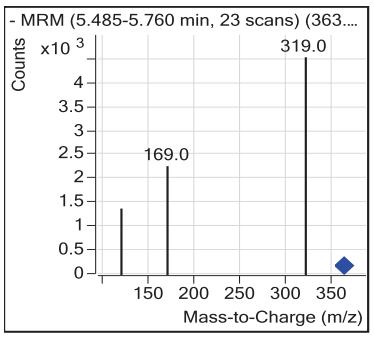




PFHpA

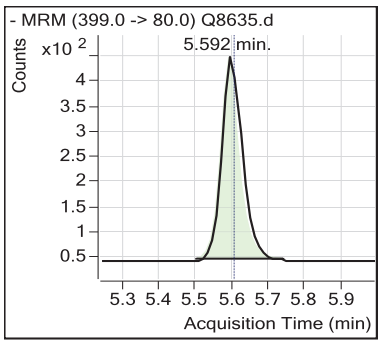


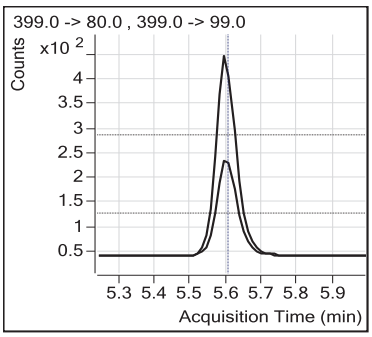


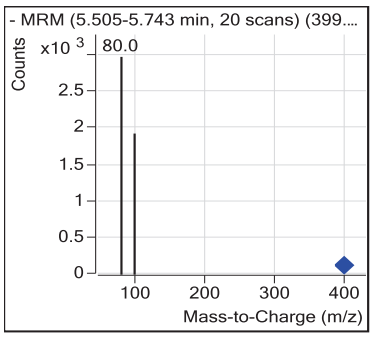


Perfluorinated Compounds by LC/MS/MS.

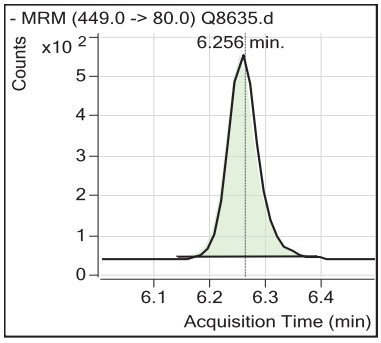
PFHxS

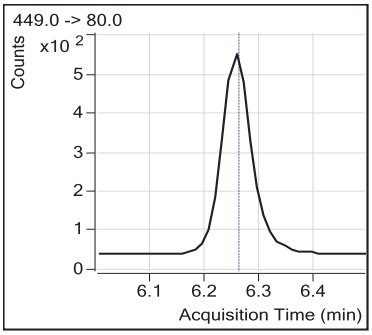


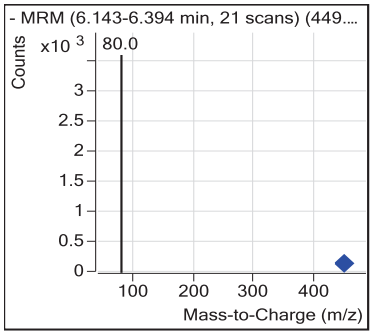




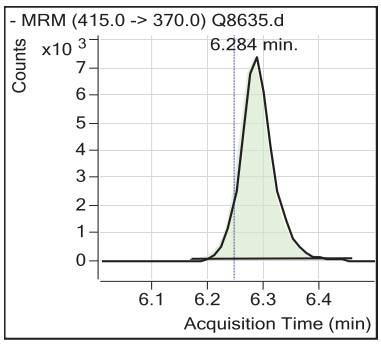
PFHpS

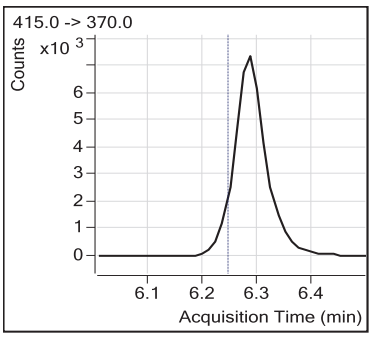


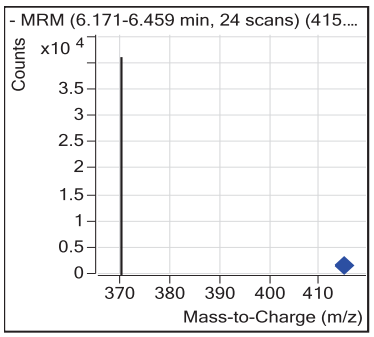




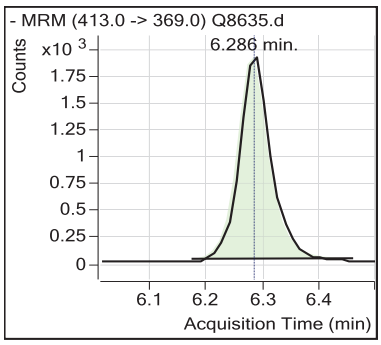
13C2-PFOA

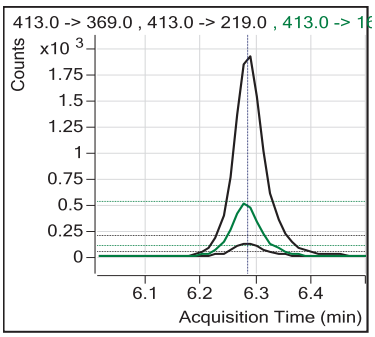


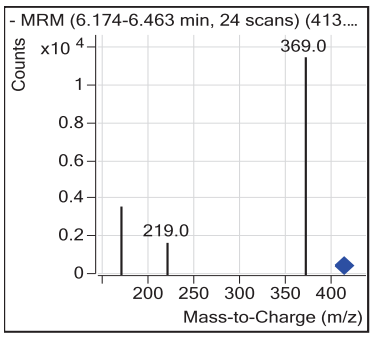




PFOA

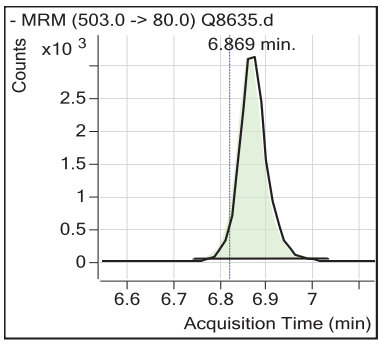


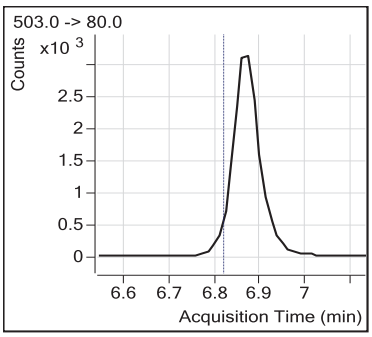


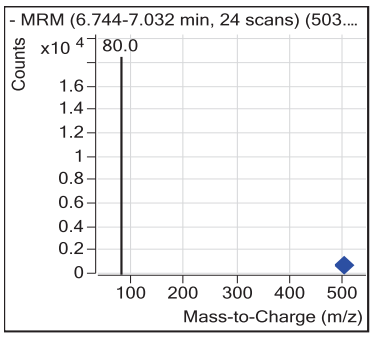


Perfluorinated Compounds by LC/MS/MS.

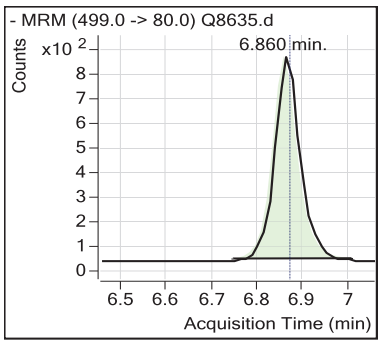
13C4-PFOS

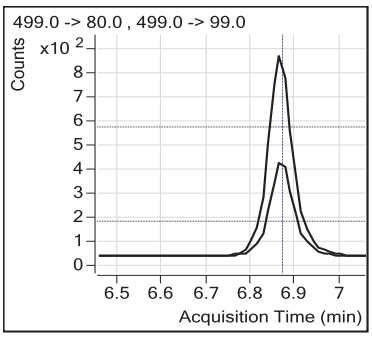


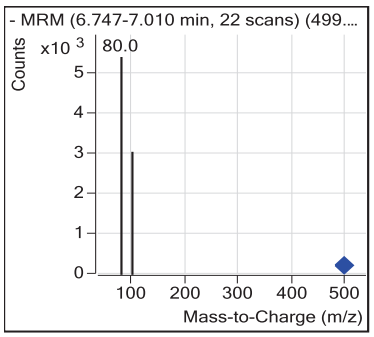




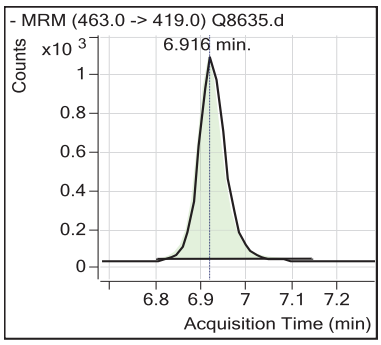
PFOS

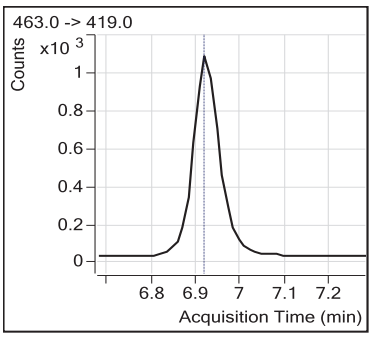


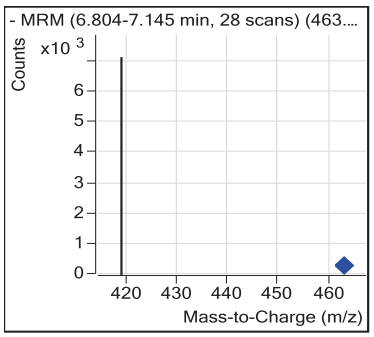




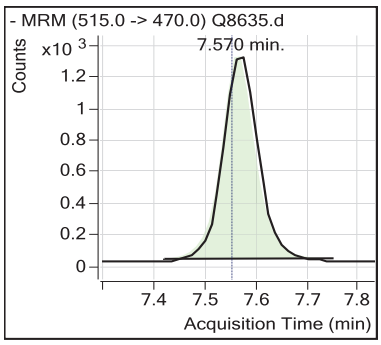
PFNA

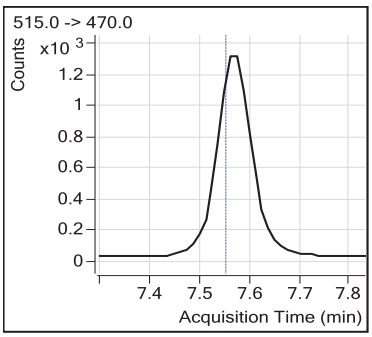


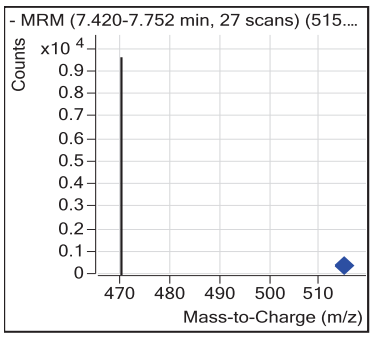




13C2-PFDA

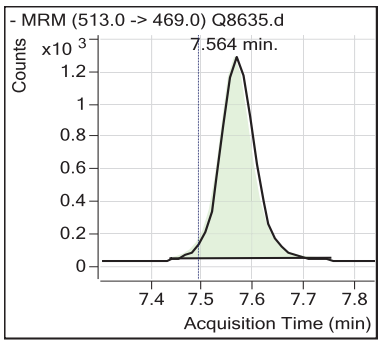


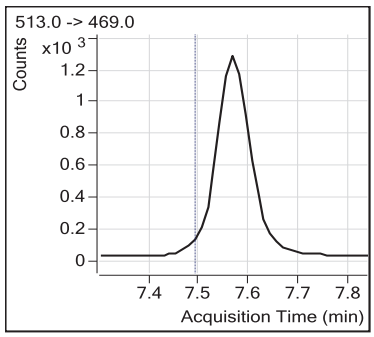


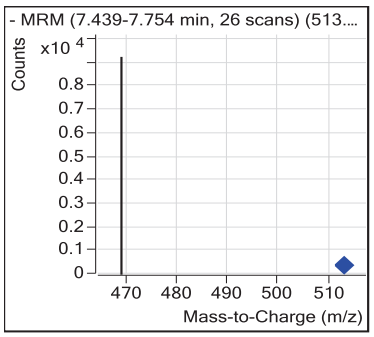


Perfluorinated Compounds by LC/MS/MS.

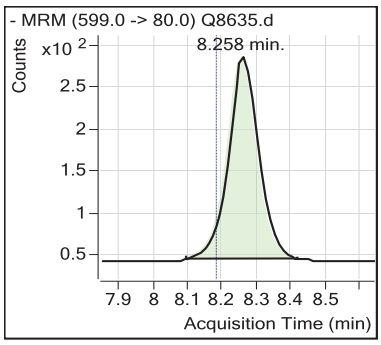
PFDA

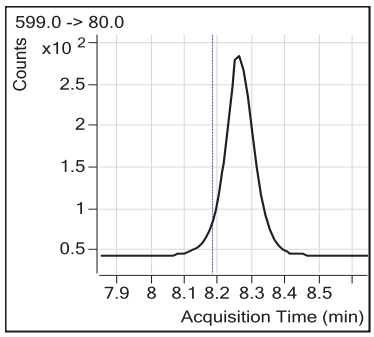


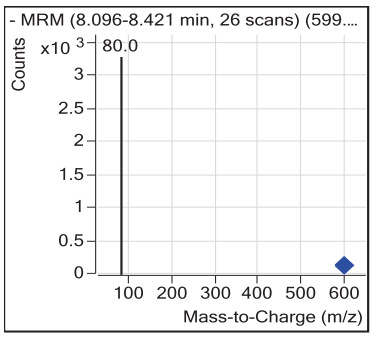




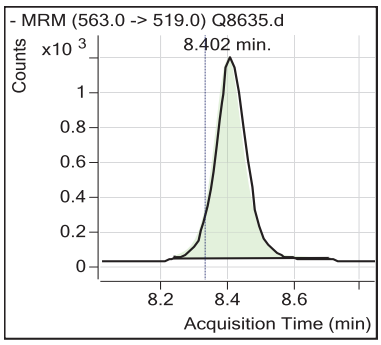
PFDS

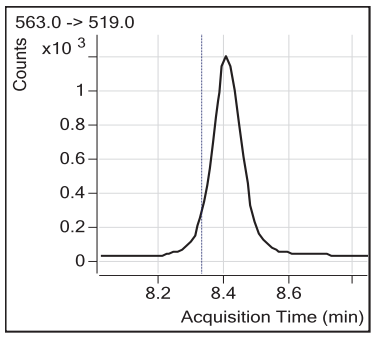


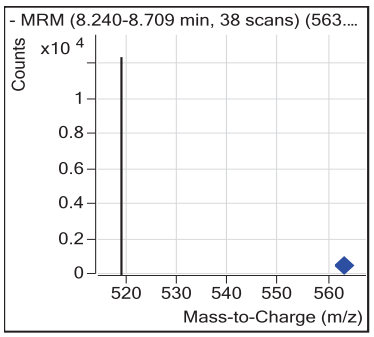




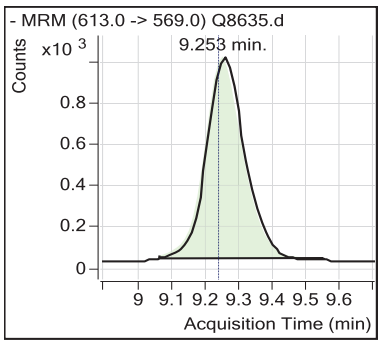
PFUnDA

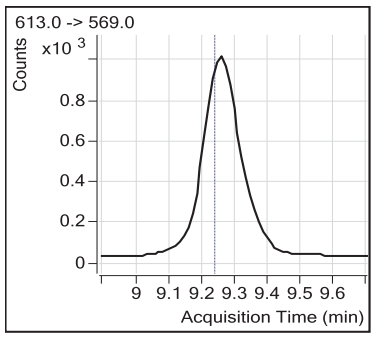


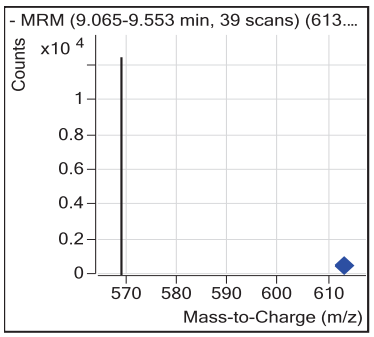




PFDoDA

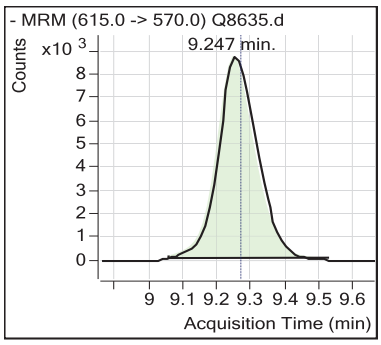


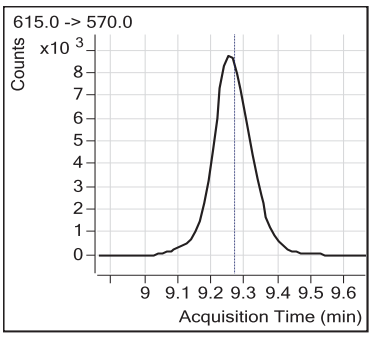


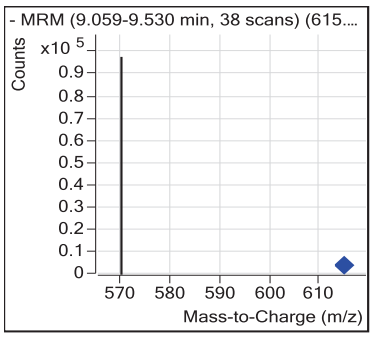


Perfluorinated Compounds by LC/MS/MS.

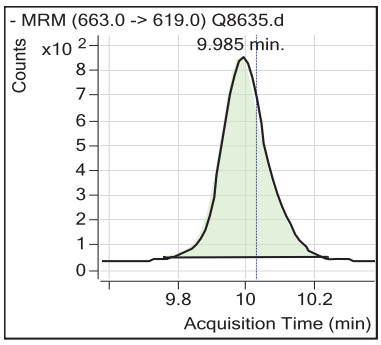
13C2-PFDoDA

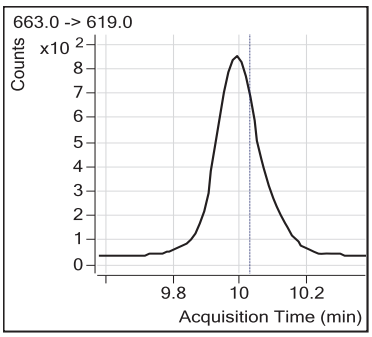


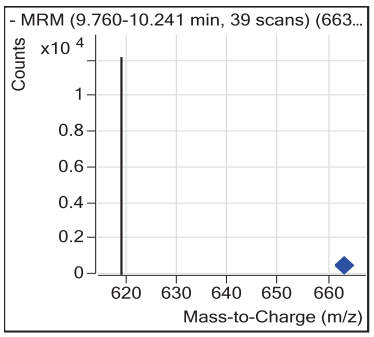




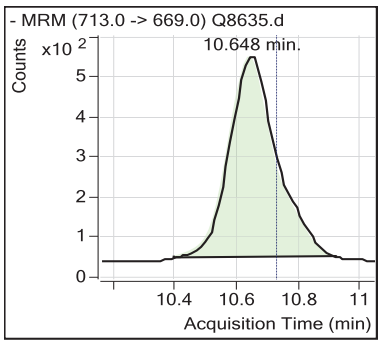
PFTrDA

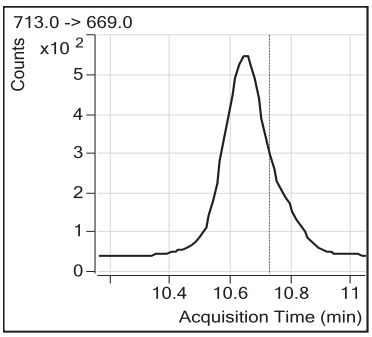


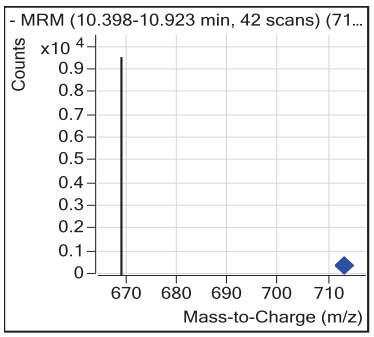




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

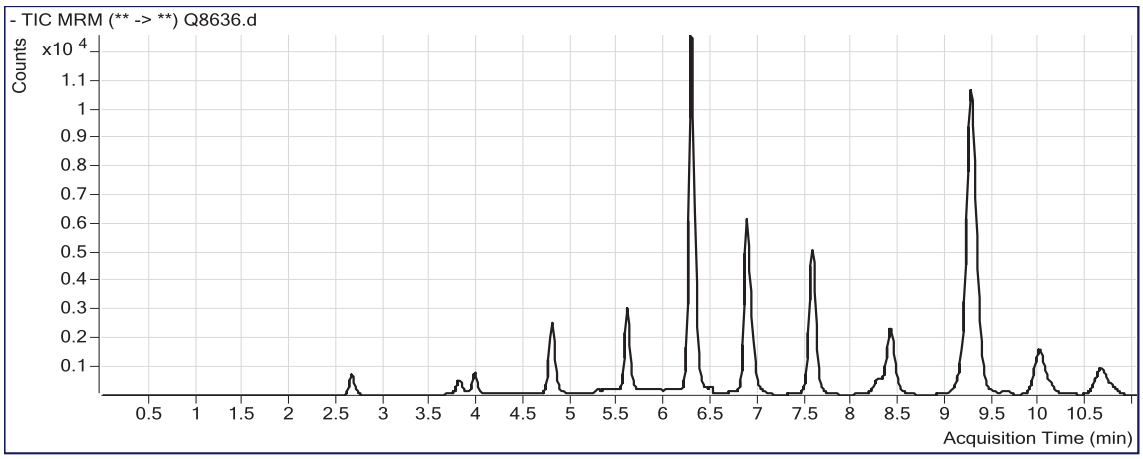
Data File	:	Q8636.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:13
Sample Name	:	IC280-10
Vial	:	Vial 4
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

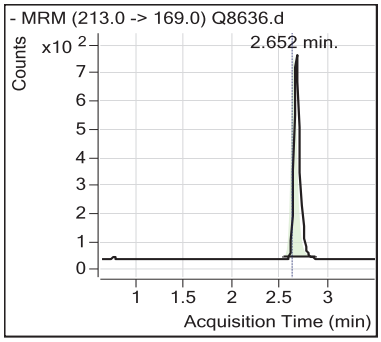
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

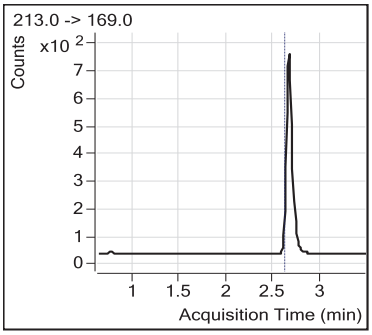
Perfluorinated Compounds by LC/MS/MS.

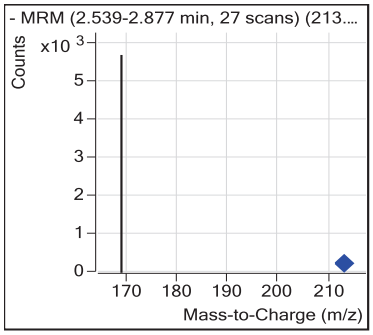
Data File	:	Q8636.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:13
Sample Name	:	IC280-10
Vial	:	Vial 4
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



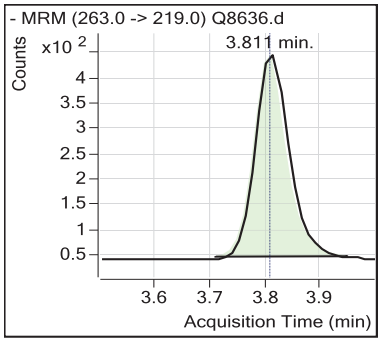
PFBA

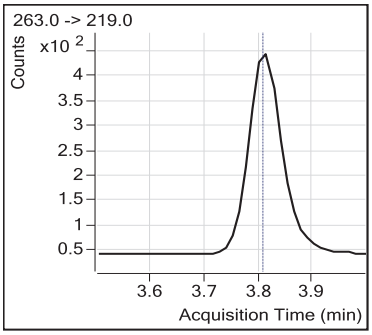


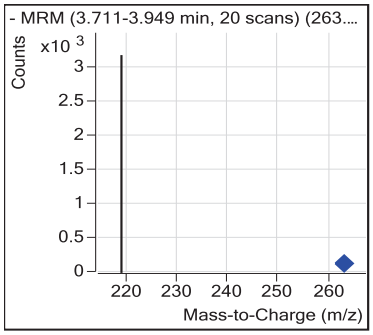




PFPeA

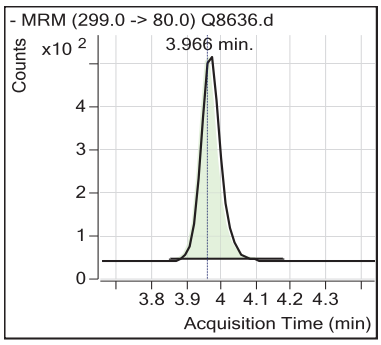


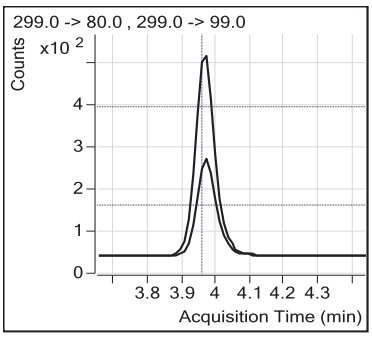


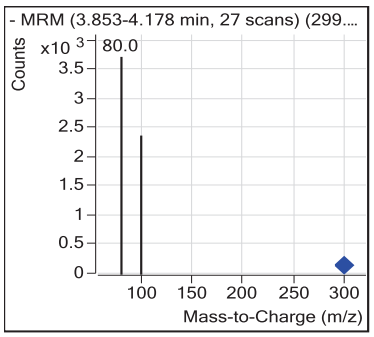


Perfluorinated Compounds by LC/MS/MS.

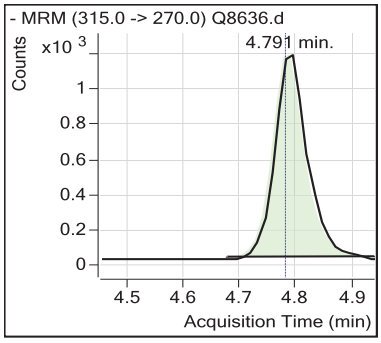
PFBS

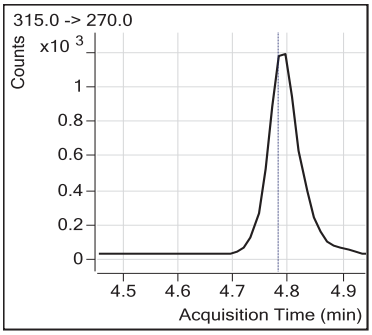


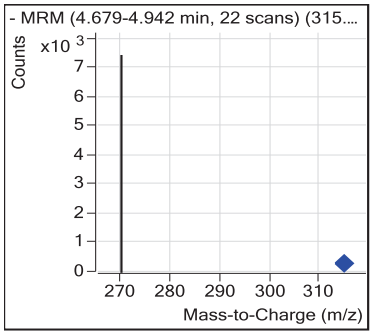




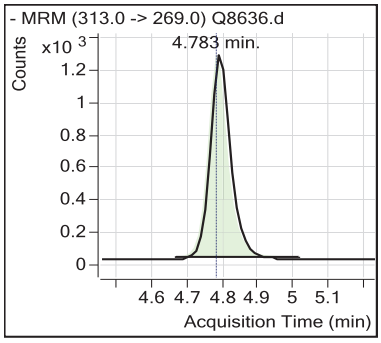
13C2-PFHxA

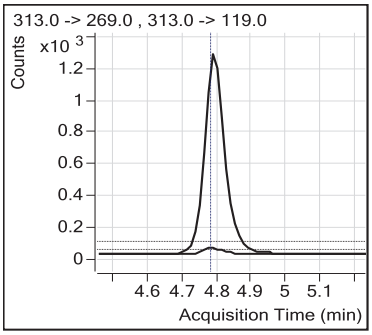


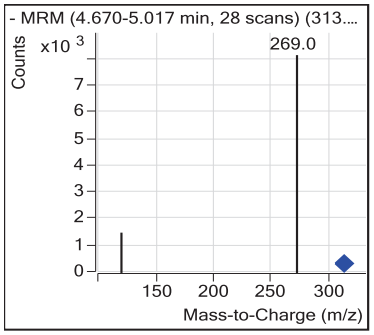




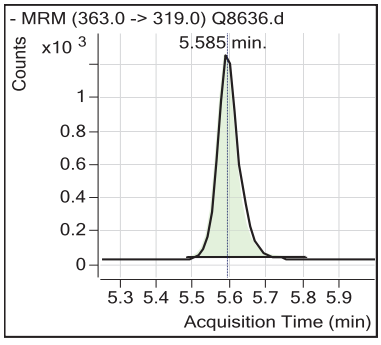
PFHxA

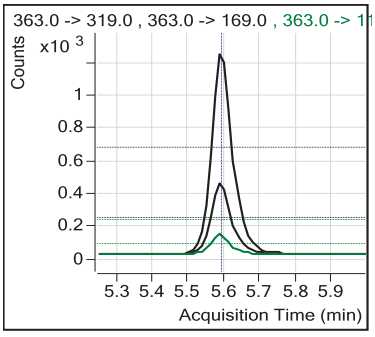


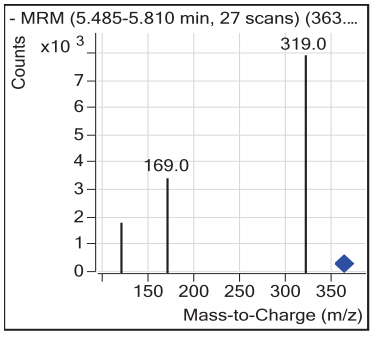




PFHpA

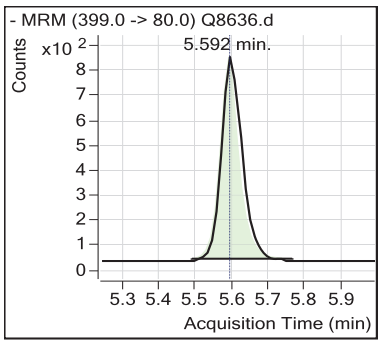


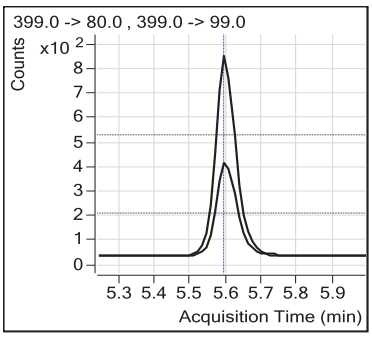


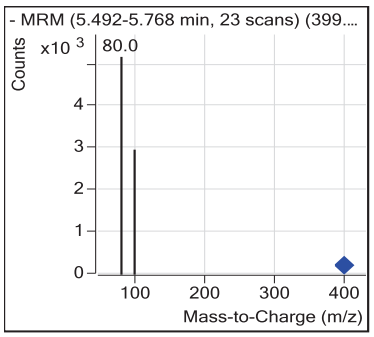


Perfluorinated Compounds by LC/MS/MS.

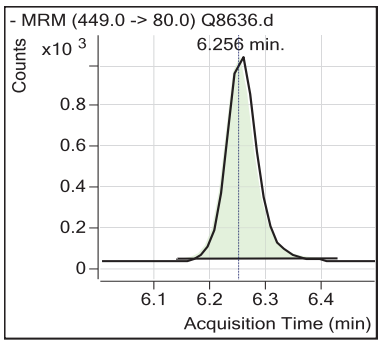
PFHxS

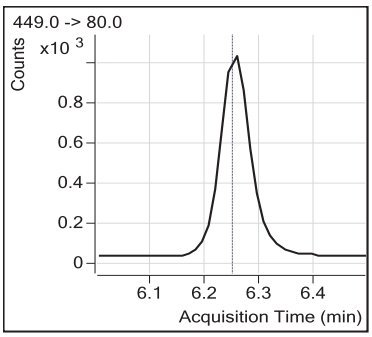


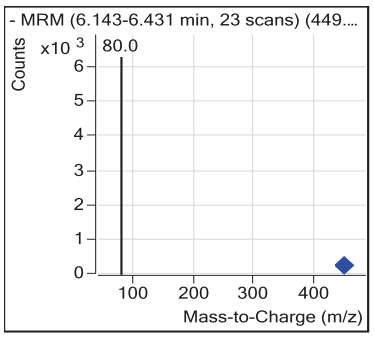




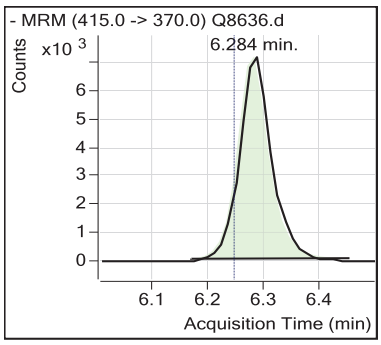
PFHpS

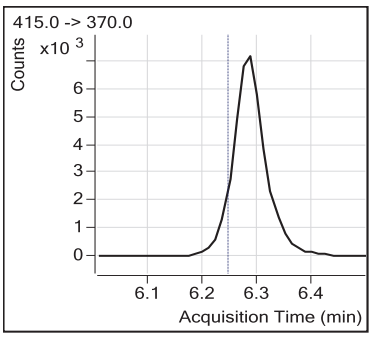


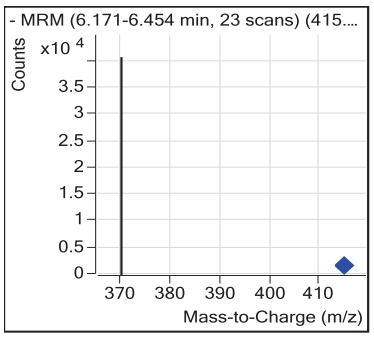




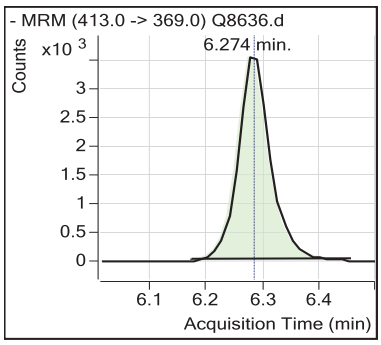
13C2-PFOA

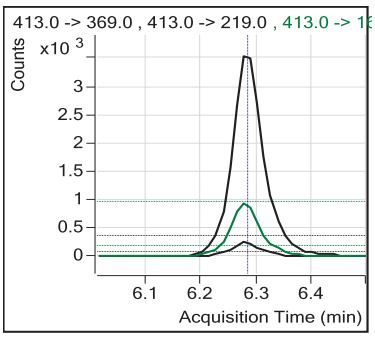


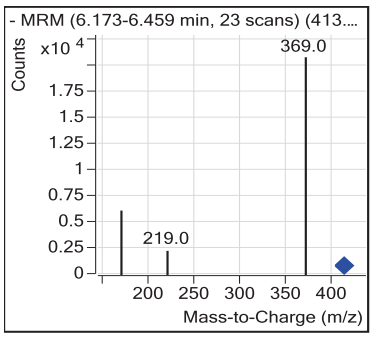




PFOA

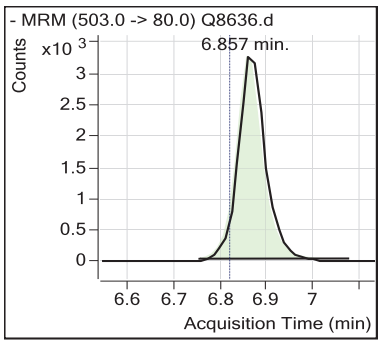


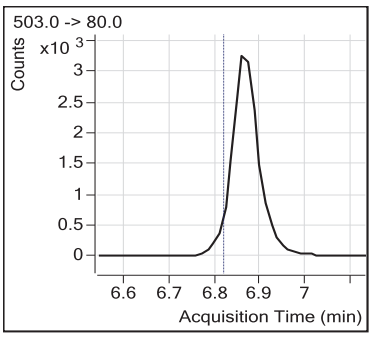


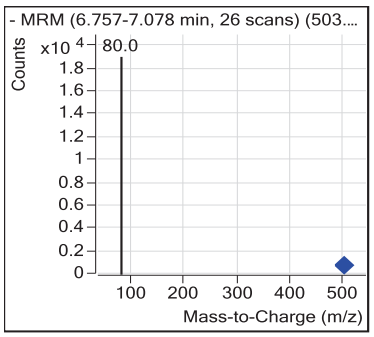


Perfluorinated Compounds by LC/MS/MS.

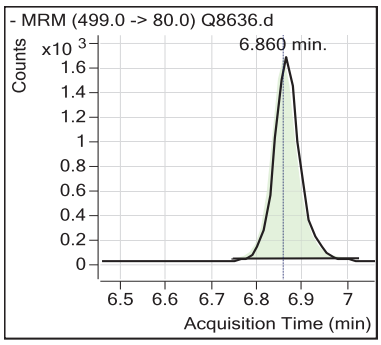
13C4-PFOS

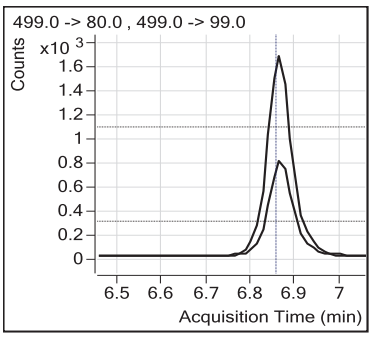


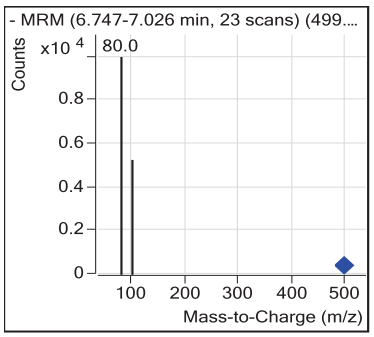




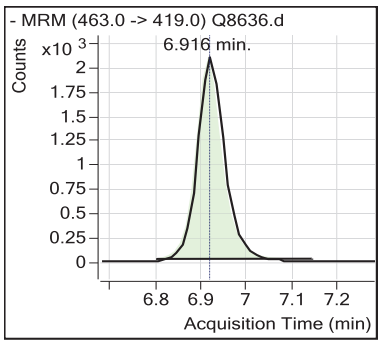
PFOS

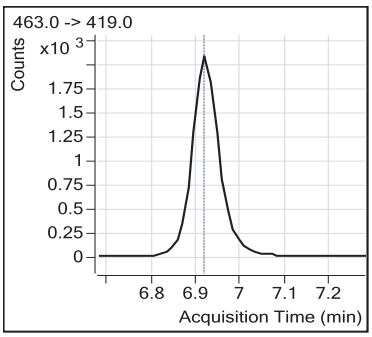


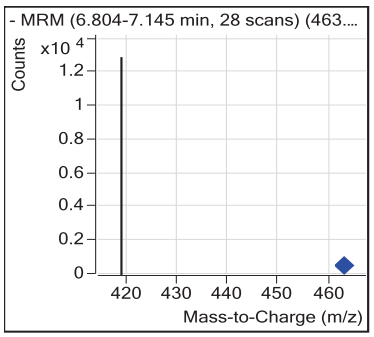




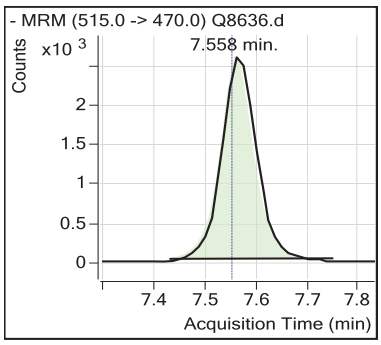
PFNA

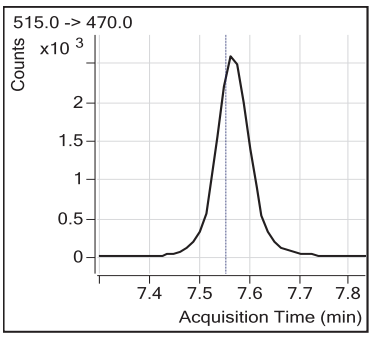


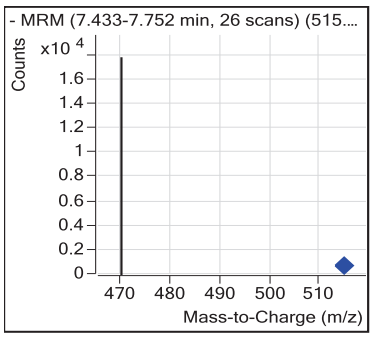




13C2-PFDA

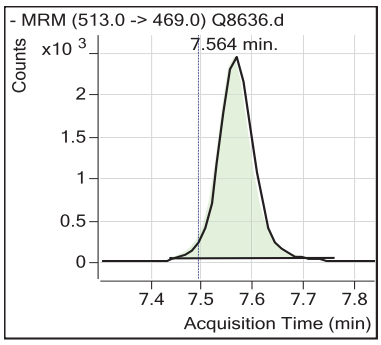


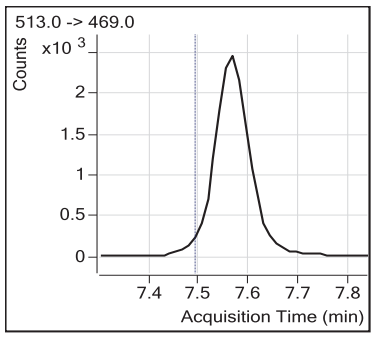


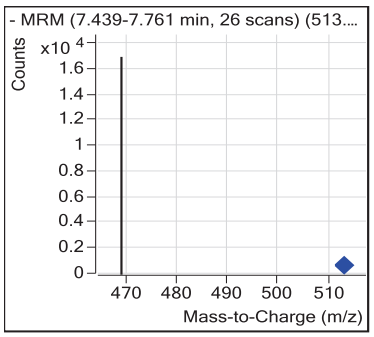


Perfluorinated Compounds by LC/MS/MS.

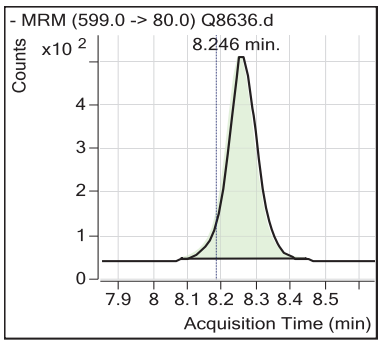
PFDA

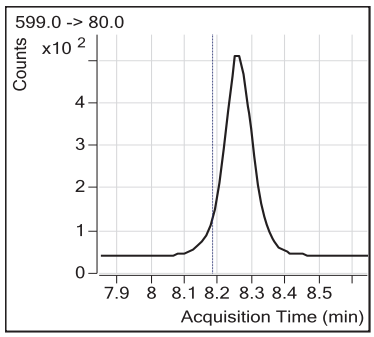


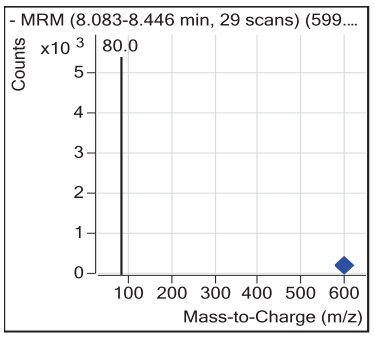




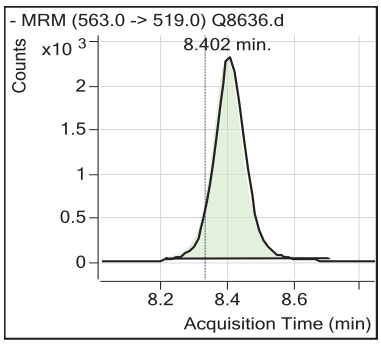
PFDS

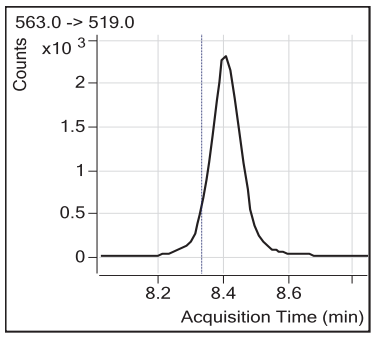


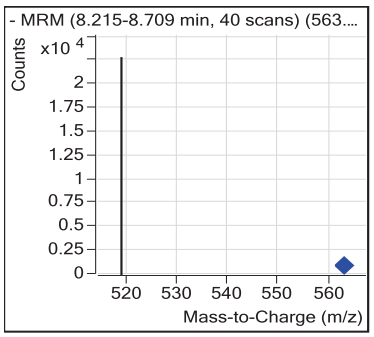




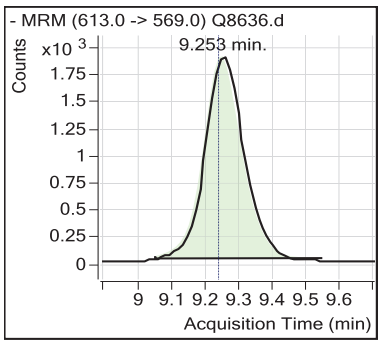
PFUnDA

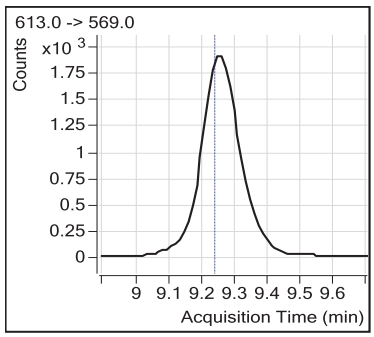


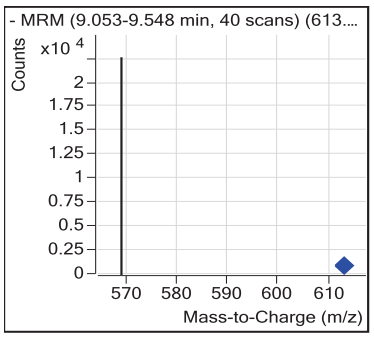




PFDoDA

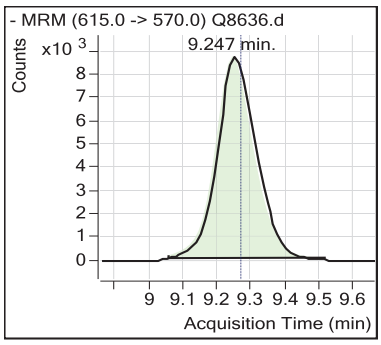


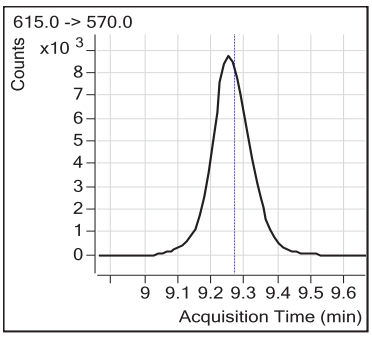


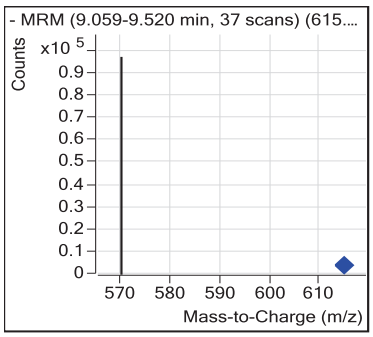


Perfluorinated Compounds by LC/MS/MS.

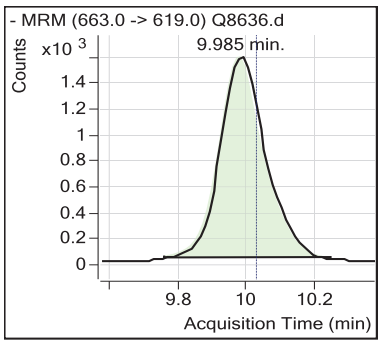
13C2-PFDoDA

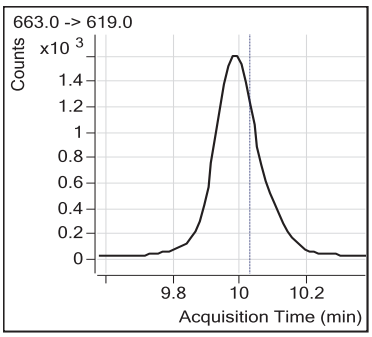


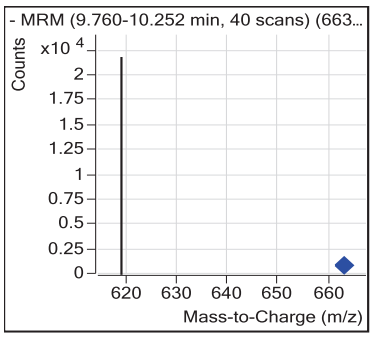




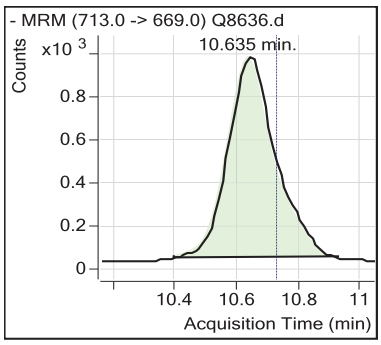
PFTrDA

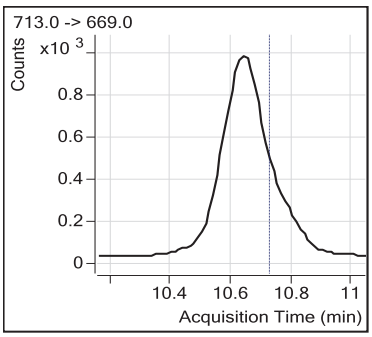


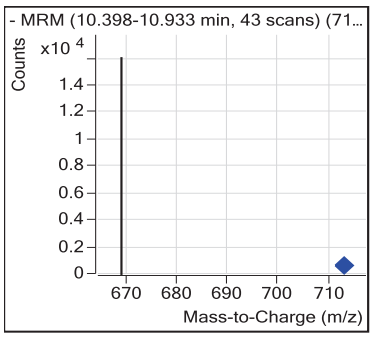




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

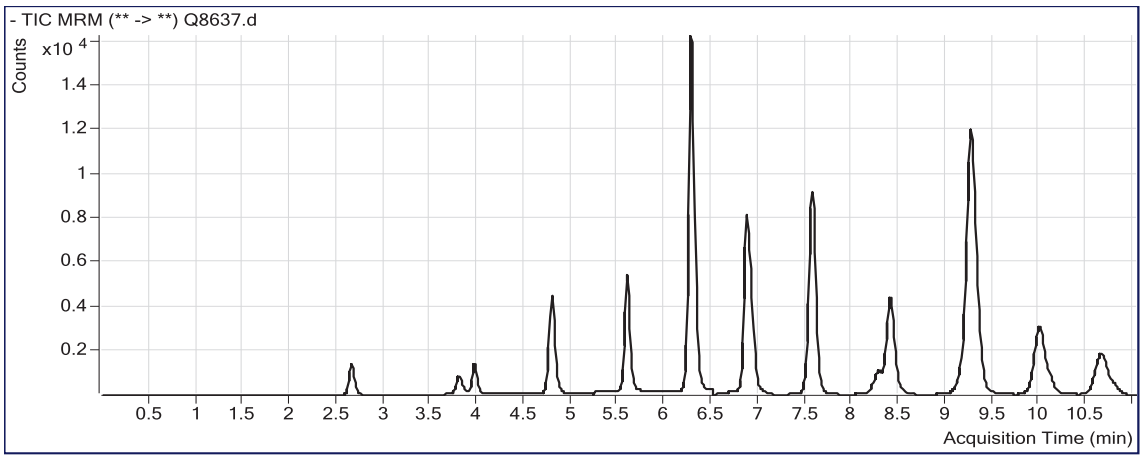
Data File	:	Q8637.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:34
Sample Name	:	ICC280-20
Vial	:	Vial 5
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

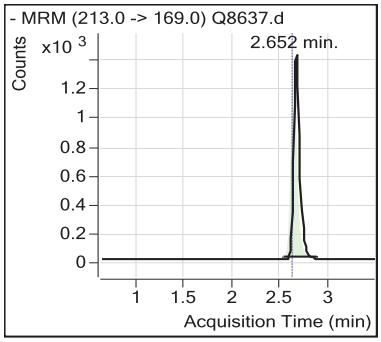
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

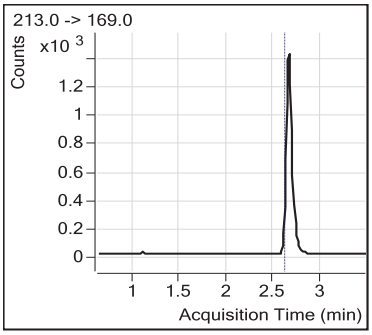
Perfluorinated Compounds by LC/MS/MS.

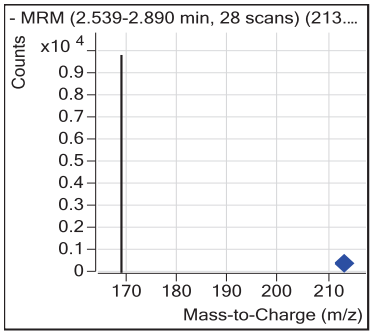
Data File	:	Q8637.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:34
Sample Name	:	ICC280-20
Vial	:	Vial 5
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



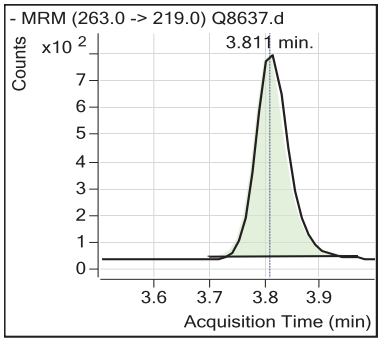
PFBA

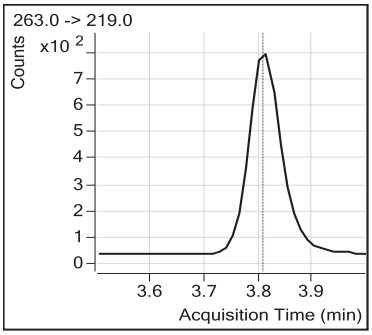


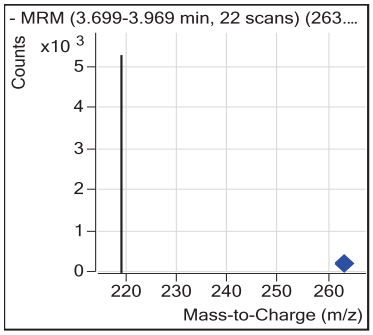




PFPeA

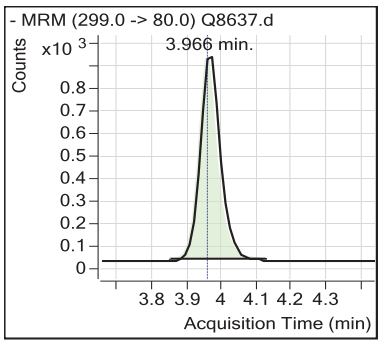


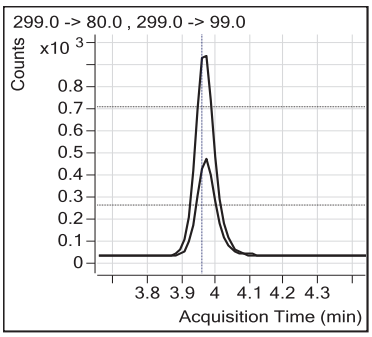


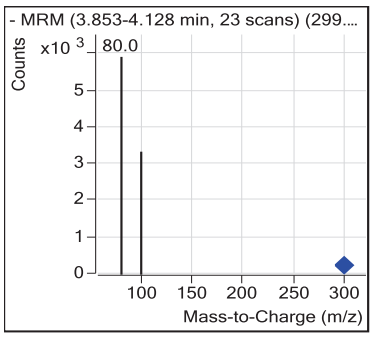


Perfluorinated Compounds by LC/MS/MS.

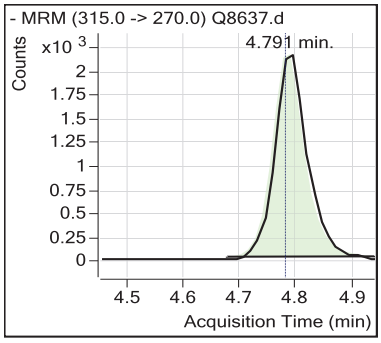
PFBS

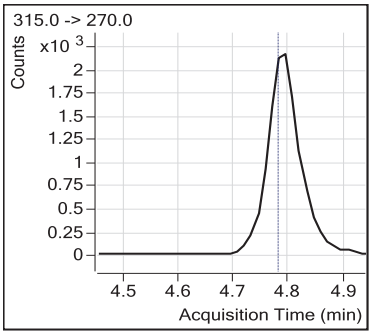


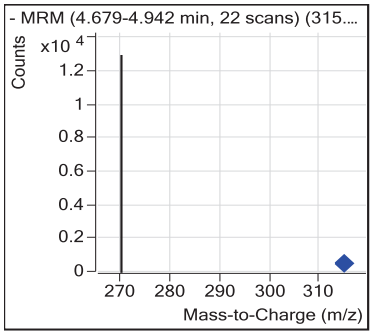




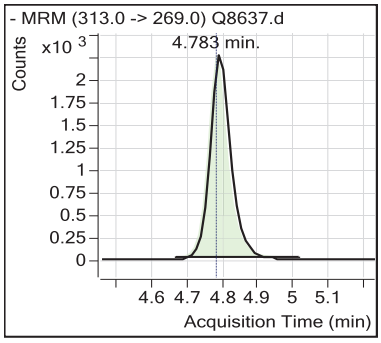
13C2-PFHxA

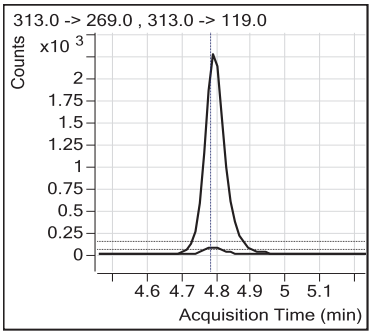


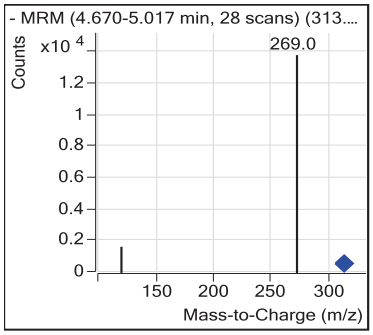




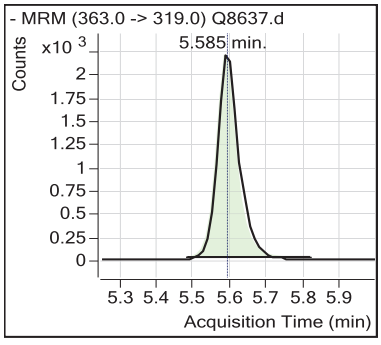
PFHxA

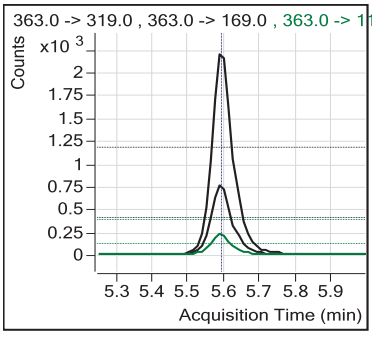


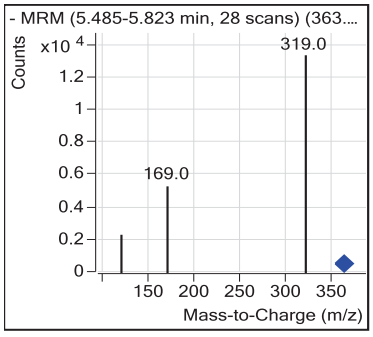




PFHpA

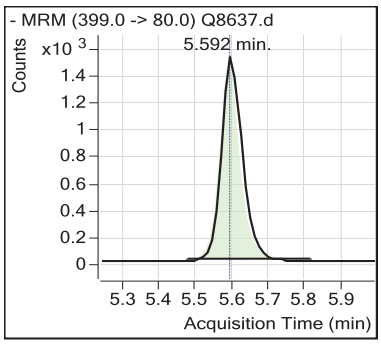


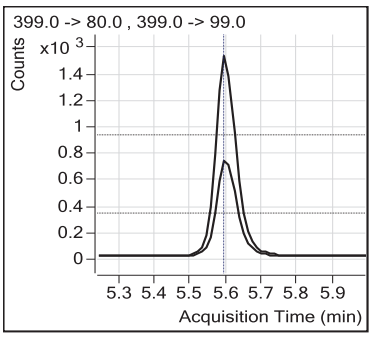


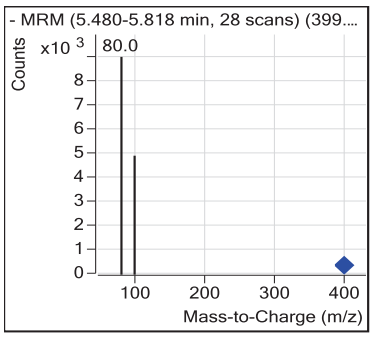


Perfluorinated Compounds by LC/MS/MS.

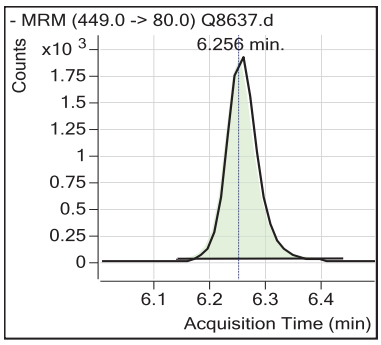
PFHxS

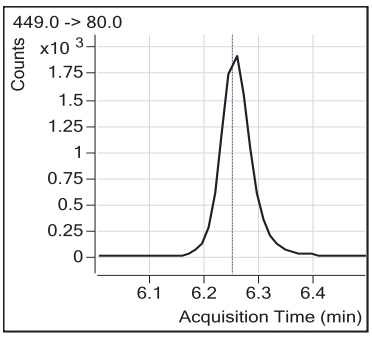


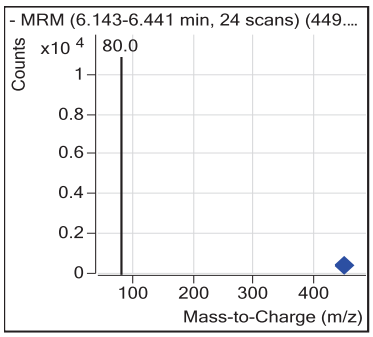




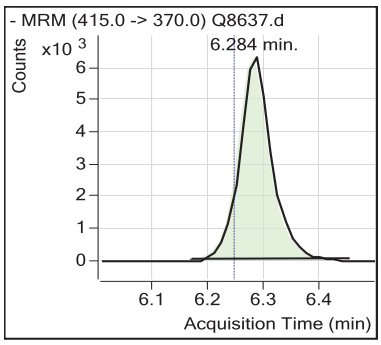
PFHpS

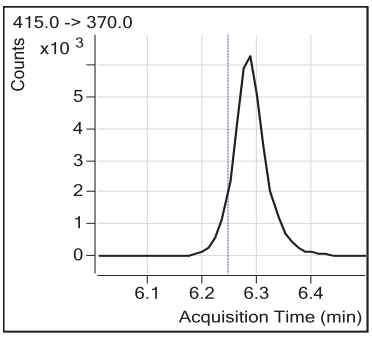


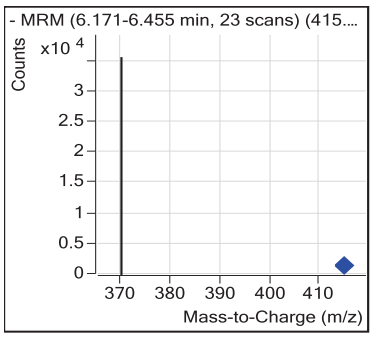




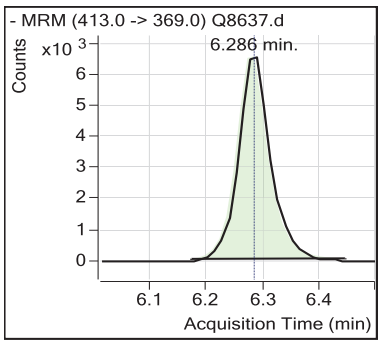
13C2-PFOA

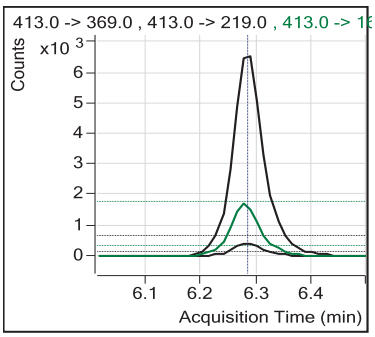


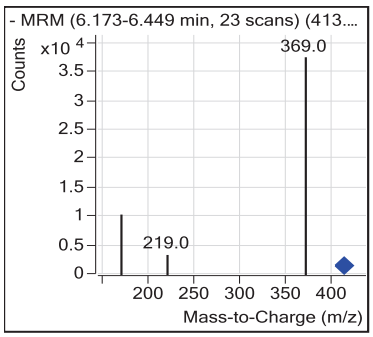




PFOA

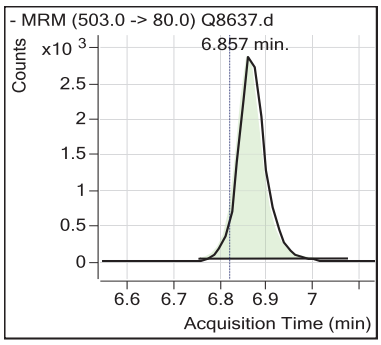


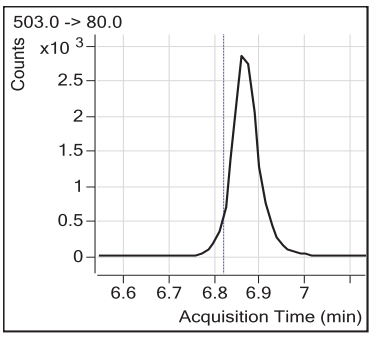


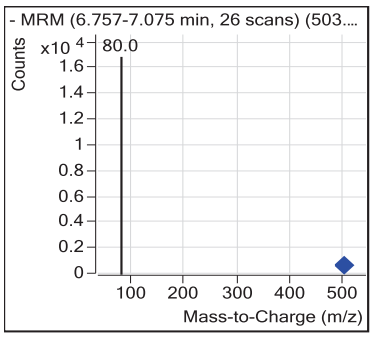


Perfluorinated Compounds by LC/MS/MS.

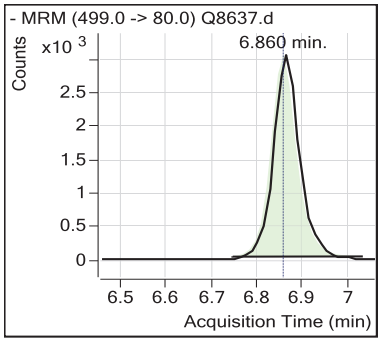
13C4-PFOS

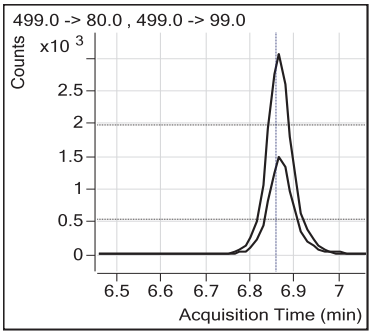


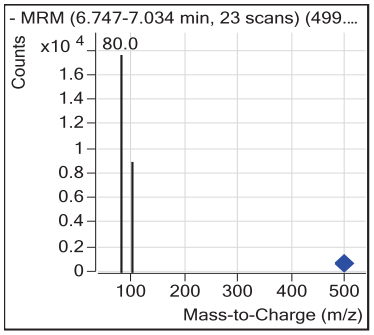




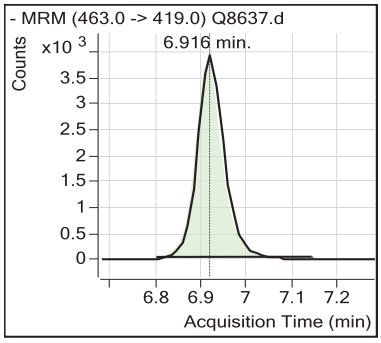
PFOS

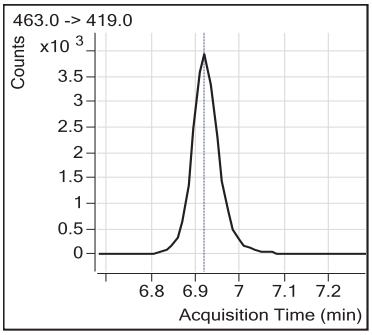


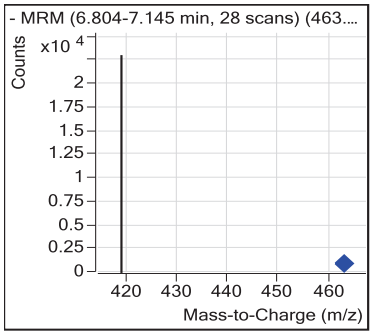




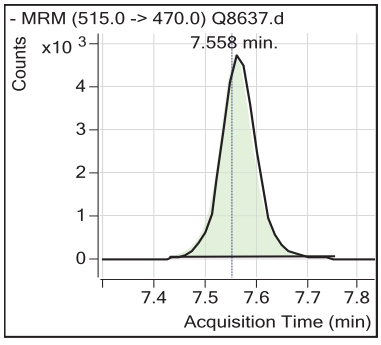
PFNA

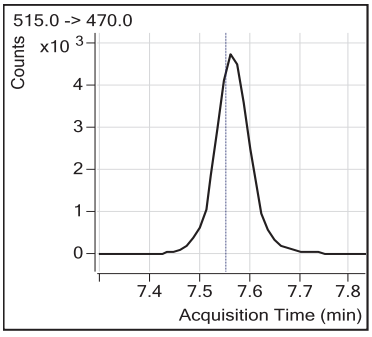


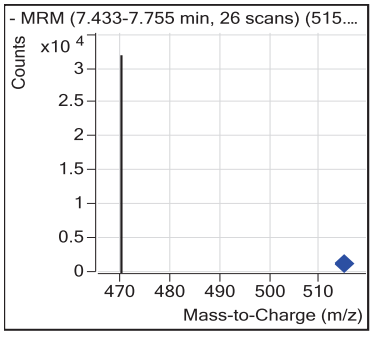




13C2-PFDA

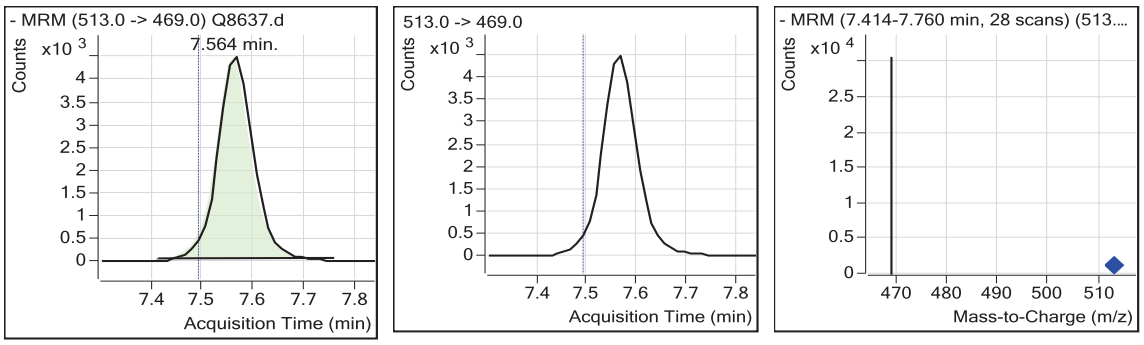




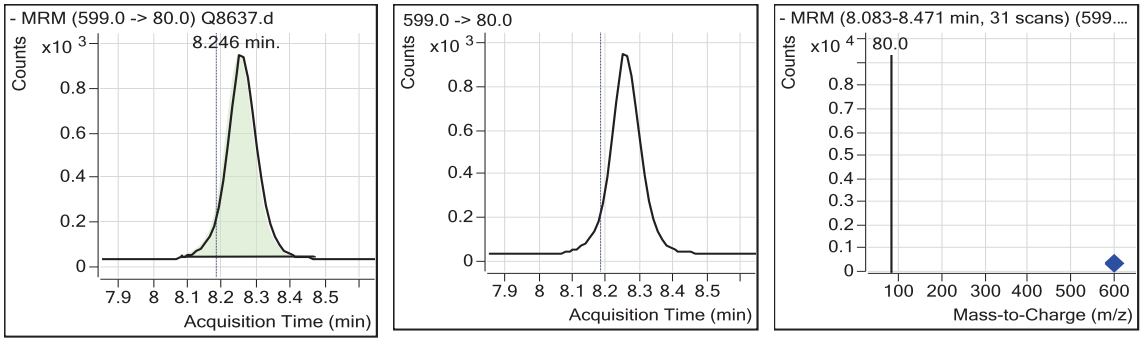


Perfluorinated Compounds by LC/MS/MS.

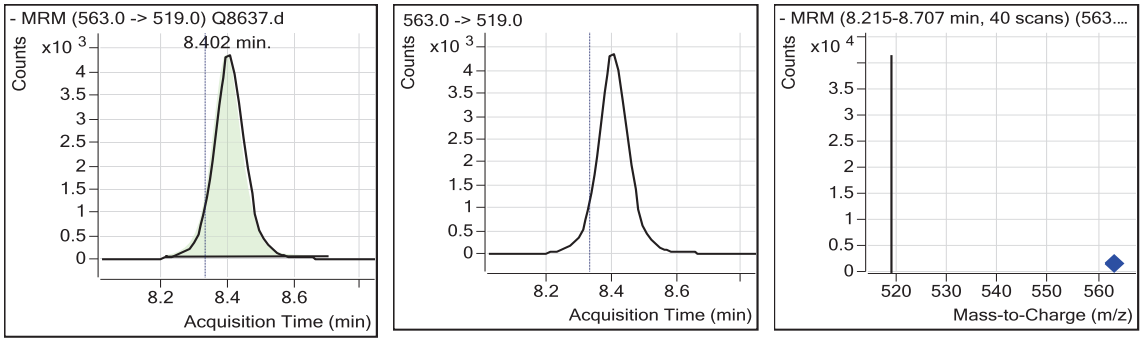
PFDA



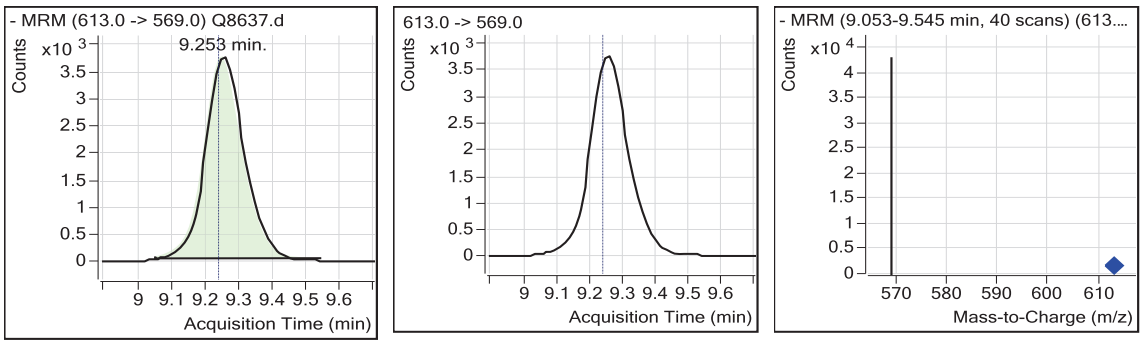
PFDS



PFUnDA

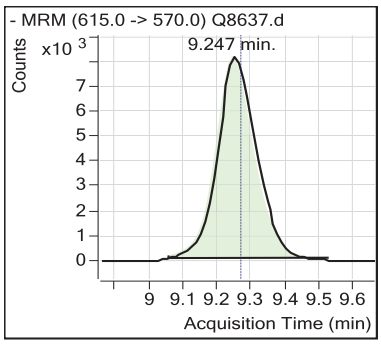


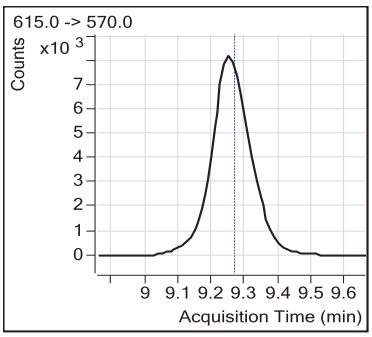
PFDoDA

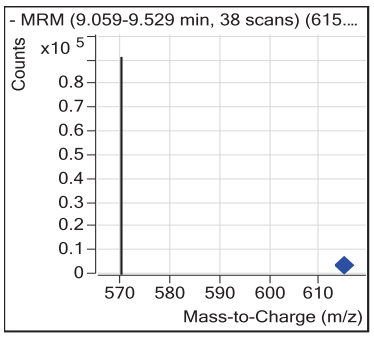


Perfluorinated Compounds by LC/MS/MS.

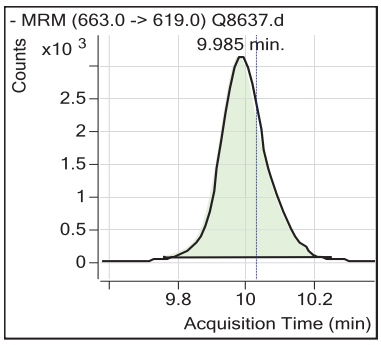
13C2-PFDoDA

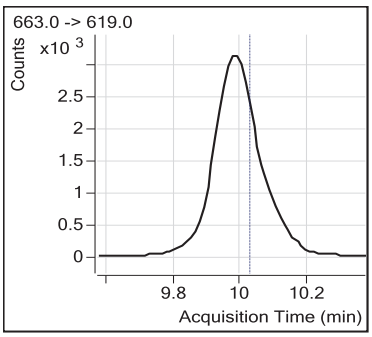


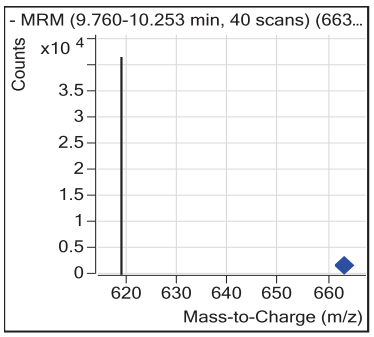




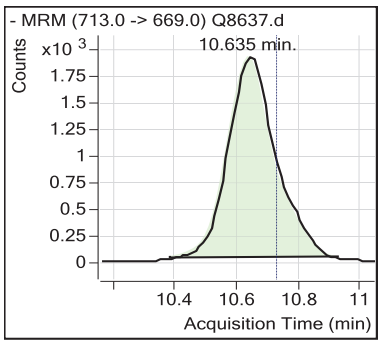
PFTrDA

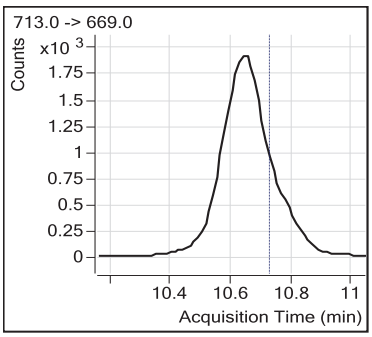


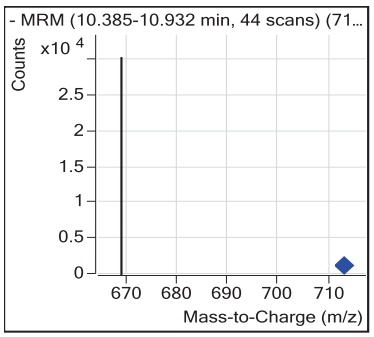




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

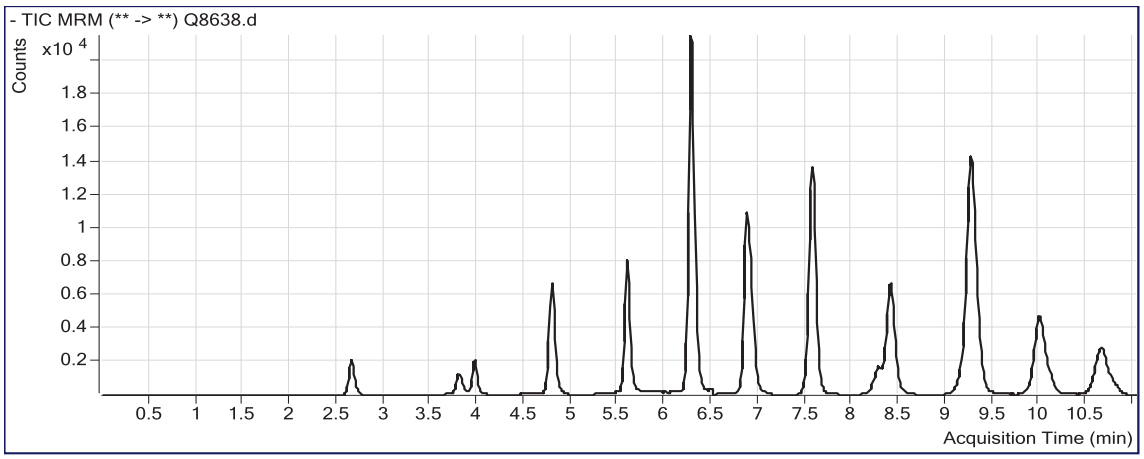
Data File	:	Q8638.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:53
Sample Name	:	IC280-30
Vial	:	Vial 6
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

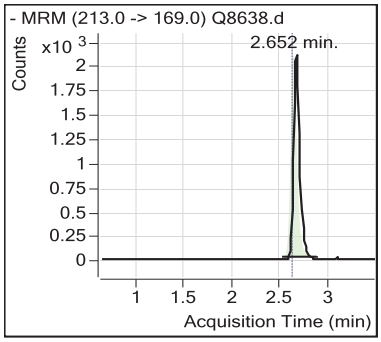
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

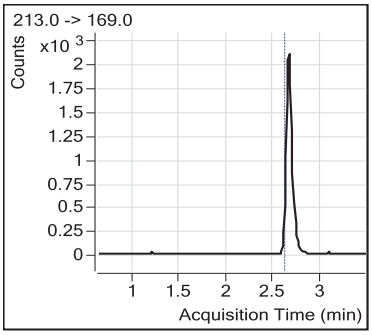
Perfluorinated Compounds by LC/MS/MS.

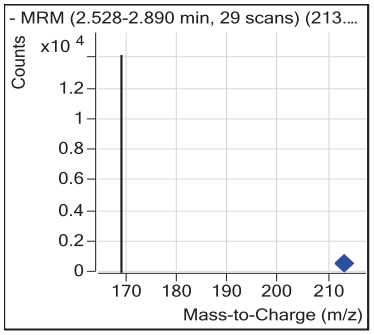
Data File	:	Q8638.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 14:53
Sample Name	:	IC280-30
Vial	:	Vial 6
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



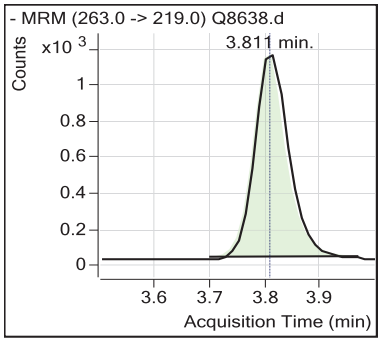
PFBA

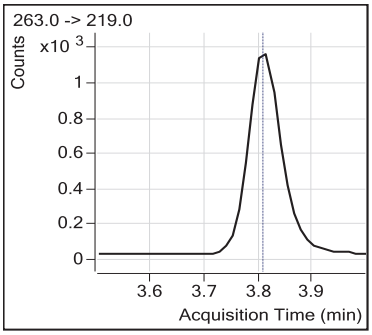


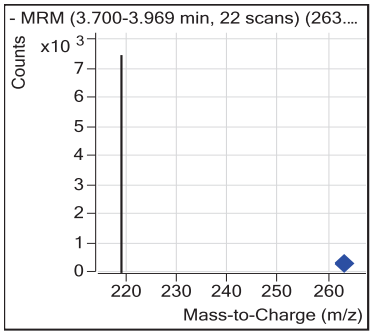




PFPeA

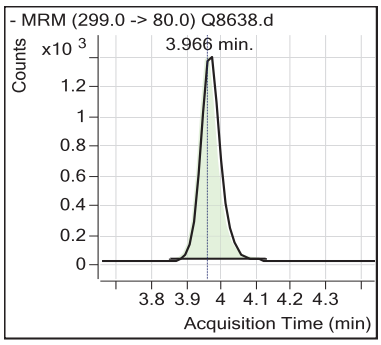


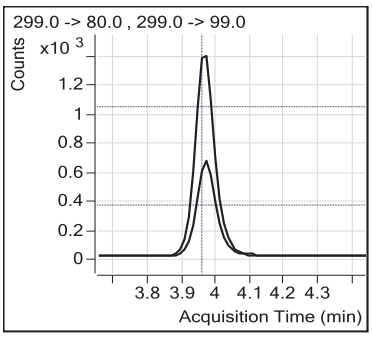


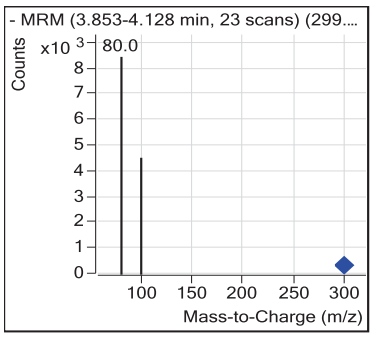


Perfluorinated Compounds by LC/MS/MS.

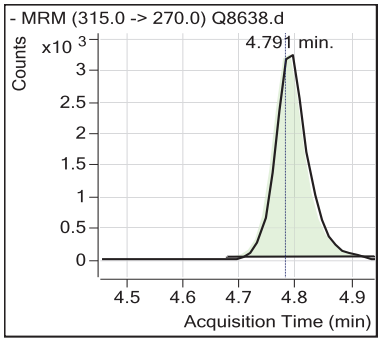
PFBS

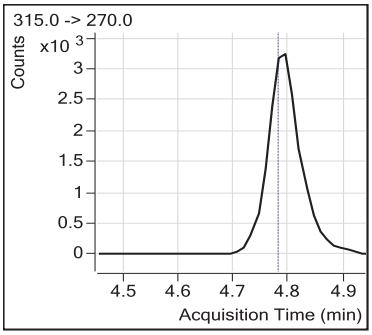


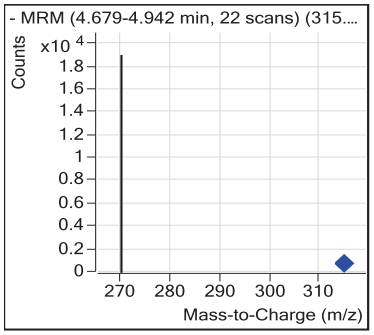




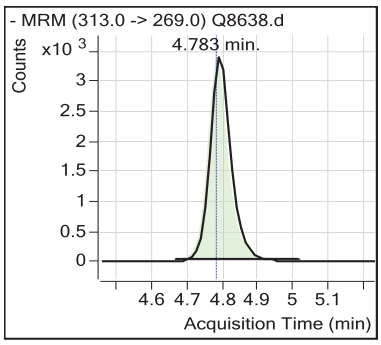
13C2-PFHxA

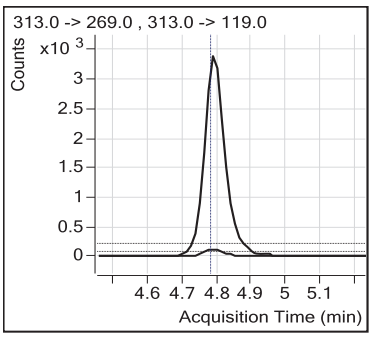


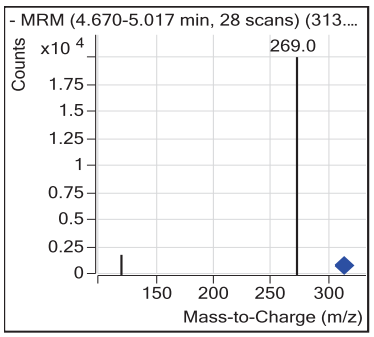




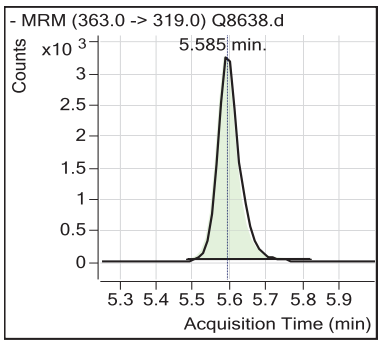
PFHxA

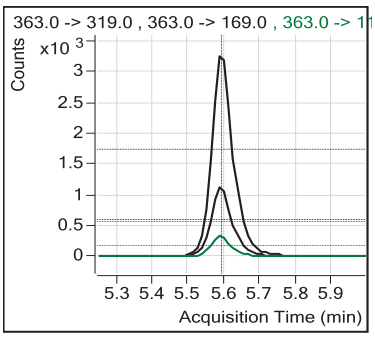


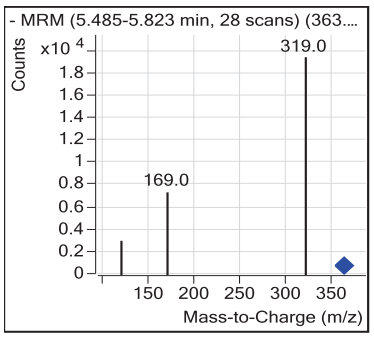




PFHpA

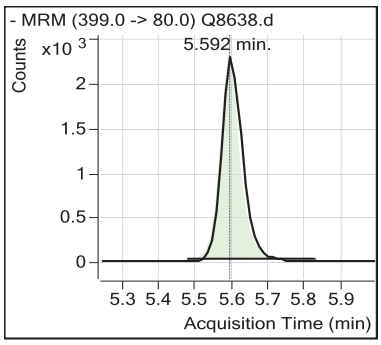


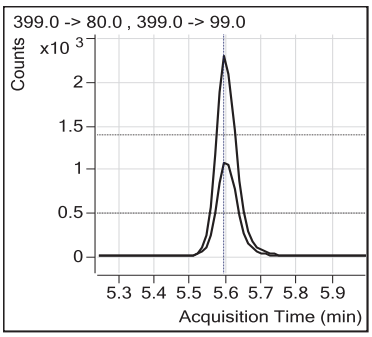


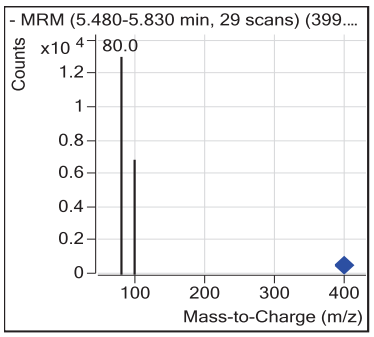


Perfluorinated Compounds by LC/MS/MS.

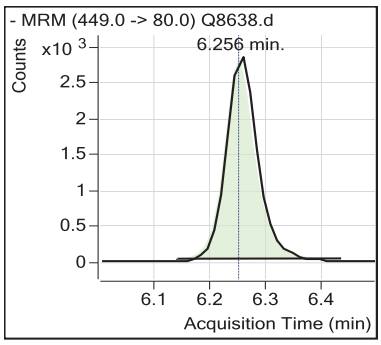
PFHxS

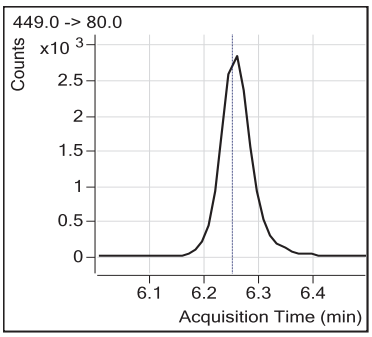


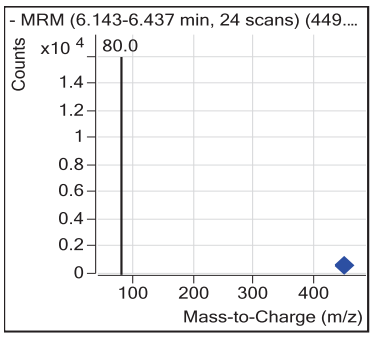




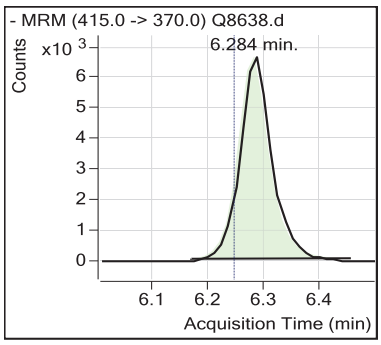
PFHpS

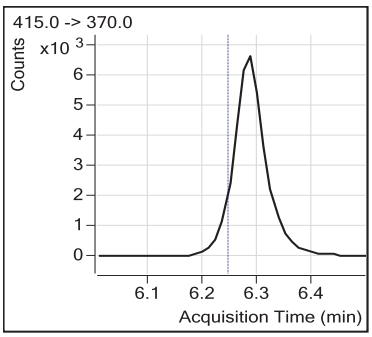


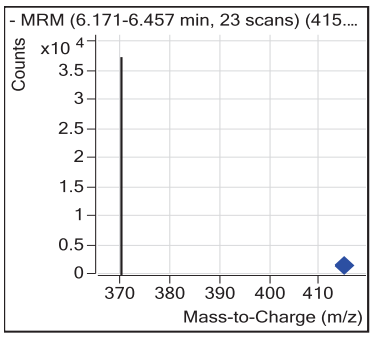




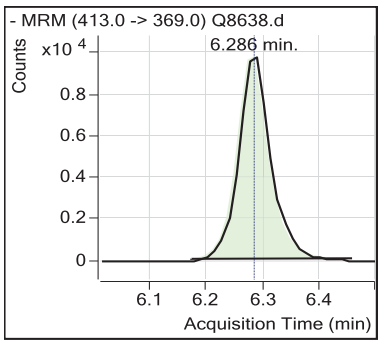
13C2-PFOA

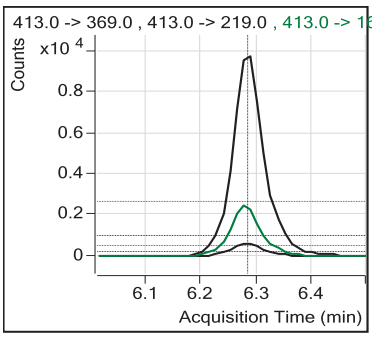


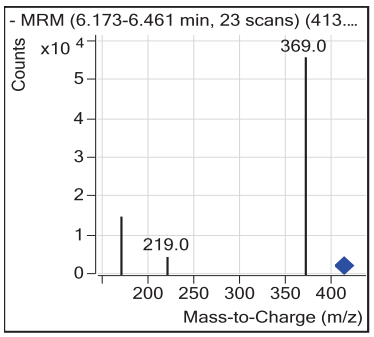




PFOA

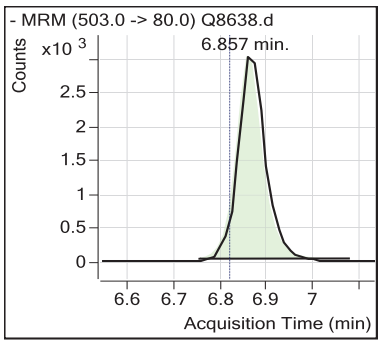


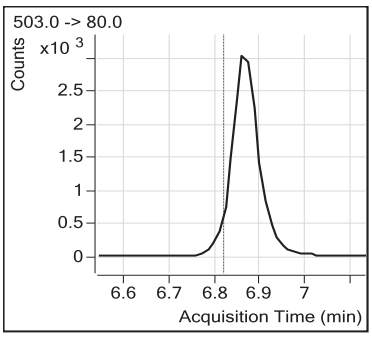


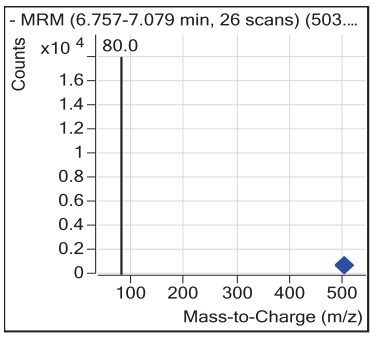


Perfluorinated Compounds by LC/MS/MS.

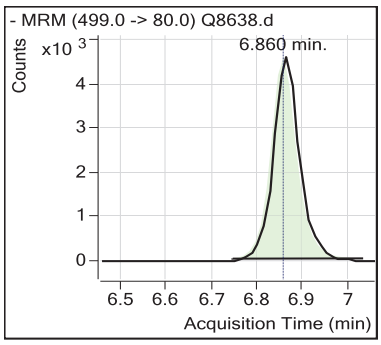
13C4-PFOS

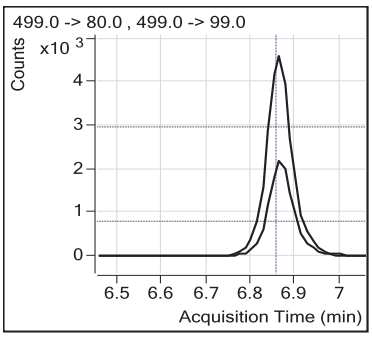


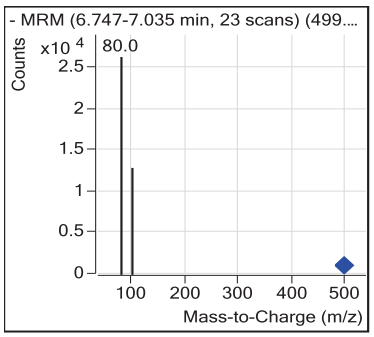




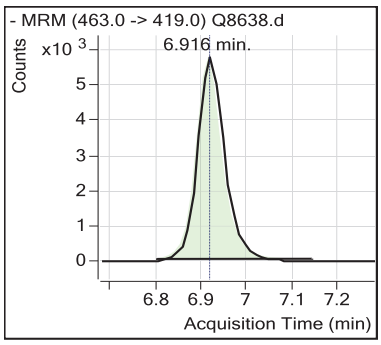
PFOS

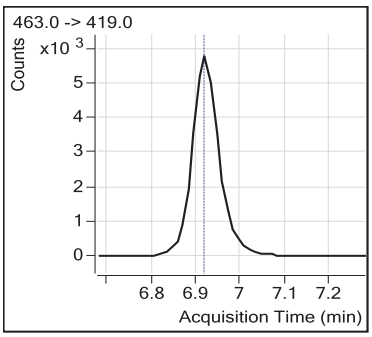


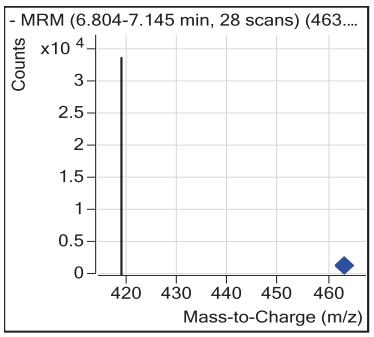




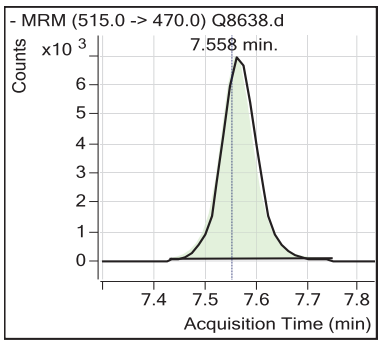
PFNA

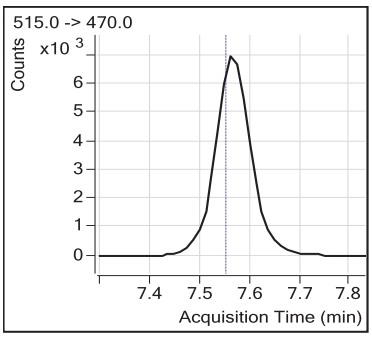


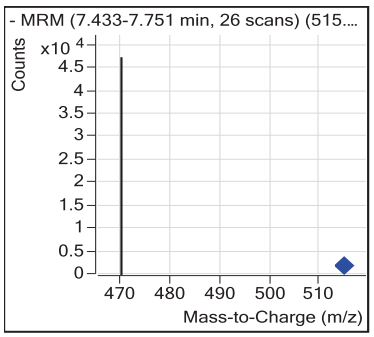




13C2-PFDA

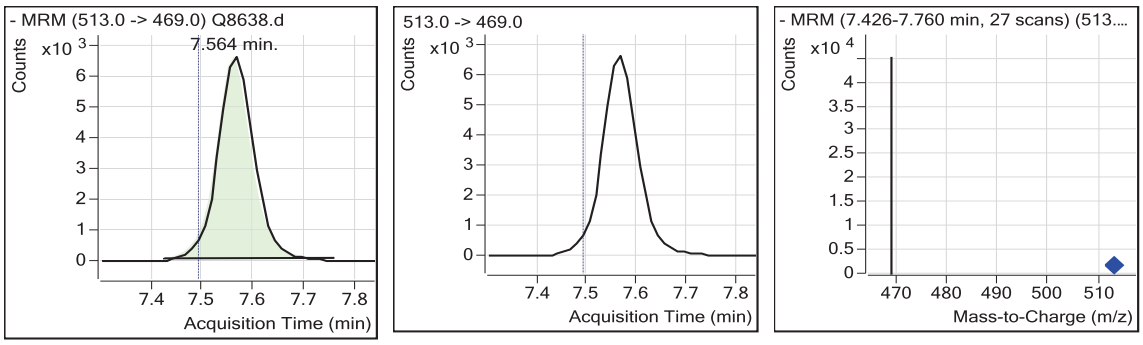




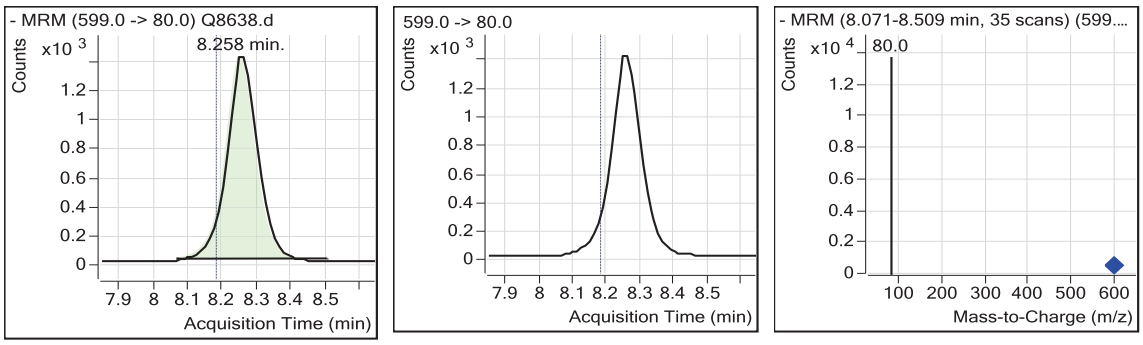


Perfluorinated Compounds by LC/MS/MS.

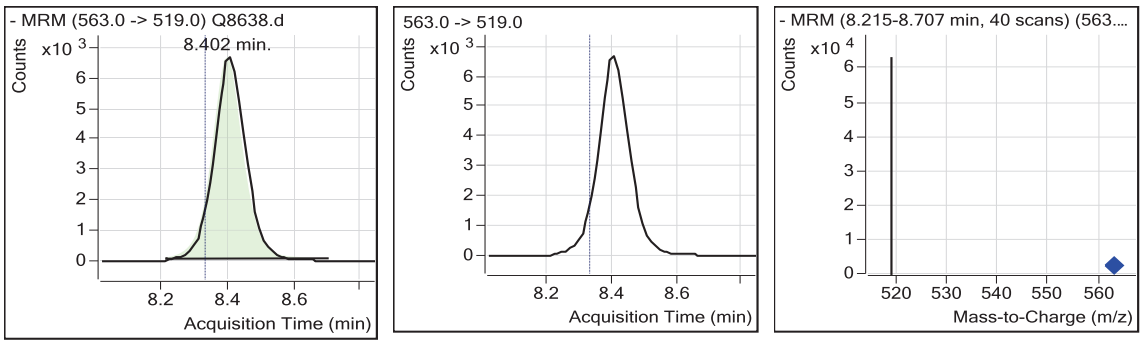
PFDA



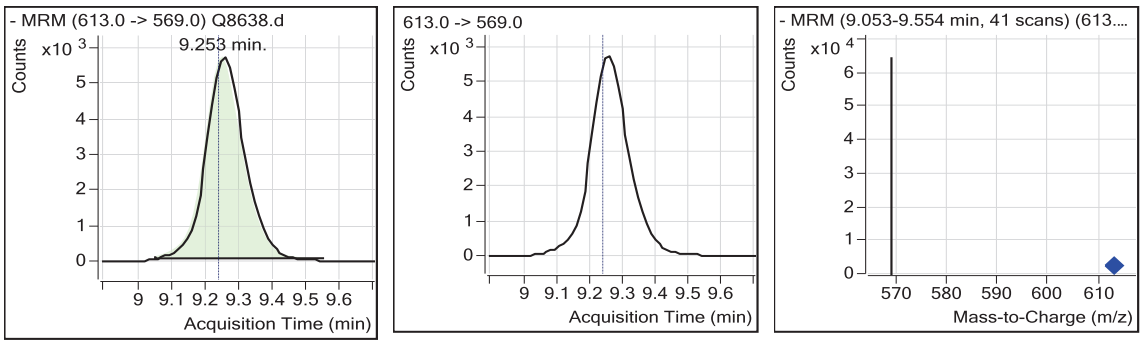
PFDS



PFUnDA

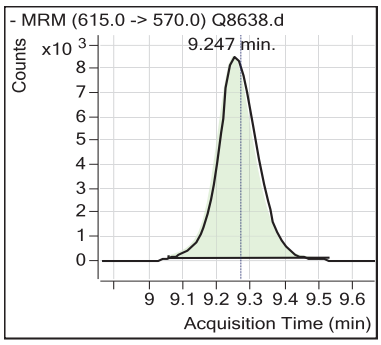


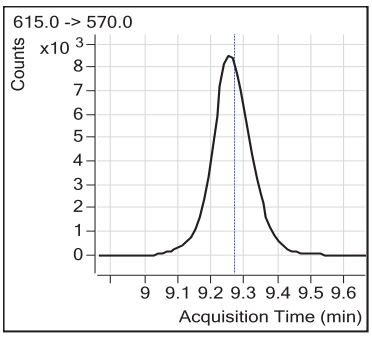
PFDoDA

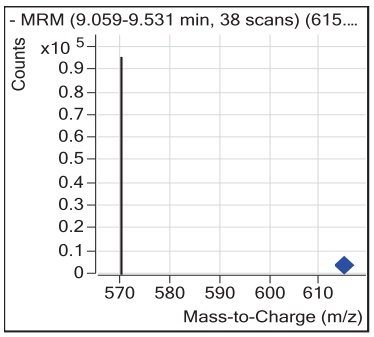


Perfluorinated Compounds by LC/MS/MS.

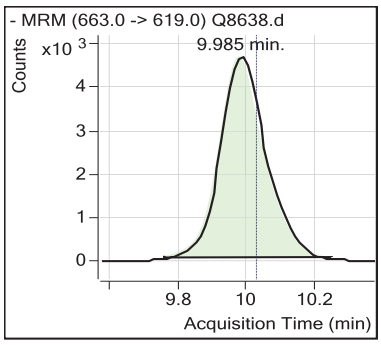
13C2-PFDoDA

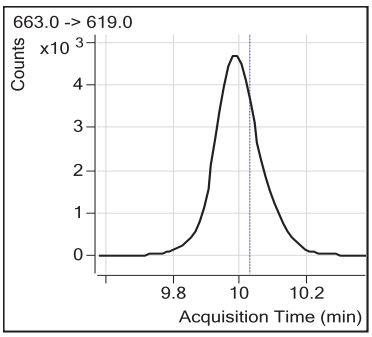


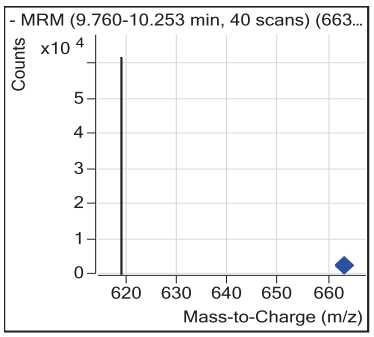




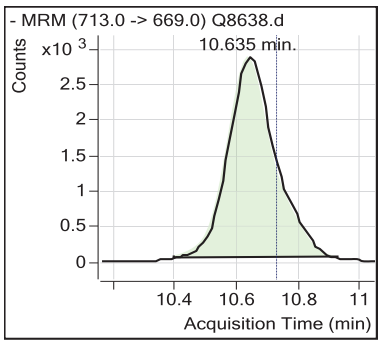
PFTrDA

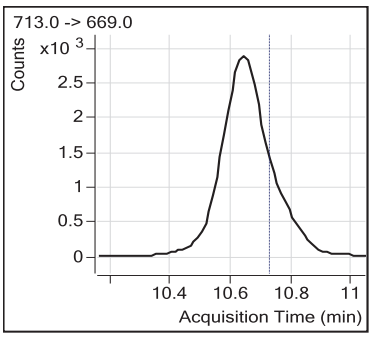


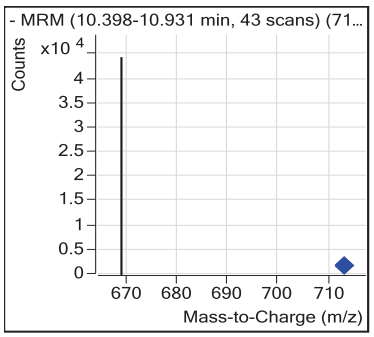




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

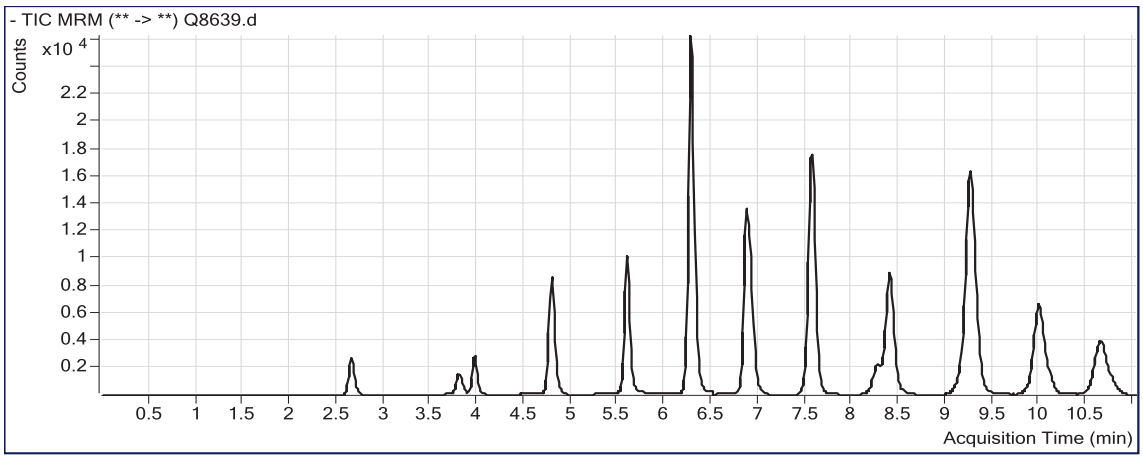
Data File	:	Q8639.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:12
Sample Name	:	IC280-40
Vial	:	Vial 7
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

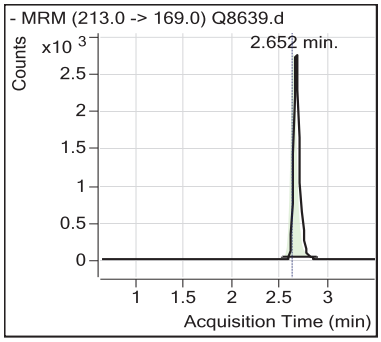
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

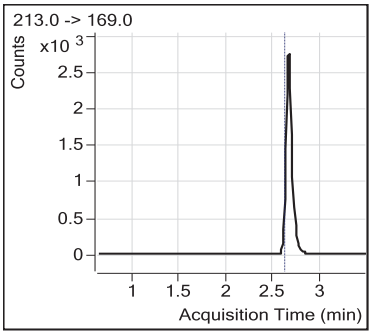
Perfluorinated Compounds by LC/MS/MS.

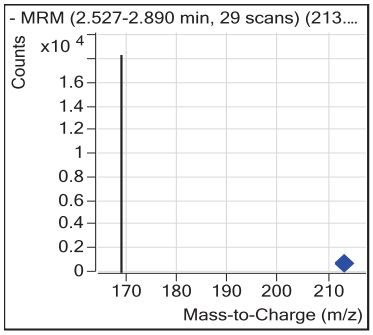
Data File	:	Q8639.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:12
Sample Name	:	IC280-40
Vial	:	Vial 7
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



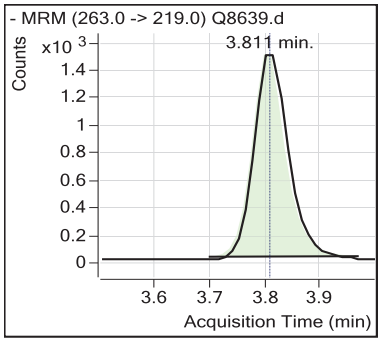
PFBA

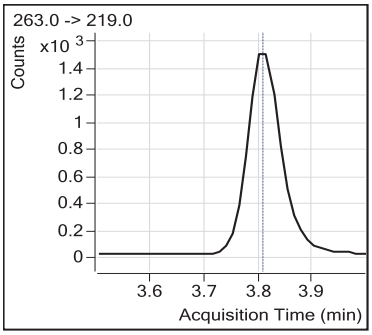


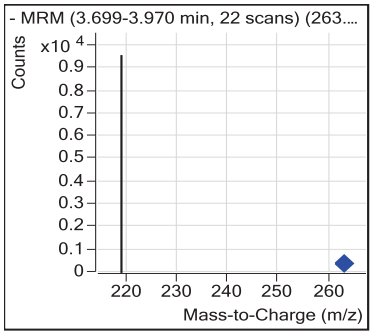




PFPeA

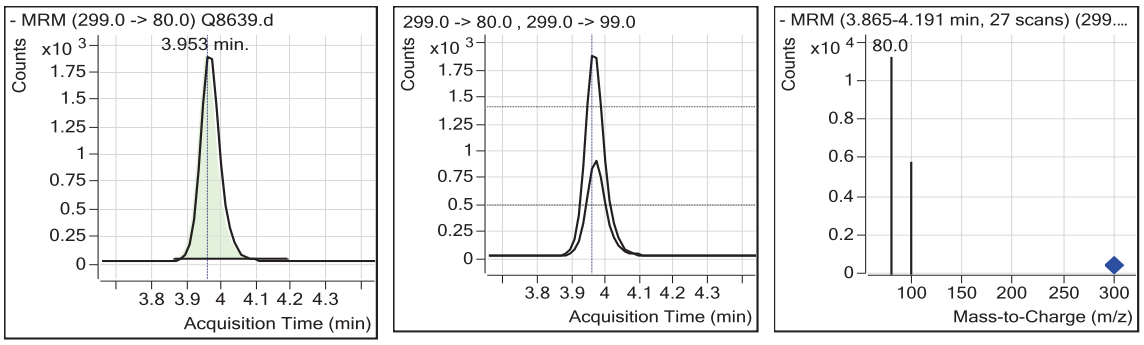




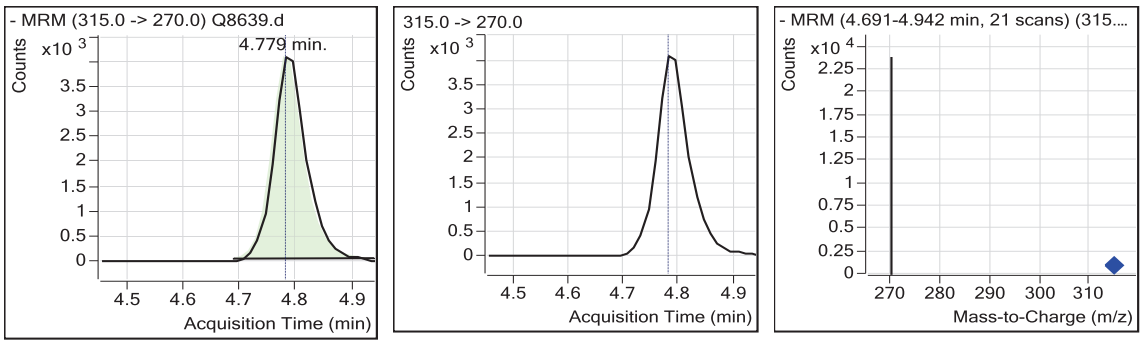


Perfluorinated Compounds by LC/MS/MS.

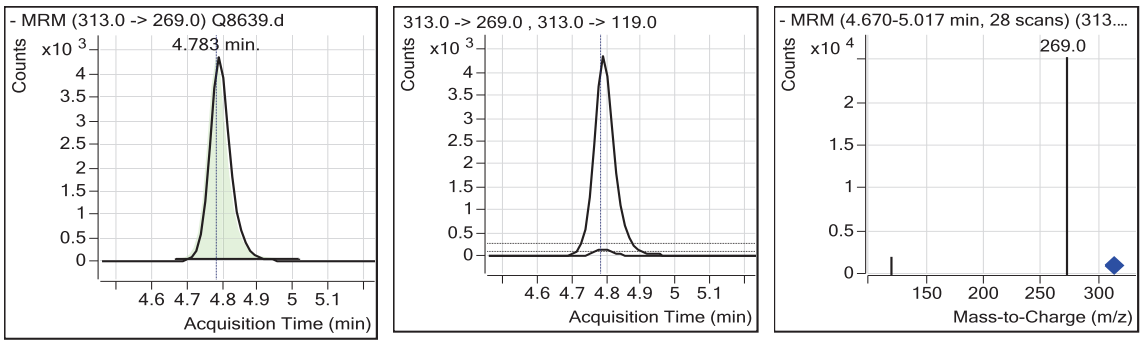
PFBS



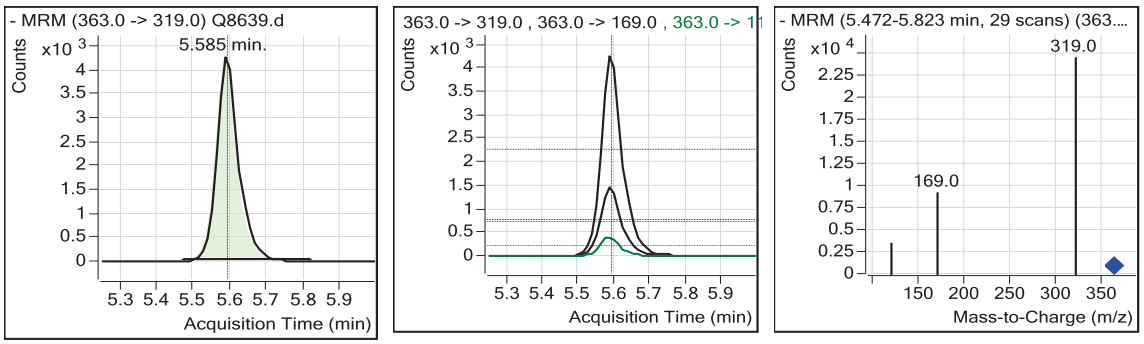
13C2-PFHxA



PFHxA

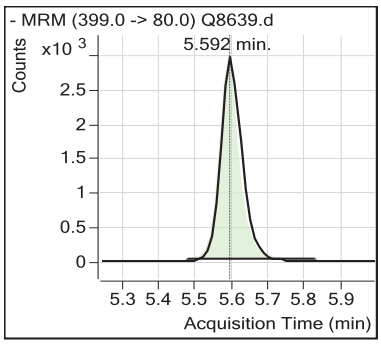


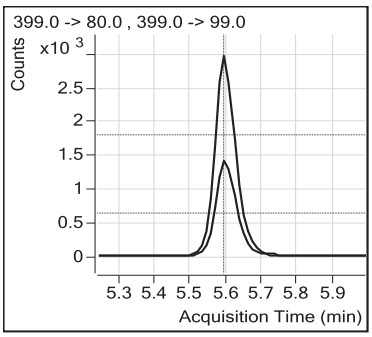
PFHpA

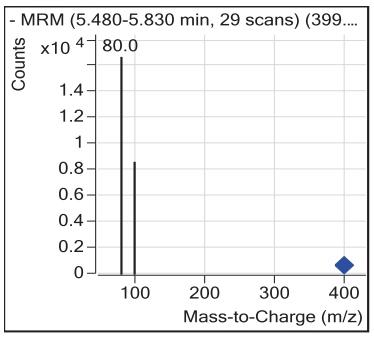


Perfluorinated Compounds by LC/MS/MS.

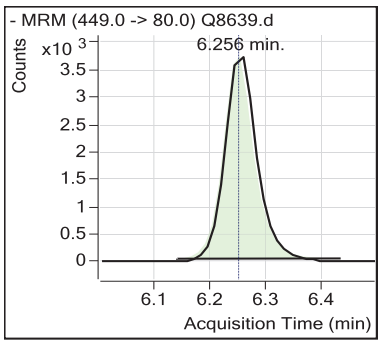
PFHxS

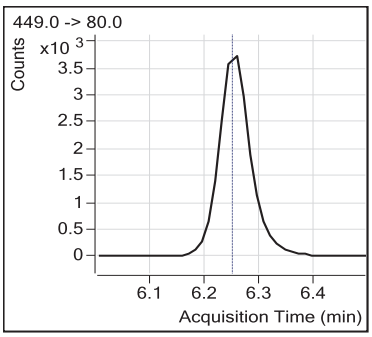


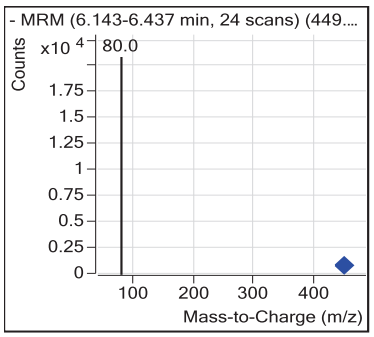




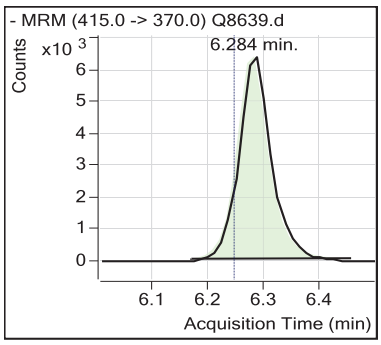
PFHpS

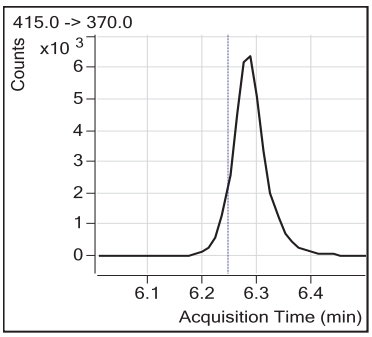


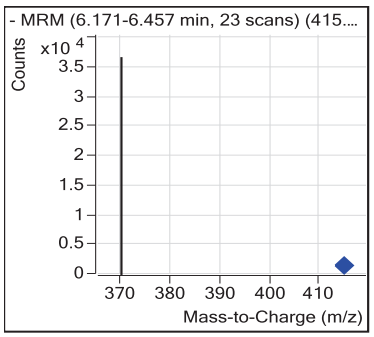




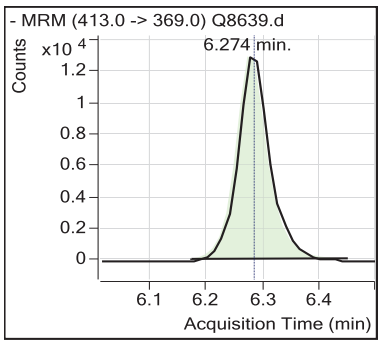
13C2-PFOA

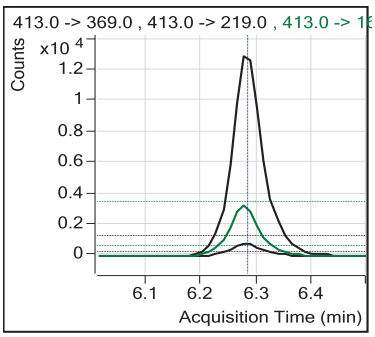


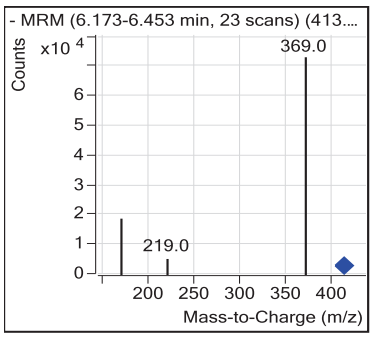




PFOA





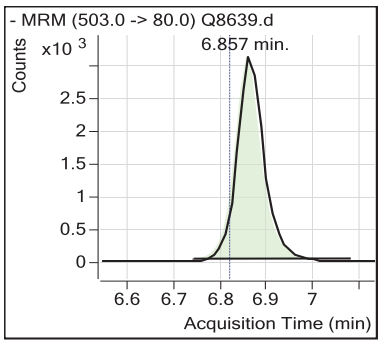


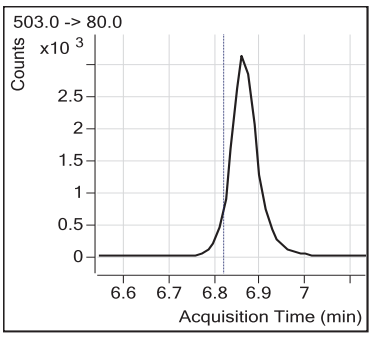
7.5.6

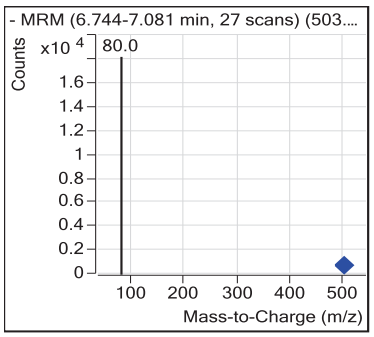
7

Perfluorinated Compounds by LC/MS/MS.

13C4-PFOS







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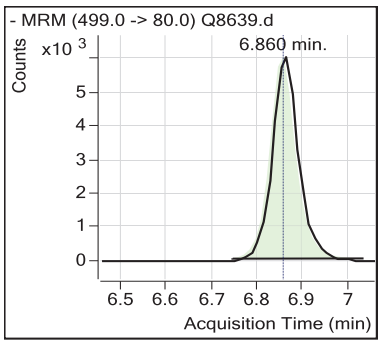

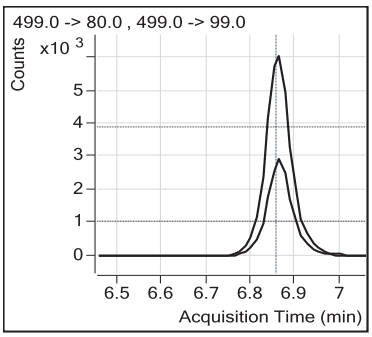

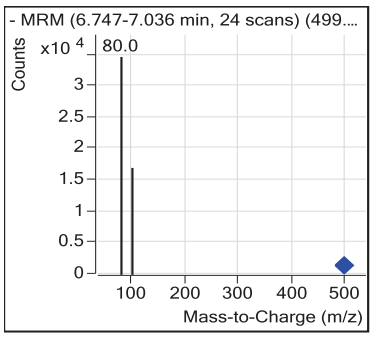

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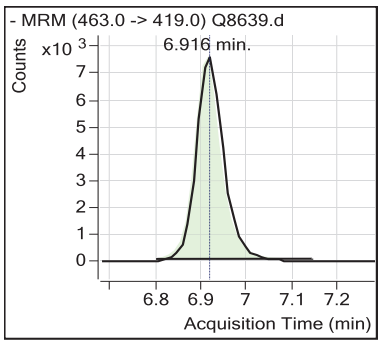
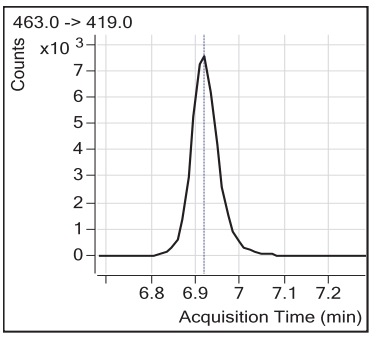
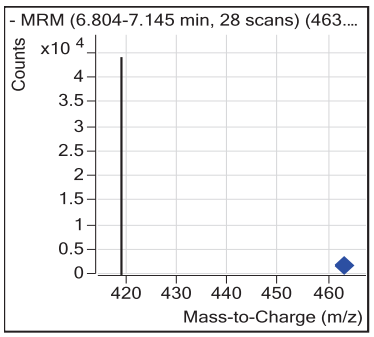
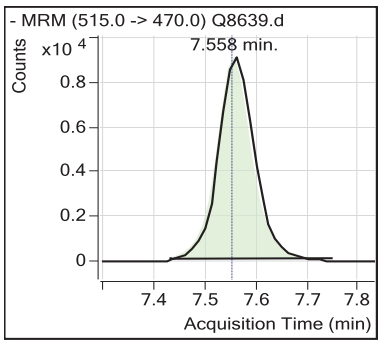
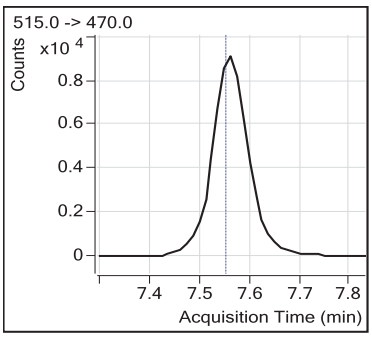


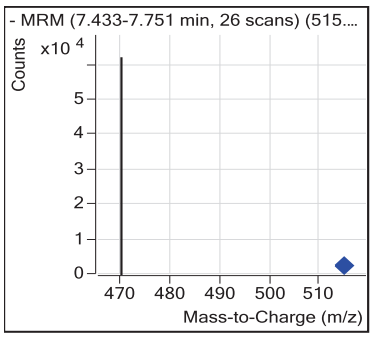




13C2-PFDA

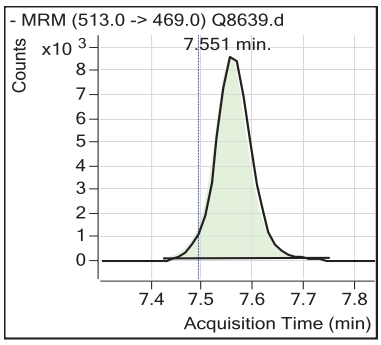


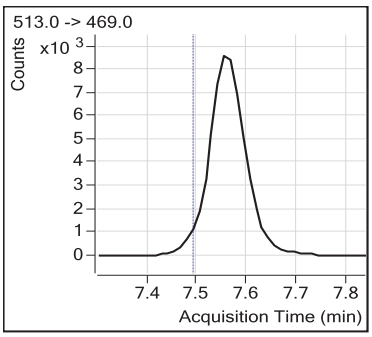


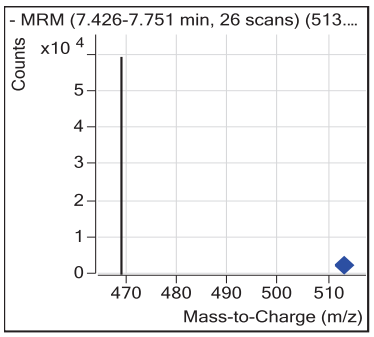


Perfluorinated Compounds by LC/MS/MS.

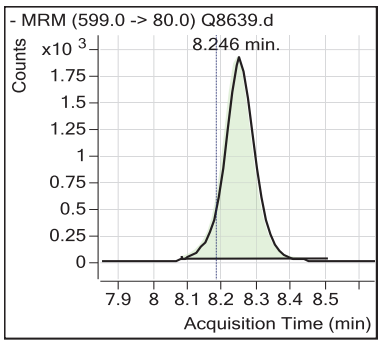
PFDA

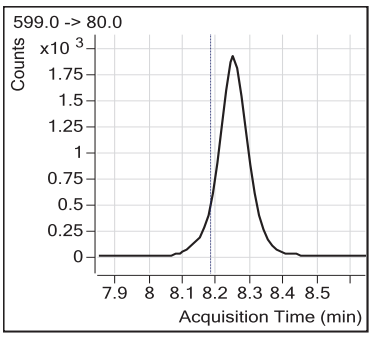


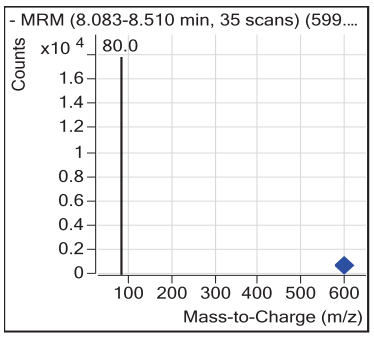




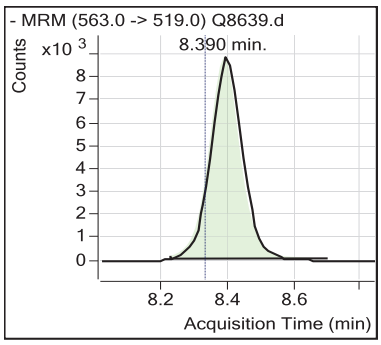
PFDS

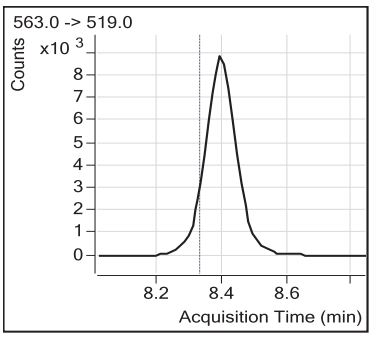


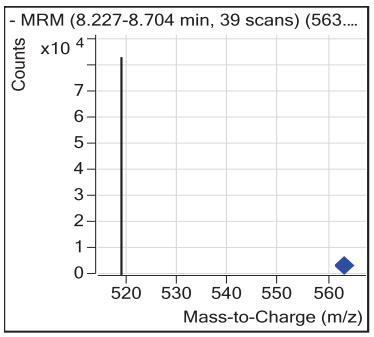




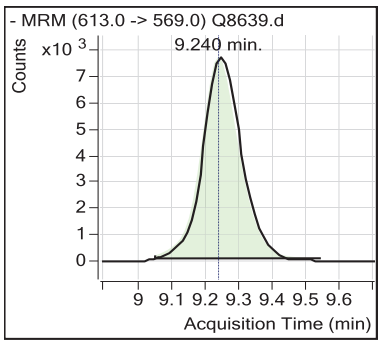
PFUnDA

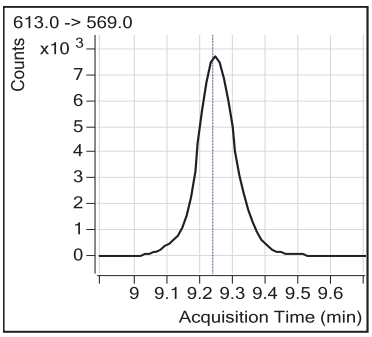


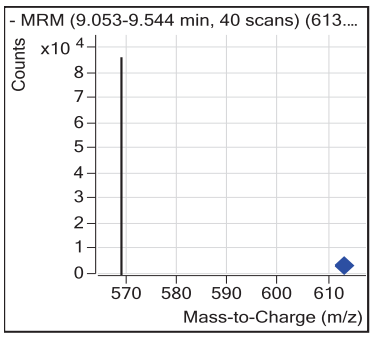




PFDoDA

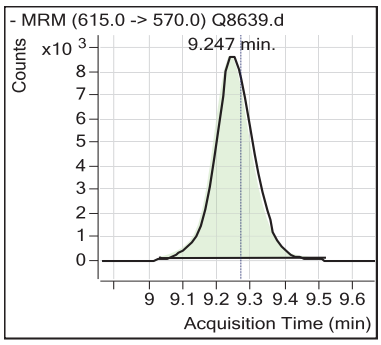


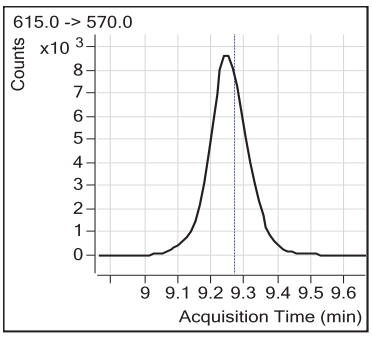


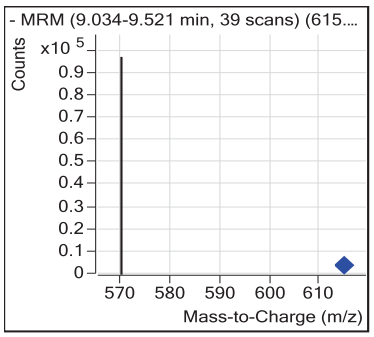


Perfluorinated Compounds by LC/MS/MS.

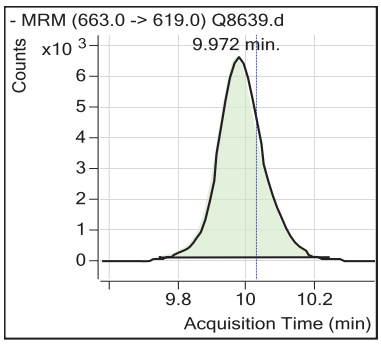
13C2-PFDoDA

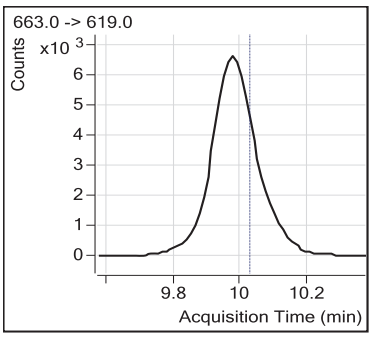


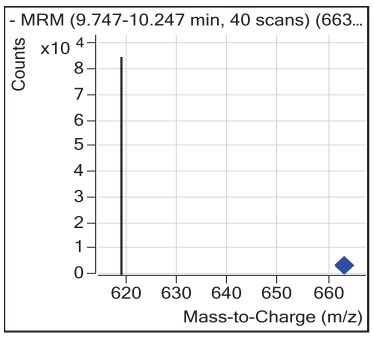




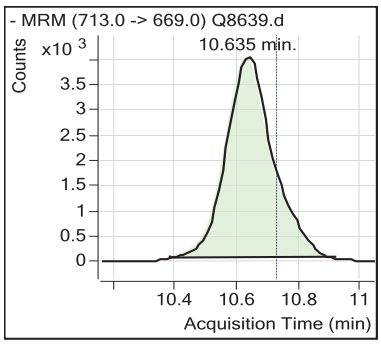
PFTrDA

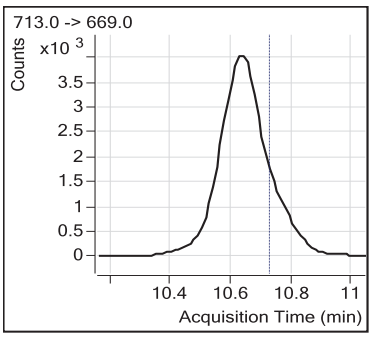


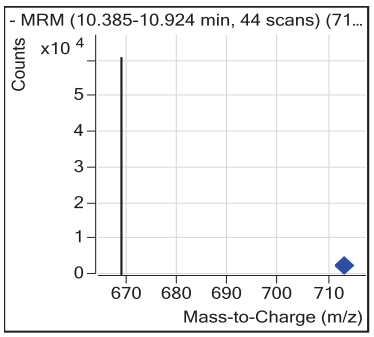




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

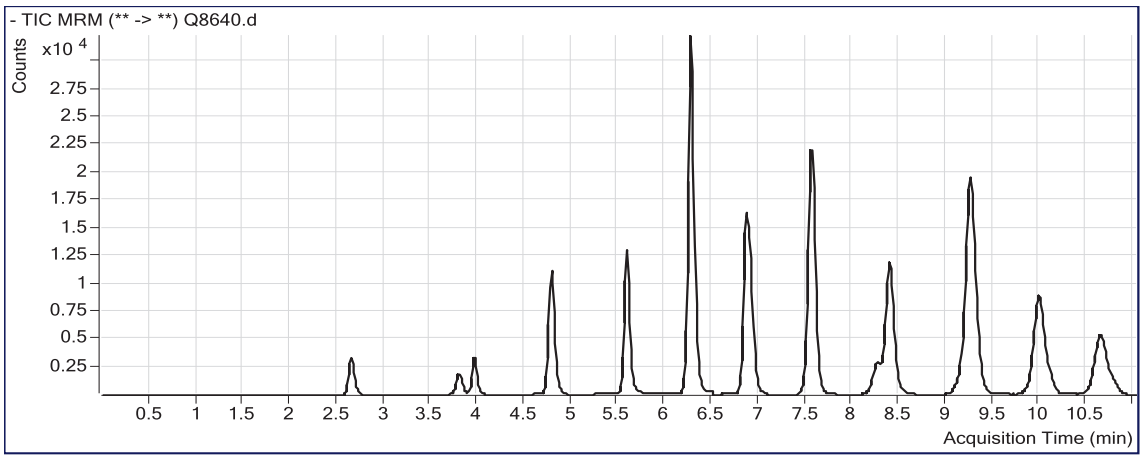
Data File	:	Q8640.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:31
Sample Name	:	IC280-50
Vial	:	Vial 8
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

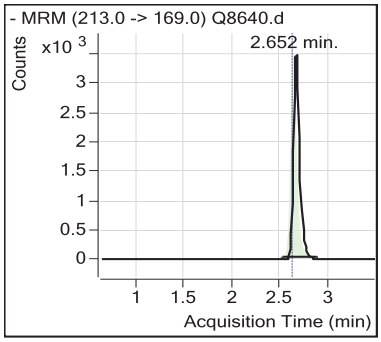
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

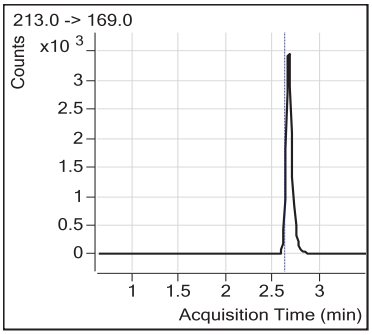
Perfluorinated Compounds by LC/MS/MS.

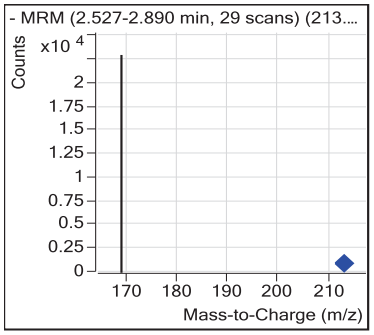
Data File	:	Q8640.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:31
Sample Name	:	IC280-50
Vial	:	Vial 8
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



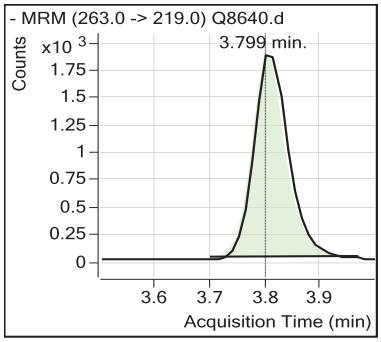
PFBA

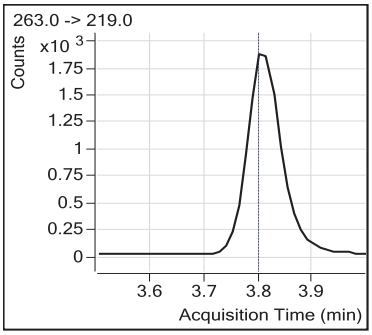


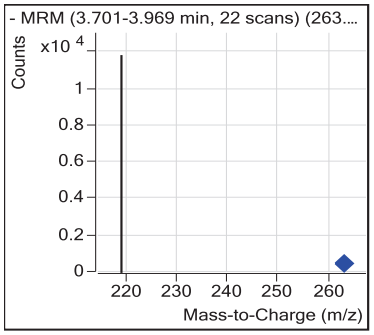




PFPeA

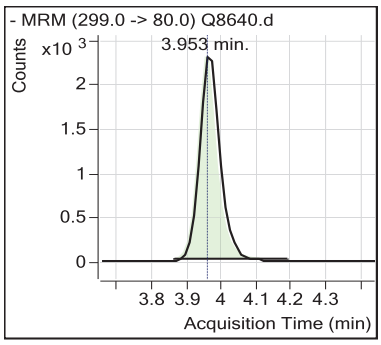


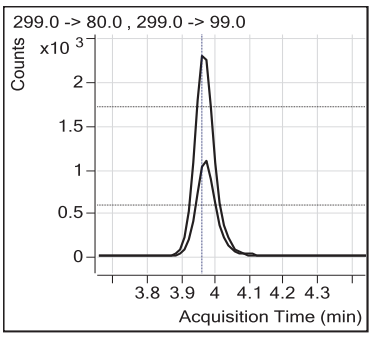


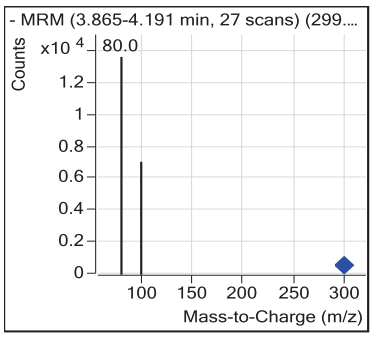


Perfluorinated Compounds by LC/MS/MS.

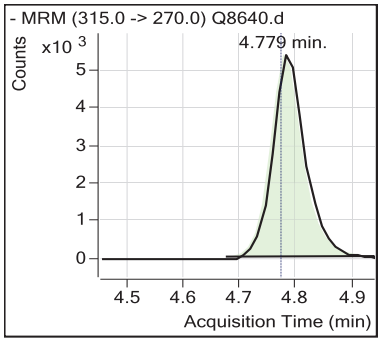
PFBS

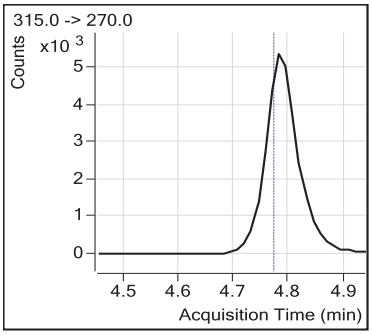


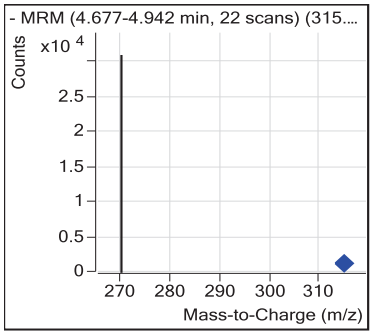




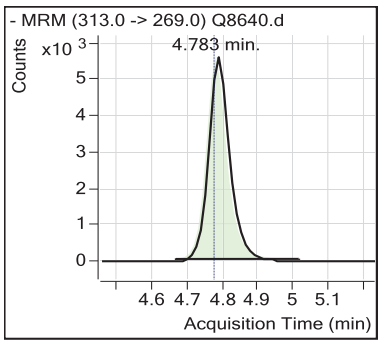
13C2-PFHxA

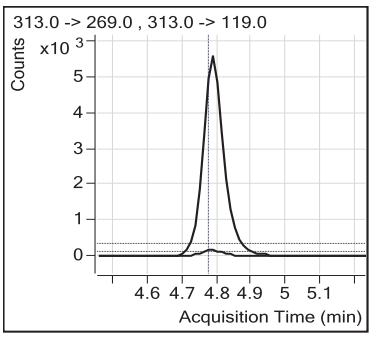


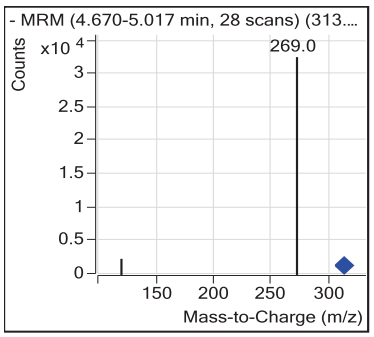




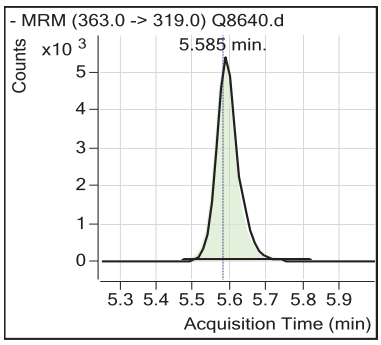
PFHxA

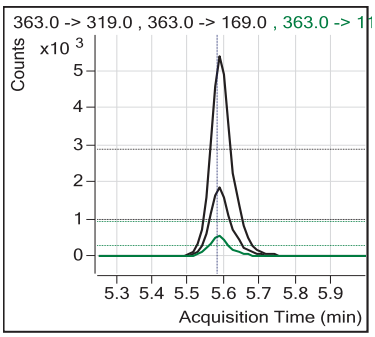


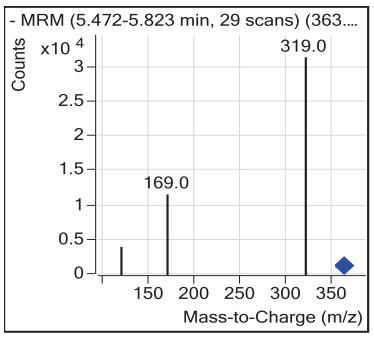




PFHpA

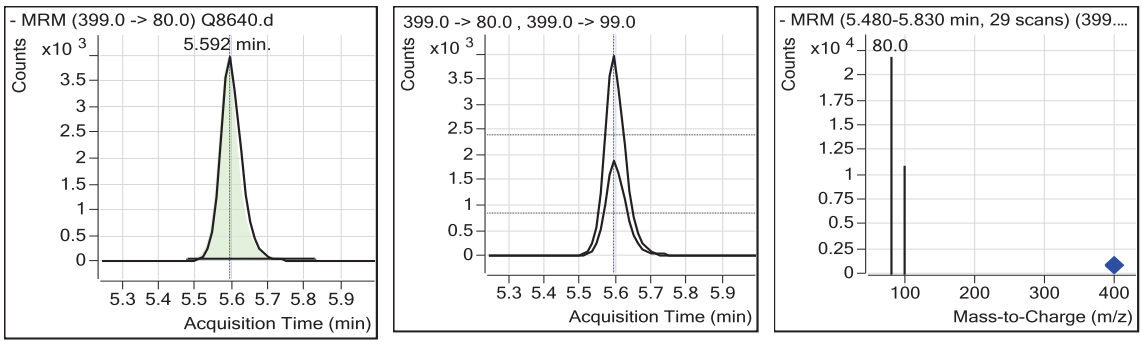




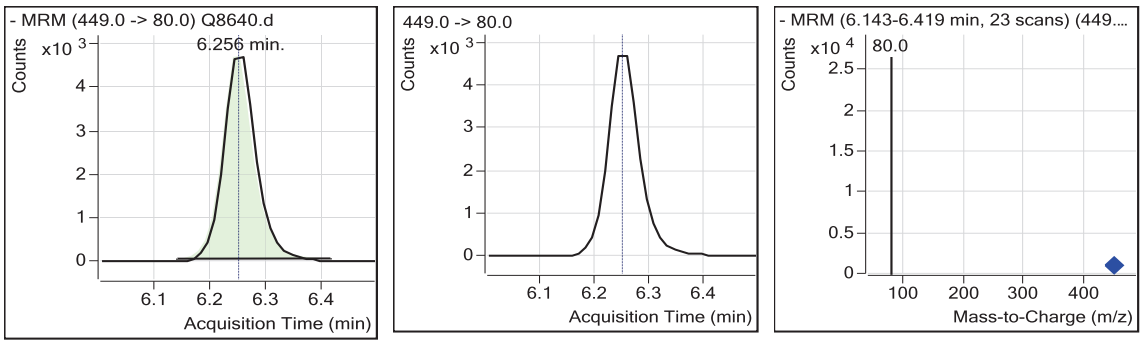


Perfluorinated Compounds by LC/MS/MS.

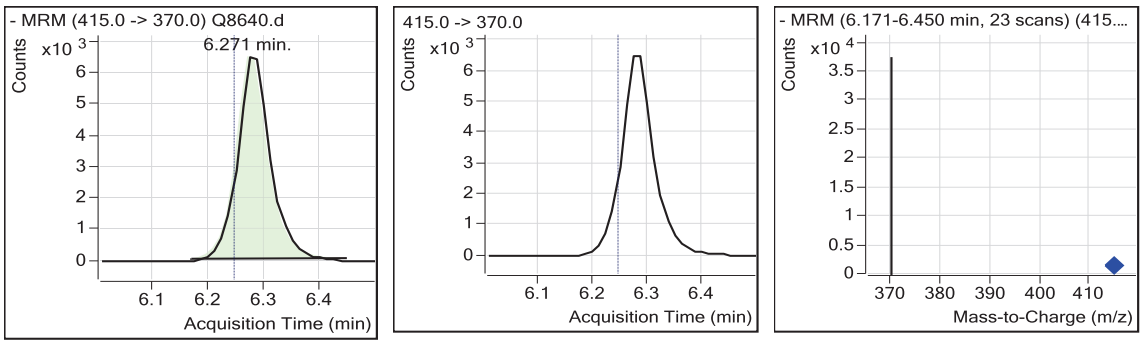
PFHxS



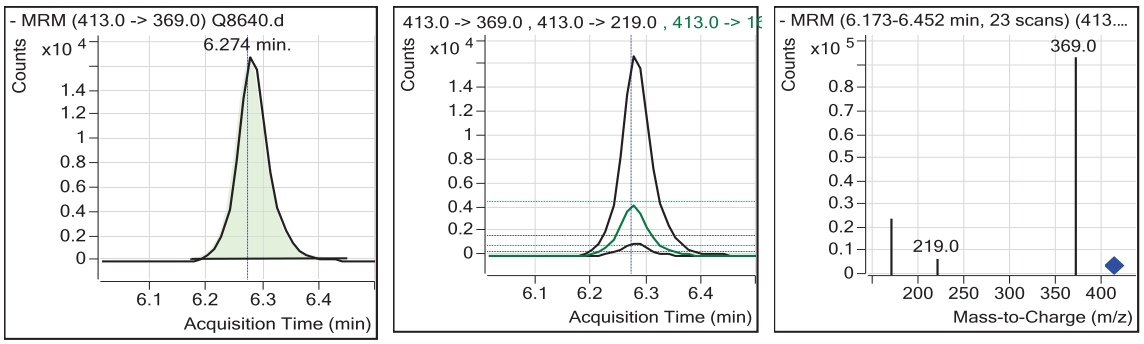
PFHpS



13C2-PFOA



PFOA

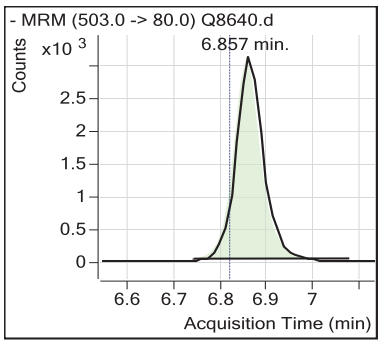


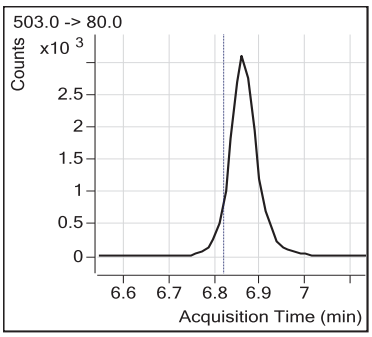
7.5.7

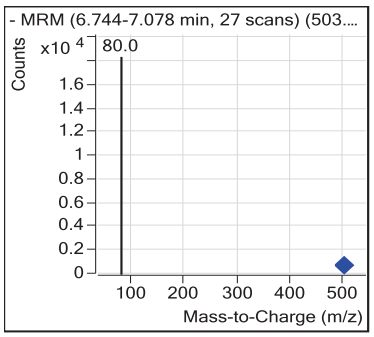
7

Perfluorinated Compounds by LC/MS/MS.

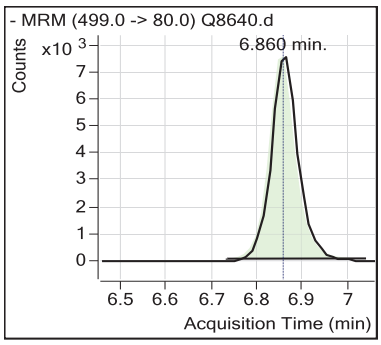
13C4-PFOS

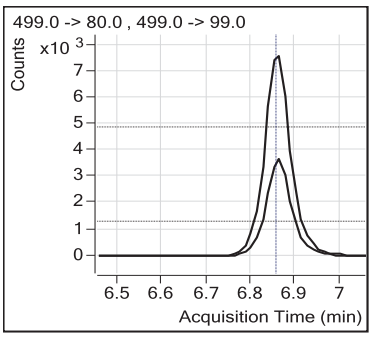


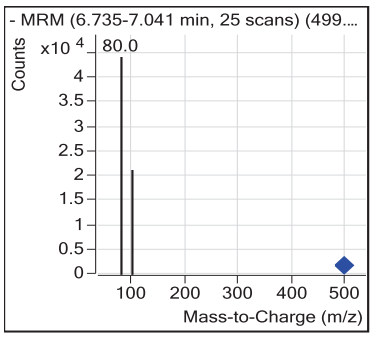




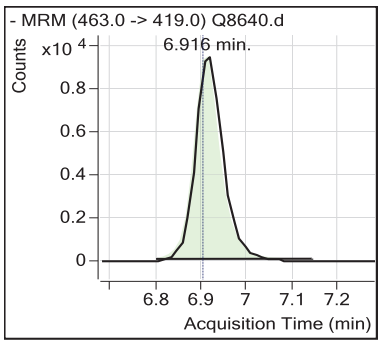
PFOS

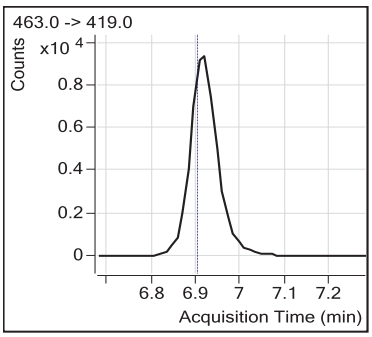


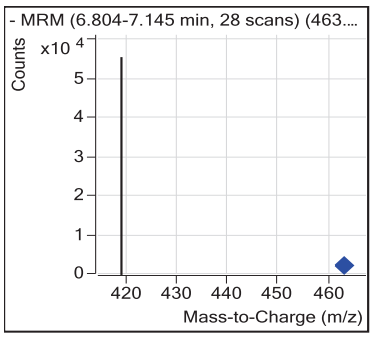




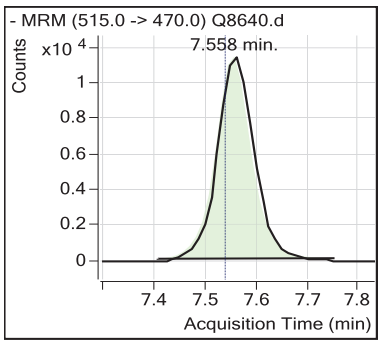
PFNA

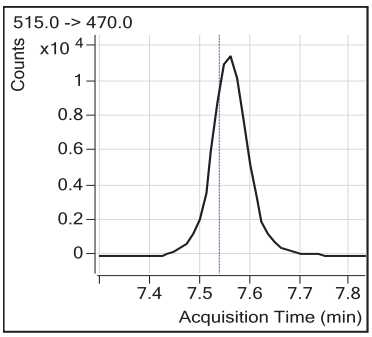


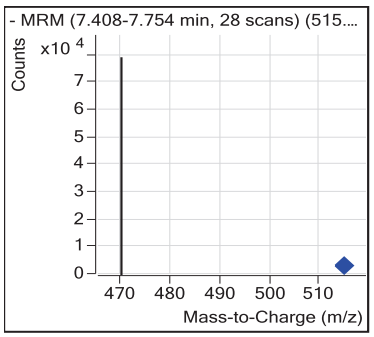




13C2-PFDA

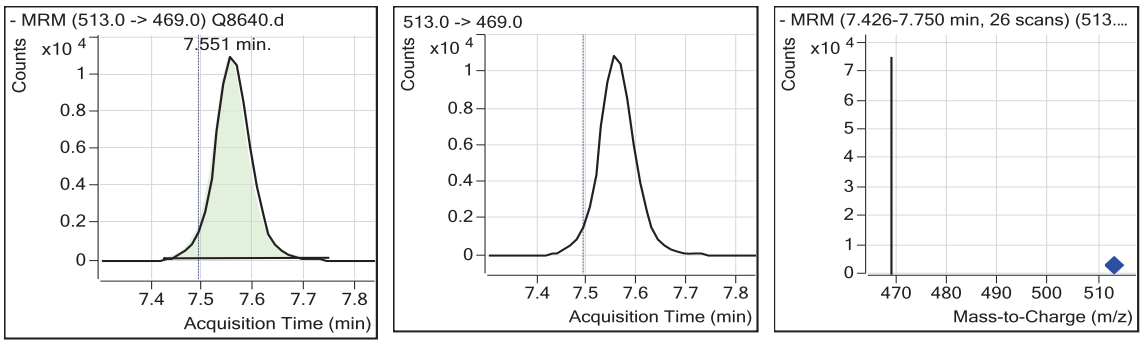




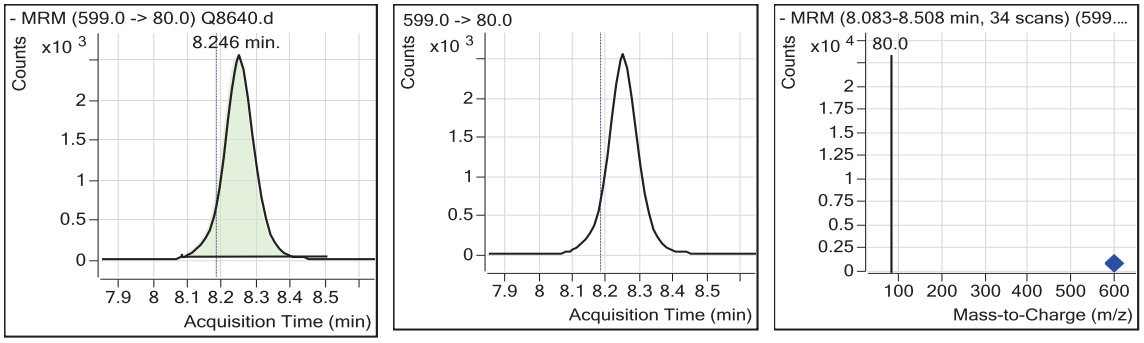


Perfluorinated Compounds by LC/MS/MS.

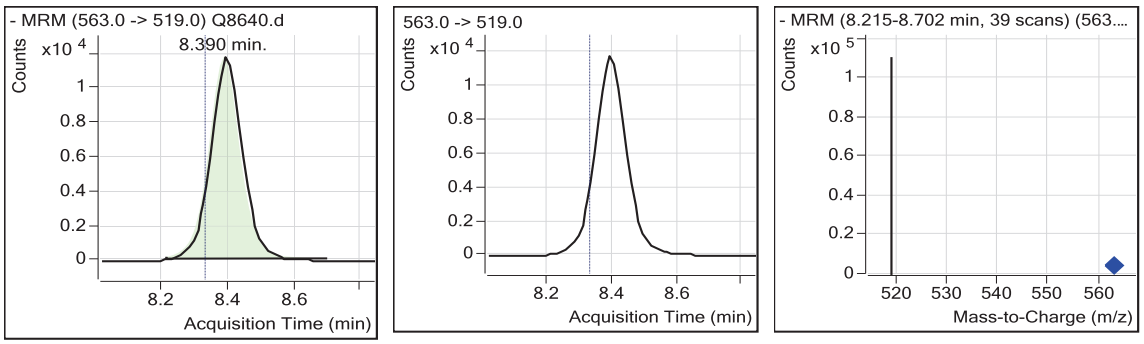
PFDA



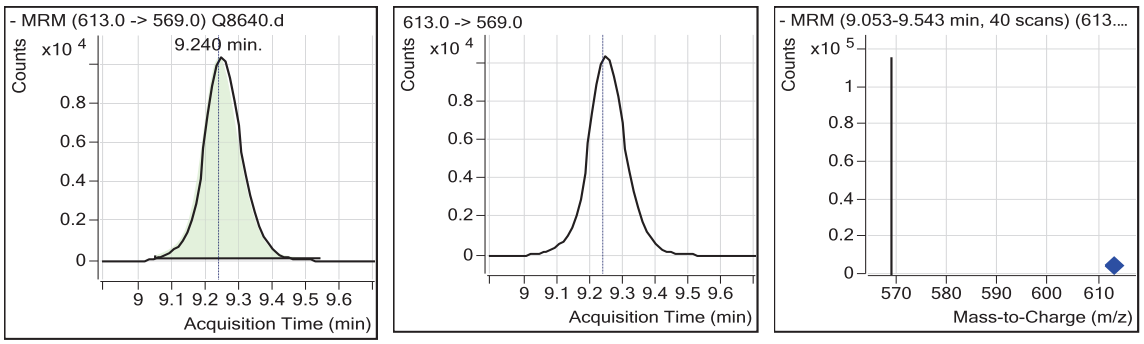
PFDS



PFUnDA



PFDoDA

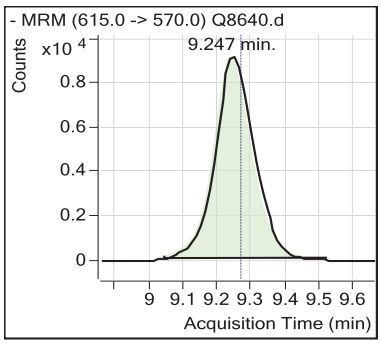


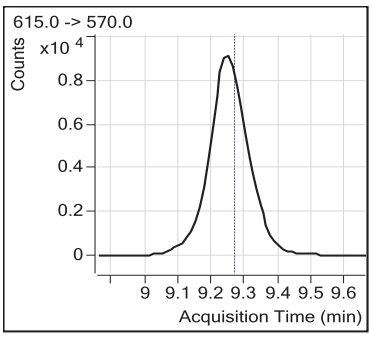
7.5.7

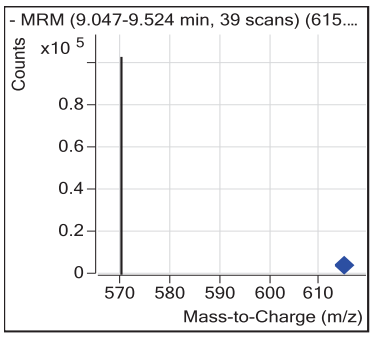
7

Perfluorinated Compounds by LC/MS/MS.

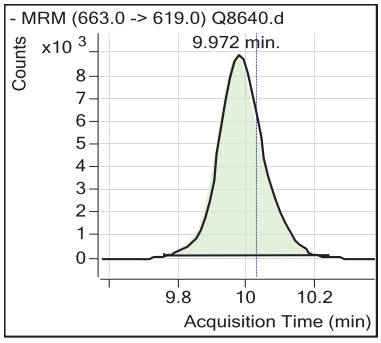
13C2-PFDoDA

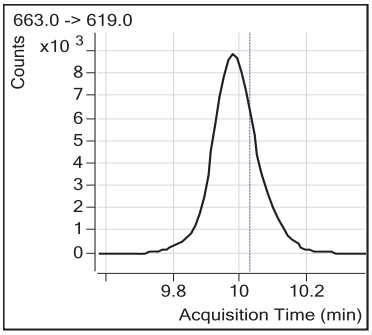


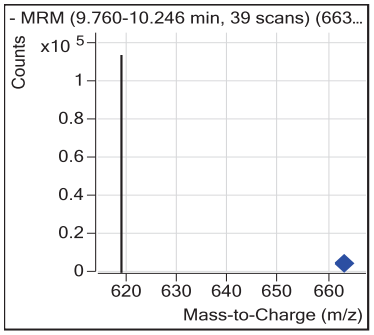




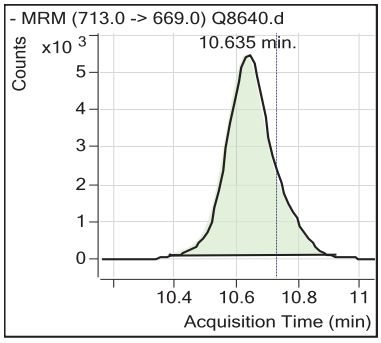
PFTrDA

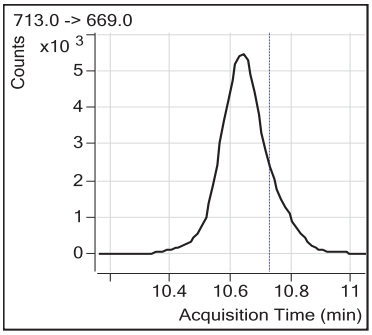


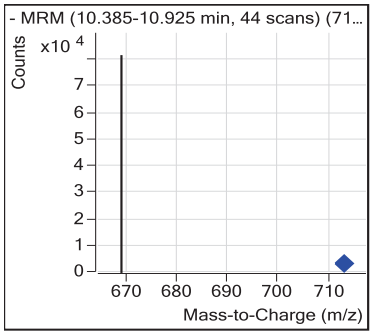




PFTeDA







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

Perfluorinated Compounds by LC/MS/MS.

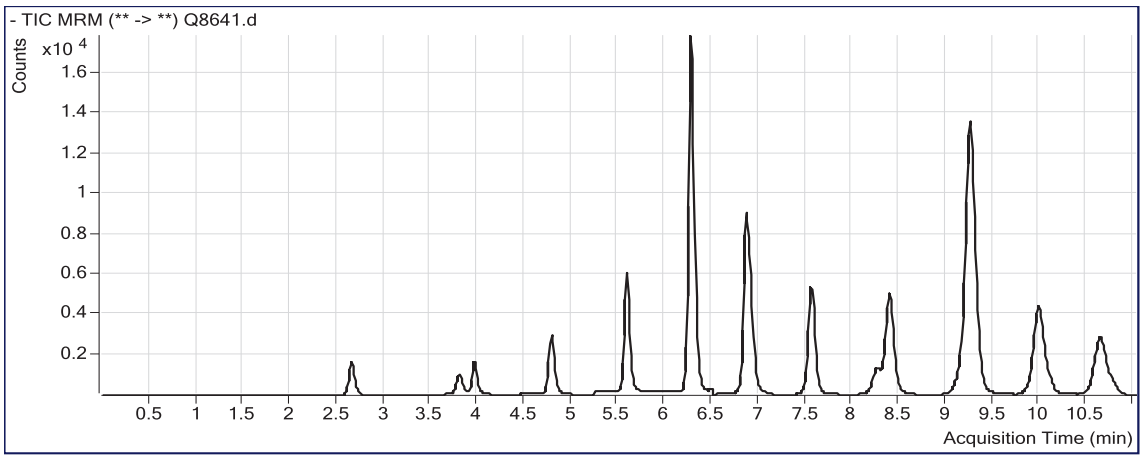
Data File	:	Q8641.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:51
Sample Name	:	ICV280-20
Vial	:	Vial 9
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

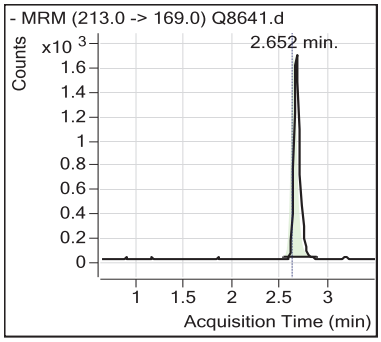
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

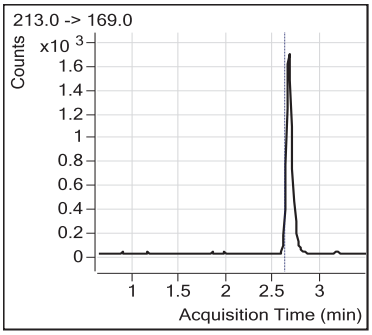
Perfluorinated Compounds by LC/MS/MS.

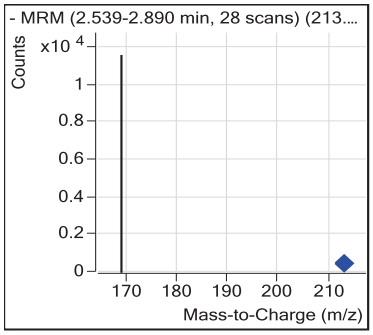
Data File	:	Q8641.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 15:51
Sample Name	:	ICV280-20
Vial	:	Vial 9
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



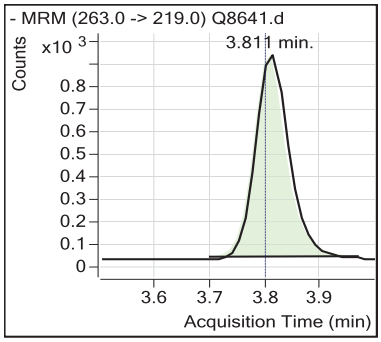
PFBA

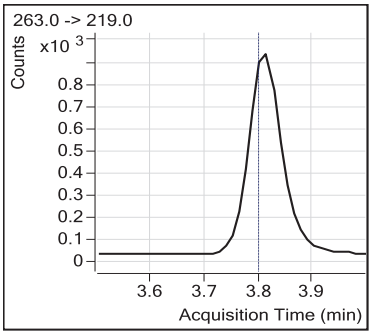


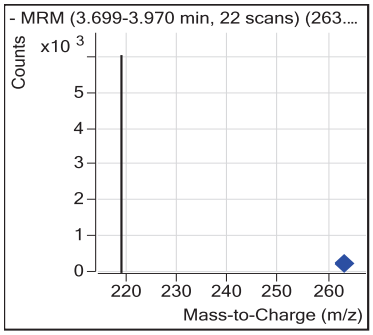




PFPeA

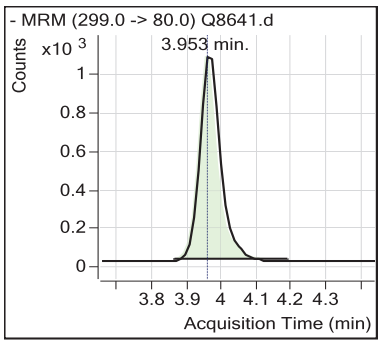


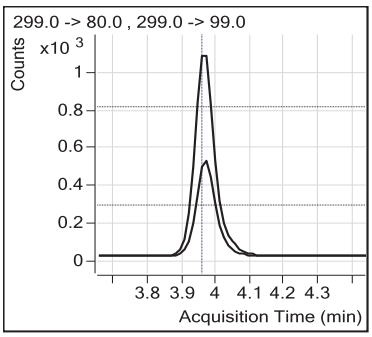


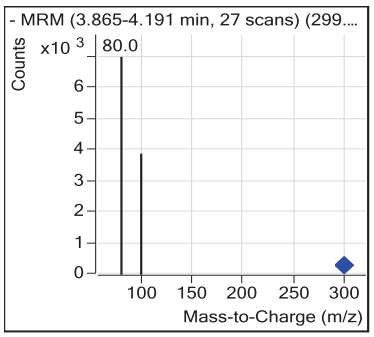


Perfluorinated Compounds by LC/MS/MS.

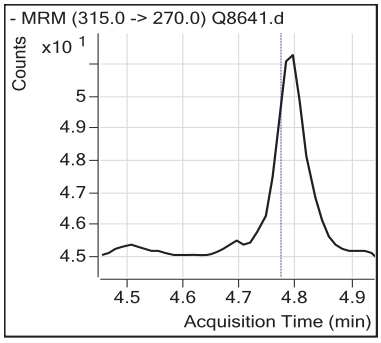
PFBS

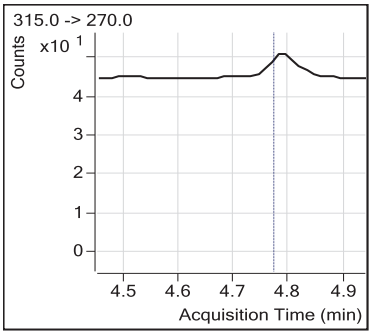


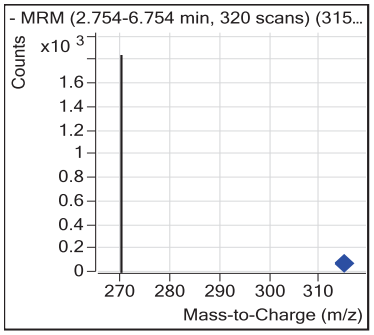




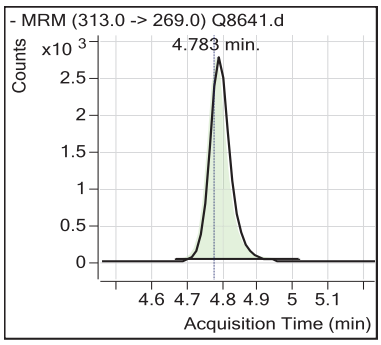
13C2-PFHxA

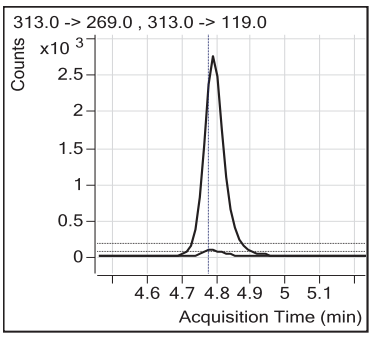


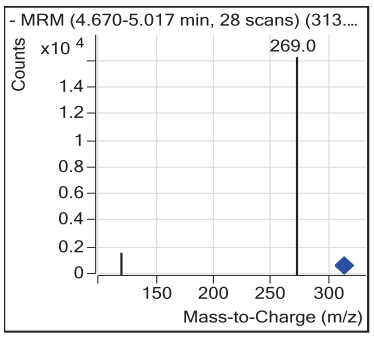




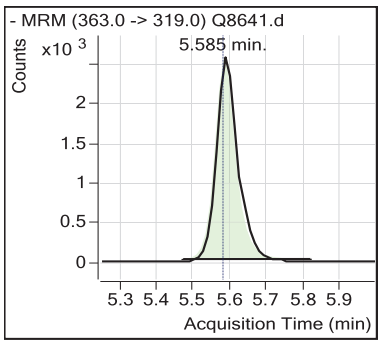
PFHxA

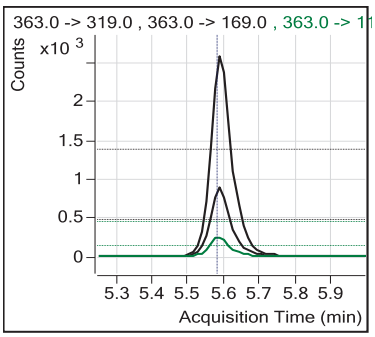


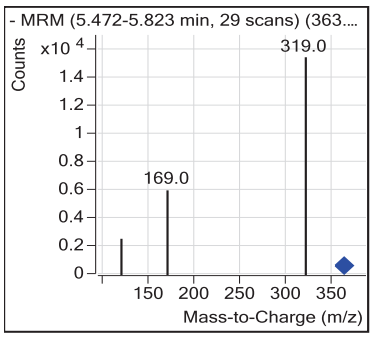




PFHpA

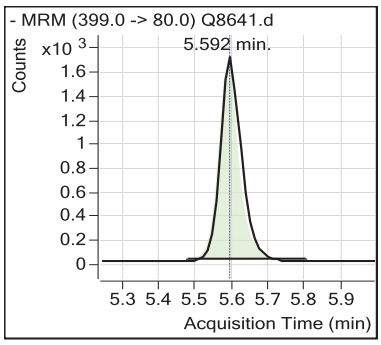


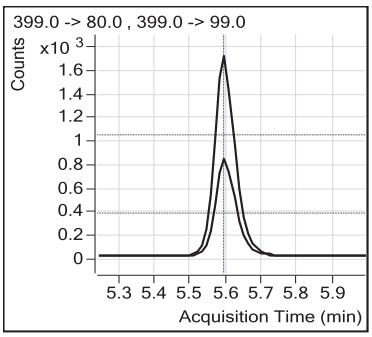


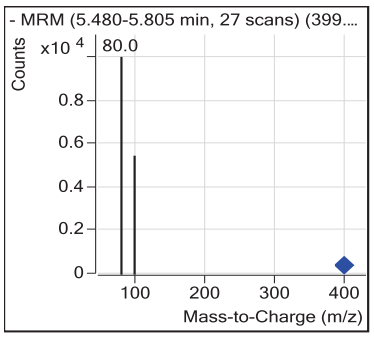


Perfluorinated Compounds by LC/MS/MS.

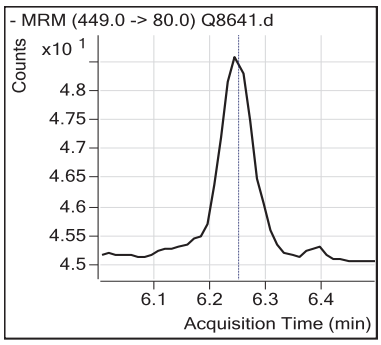
PFHxS

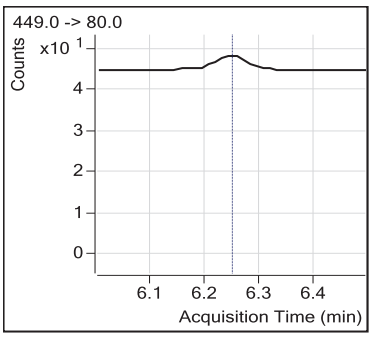


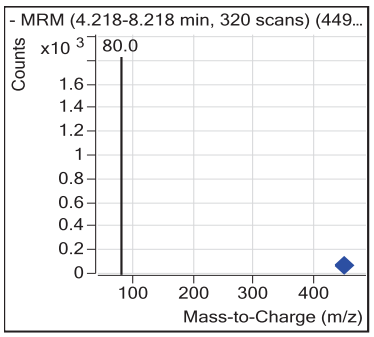




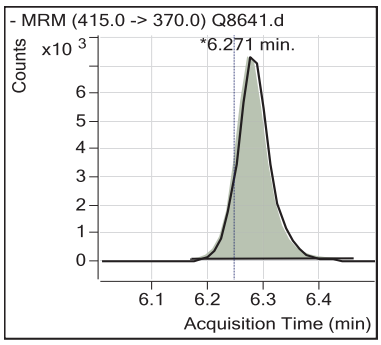
PFHpS

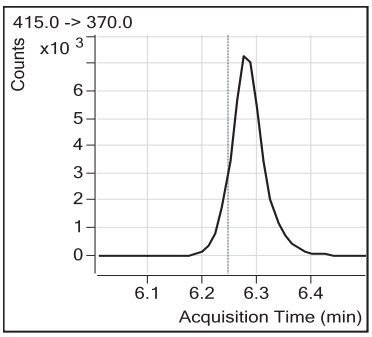


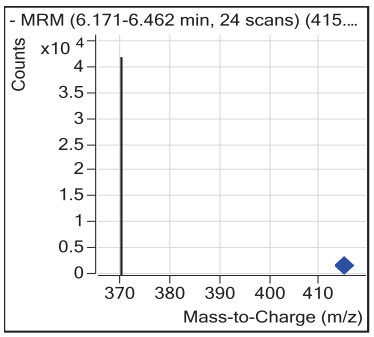




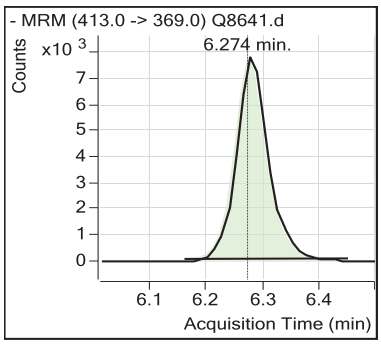
13C2-PFOA

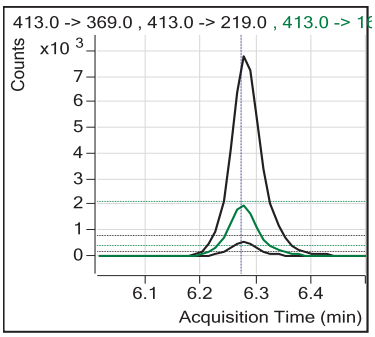


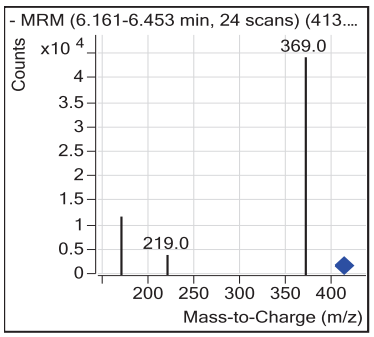




PFOA

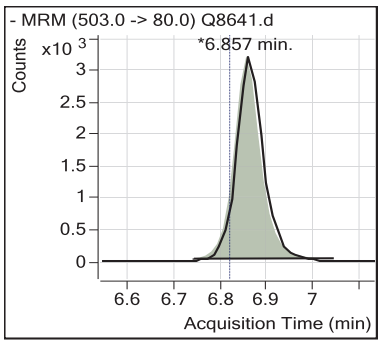


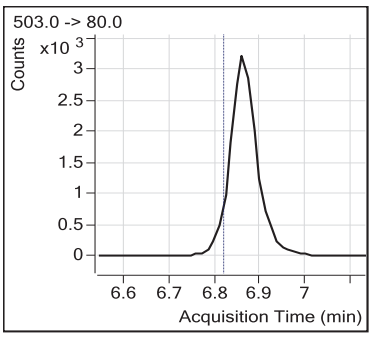


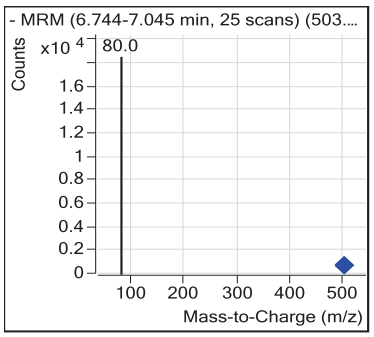


Perfluorinated Compounds by LC/MS/MS.

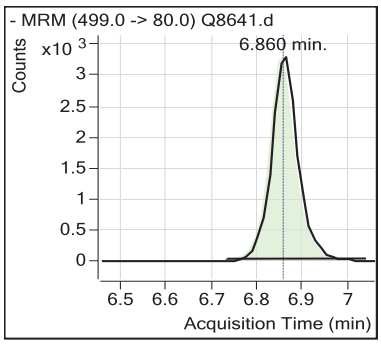
13C4-PFOS

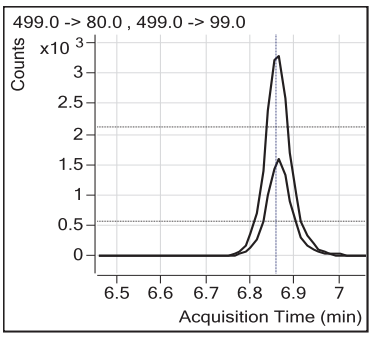


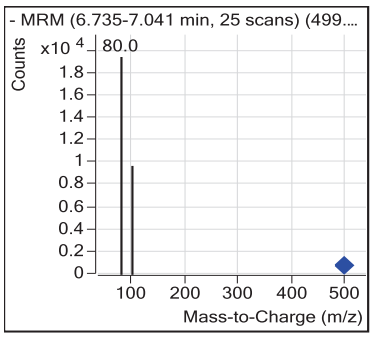




PFOS







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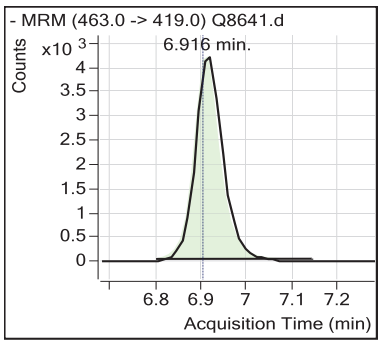
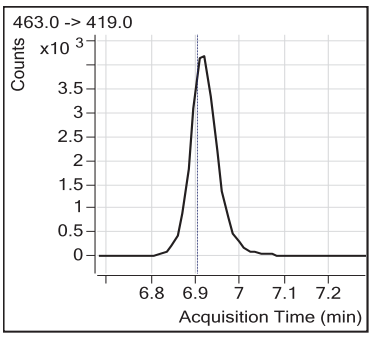
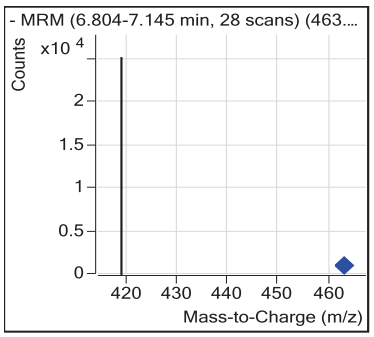
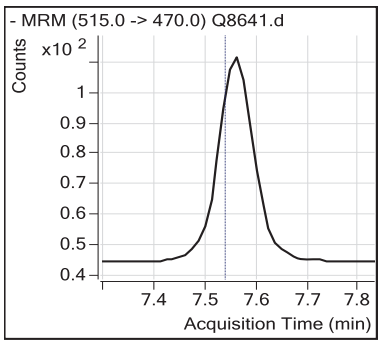
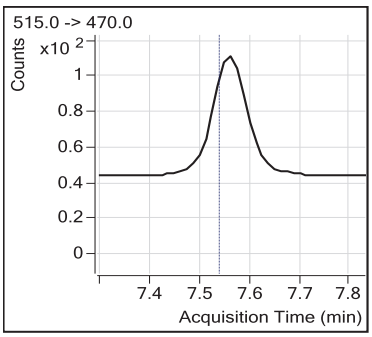


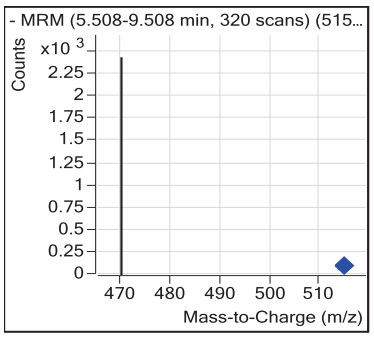




13C2-PFDA

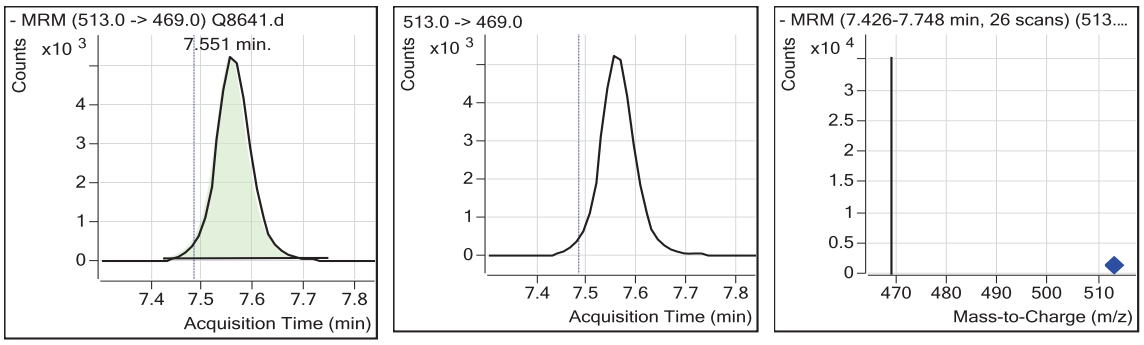




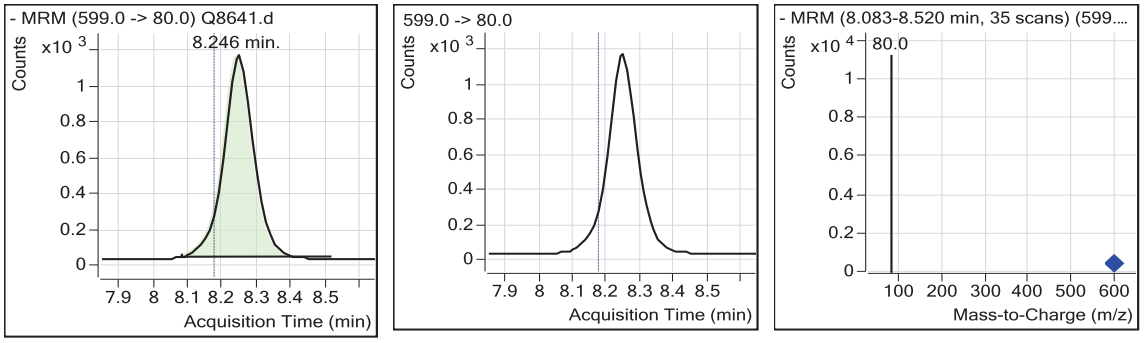


Perfluorinated Compounds by LC/MS/MS.

PFDA



PFDS



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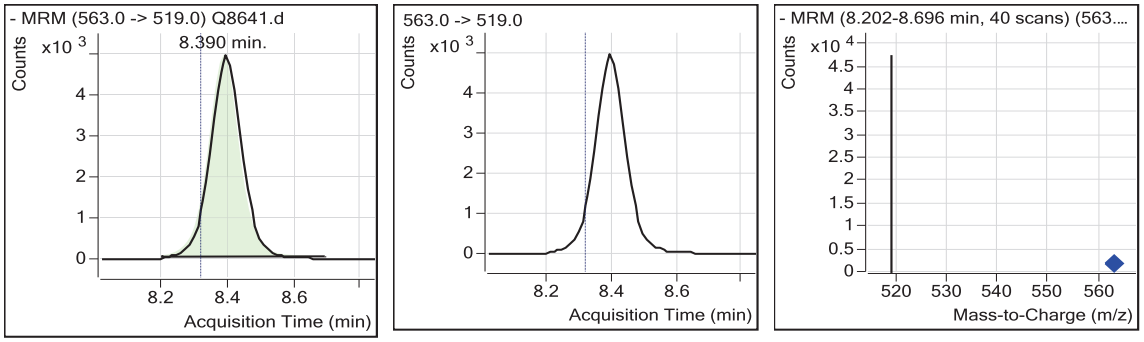
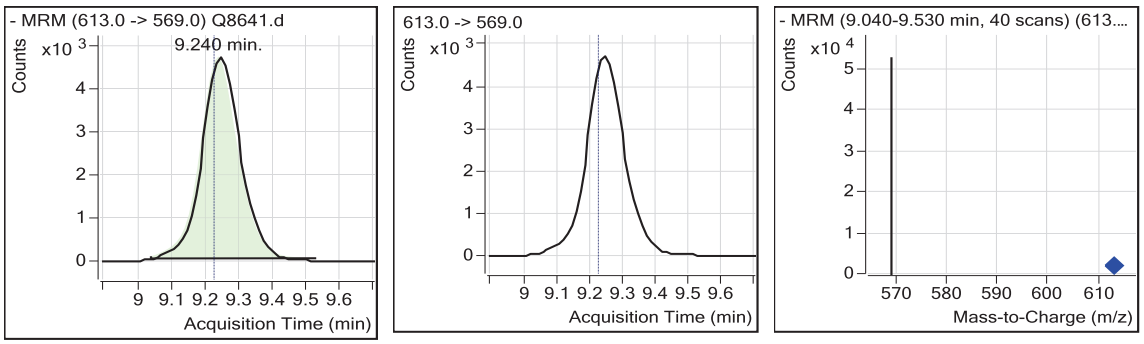


PFDoDA

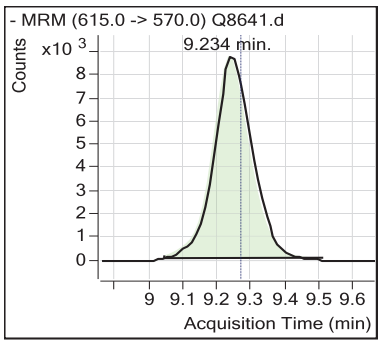


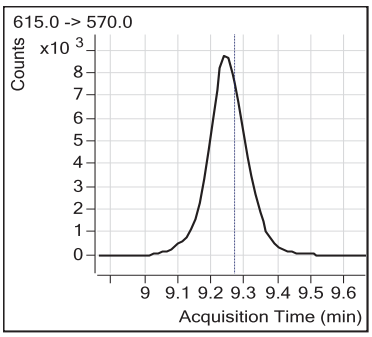
7.5.8

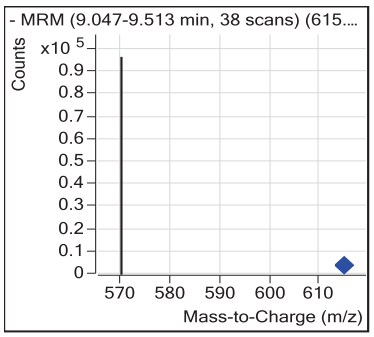
7

Perfluorinated Compounds by LC/MS/MS.

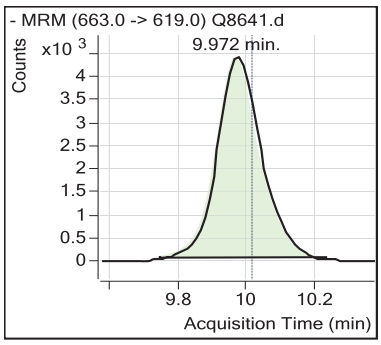
13C2-PFDoDA

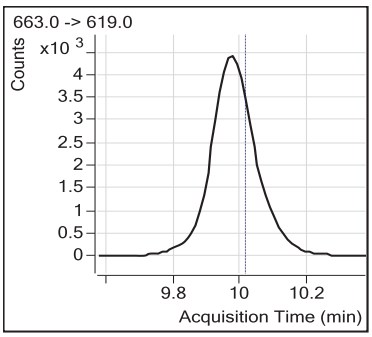


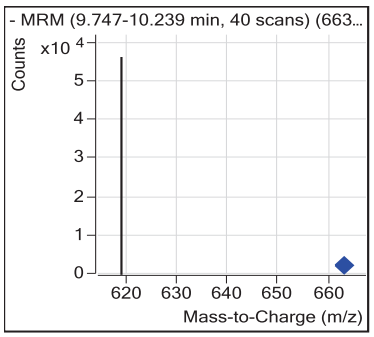




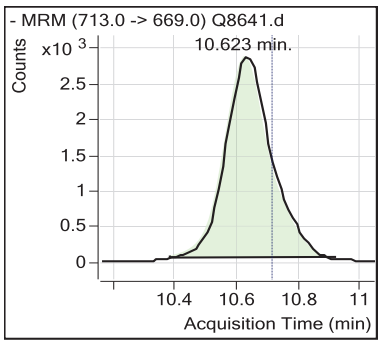
PFTrDA

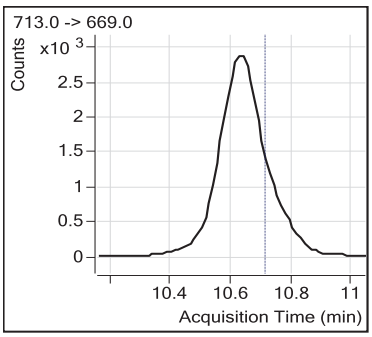


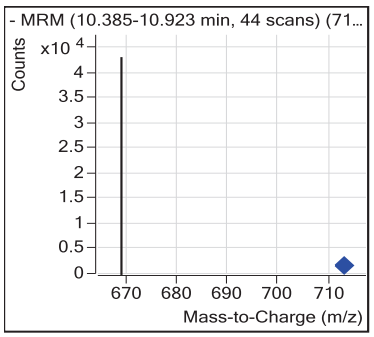




PFTeDA







Manual Integration Approval Summary

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

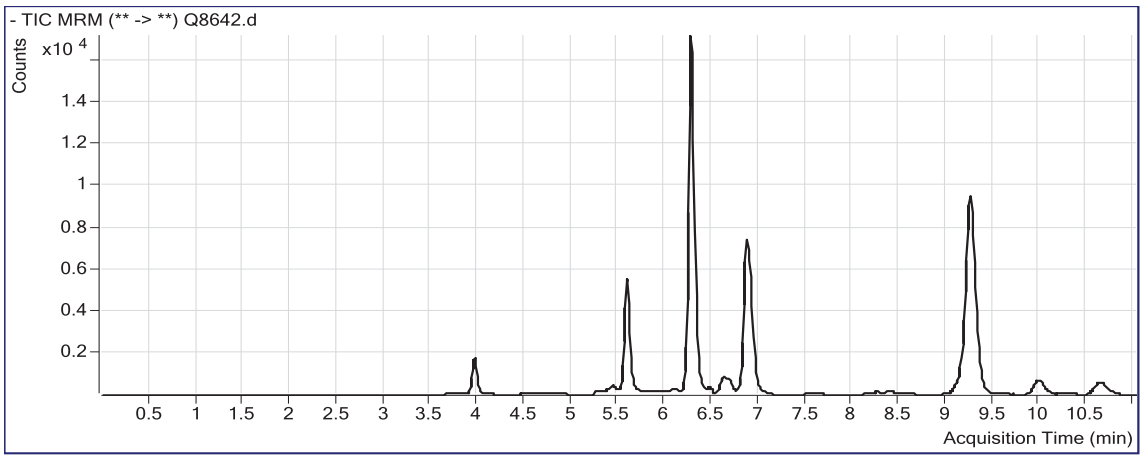
Data File	:	Q8642.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 16:10
Sample Name	:	ICV280-20
Vial	:	Vial 10
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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

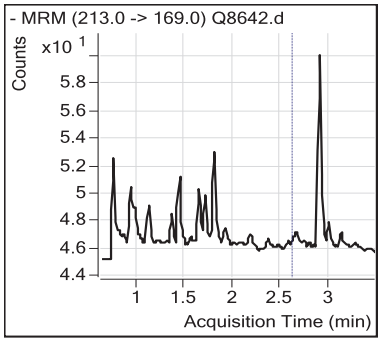
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

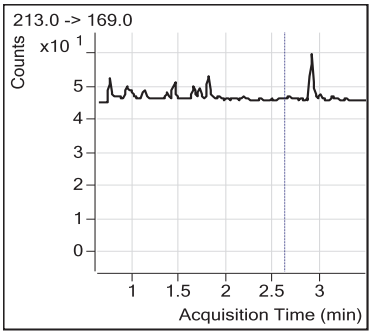
Perfluorinated Compounds by LC/MS/MS.

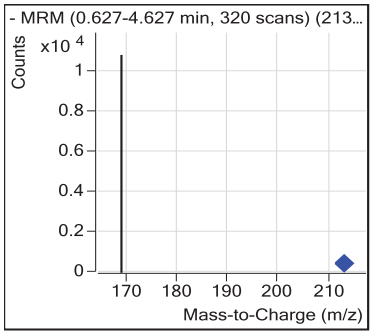
Data File	:	Q8642.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-08 16:10
Sample Name	:	ICV280-20
Vial	:	Vial 10
Sample Info	:	OP54098,SQ280,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ280.batch.bin
Last Calib Update	:	2014-12-09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



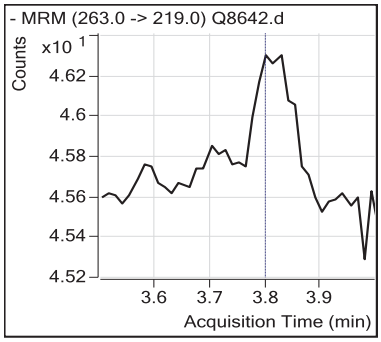
PFBA

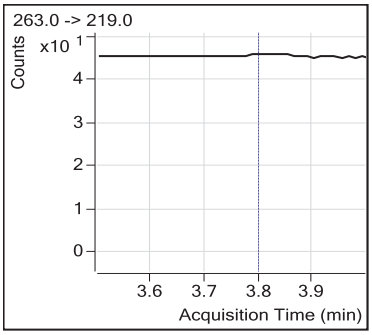


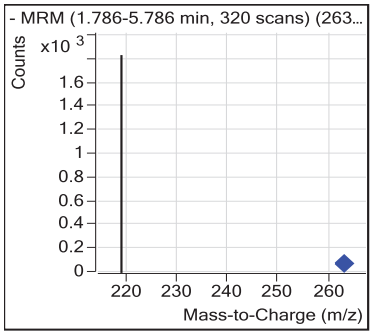




PFPeA

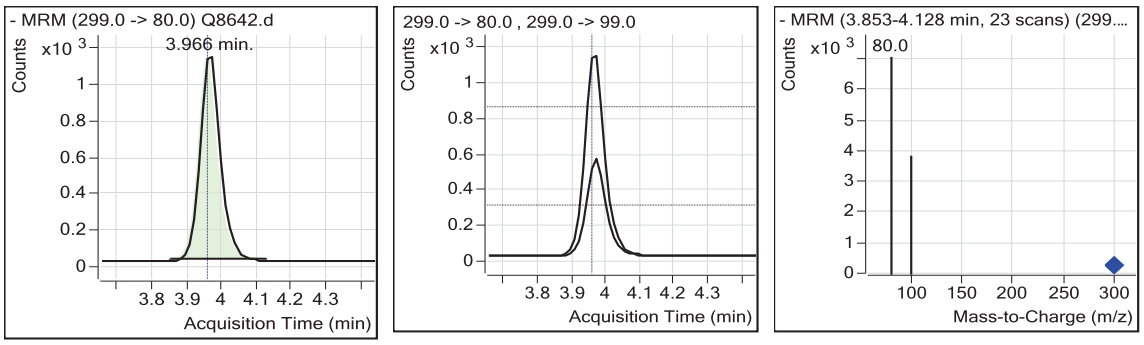




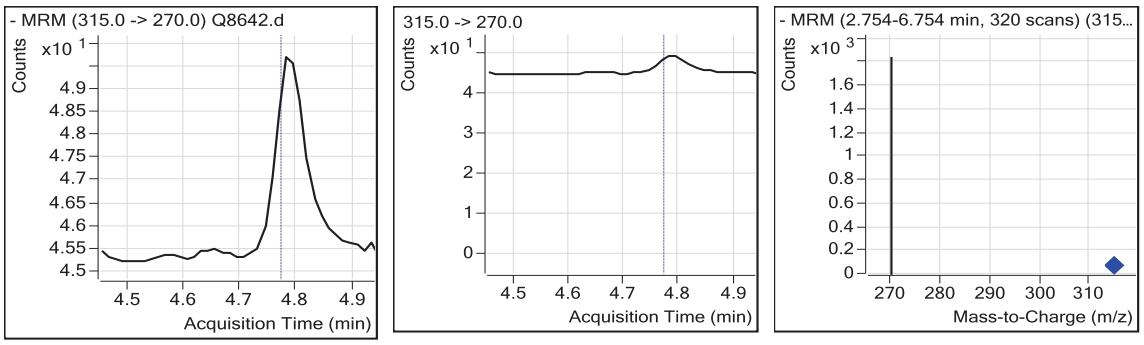


Perfluorinated Compounds by LC/MS/MS.

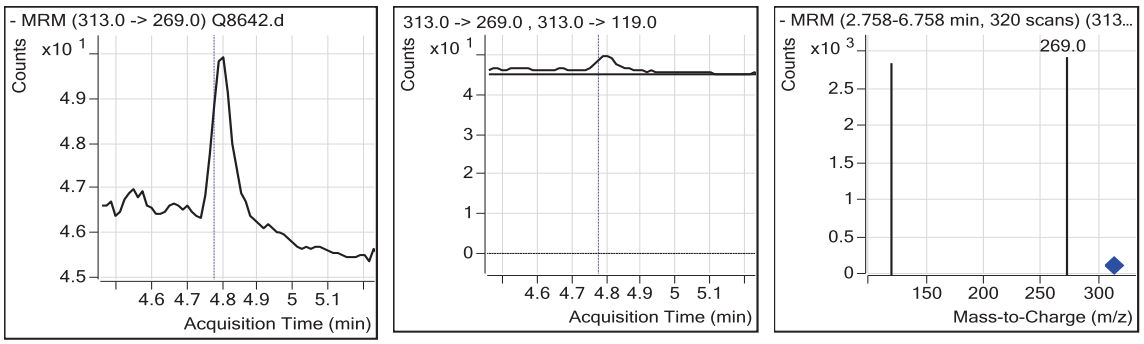
PFBS



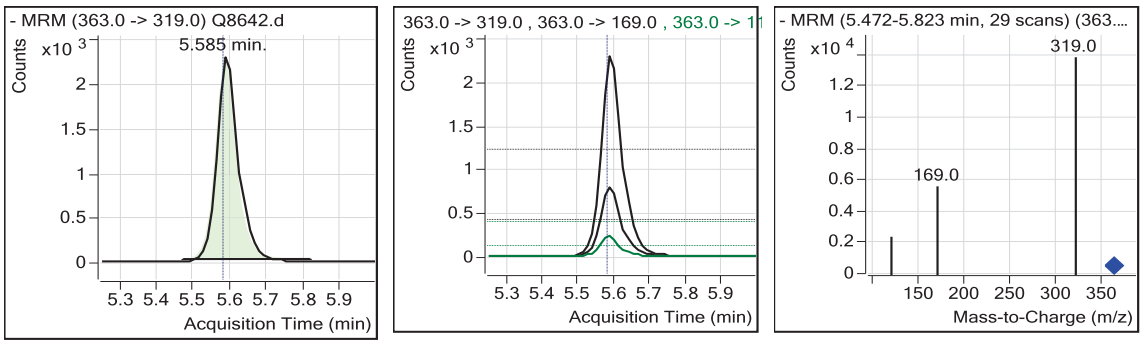
13C2-PFHxA



PFHxA

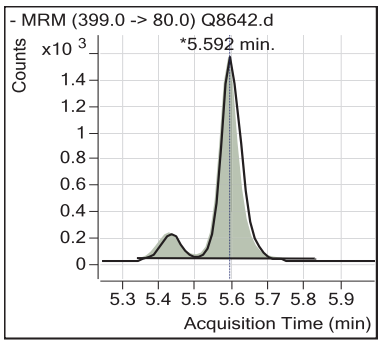


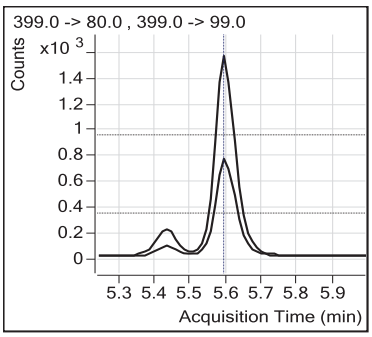
PFHpA

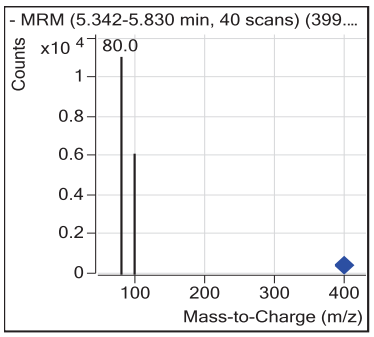


Perfluorinated Compounds by LC/MS/MS.

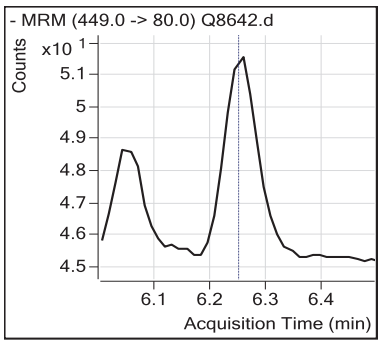
PFHxS

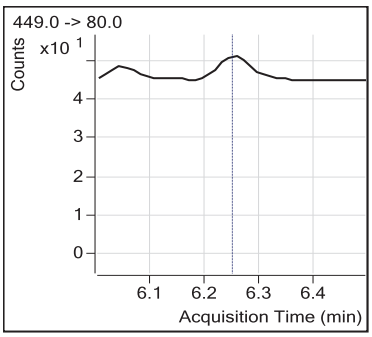


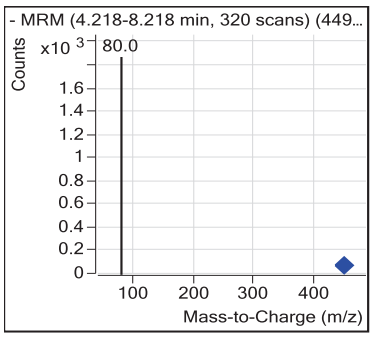




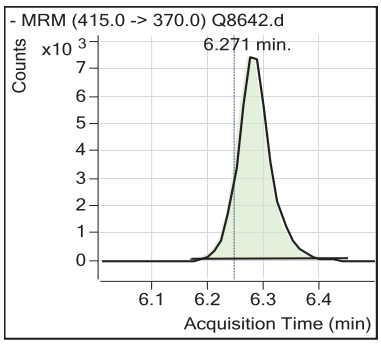
PFHpS

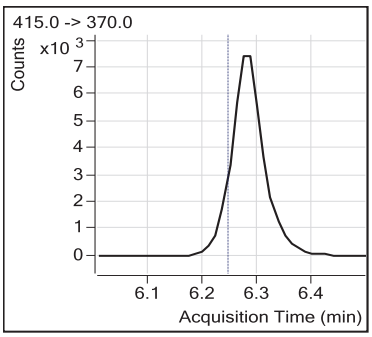


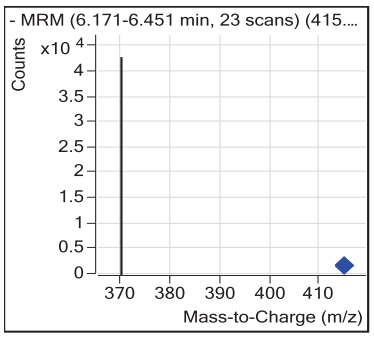




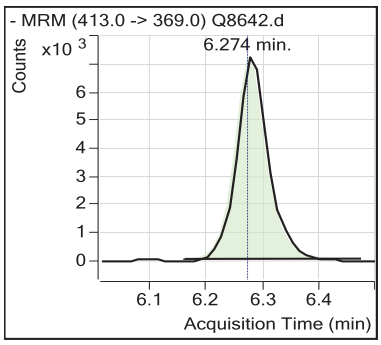
13C2-PFOA

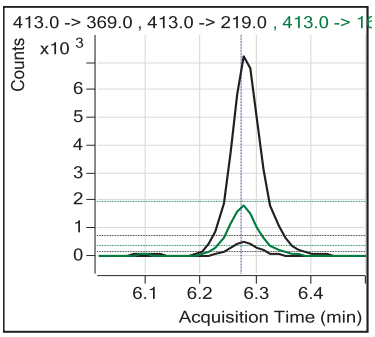


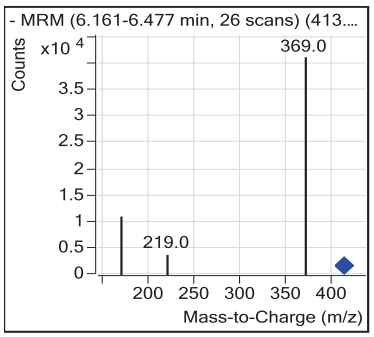




PFOA





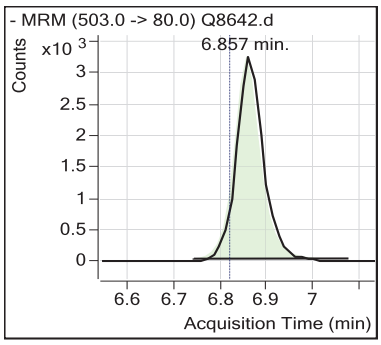


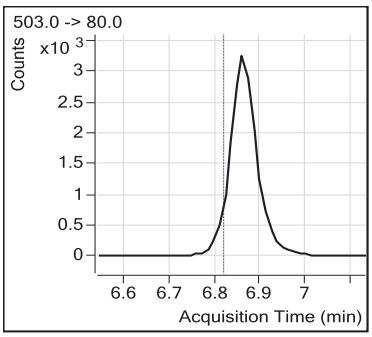
7.5.9

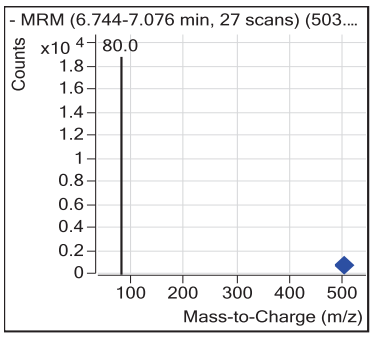
7

Perfluorinated Compounds by LC/MS/MS.

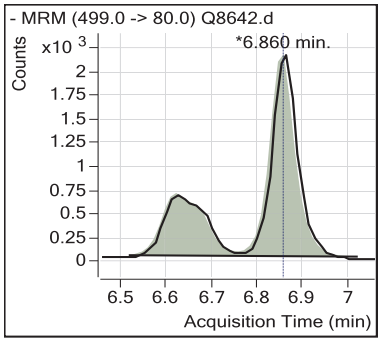
13C4-PFOS

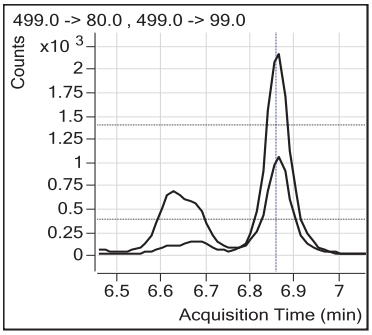


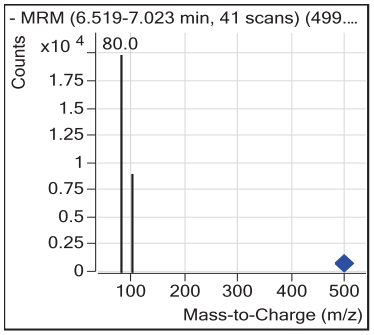




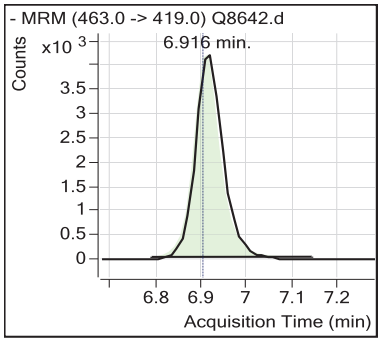
PFOS

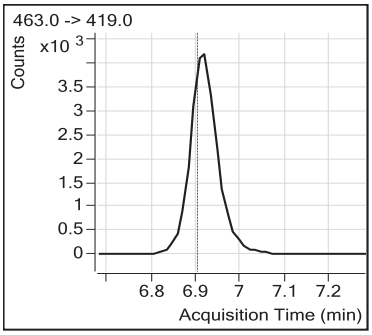


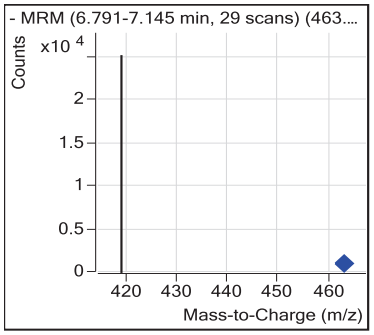




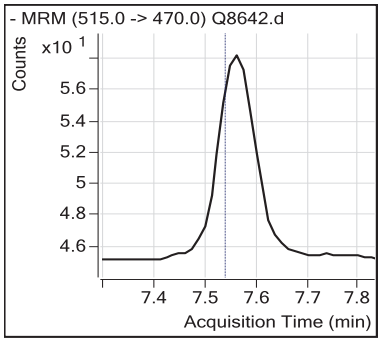
PFNA

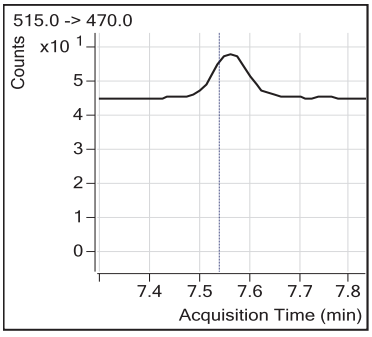


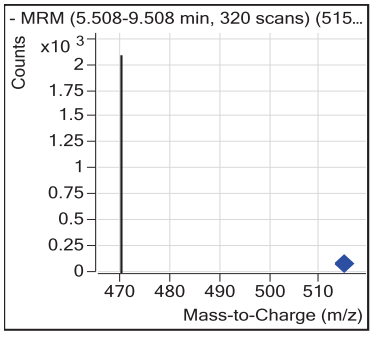




13C2-PFDA

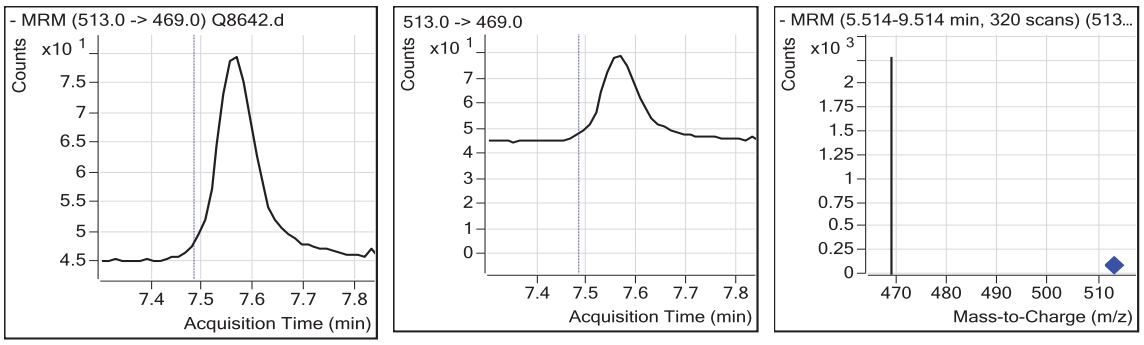




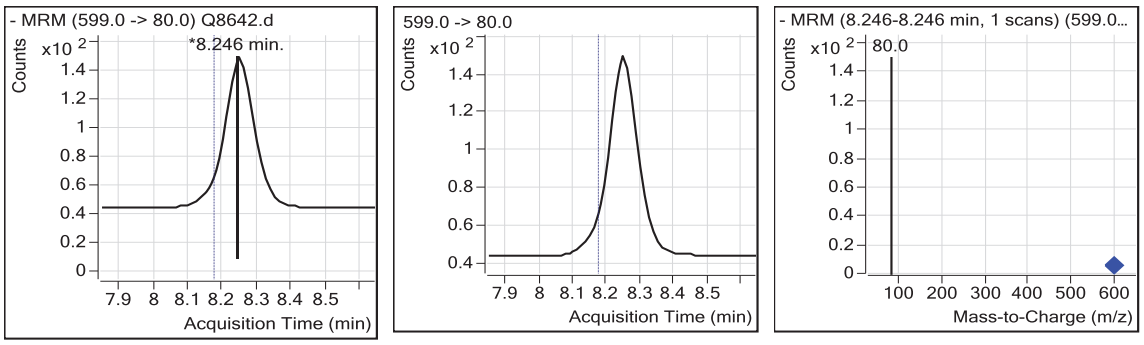


Perfluorinated Compounds by LC/MS/MS.

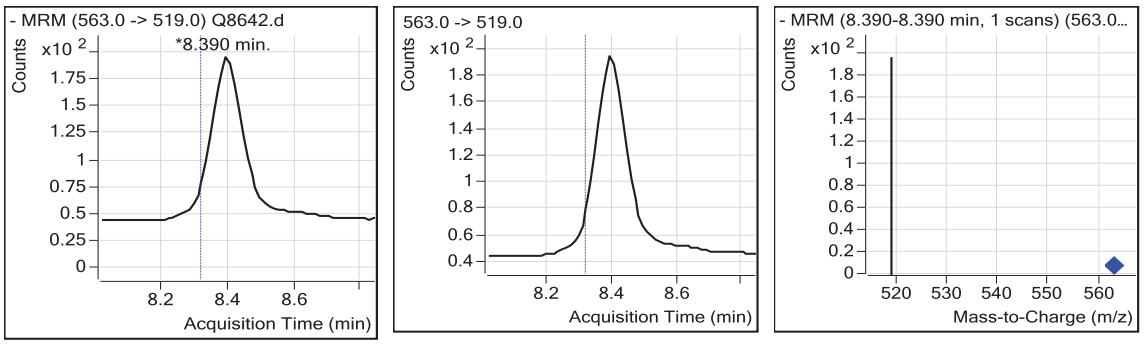
PFDA



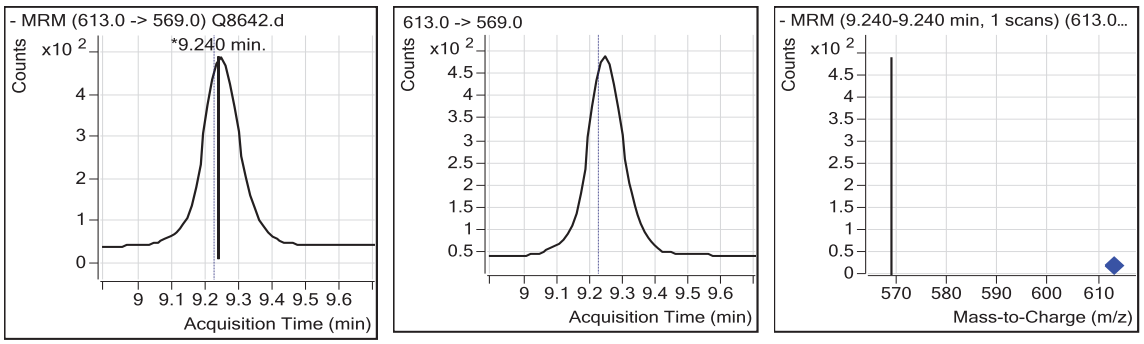
PFDS



PFUnDA

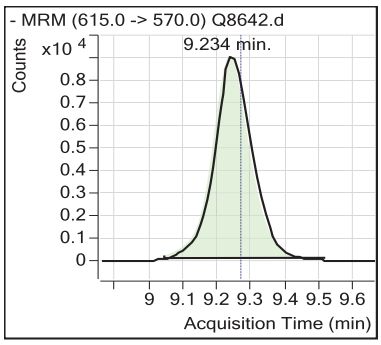


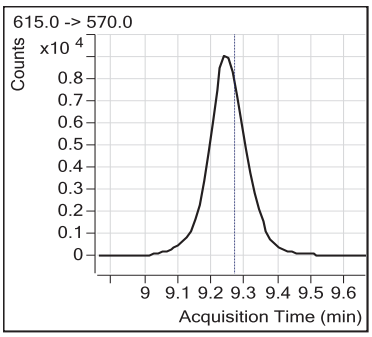
PFDoDA

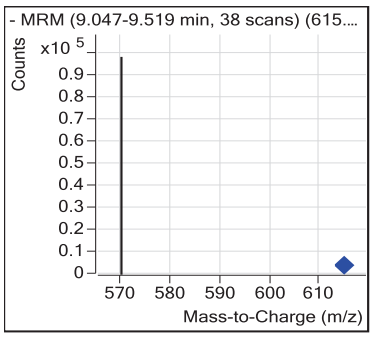


Perfluorinated Compounds by LC/MS/MS.

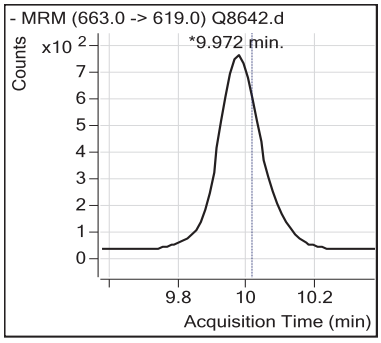
13C2-PFDoDA

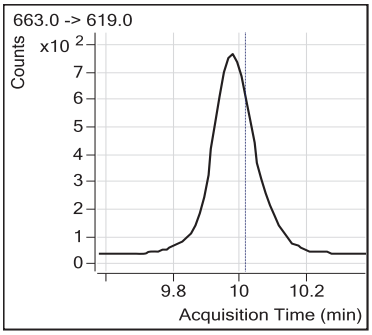


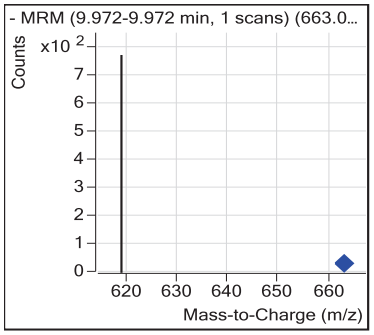




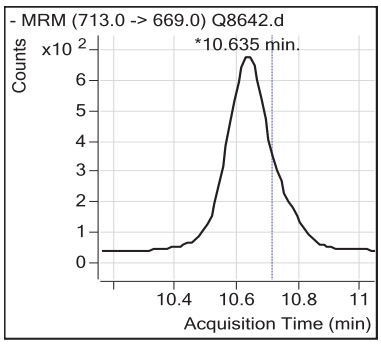
PFTrDA

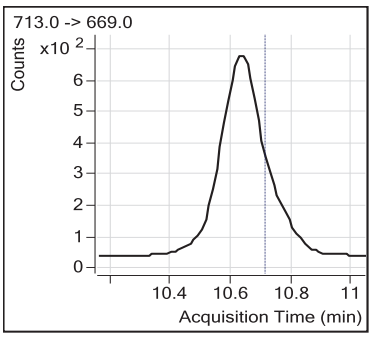


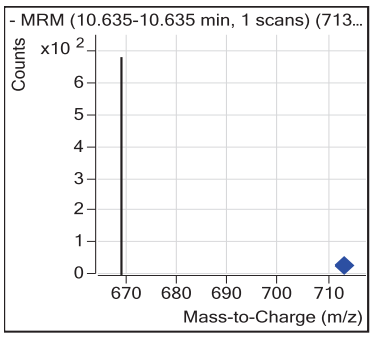




PFTeDA







Manual Integration Approval Summary

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

Perfluorinated Compounds by LC/MS/MS.

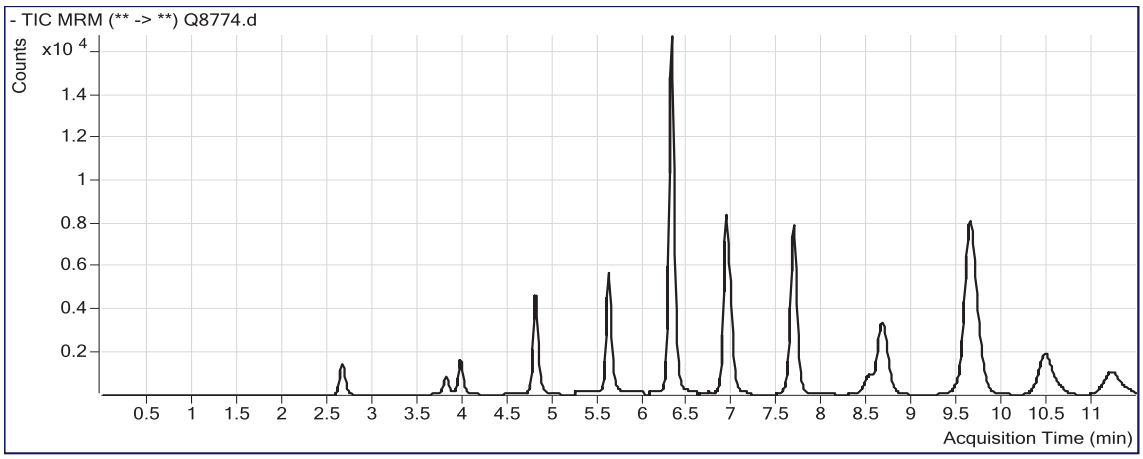
Data File	:	Q8774.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 16:51
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54151,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	26490	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	13031	20.000	µg/L	0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	55699	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	9144	20.99	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 104.97%			
13C2-PFDA	7.658	515.0 -> 470.0	21326	18.87	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 94.36%			
Target Compounds						**Qvalue**
PFBA	2.664	213.0 -> 169.0	6798	21.384	µg/L	100
PFPeA	3.811	263.0 -> 219.0	3315	20.867	µg/L	100
PFBS	3.966	299.0 -> 80.0	4187	21.746	µg/L	96
PFHxA	4.796	313.0 -> 269.0	9713	21.236	µg/L	99
PFHpA	5.610	363.0 -> 319.0	8984	20.248	µg/L	98
PFHxS	5.618	399.0 -> 80.0	6381	20.636	µg/L	87
PFHpS	6.281	449.0 -> 80.0	7831	20.273	µg/L	100
PFOA	6.311	413.0 -> 369.0	26869	20.023	µg/L	81
PFOS	6.910	499.0 -> 80.0	13223	20.289	µg/L	89
PFNA	6.966	463.0 -> 419.0	14254	17.865	µg/L	100
PFDA	7.664	513.0 -> 469.0	20405	24.142	µg/L	100
PFDS	8.496	599.0 -> 80.0	6111	25.207	µg/L	100
PFUnDA	8.653	563.0 -> 519.0	27658	22.950	µg/L	100
PFDoDA	9.616	613.0 -> 569.0	25077	20.092	µg/L	100
PFTrDA	10.448	663.0 -> 619.0	22085	18.208	µg/L	100
PFTeDA	11.186	713.0 -> 669.0	13885	16.241	µg/L	100

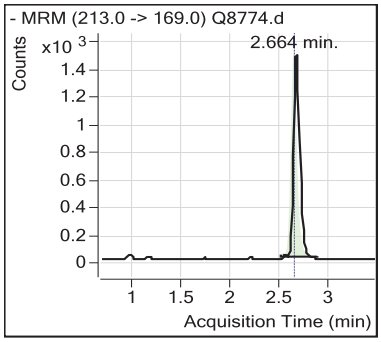
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

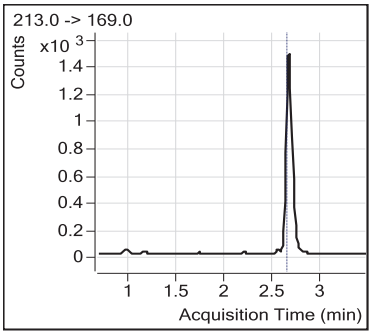
Perfluorinated Compounds by LC/MS/MS.

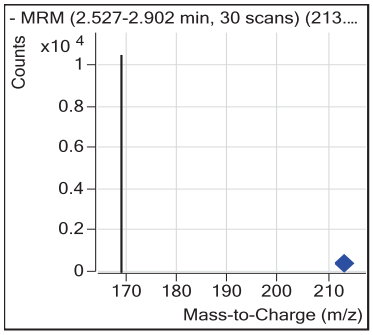
Data File	:	Q8774.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 16:51
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54151,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



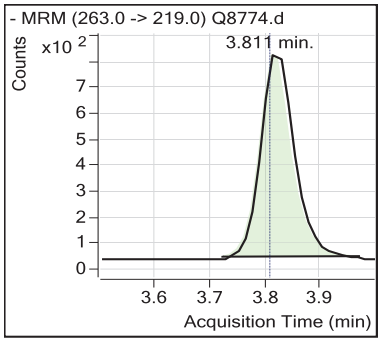
PFBA

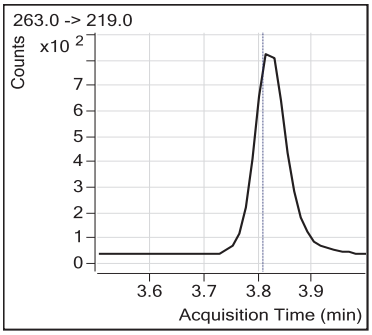


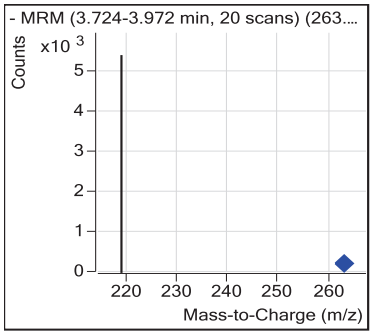




PFPeA

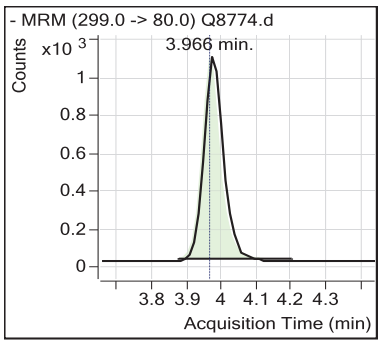


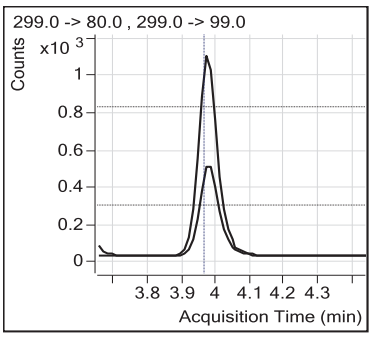


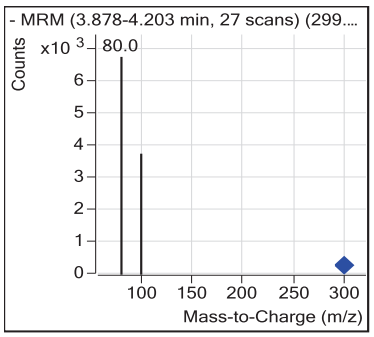


Perfluorinated Compounds by LC/MS/MS.

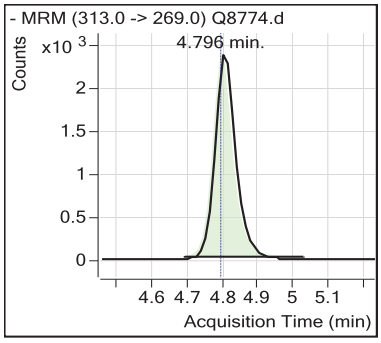
PFBS

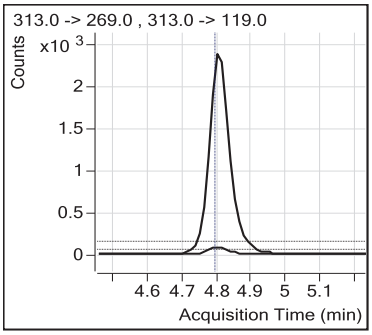


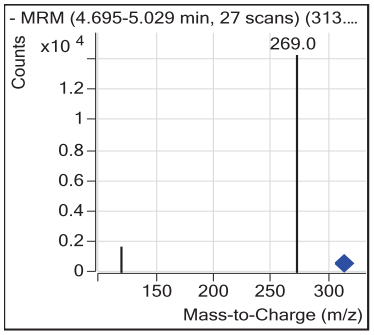




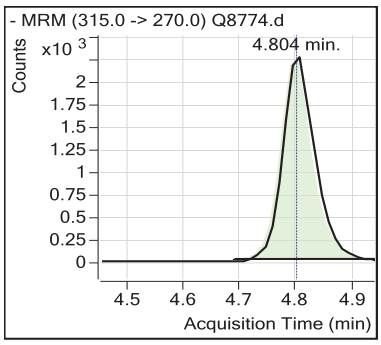
PFHxA

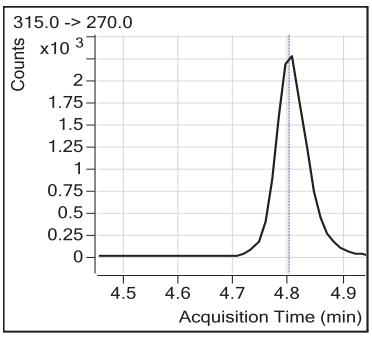


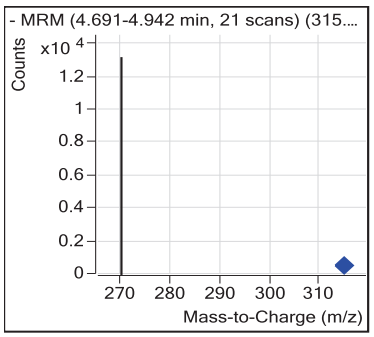




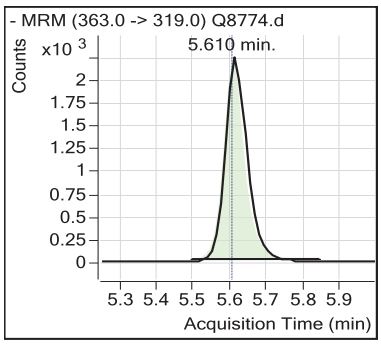
13C2-PFHxA

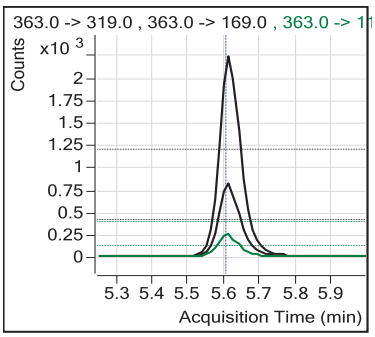


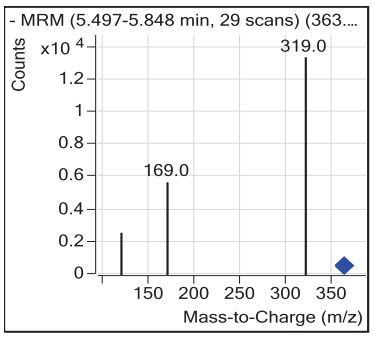




PFHpA

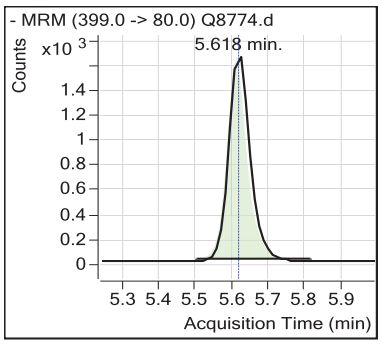


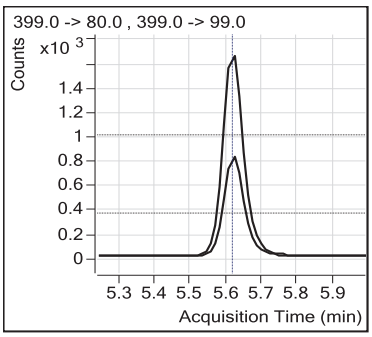


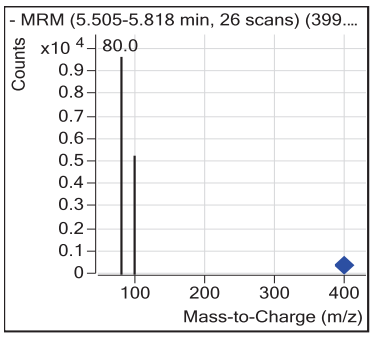


Perfluorinated Compounds by LC/MS/MS.

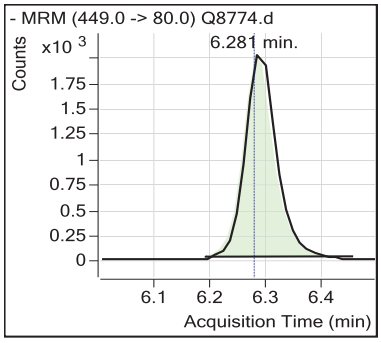
PFHxS

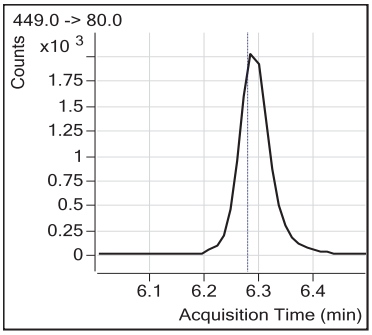


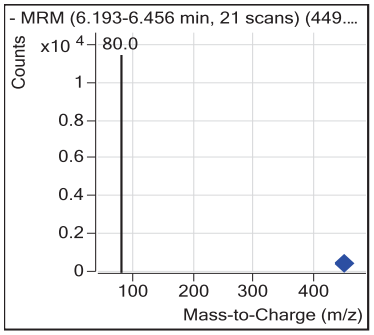




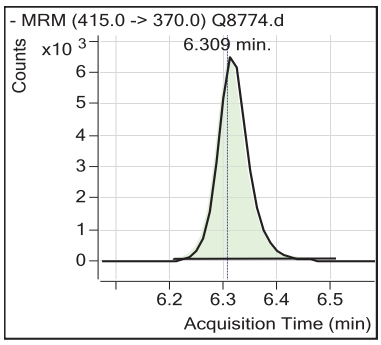
PFHpS

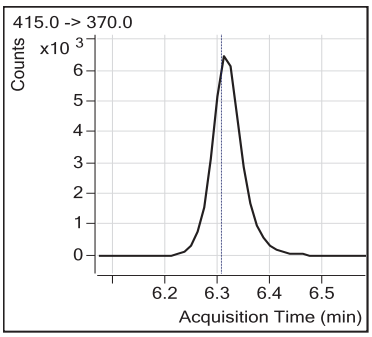


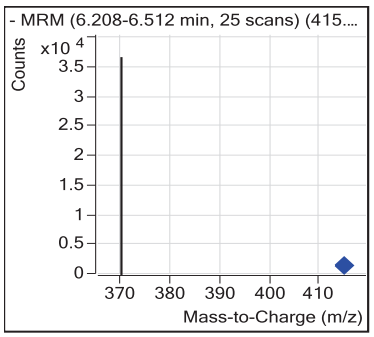




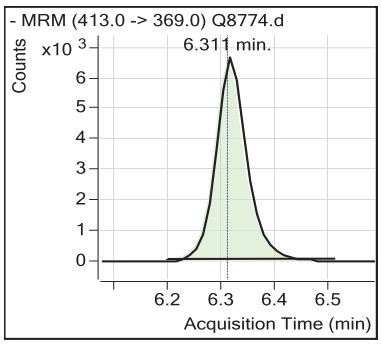
13C2-PFOA

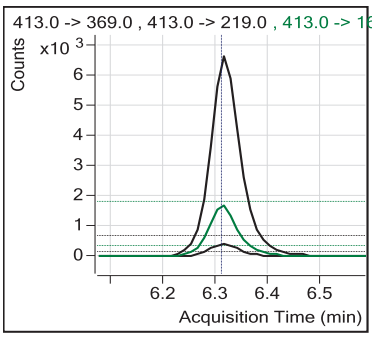


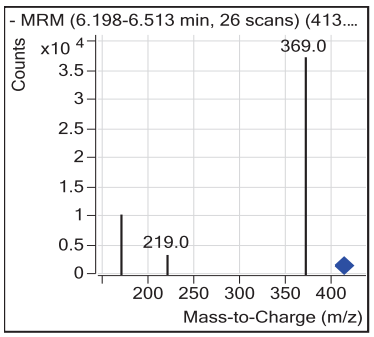




PFOA

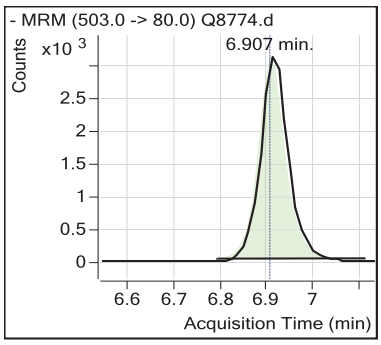


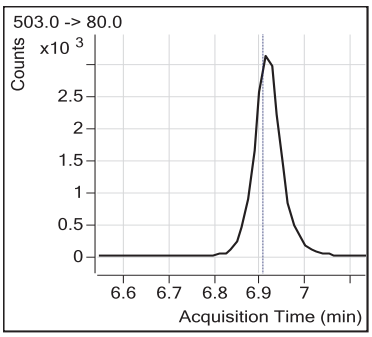


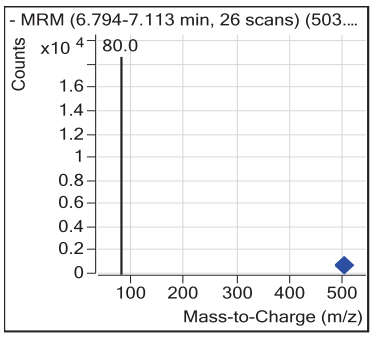


Perfluorinated Compounds by LC/MS/MS.

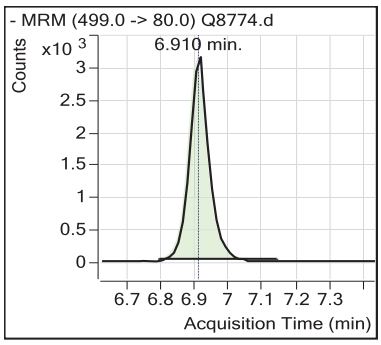
13C4-PFOS

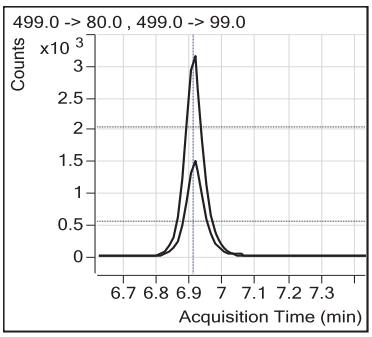


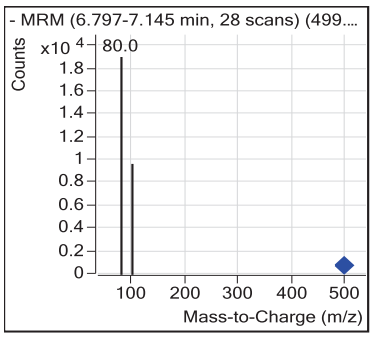




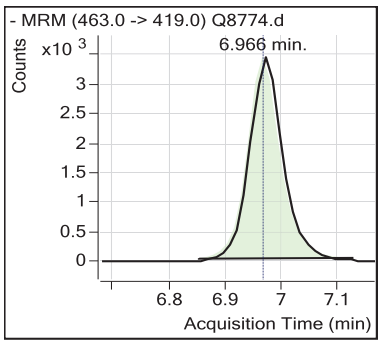
PFOS

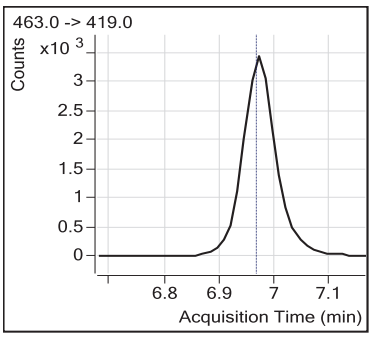


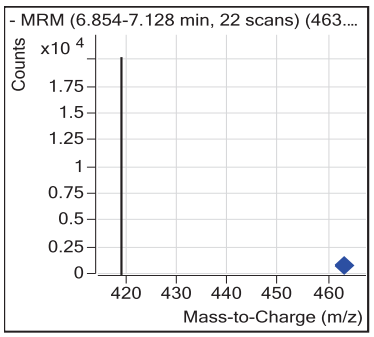




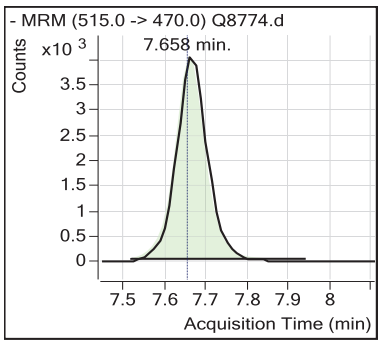
PFNA

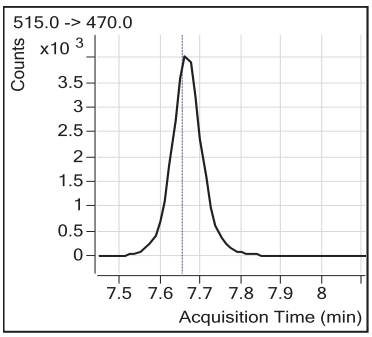


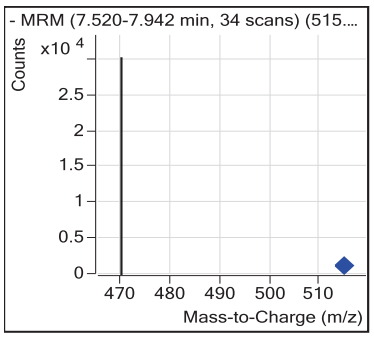




13C2-PFDA

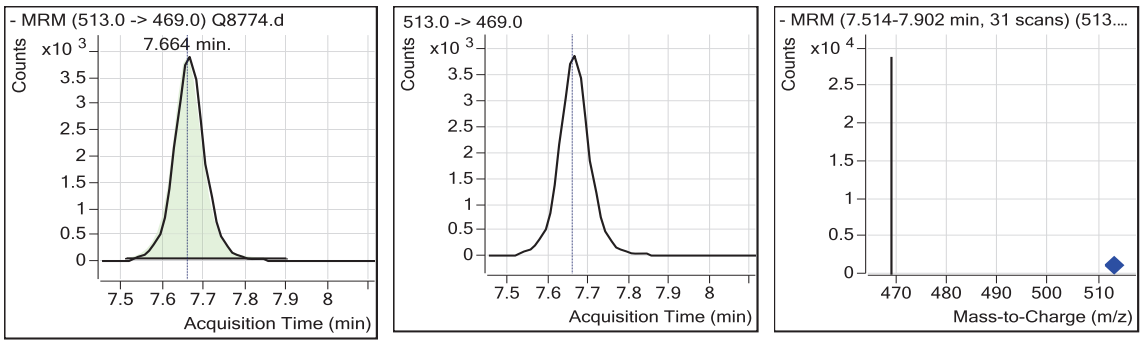




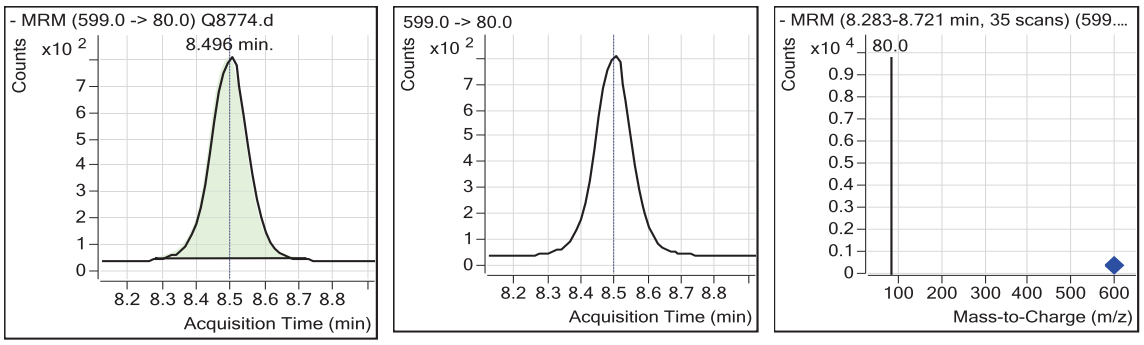


Perfluorinated Compounds by LC/MS/MS.

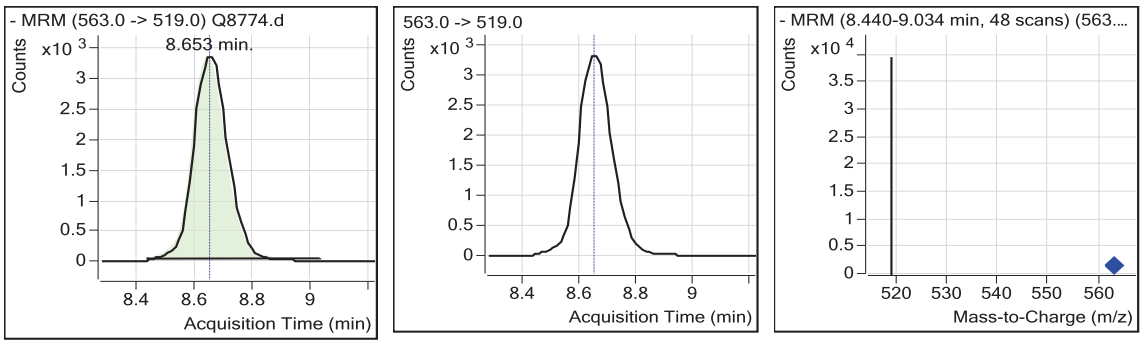
PFDA



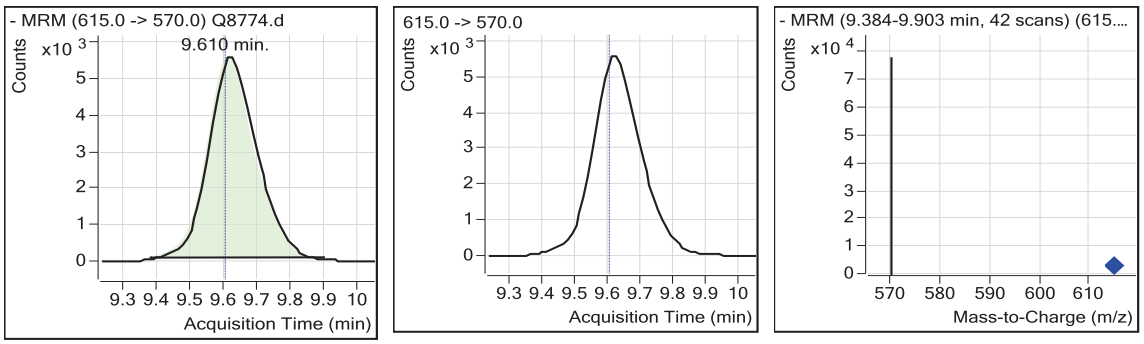
PFDS



PFUnDA

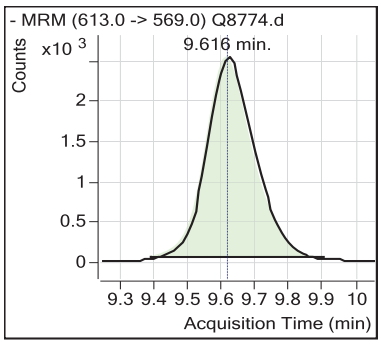


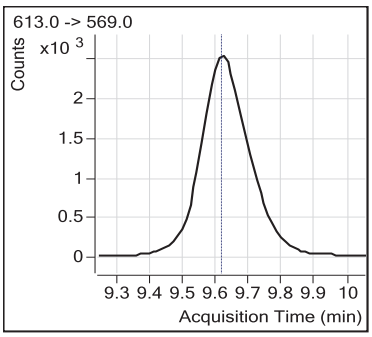
13C2-PFDoDA

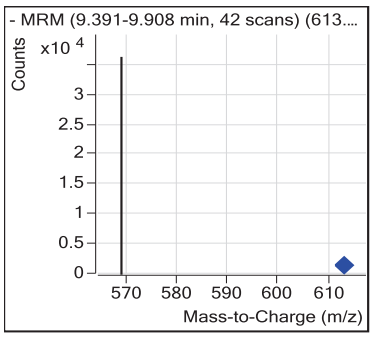


Perfluorinated Compounds by LC/MS/MS.

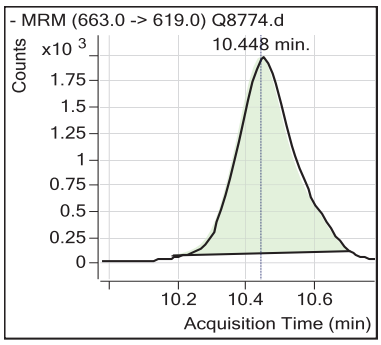
PFDoDA

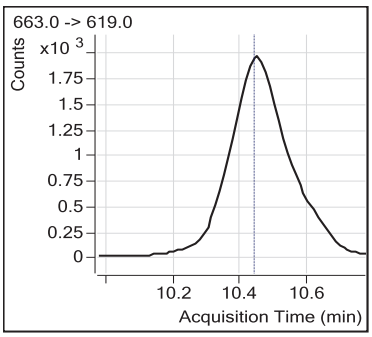


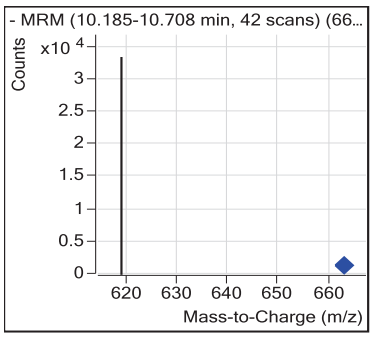




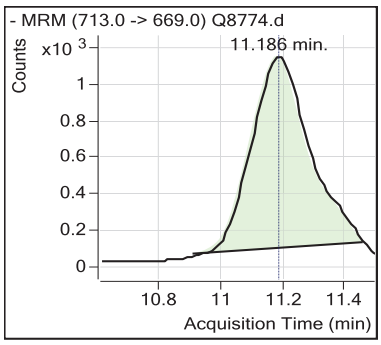
PFTrDA

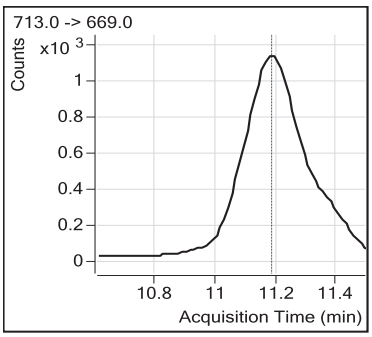


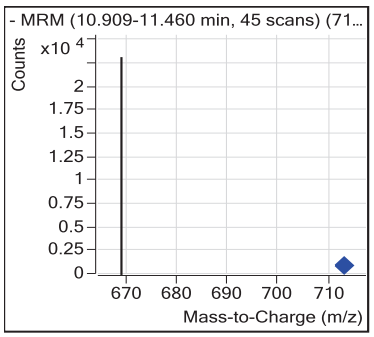




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

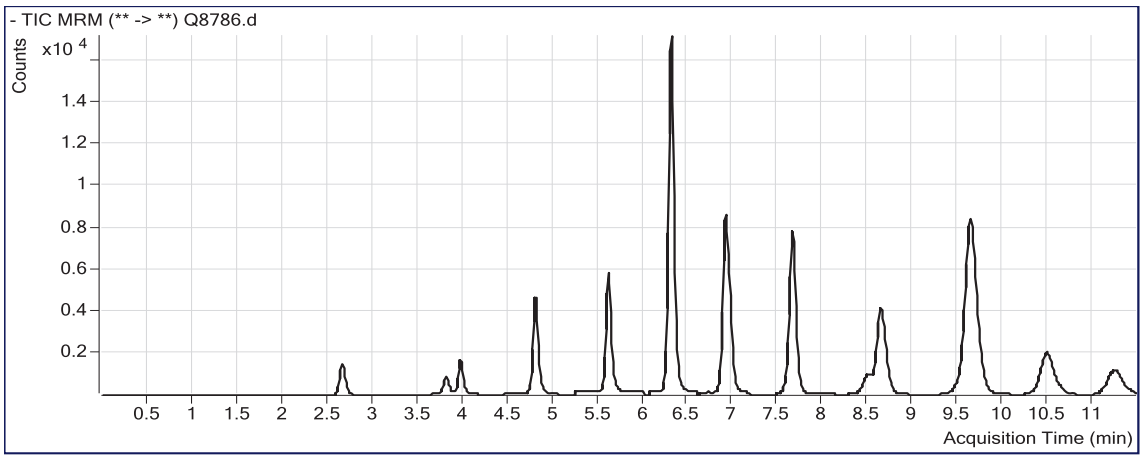
Data File	:	Q8786.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 21:00
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54151,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	27830	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	13391	20.000	µg/L	0.000
13C2-PFDoDA	9.622	615.0 -> 570.0	54601	20.000	µg/L	0.012
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	9165	20.03	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 100.15%			
13C2-PFDA	7.645	515.0 -> 470.0	20951	17.65	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 88.23%			
Target Compounds						**Qvalue**
PFBA	2.664	213.0 -> 169.0	7087	21.222	µg/L	100
PFPeA	3.811	263.0 -> 219.0	3366	20.172	µg/L	100
PFBS	3.966	299.0 -> 80.0	4231	21.385	µg/L	97
PFHxA	4.796	313.0 -> 269.0	9648	20.080	µg/L	99
PFHpA	5.610	363.0 -> 319.0	9262	19.870	µg/L	100
PFHxS	5.618	399.0 -> 80.0	6564	20.657	µg/L	88
PFHpS	6.281	449.0 -> 80.0	8165	20.569	µg/L	100
PFOA	6.311	413.0 -> 369.0	27865	19.765	µg/L	80
PFOS	6.898	499.0 -> 80.0	13646	20.374	µg/L	90
PFNA	6.954	463.0 -> 419.0	14316	17.079	µg/L	100
PFDA	7.652	513.0 -> 469.0	19972	24.106	µg/L	100
PFDS	8.471	599.0 -> 80.0	6207	26.118	µg/L	100
PFUnDA	8.627	563.0 -> 519.0	30581	25.885	µg/L	100
PFDoDA	9.616	613.0 -> 569.0	24477	20.006	µg/L	100
PFTrDA	10.460	663.0 -> 619.0	21701	18.251	µg/L	100
PFTeDA	11.211	713.0 -> 669.0	13911	16.599	µg/L	100

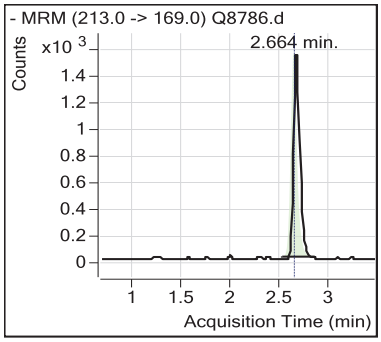
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

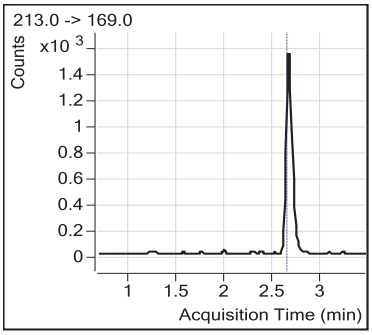
Perfluorinated Compounds by LC/MS/MS.

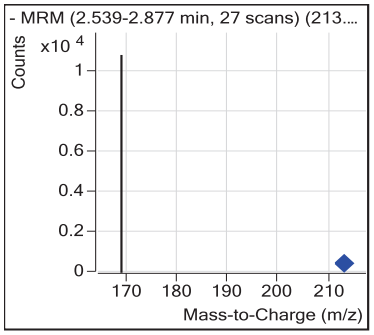
Data File	:	Q8786.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 21:00
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54151,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



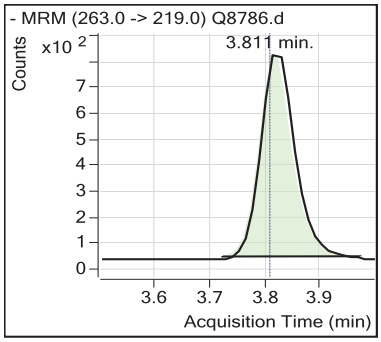
PFBA

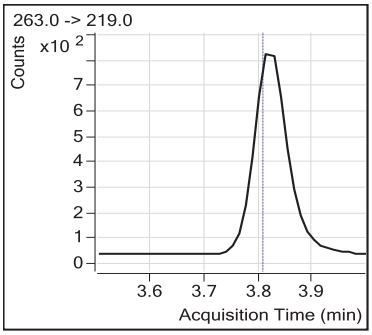


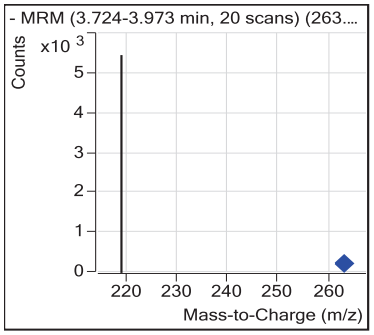




PFPeA

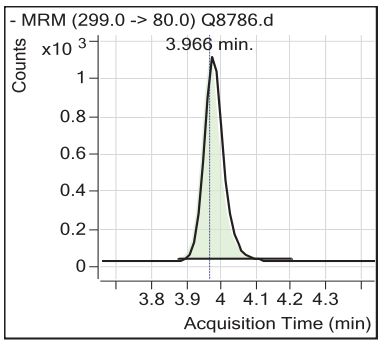


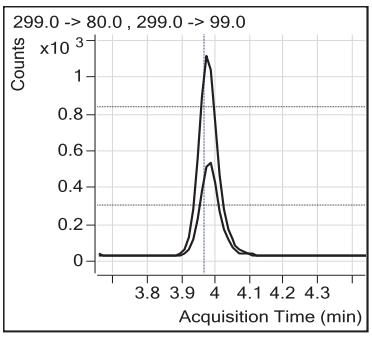


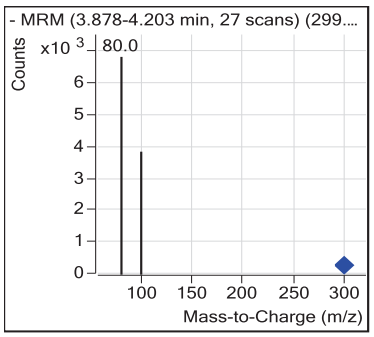


Perfluorinated Compounds by LC/MS/MS.

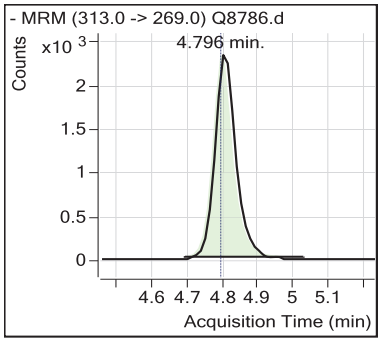
PFBS

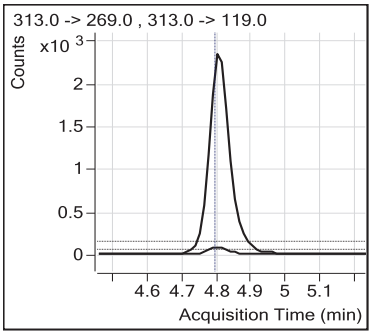


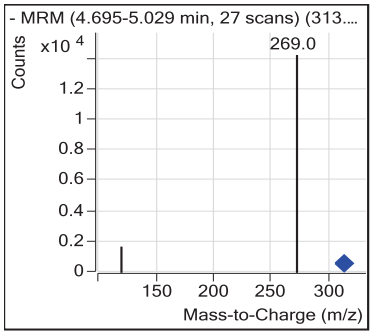




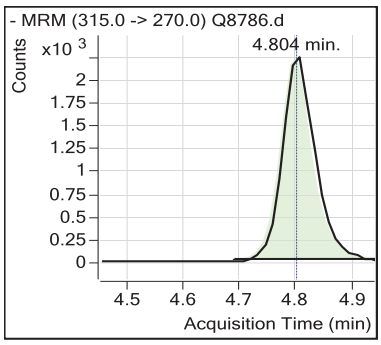
PFHxA

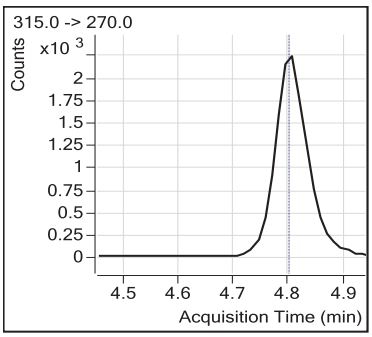


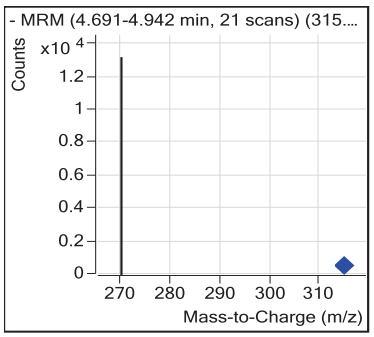




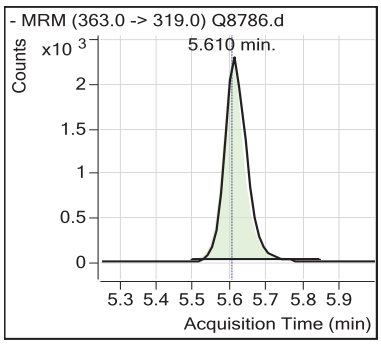
13C2-PFHxA

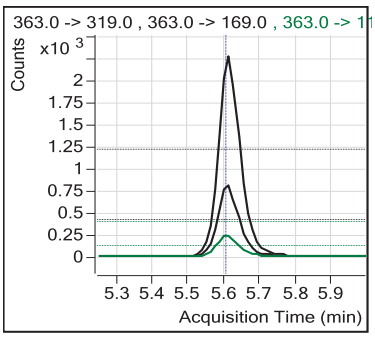


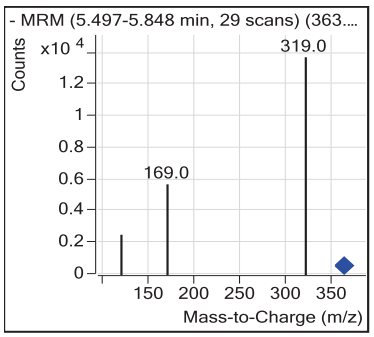




PFHpA

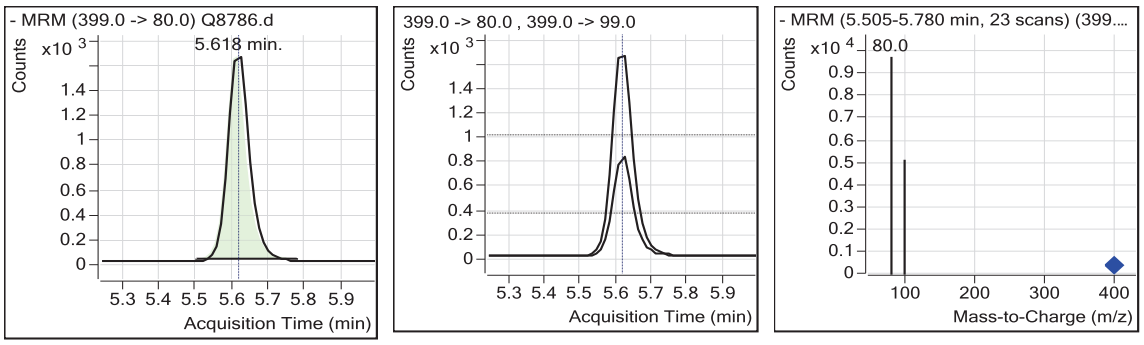




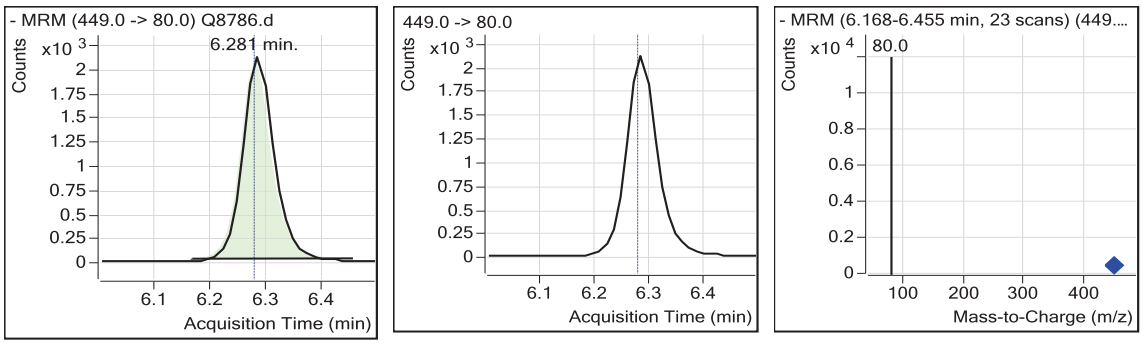


Perfluorinated Compounds by LC/MS/MS.

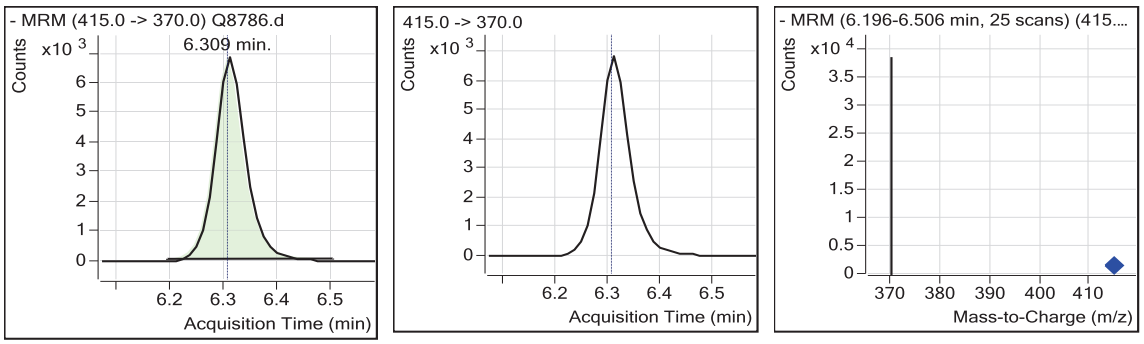
PFHxS



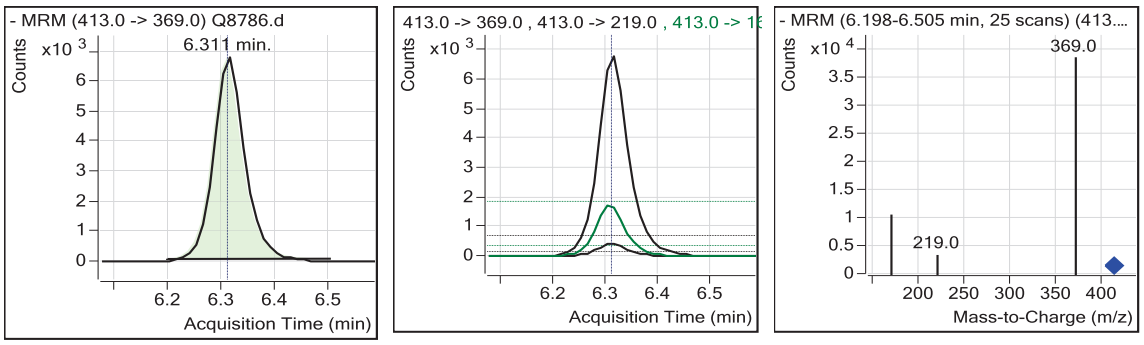
PFHpS



13C2-PFOA



PFOA

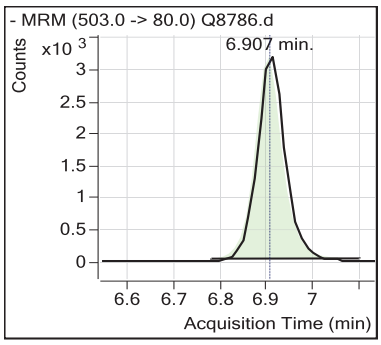


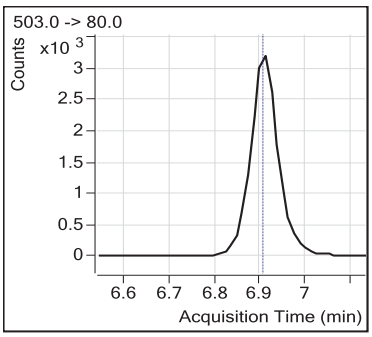
7.5.11

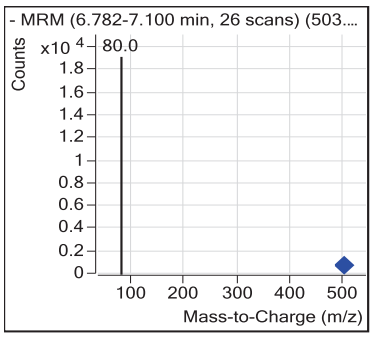
7

Perfluorinated Compounds by LC/MS/MS.

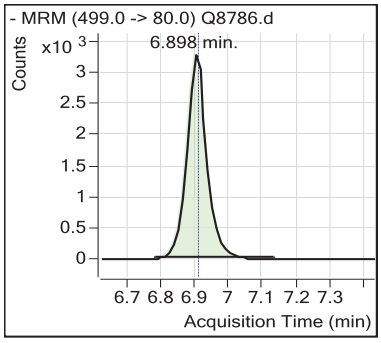
13C4-PFOS

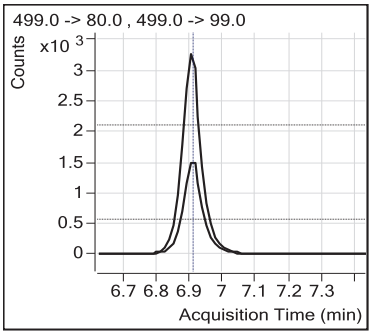


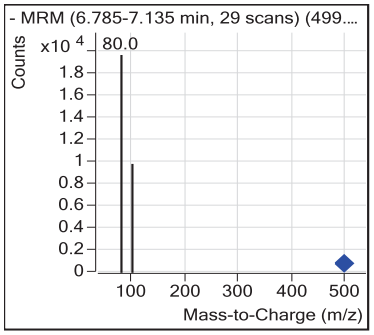




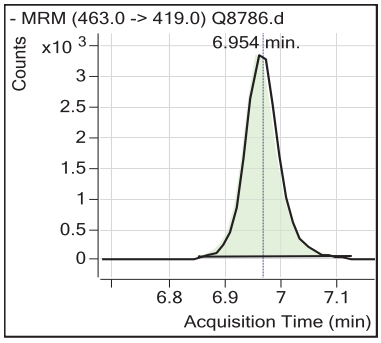
PFOS

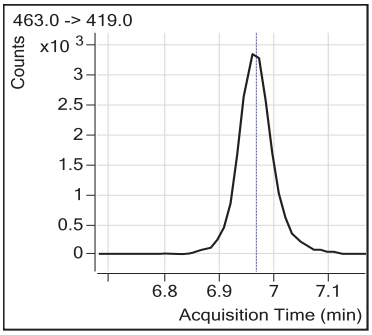


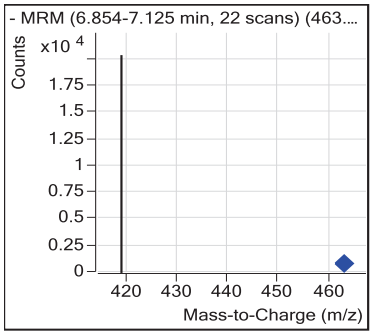




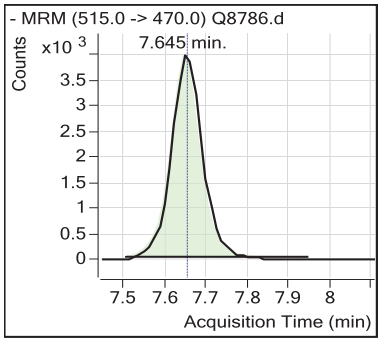
PFNA

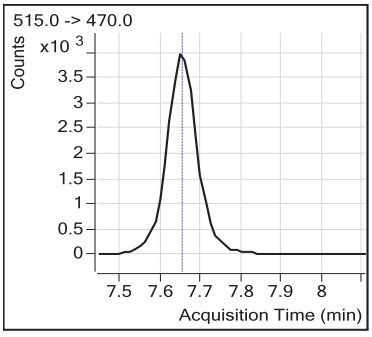


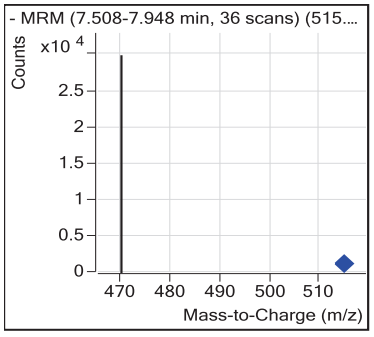




13C2-PFDA

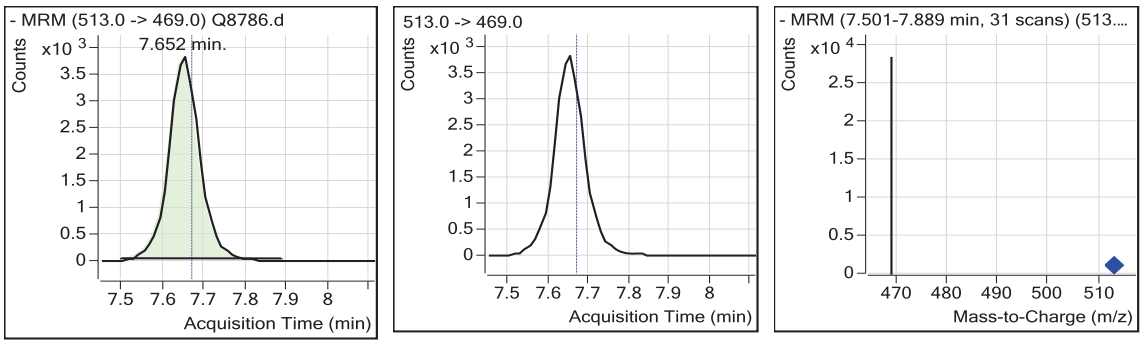




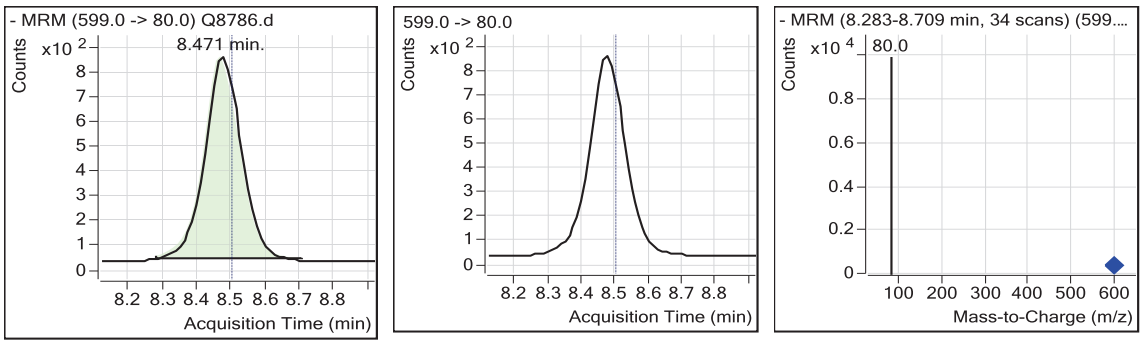


Perfluorinated Compounds by LC/MS/MS.

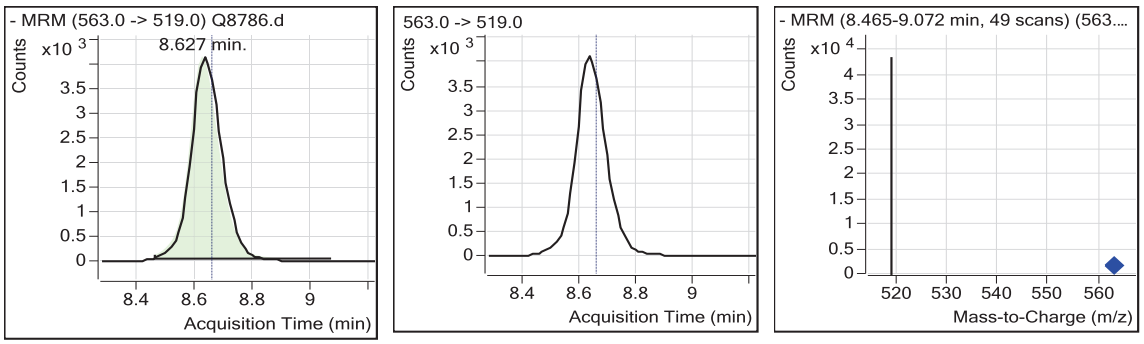
PFDA



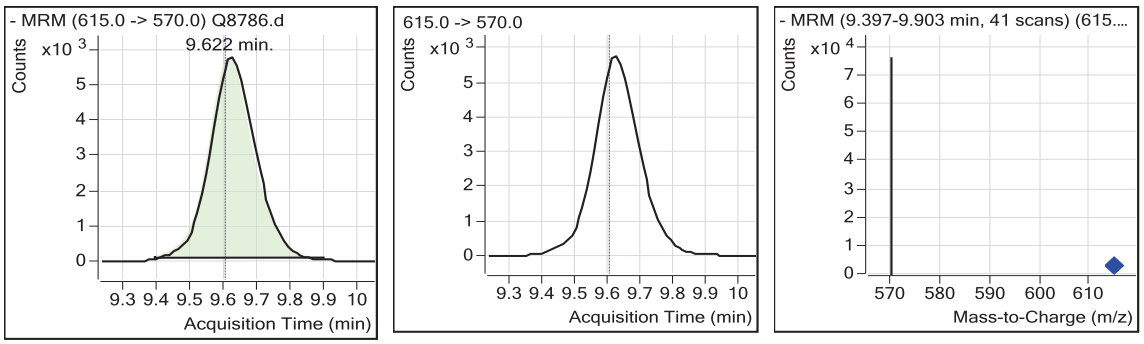
PFDS



PFUnDA

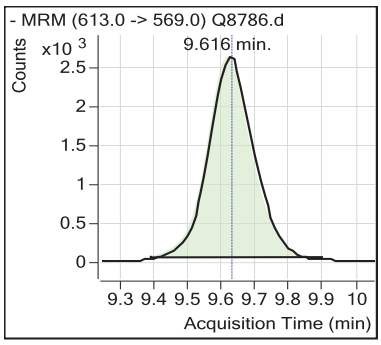


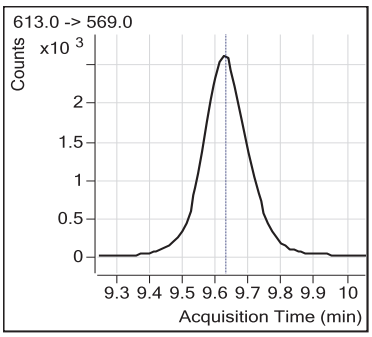
13C2-PFDoDA

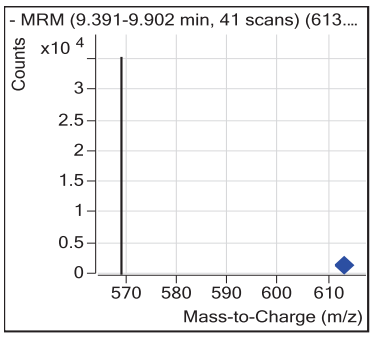


Perfluorinated Compounds by LC/MS/MS.

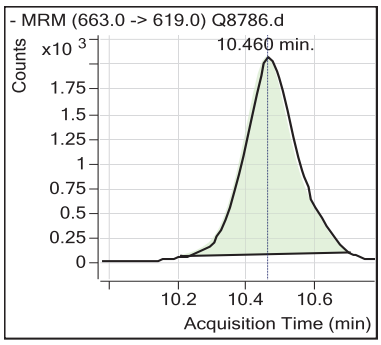
PFDoDA

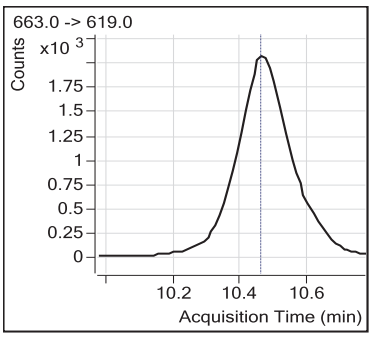


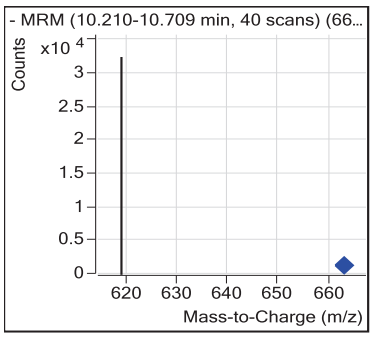




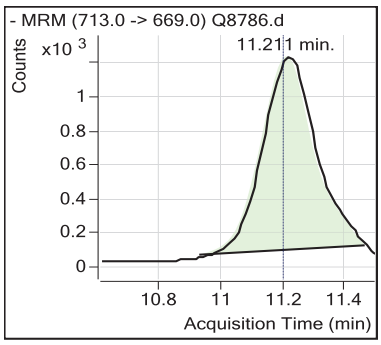
PFTrDA

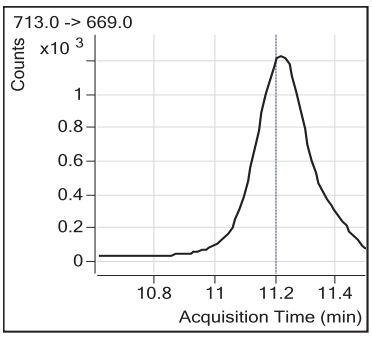


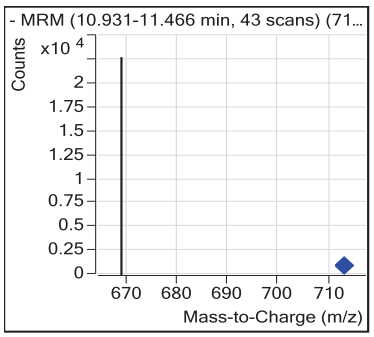




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

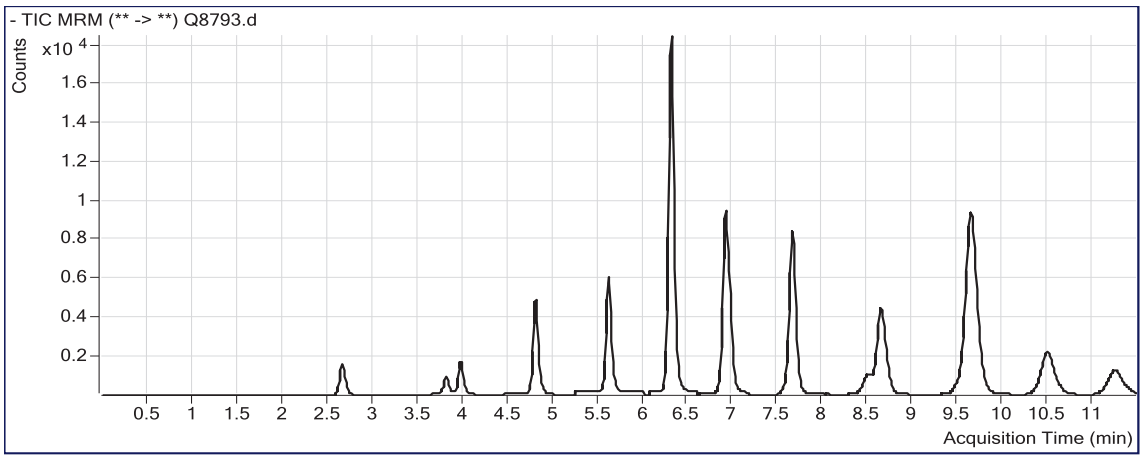
Data File	:	Q8793.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 23:25
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54151,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	30020	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	14852	20.000	µg/L	0.000
13C2-PFDoDA	9.622	615.0 -> 570.0	59443	20.000	µg/L	0.013
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	9787	19.83	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.14%			
13C2-PFDA	7.645	515.0 -> 470.0	22818	17.82	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 89.09%			
Target Compounds						**Qvalue**
PFBA	2.664	213.0 -> 169.0	7300	20.266	µg/L	100
PFPeA	3.824	263.0 -> 219.0	3603	20.015	µg/L	100
PFBS	3.966	299.0 -> 80.0	4516	20.580	µg/L	98
PFHxA	4.796	313.0 -> 269.0	10233	19.743	µg/L	99
PFHpA	5.610	363.0 -> 319.0	9665	19.222	µg/L	99
PFHxS	5.618	399.0 -> 80.0	6976	19.796	µg/L	88
PFHpS	6.281	449.0 -> 80.0	8755	19.888	µg/L	100
PFOA	6.311	413.0 -> 369.0	30370	19.970	µg/L	81
PFOS	6.898	499.0 -> 80.0	14819	19.950	µg/L	87
PFNA	6.954	463.0 -> 419.0	15941	17.630	µg/L	100
PFDA	7.652	513.0 -> 469.0	21656	24.009	µg/L	100
PFDS	8.471	599.0 -> 80.0	6763	26.139	µg/L	100
PFUnDA	8.627	563.0 -> 519.0	32906	25.585	µg/L	100
PFDoDA	9.616	613.0 -> 569.0	26948	20.232	µg/L	100
PFTrDA	10.473	663.0 -> 619.0	23508	18.160	µg/L	100
PFTeDA	11.223	713.0 -> 669.0	14925	16.359	µg/L	100

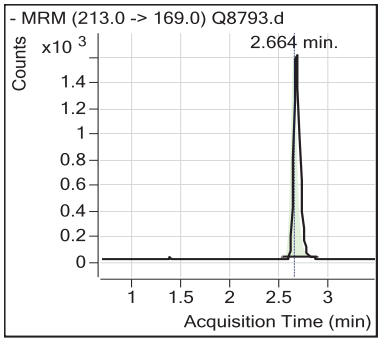
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

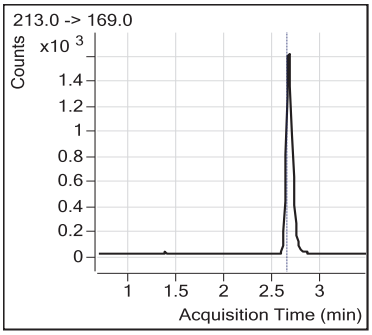
Perfluorinated Compounds by LC/MS/MS.

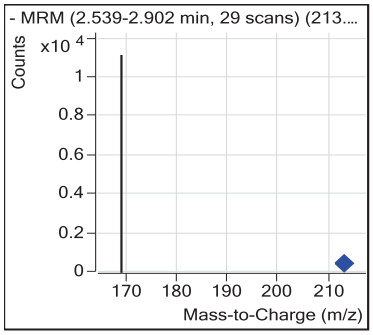
Data File	:	Q8793.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-15 23:25
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54151,SQ284,125,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



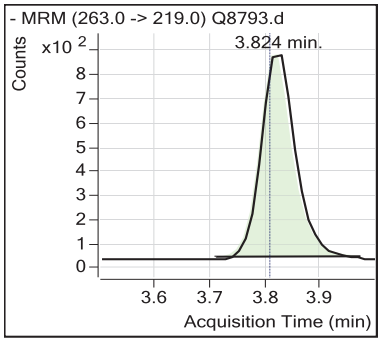
PFBA

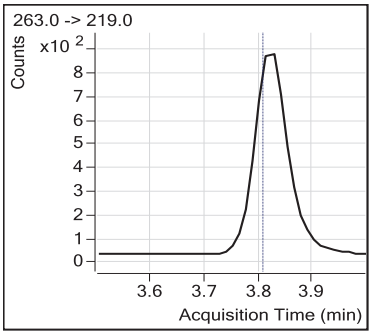


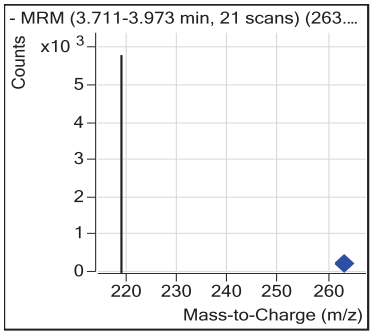




PFPeA

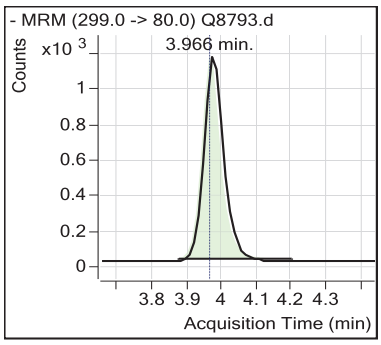


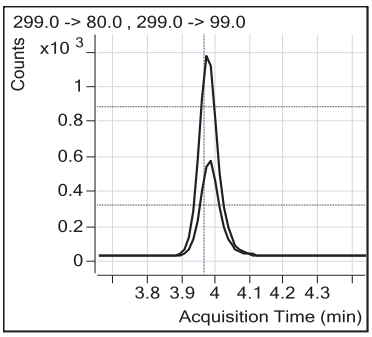


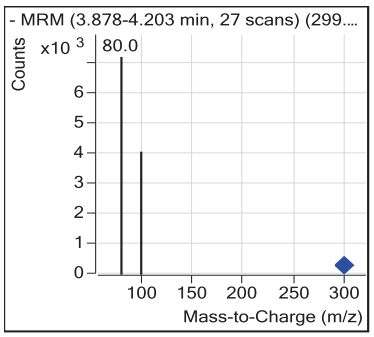


Perfluorinated Compounds by LC/MS/MS.

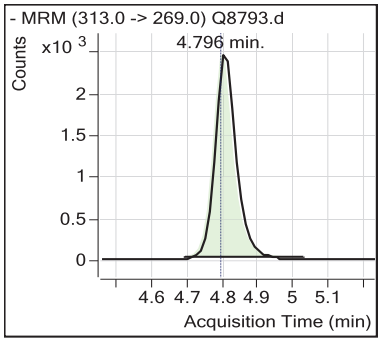
PFBS

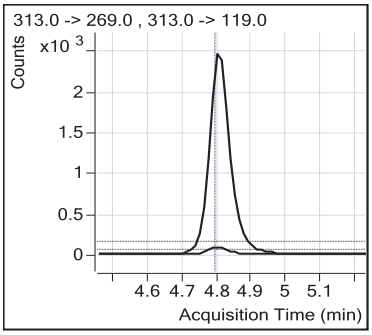


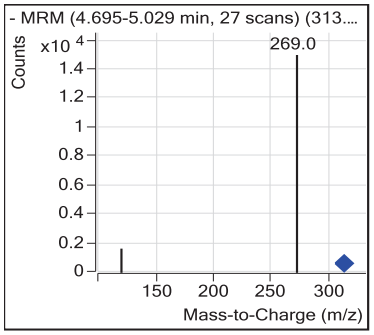




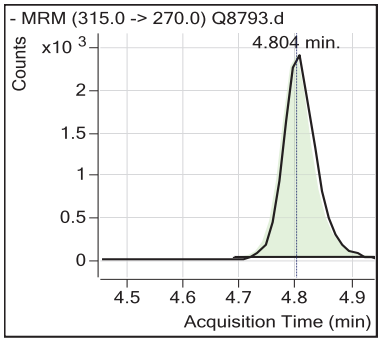
PFHxA

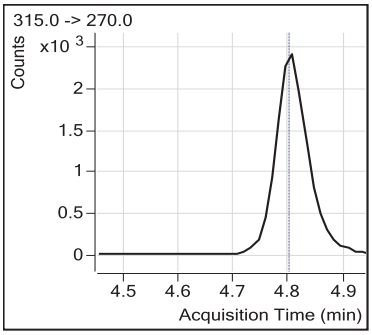


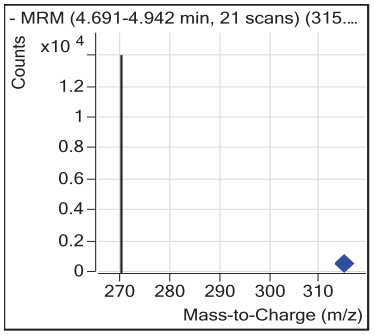




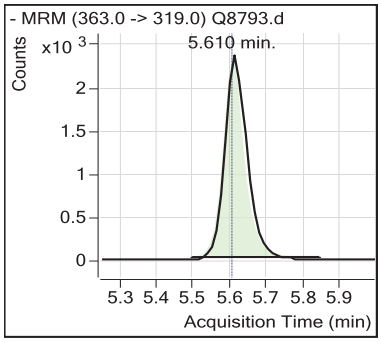
13C2-PFHxA

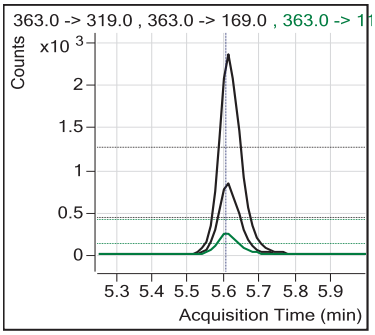


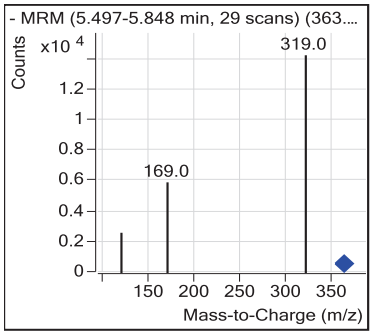




PFHpA

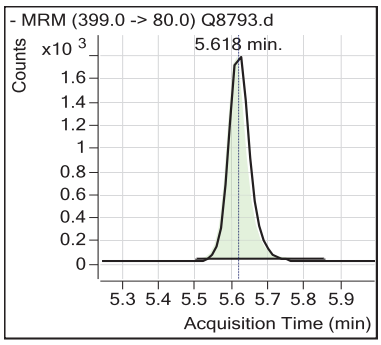


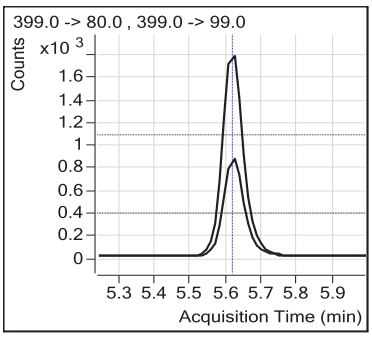


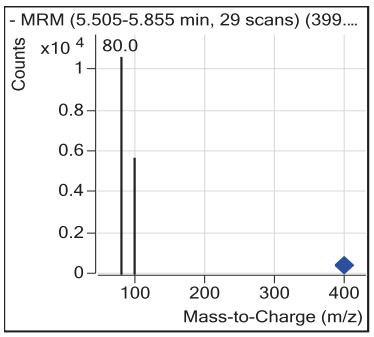


Perfluorinated Compounds by LC/MS/MS.

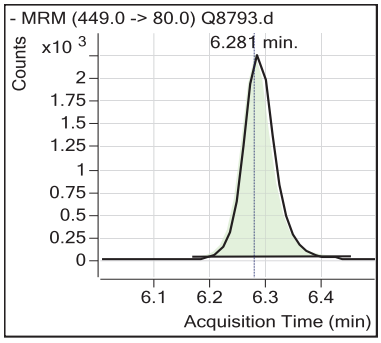
PFHxS

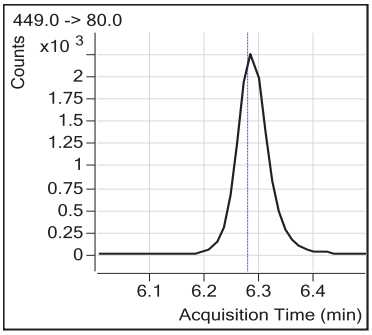


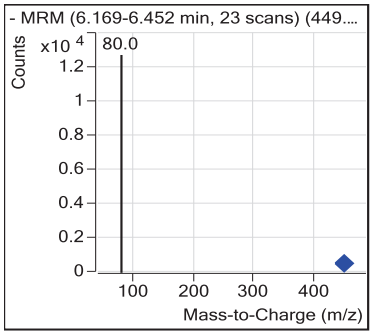




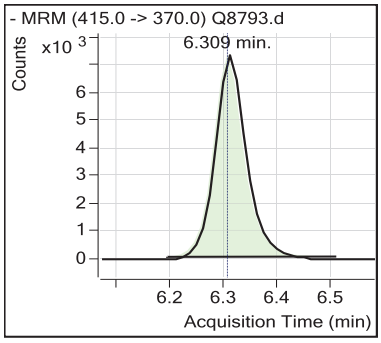
PFHpS

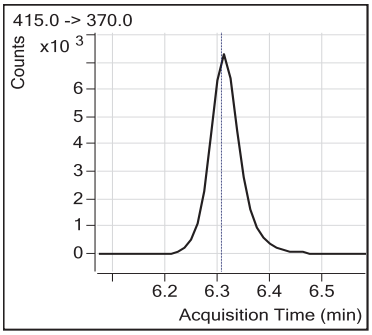


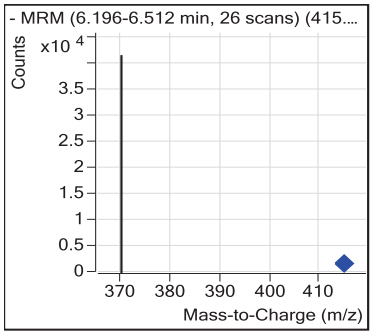




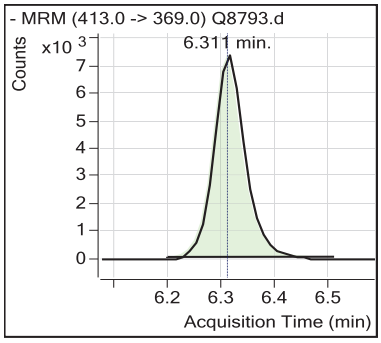
13C2-PFOA

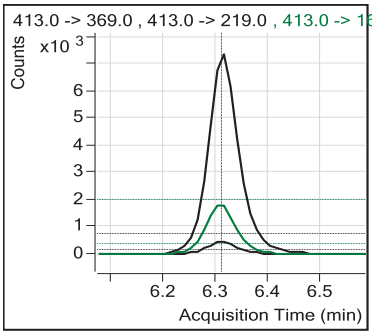


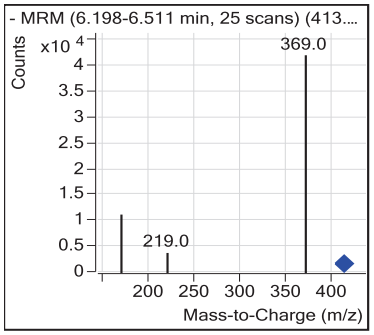




PFOA





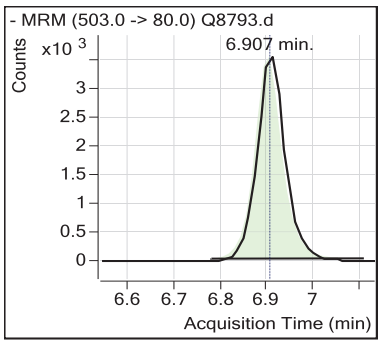


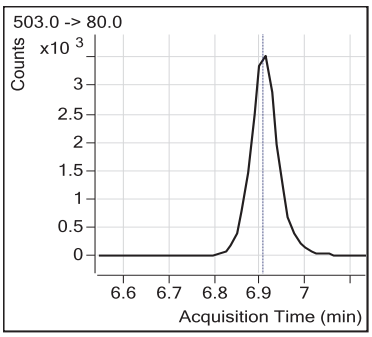
7.5.12

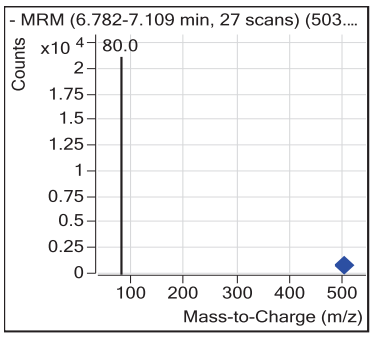
7

Perfluorinated Compounds by LC/MS/MS.

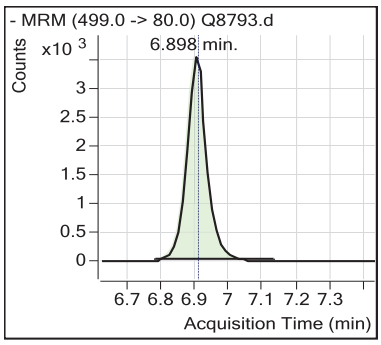
13C4-PFOS

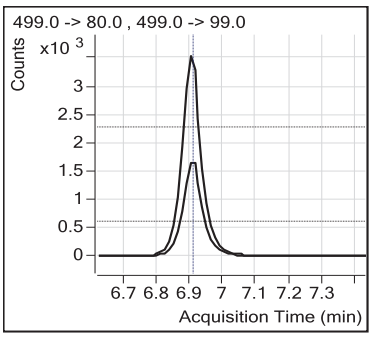


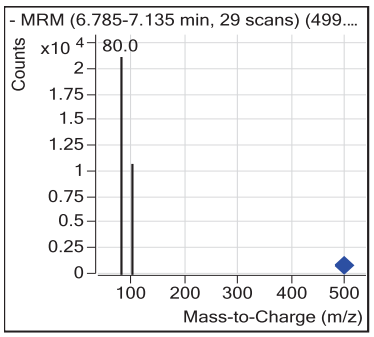




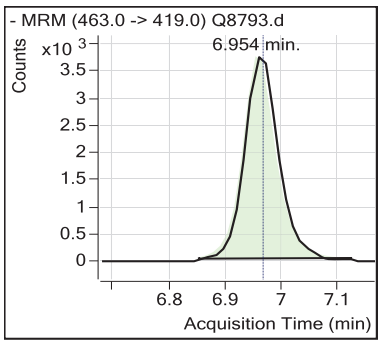
PFOS

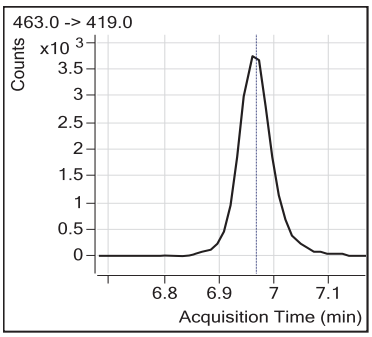


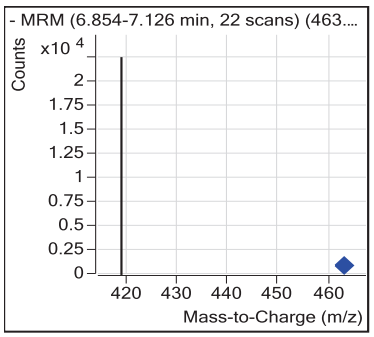




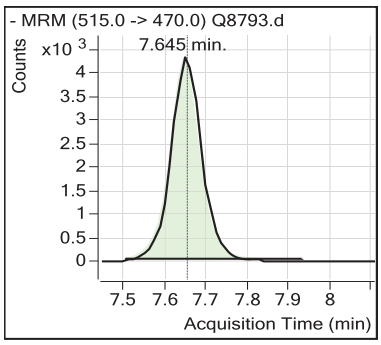
PFNA

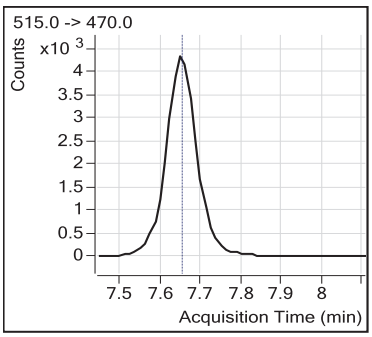


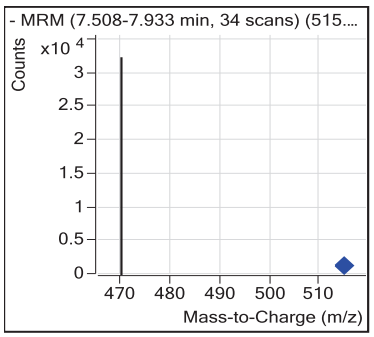




13C2-PFDA

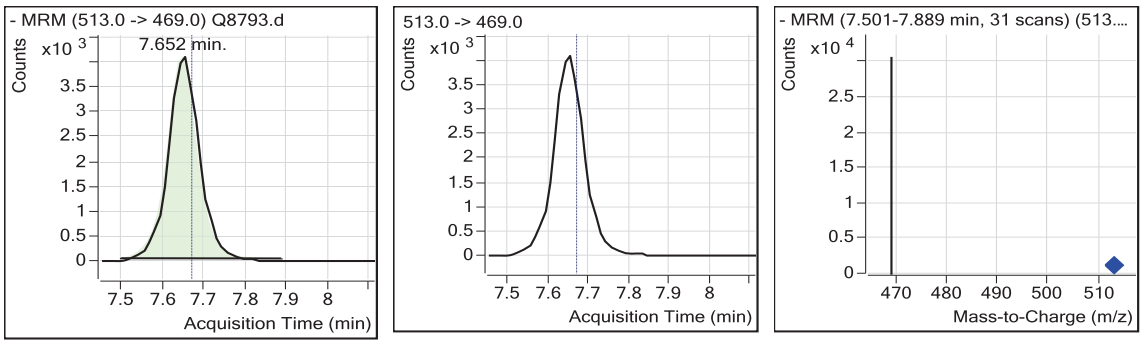




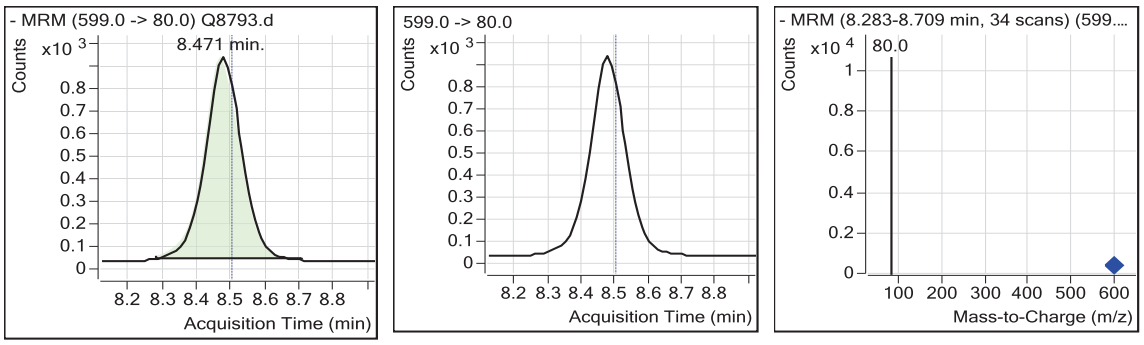


Perfluorinated Compounds by LC/MS/MS.

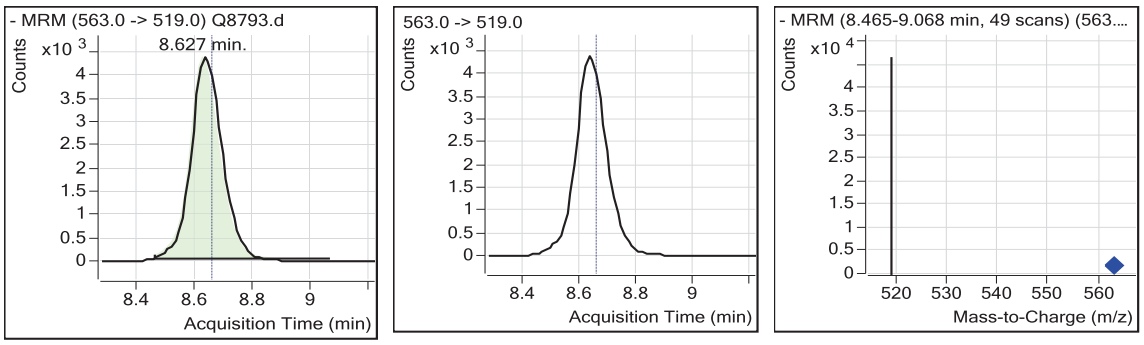
PFDA



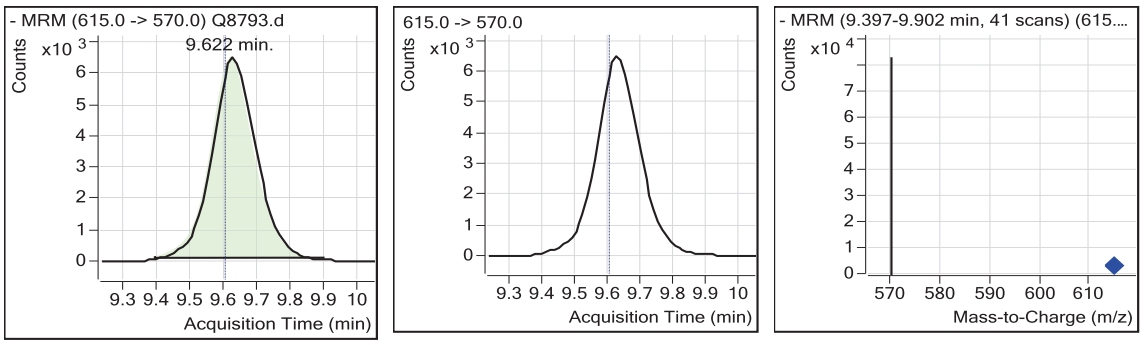
PFDS



PFUnDA

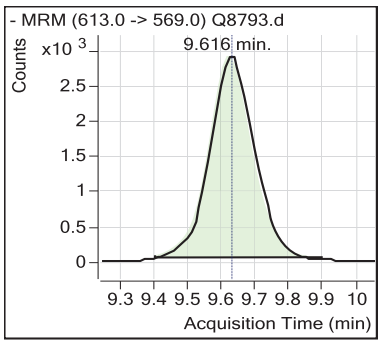


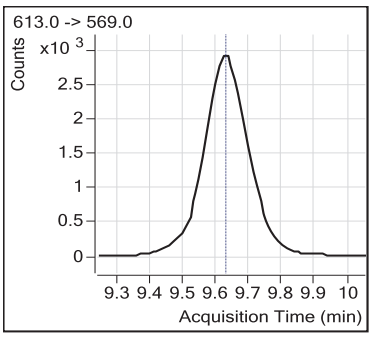
13C2-PFDoDA

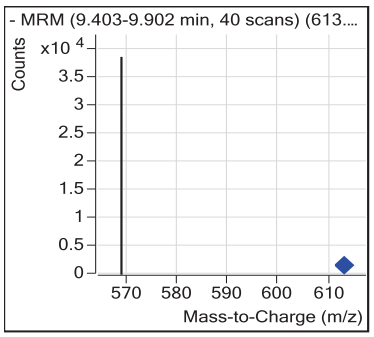


Perfluorinated Compounds by LC/MS/MS.

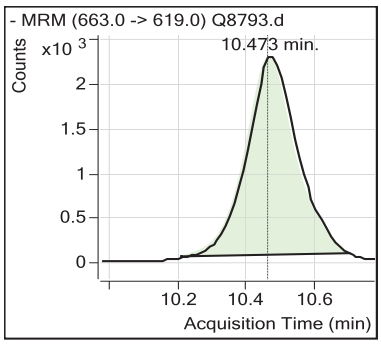
PFDoDA

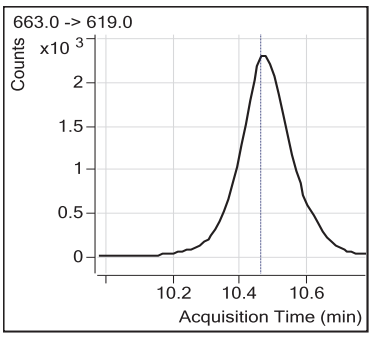


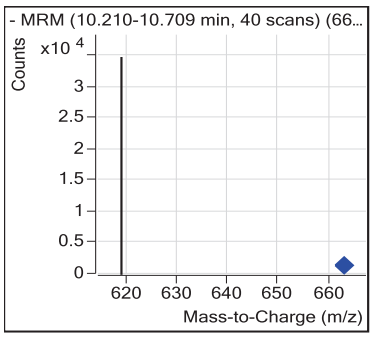




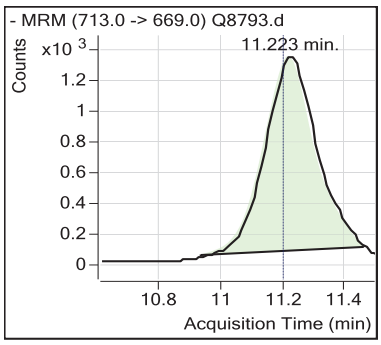
PFTrDA

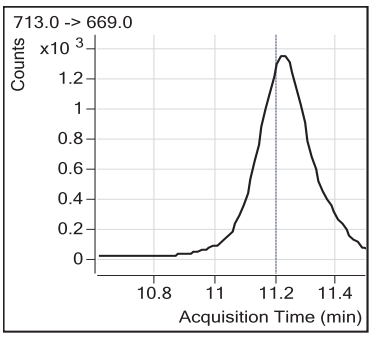


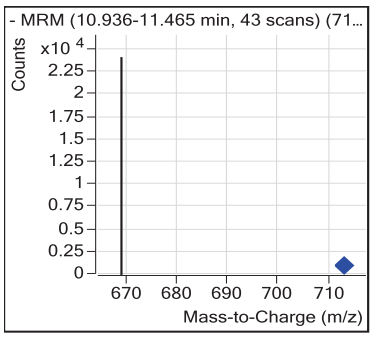




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

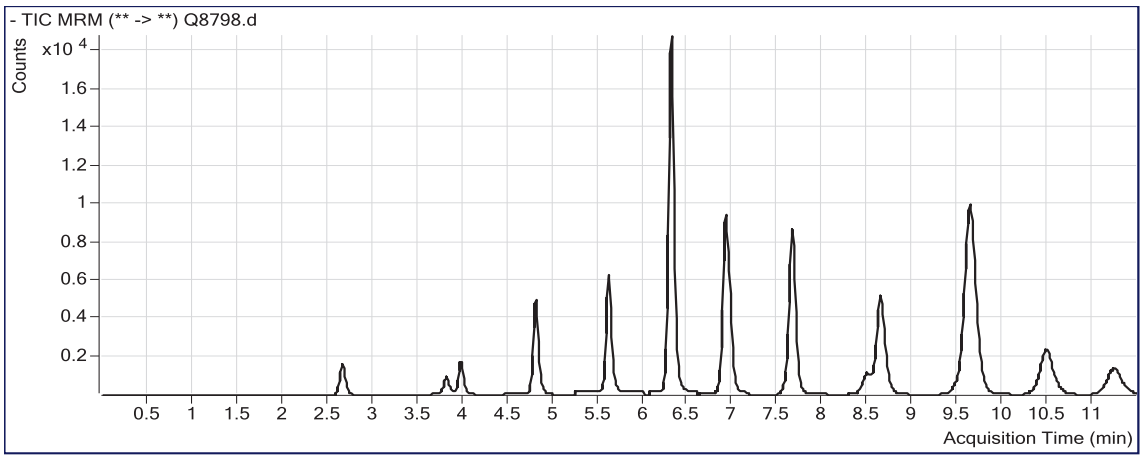
Data File	:	Q8798.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 01:08
Sample Name	:	ECC280-20
Vial	:	Vial 2
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	30516	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	14680	20.000	µg/L	0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	62398	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	9912	19.75	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 98.77%			
13C2-PFDA	7.645	515.0 -> 470.0	23420	17.99	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 89.95%			
Target Compounds						**Qvalue**
PFBA	2.664	213.0 -> 169.0	7413	20.245	µg/L	100
PFPeA	3.824	263.0 -> 219.0	3689	20.160	µg/L	100
PFBS	3.966	299.0 -> 80.0	4582	21.126	µg/L	99
PFHxA	4.808	313.0 -> 269.0	10454	19.842	µg/L	99
PFHpA	5.610	363.0 -> 319.0	10098	19.757	µg/L	99
PFHxS	5.618	399.0 -> 80.0	7318	21.009	µg/L	89
PFHpS	6.281	449.0 -> 80.0	8880	20.407	µg/L	100
PFOA	6.311	413.0 -> 369.0	31112	20.125	µg/L	80
PFOS	6.898	499.0 -> 80.0	14816	20.179	µg/L	88
PFNA	6.954	463.0 -> 419.0	16281	17.713	µg/L	100
PFDA	7.652	513.0 -> 469.0	22478	23.740	µg/L	100
PFDS	8.459	599.0 -> 80.0	6999	25.771	µg/L	100
PFUnDA	8.627	563.0 -> 519.0	35879	26.575	µg/L	100
PFDoDA	9.616	613.0 -> 569.0	28492	20.378	µg/L	100
PFTrDA	10.460	663.0 -> 619.0	25055	18.438	µg/L	100
PFTeDA	11.211	713.0 -> 669.0	16113	16.824	µg/L	100

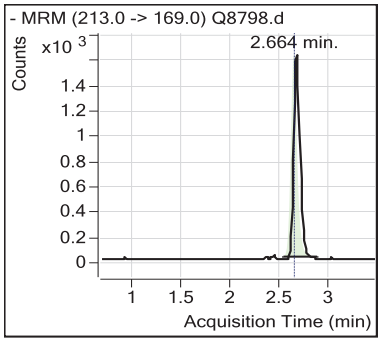
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

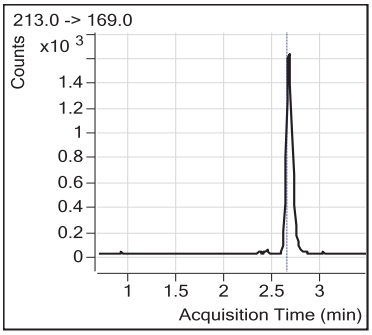
Perfluorinated Compounds by LC/MS/MS.

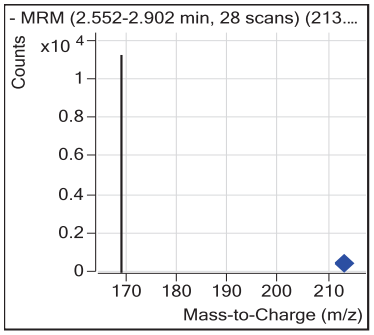
Data File	:	Q8798.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 01:08
Sample Name	:	ECC280-20
Vial	:	Vial 2
Sample Info	:	OP54204,SQ284,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ284.batch.bin
Last Calib Update	:	2014-12-10 09:24



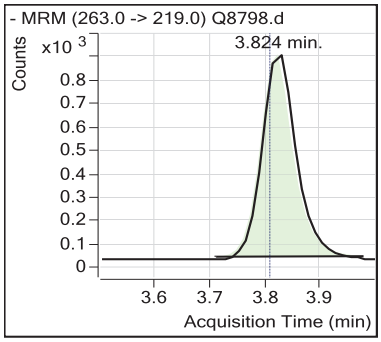
PFBA

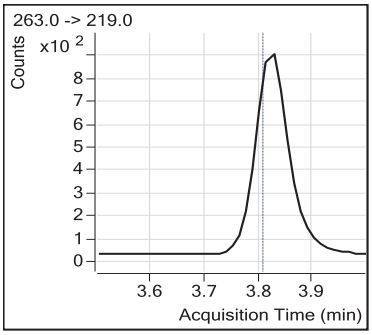


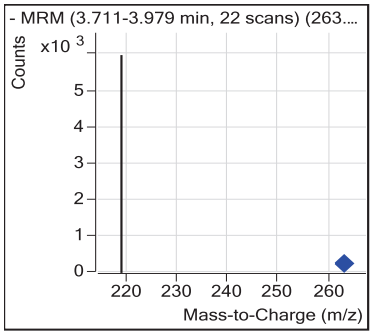




PFPeA

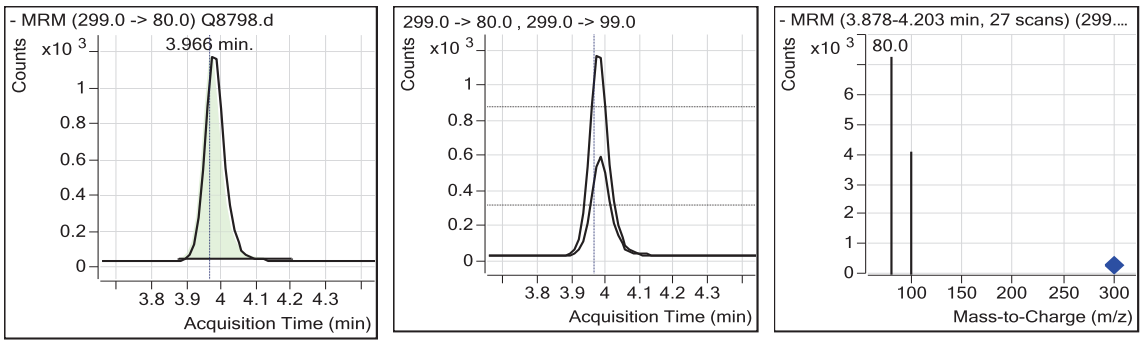




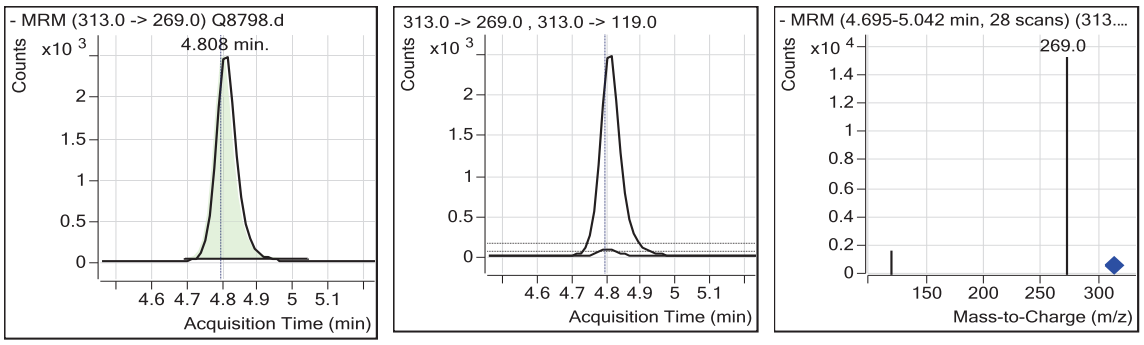


Perfluorinated Compounds by LC/MS/MS.

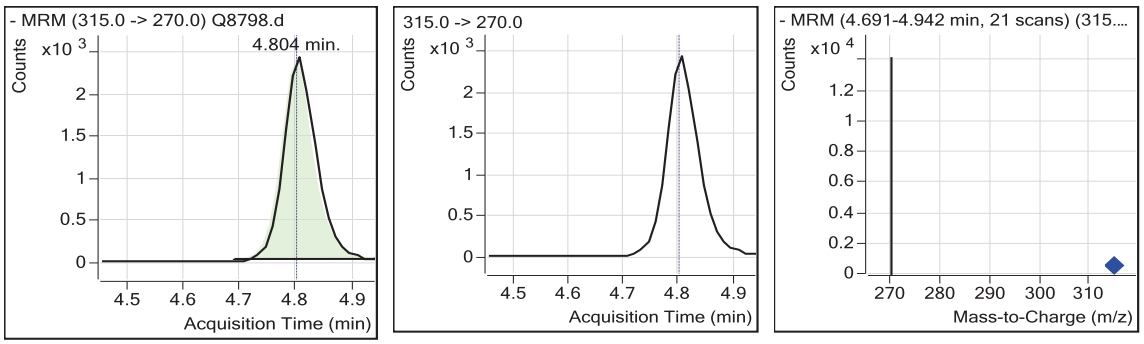
PFBS



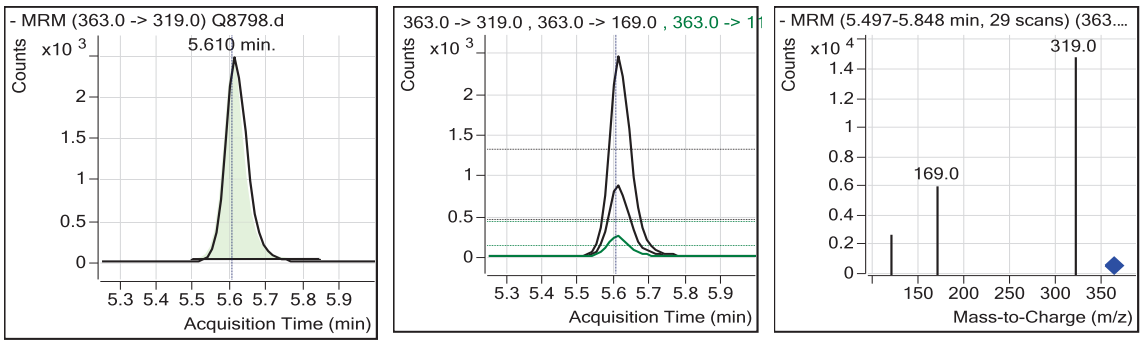
PFHxA



13C2-PFHxA

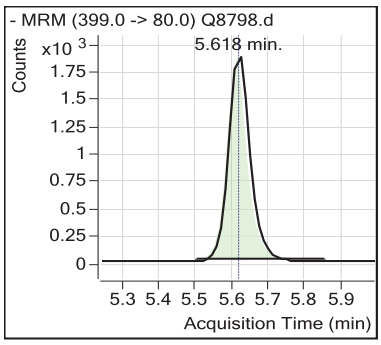


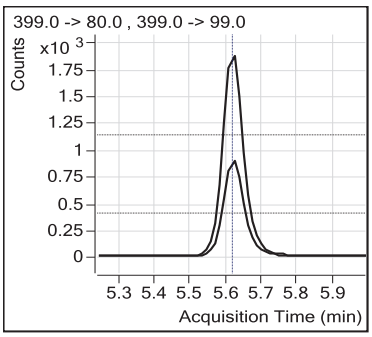
PFHpA

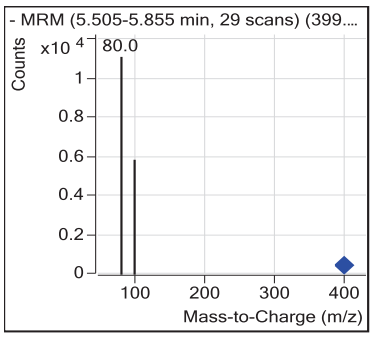


Perfluorinated Compounds by LC/MS/MS.

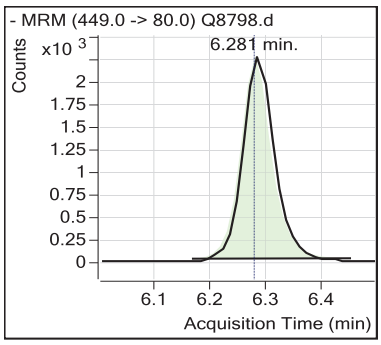
PFHxS

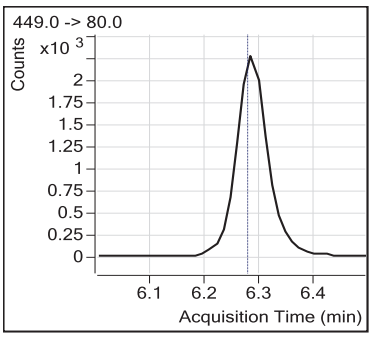


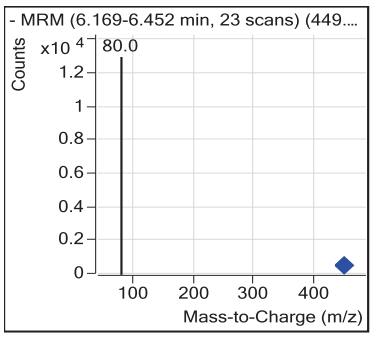




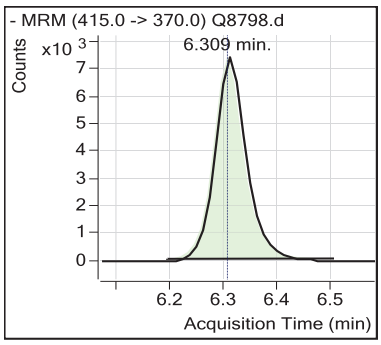
PFHpS

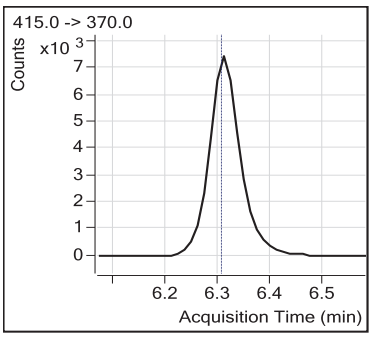


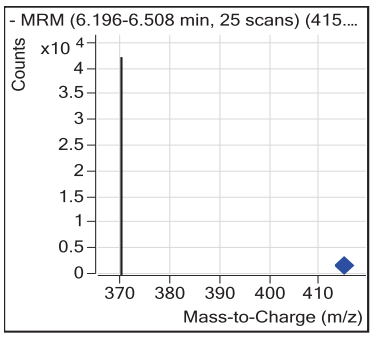




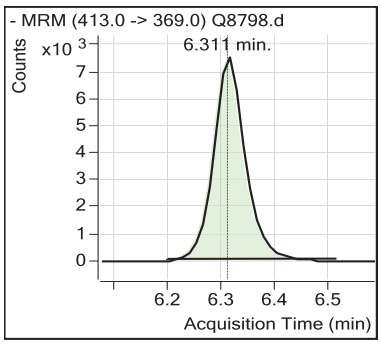
13C2-PFOA

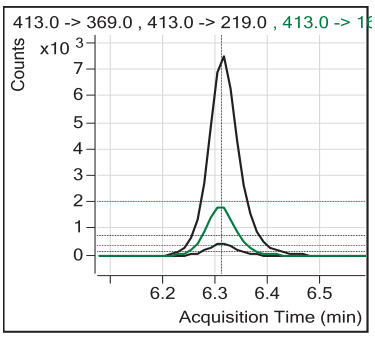


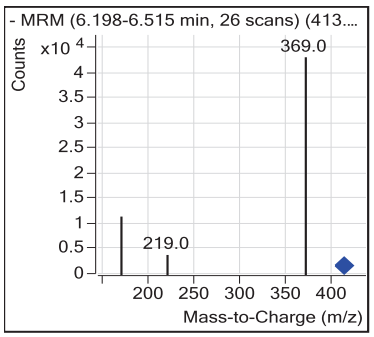




PFOA

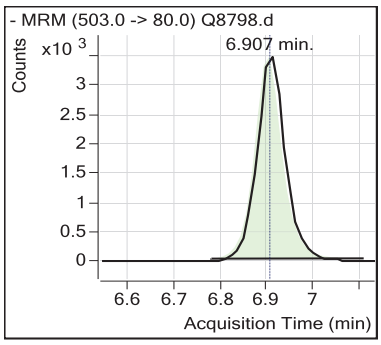


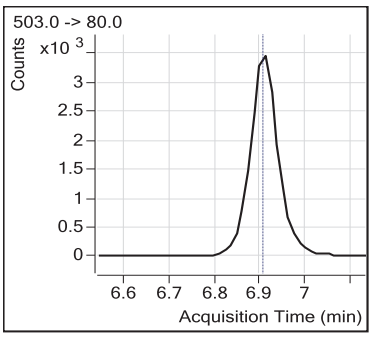


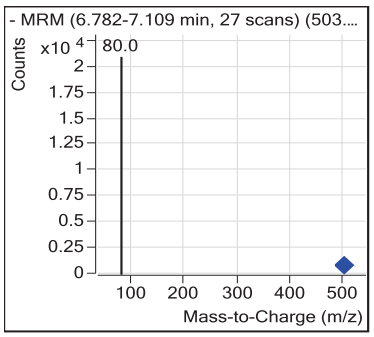


Perfluorinated Compounds by LC/MS/MS.

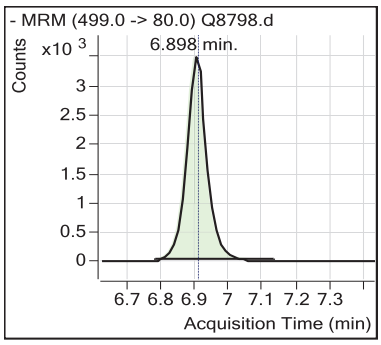
13C4-PFOS

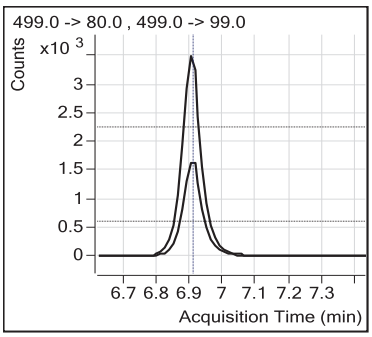


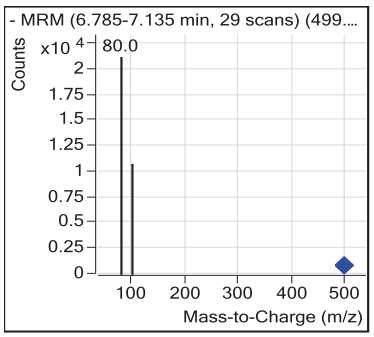




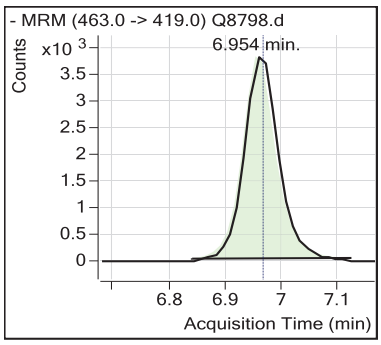
PFOS

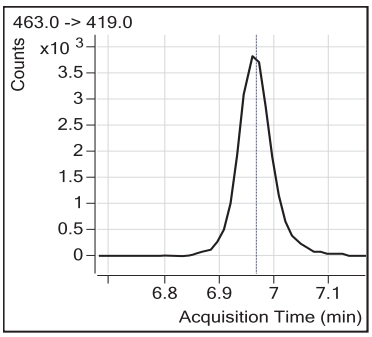


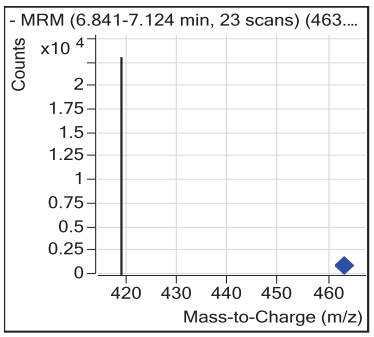




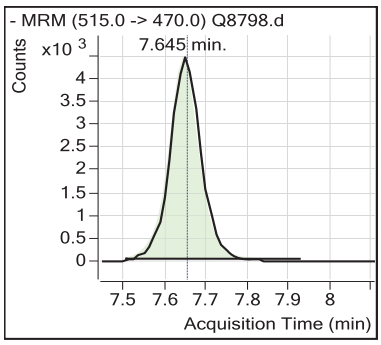
PFNA

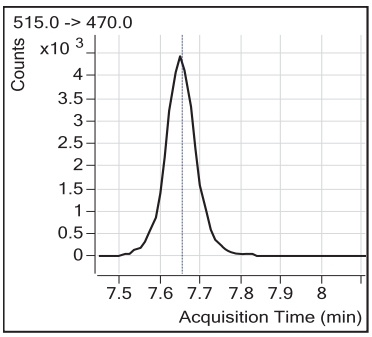


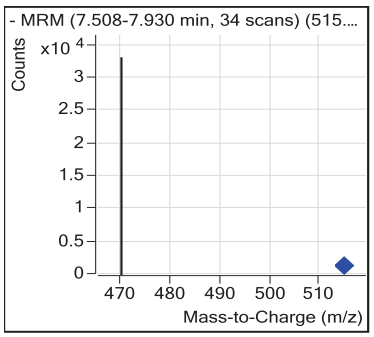




13C2-PFDA

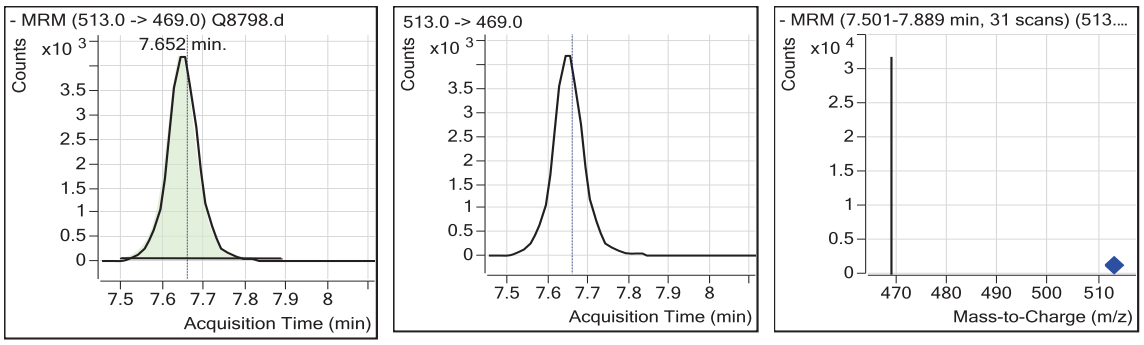




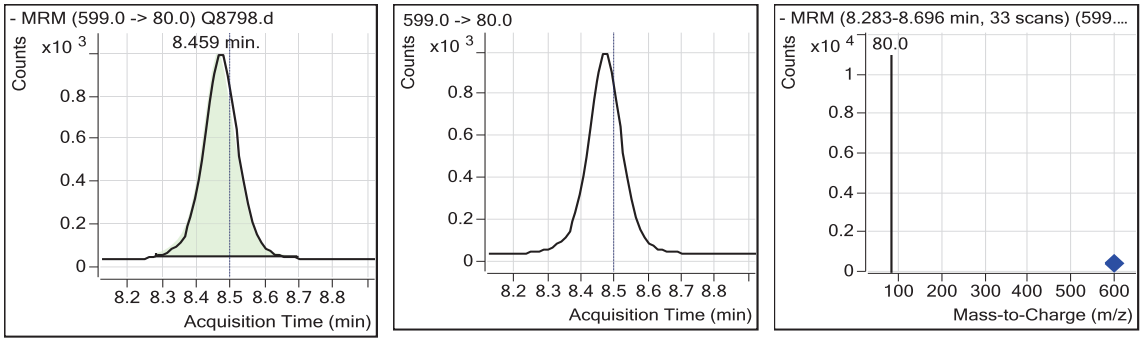


Perfluorinated Compounds by LC/MS/MS.

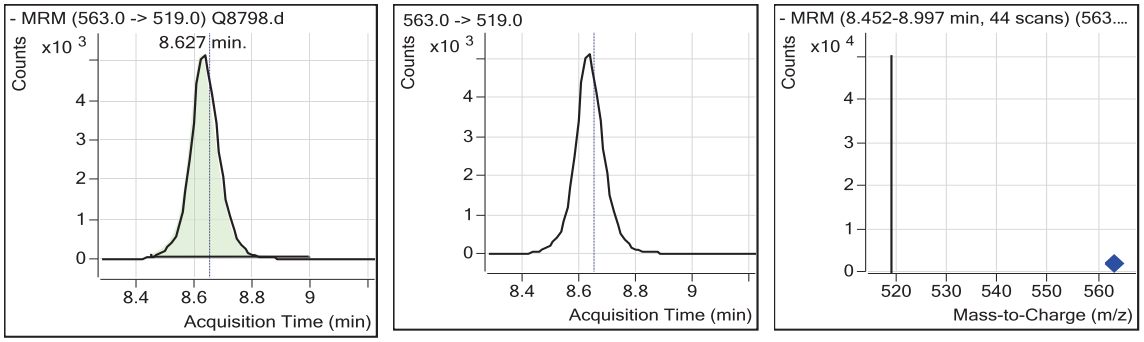
PFDA



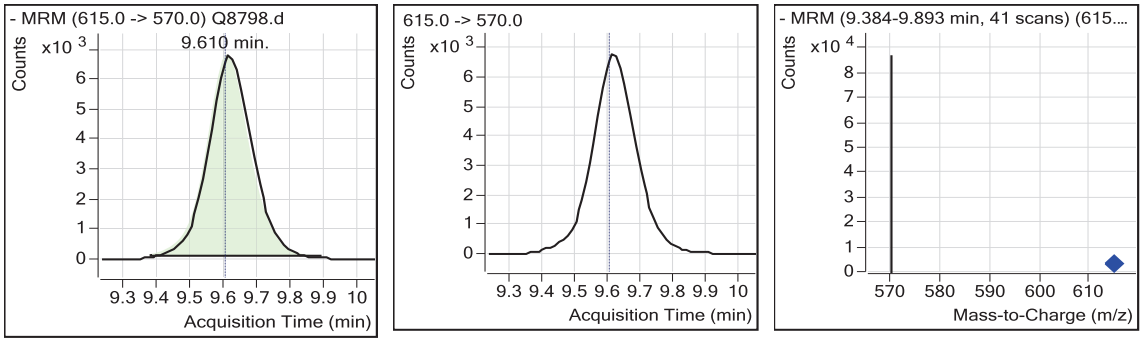
PFDS



PFUnDA

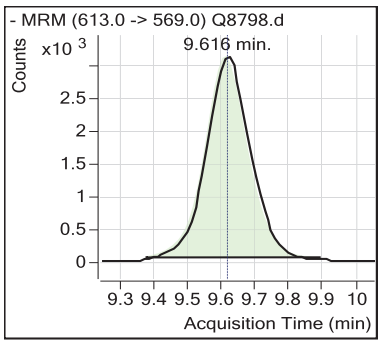


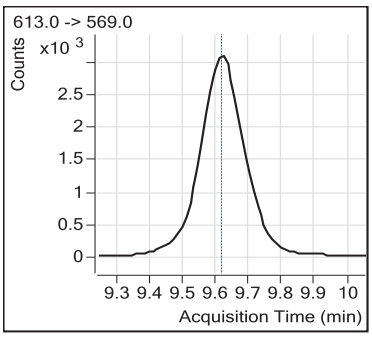
13C2-PFDoDA

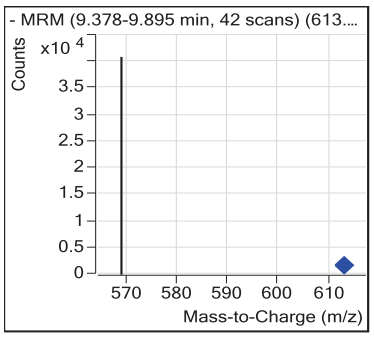


Perfluorinated Compounds by LC/MS/MS.

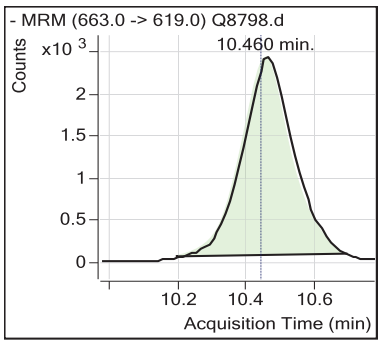
PFDoDA

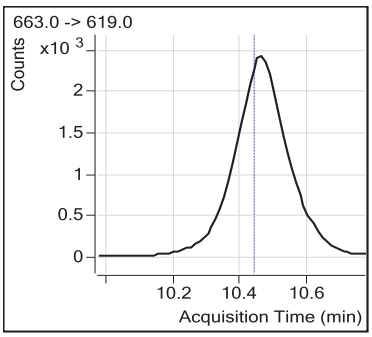


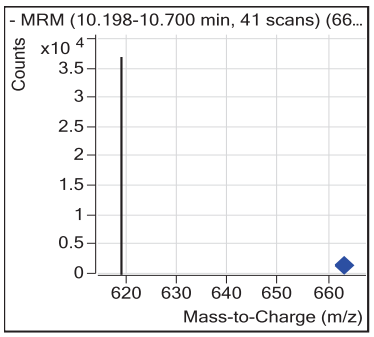




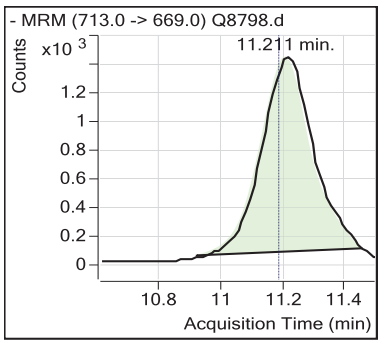
PFTrDA

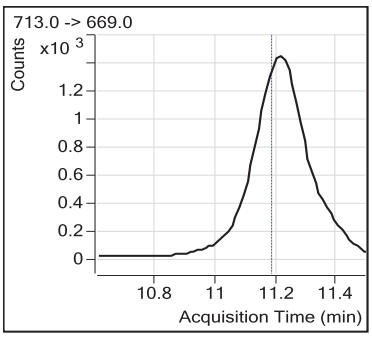


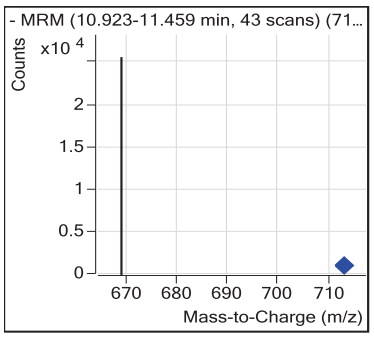




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

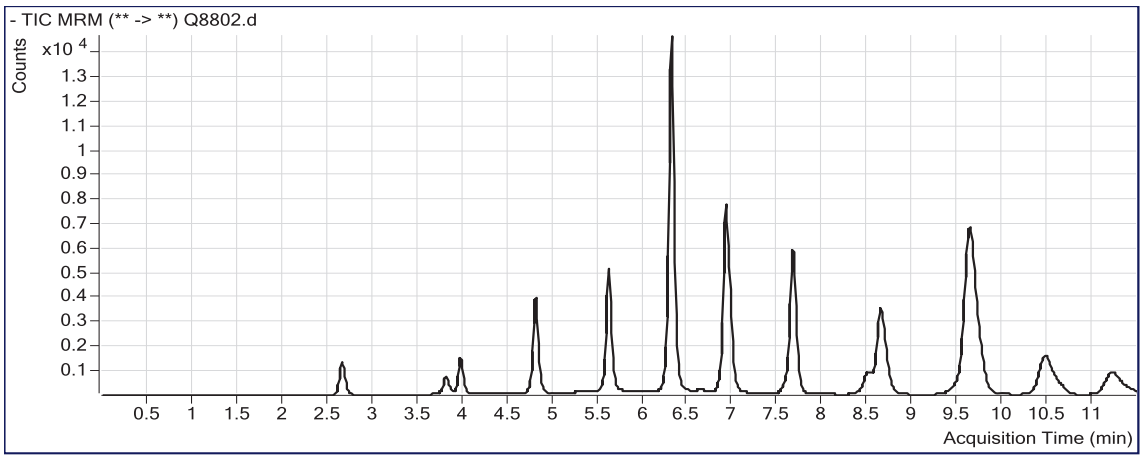
Data File	:	Q8802.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 10:26
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54204,SQ285,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.309	415.0 -> 370.0	22918	20.000	µg/L	0.000
13C4-PFOS	6.907	503.0 -> 80.0	11747	20.000	µg/L	0.000
13C2-PFDoDA	9.610	615.0 -> 570.0	47001	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.804	315.0 -> 270.0	8001	21.23	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 106.17%			
13C2-PFDA	7.658	515.0 -> 470.0	15931	16.29	µg/L	0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 81.47%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	6178	22.463	µg/L	100
PFPeA	3.811	263.0 -> 219.0	3025	22.011	µg/L	100
PFBS	3.966	299.0 -> 80.0	3943	22.718	µg/L	99
PFHxA	4.796	313.0 -> 269.0	8348	21.098	µg/L	99
PFHpA	5.610	363.0 -> 319.0	8194	21.348	µg/L	99
PFHxS	5.618	399.0 -> 80.0	6183	22.181	µg/L	89
PFHpS	6.281	449.0 -> 80.0	7351	21.111	µg/L	100
PFOA	6.311	413.0 -> 369.0	24240	20.879	µg/L	80
PFOS	6.910	499.0 -> 80.0	12466	21.216	µg/L	88
PFNA	6.967	463.0 -> 419.0	11986	17.364	µg/L	100
PFDA	7.652	513.0 -> 469.0	15177	21.280	µg/L	100
PFDS	8.471	599.0 -> 80.0	5664	27.688	µg/L	100
PFUnDA	8.628	563.0 -> 519.0	26136	25.700	µg/L	100
PFDoDA	9.603	613.0 -> 569.0	21723	20.626	µg/L	100
PFTrDA	10.448	663.0 -> 619.0	18661	18.232	µg/L	100
PFTeDA	11.186	713.0 -> 669.0	14037	19.458	µg/L	100

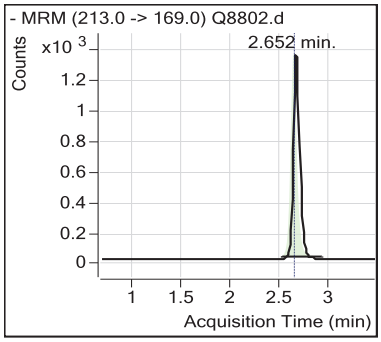
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

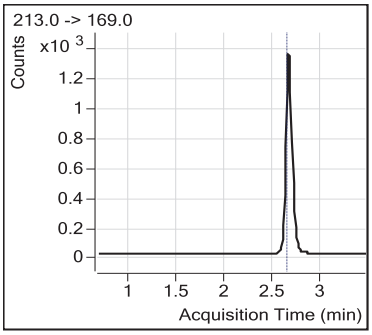
Perfluorinated Compounds by LC/MS/MS.

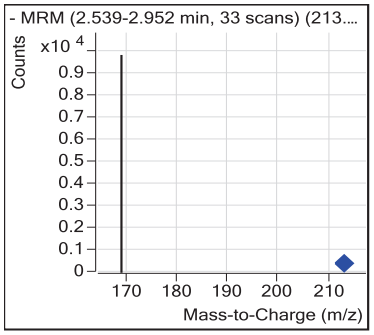
Data File	:	Q8802.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 10:26
Sample Name	:	CC280-20
Vial	:	Vial 2
Sample Info	:	OP54204,SQ285,120,,,1,1,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24



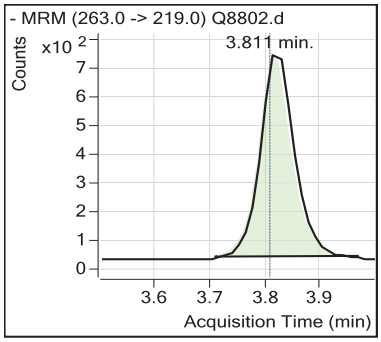
PFBA

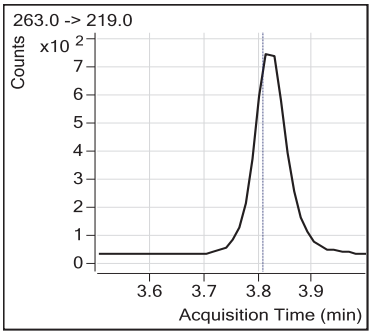


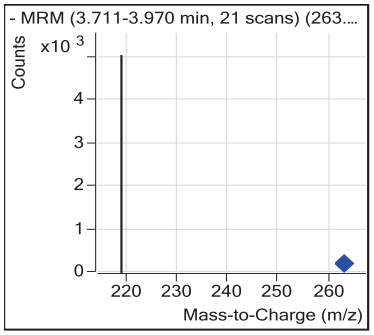




PFPeA

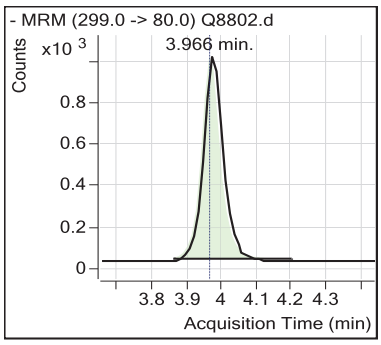


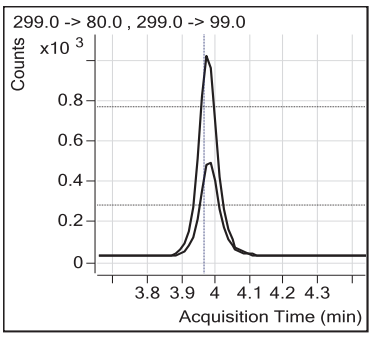


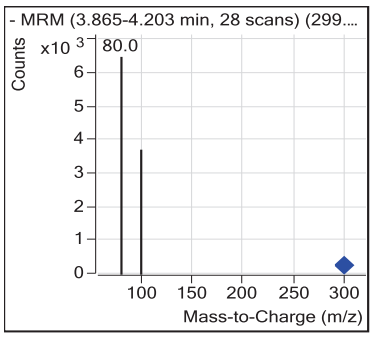


Perfluorinated Compounds by LC/MS/MS.

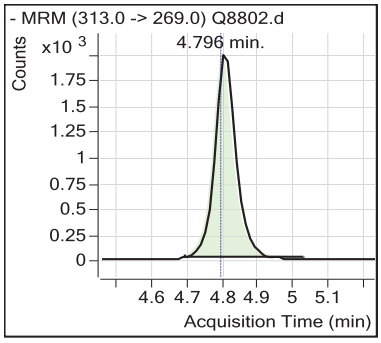
PFBS

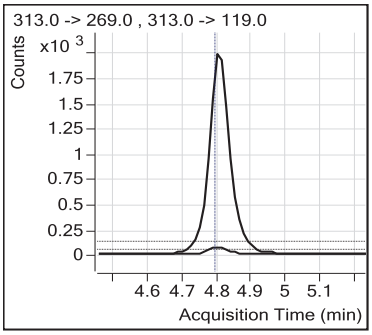


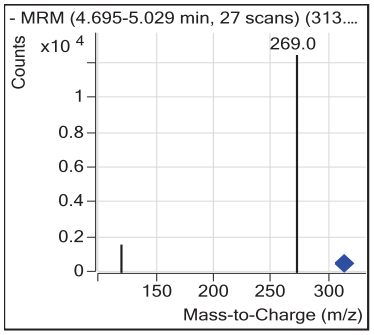




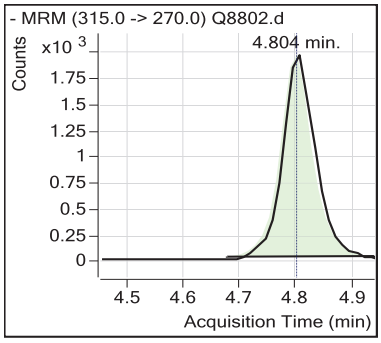
PFHxA

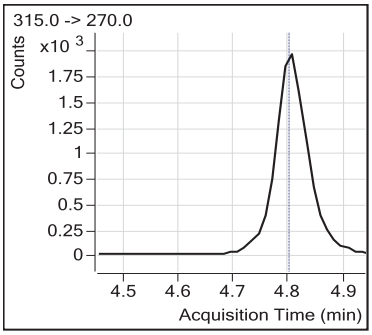


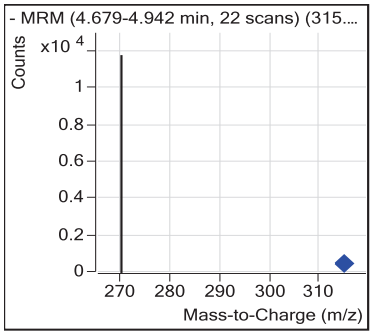




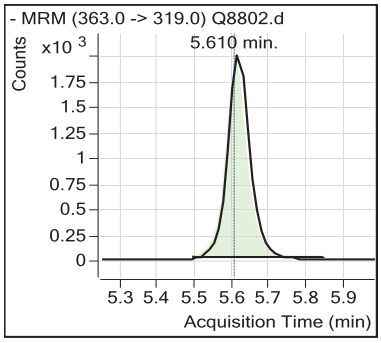
13C2-PFHxA

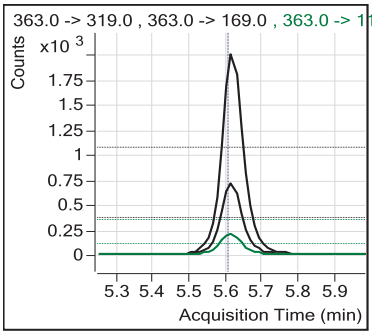


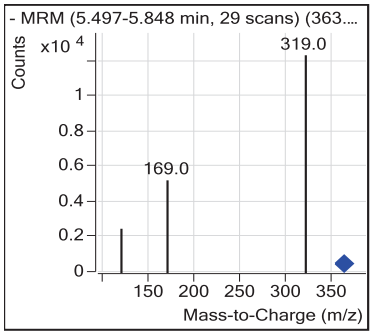




PFHpA

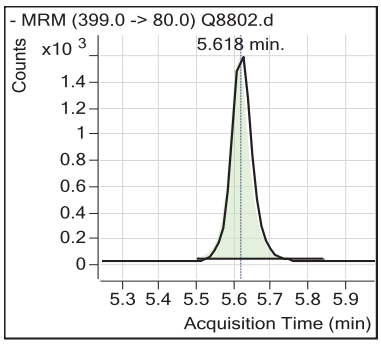


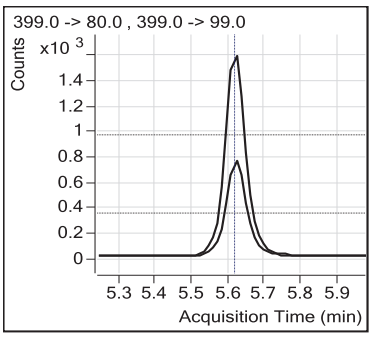


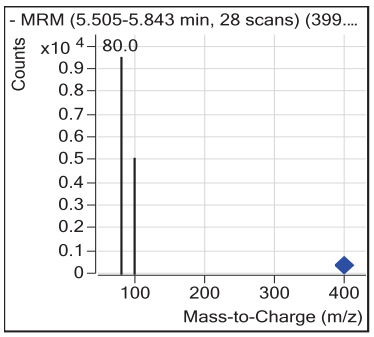


Perfluorinated Compounds by LC/MS/MS.

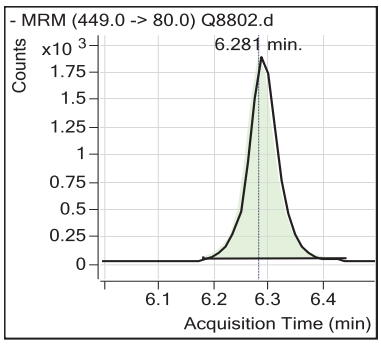
PFHxS

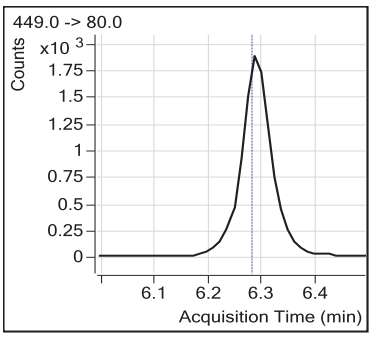


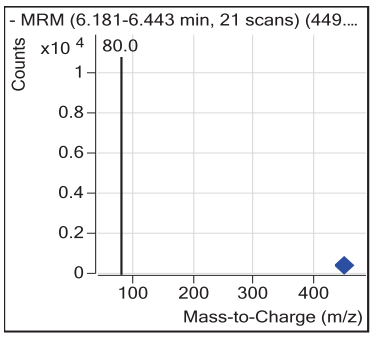




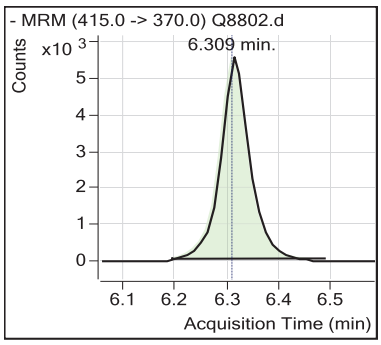
PFHpS

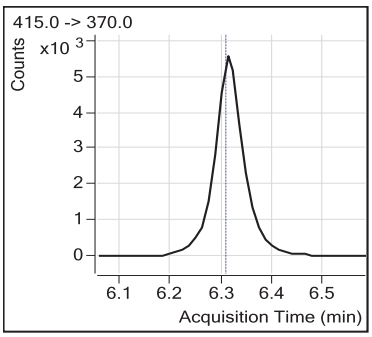


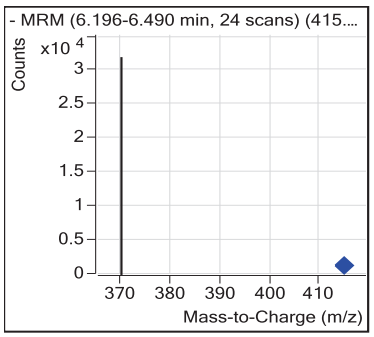




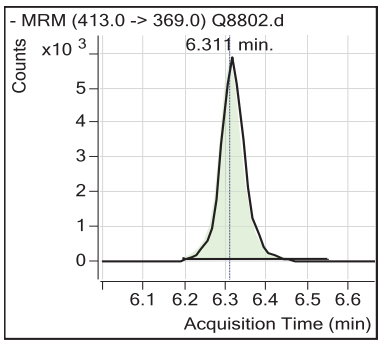
13C2-PFOA

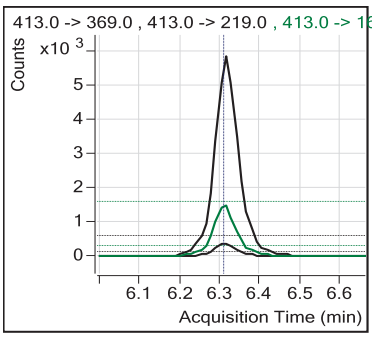


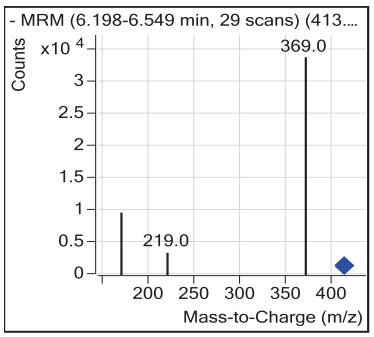




PFOA

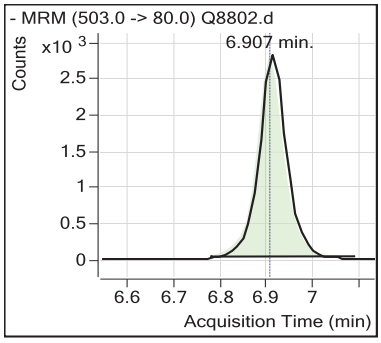


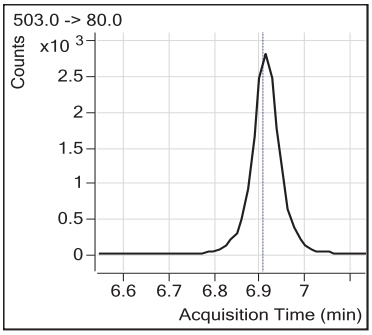


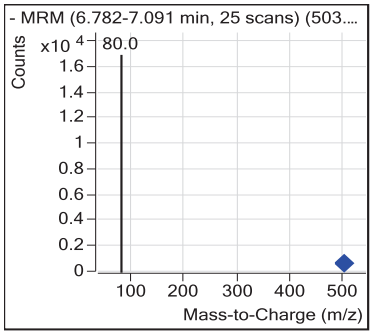


Perfluorinated Compounds by LC/MS/MS.

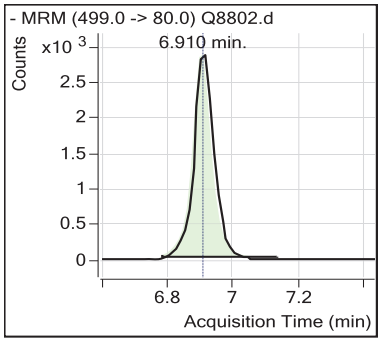
13C4-PFOS

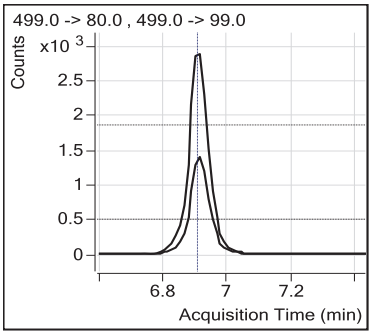


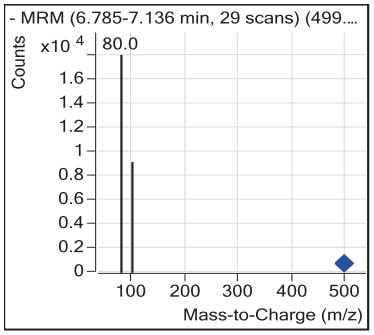




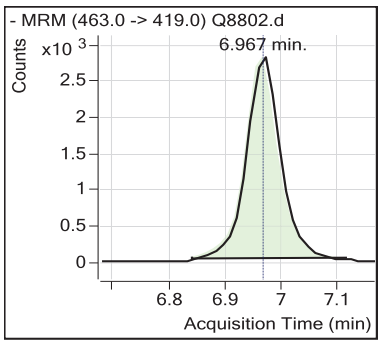
PFOS

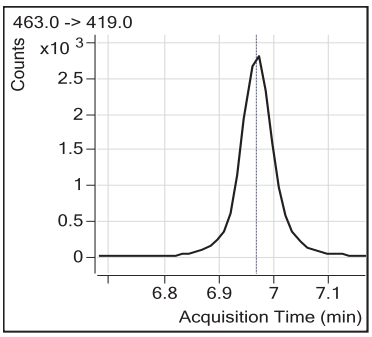


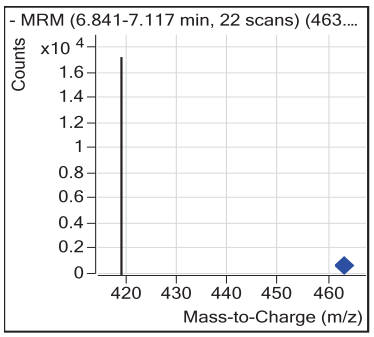




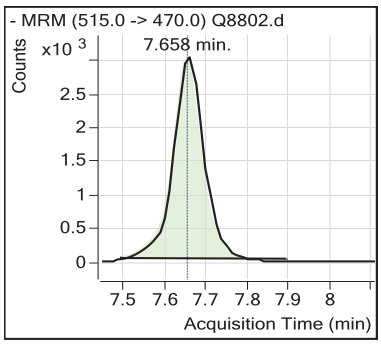
PFNA

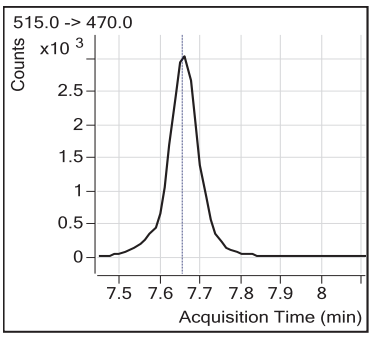


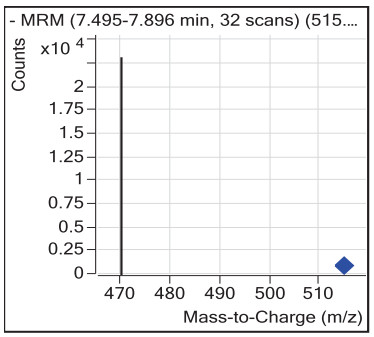




13C2-PFDA

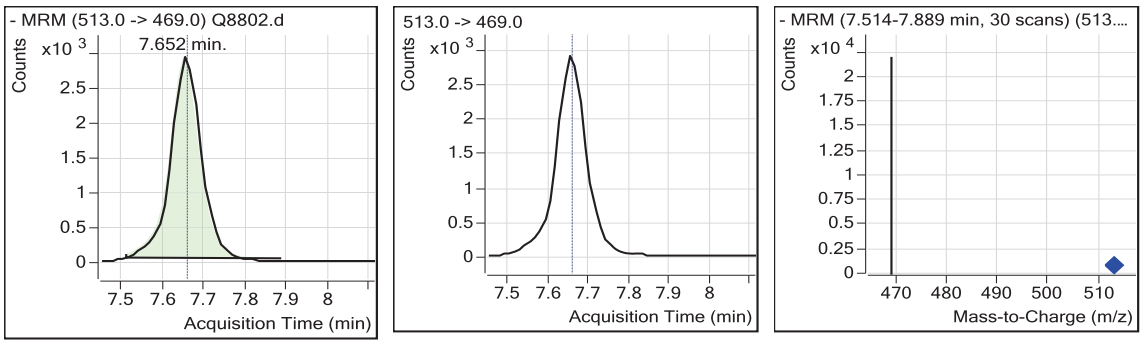




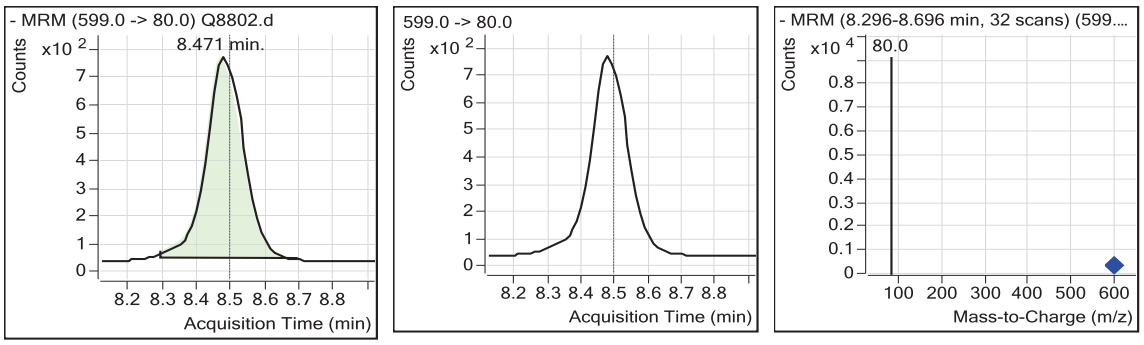


Perfluorinated Compounds by LC/MS/MS.

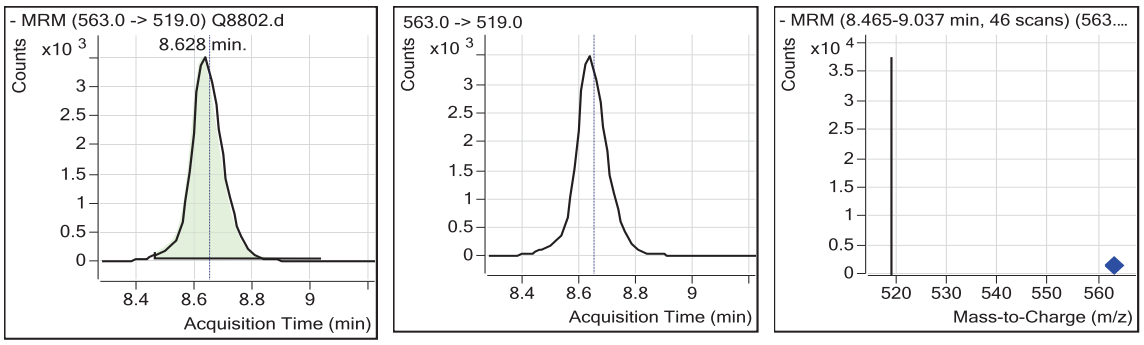
PFDA



PFDS



PFUnDA



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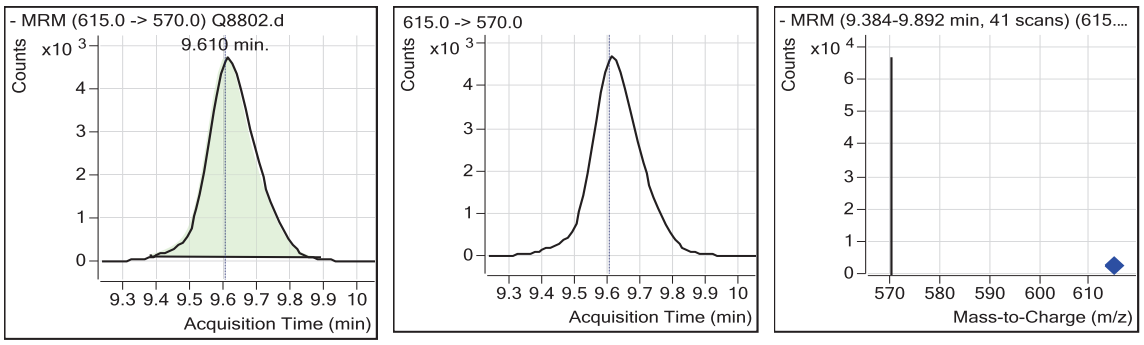
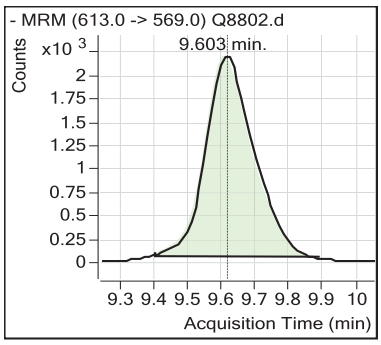
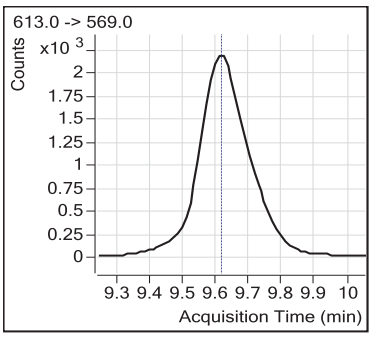
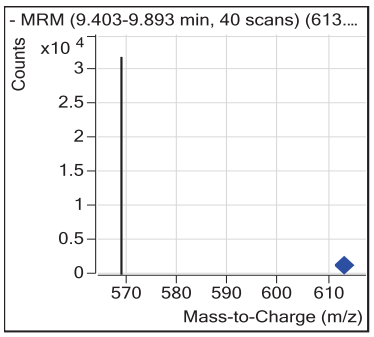


Perfluorinated Compounds by LC/MS/MS.

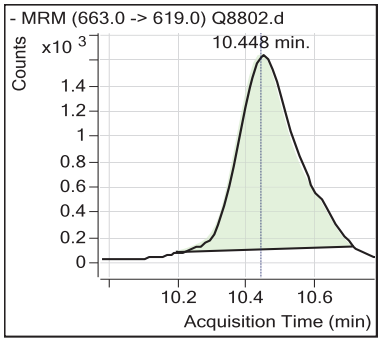
PFDoDA

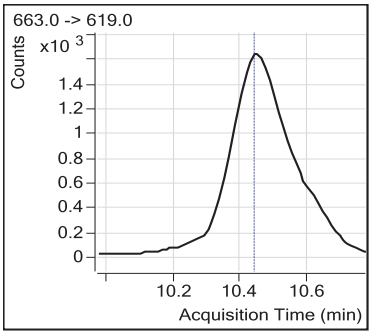


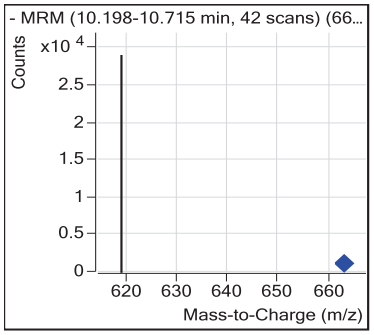




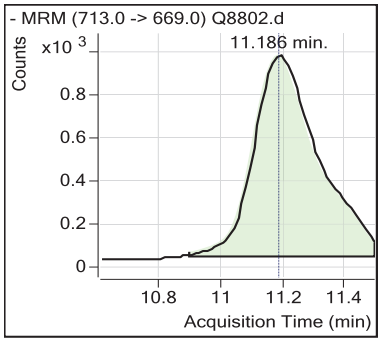
PFTrDA

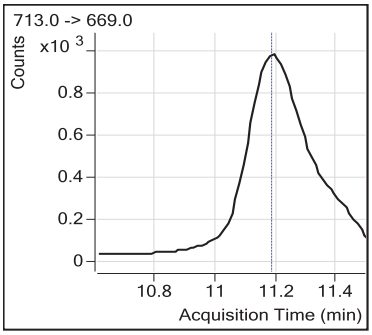


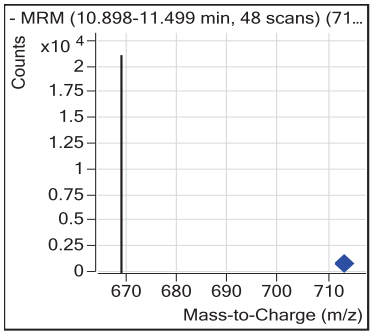




PFTeDA







Perfluorinated Compounds by LC/MS/MS.

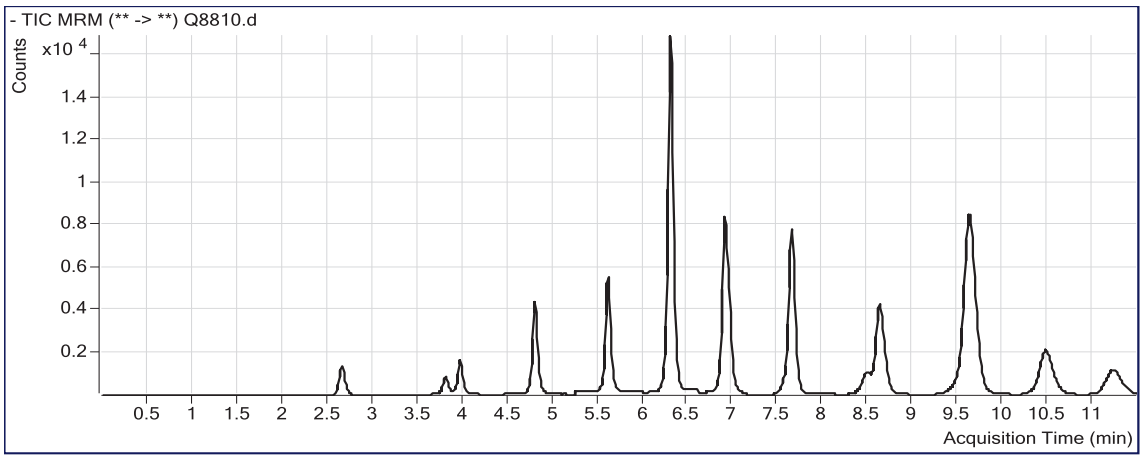
Data File	:	Q8810.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 13:56
Sample Name	:	ECC280-20
Vial	:	Vial 2
Sample Info	:	OP54204,SQ285,120,,,1,2,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
13C2-PFOA	6.296	415.0 -> 370.0	26757	20.000	µg/L	-0.012
13C4-PFOS	6.895	503.0 -> 80.0	12770	20.000	µg/L	-0.012
13C2-PFDoDA	9.610	615.0 -> 570.0	53466	20.000	µg/L	0.000
System Monitoring Compounds						
13C2-PFHxA	4.791	315.0 -> 270.0	8503	19.33	µg/L	-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 96.64%			
13C2-PFDA	7.645	515.0 -> 470.0	20949	18.35	µg/L	-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 91.77%			
Target Compounds						**Qvalue**
PFBA	2.652	213.0 -> 169.0	6477	20.174	µg/L	100
PFPeA	3.811	263.0 -> 219.0	3234	20.155	µg/L	100
PFBS	3.966	299.0 -> 80.0	4187	22.192	µg/L	98
PFHxA	4.796	313.0 -> 269.0	9082	19.659	µg/L	99
PFHpA	5.597	363.0 -> 319.0	8959	19.992	µg/L	99
PFHxS	5.605	399.0 -> 80.0	6492	21.423	µg/L	87
PFHpS	6.281	449.0 -> 80.0	8101	21.402	µg/L	100
PFOA	6.299	413.0 -> 369.0	28205	20.808	µg/L	81
PFOS	6.898	499.0 -> 80.0	13178	20.632	µg/L	88
PFNA	6.954	463.0 -> 419.0	14057	17.443	µg/L	100
PFDA	7.639	513.0 -> 469.0	19843	24.458	µg/L	100
PFDS	8.459	599.0 -> 80.0	6198	26.635	µg/L	100
PFUnDA	8.615	563.0 -> 519.0	30169	26.079	µg/L	100
PFDoDA	9.603	613.0 -> 569.0	25221	21.052	µg/L	100
PFTrDA	10.448	663.0 -> 619.0	22494	19.319	µg/L	100
PFTeDA	11.198	713.0 -> 669.0	14617	17.812	µg/L	100

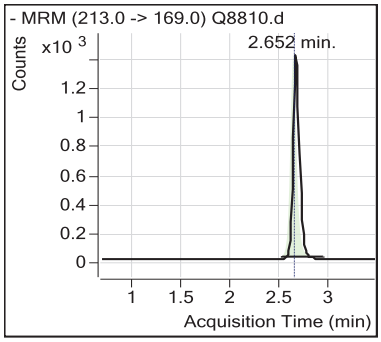
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

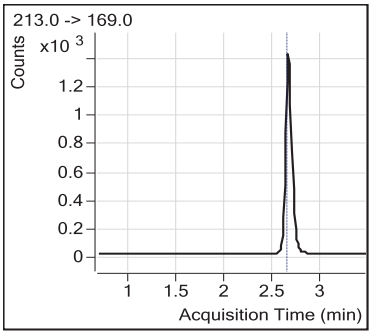
Perfluorinated Compounds by LC/MS/MS.

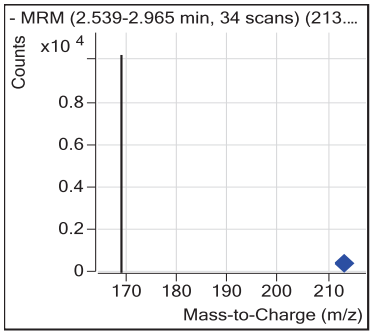
Data File	:	Q8810.d
Operator	:	nancyf
Acq Method Name	:	dMRM_PFOA_PFOS.m
Acquisition date	:	2014-12-16 13:56
Sample Name	:	ECC280-20
Vial	:	Vial 2
Sample Info	:	OP54204,SQ285,120,,,1,2,WATER
Quant Method	:	PFC_1208_SQ280.quantmethod.xml
Quant Batch Name	:	SQ285.batch.bin
Last Calib Update	:	2014-12-10 09:24



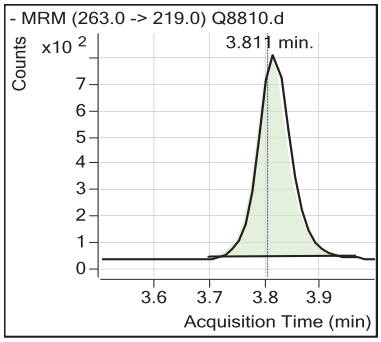
PFBA

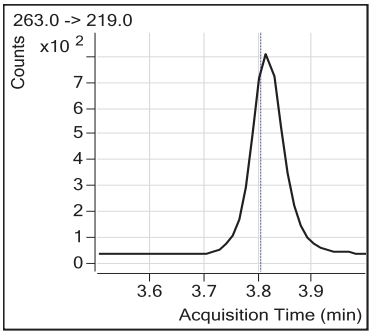


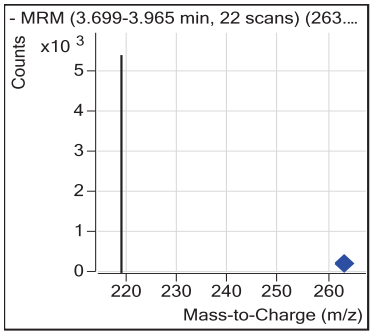




PFPeA

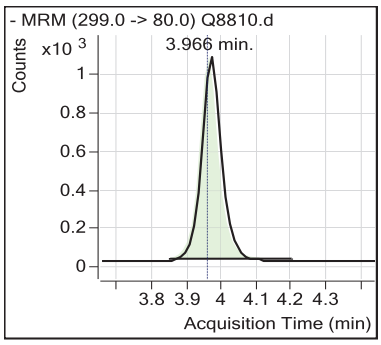


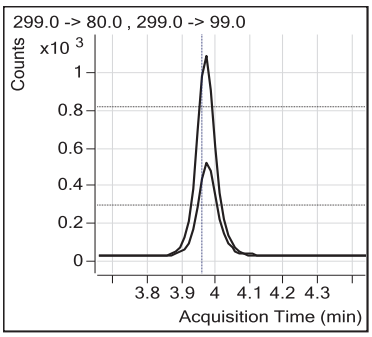


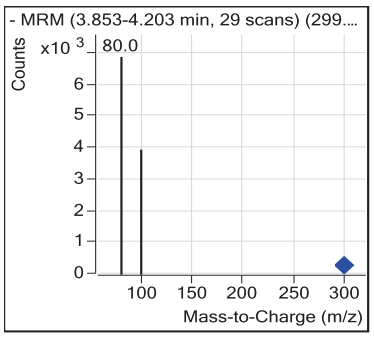


Perfluorinated Compounds by LC/MS/MS.

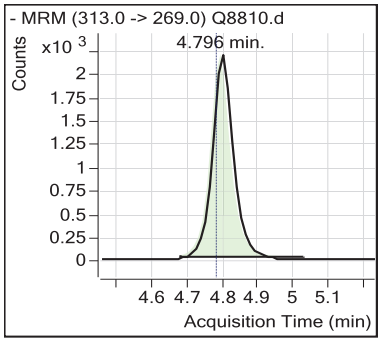
PFBS

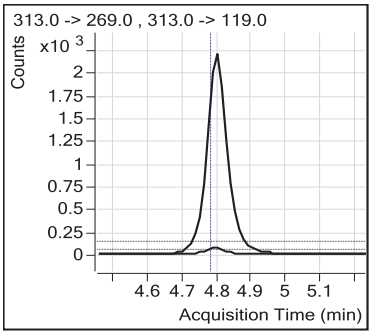


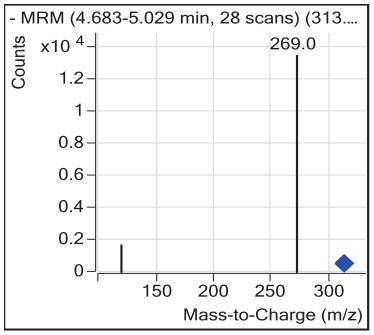




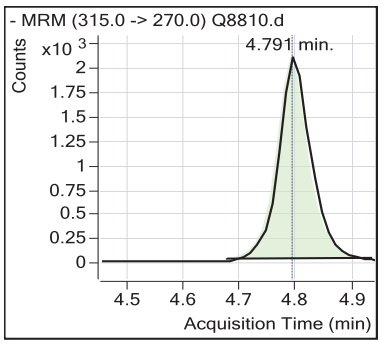
PFHxA

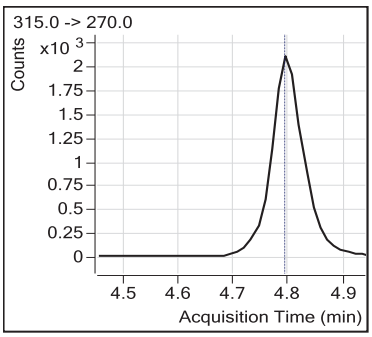


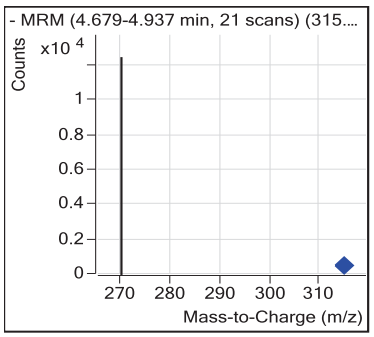




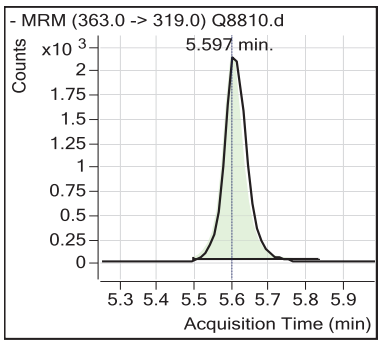
13C2-PFHxA

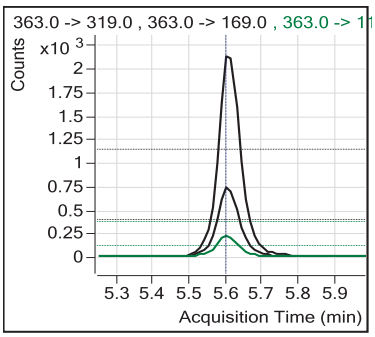


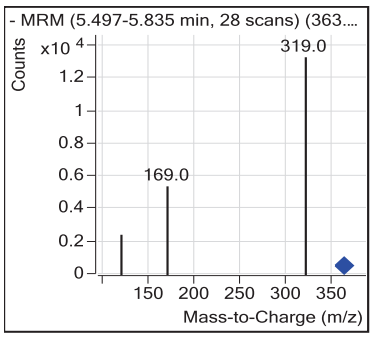




PFHpA

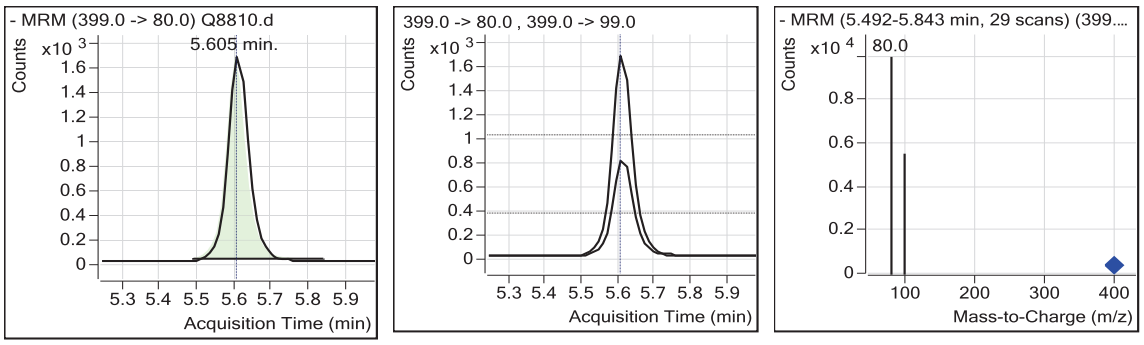




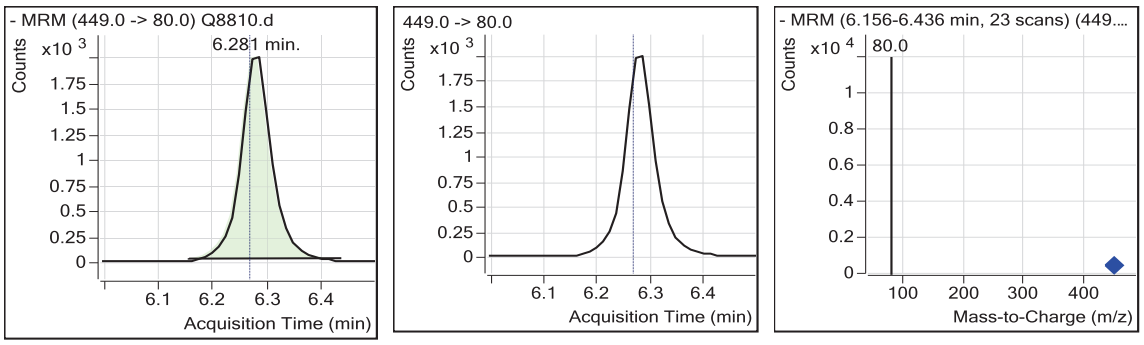


Perfluorinated Compounds by LC/MS/MS.

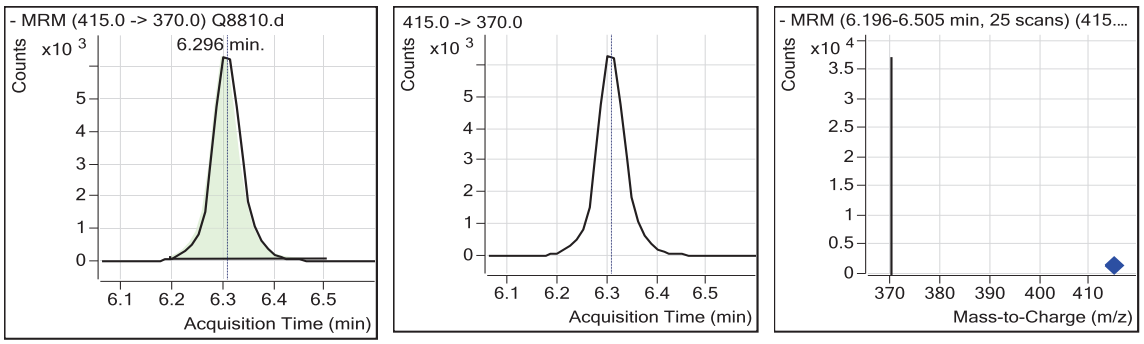
PFHxS



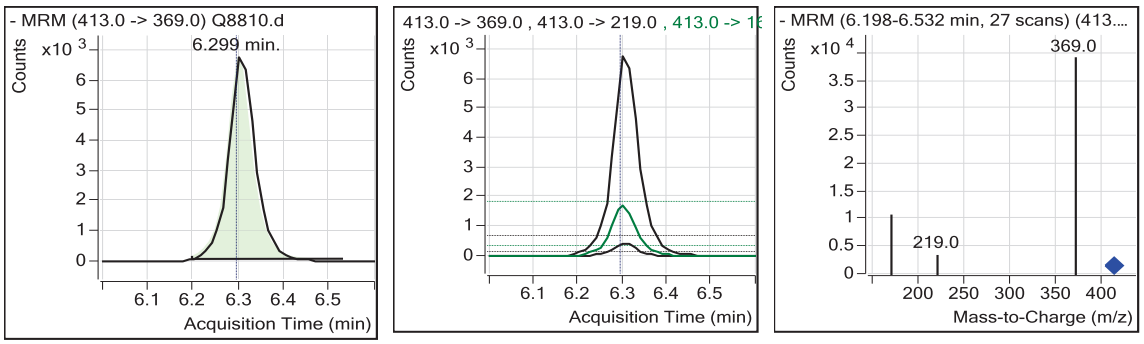
PFHpS



13C2-PFOA

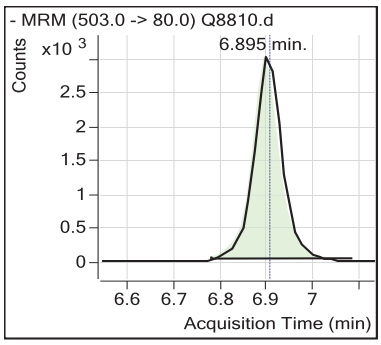


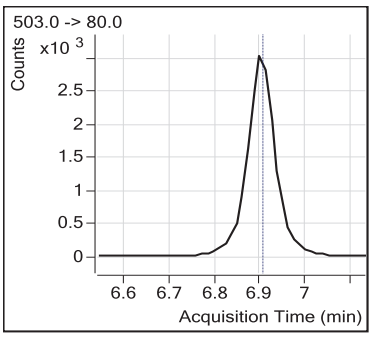
PFOA

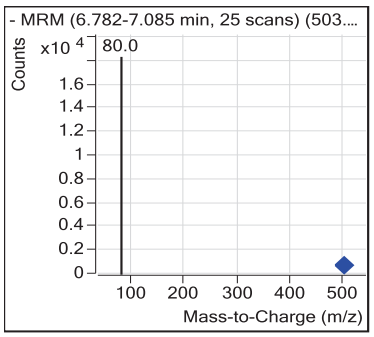


Perfluorinated Compounds by LC/MS/MS.

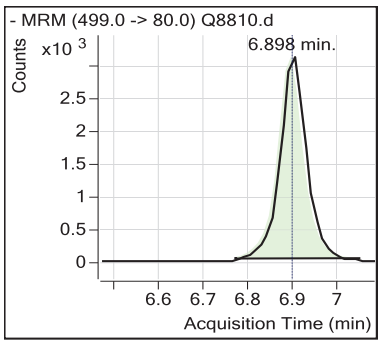
13C4-PFOS

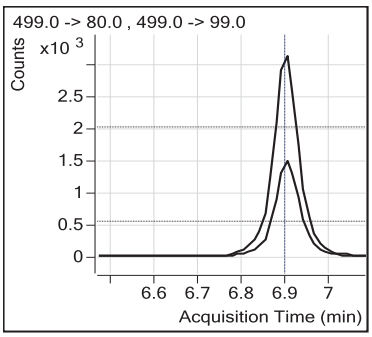


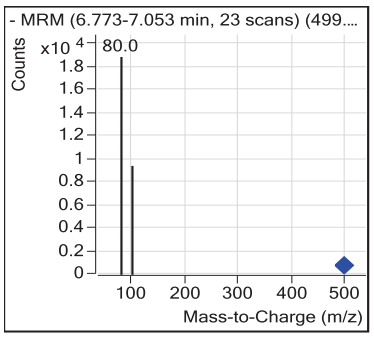




PFOS







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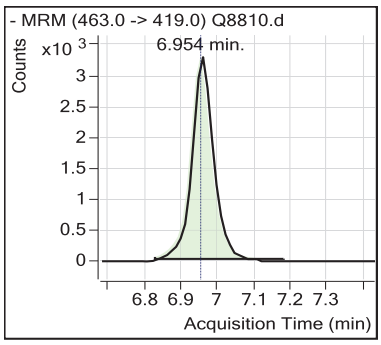
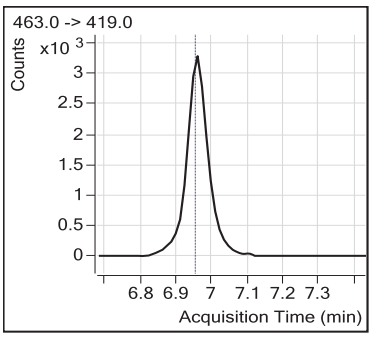
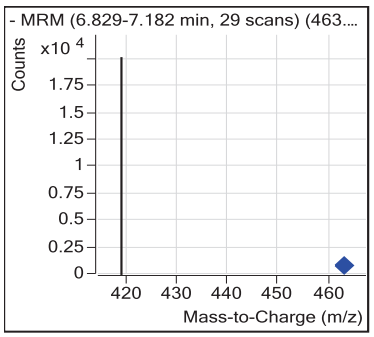
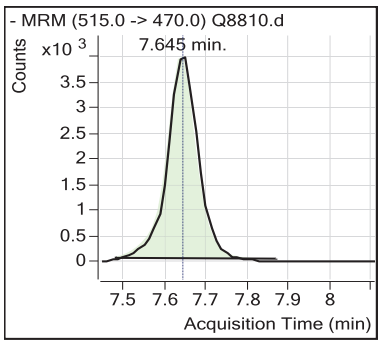
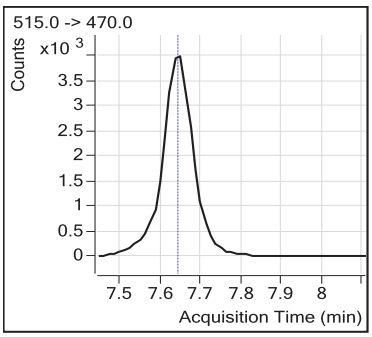


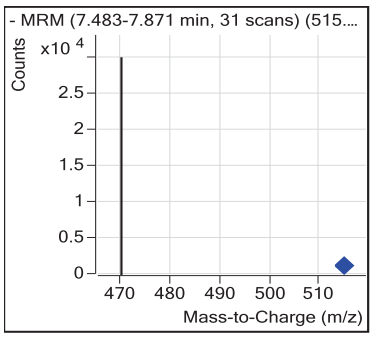




13C2-PFDA

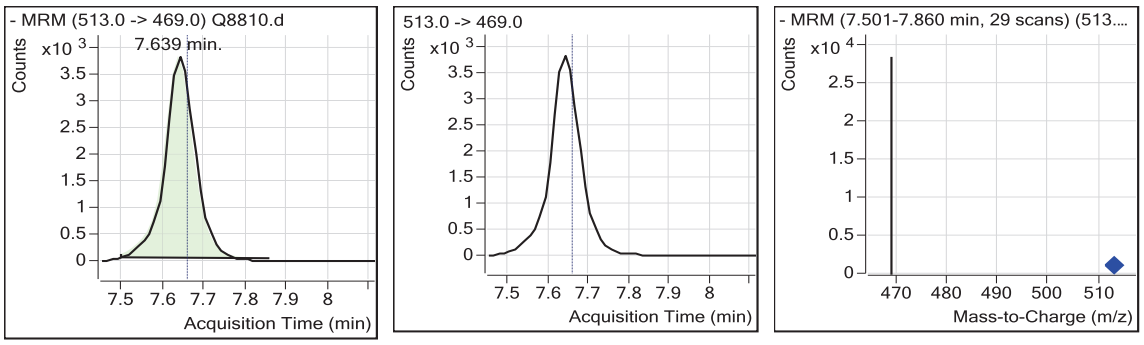




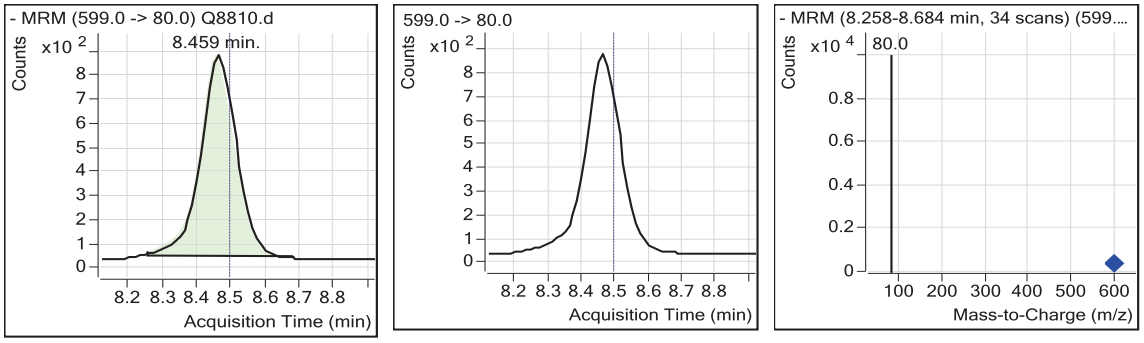


Perfluorinated Compounds by LC/MS/MS.

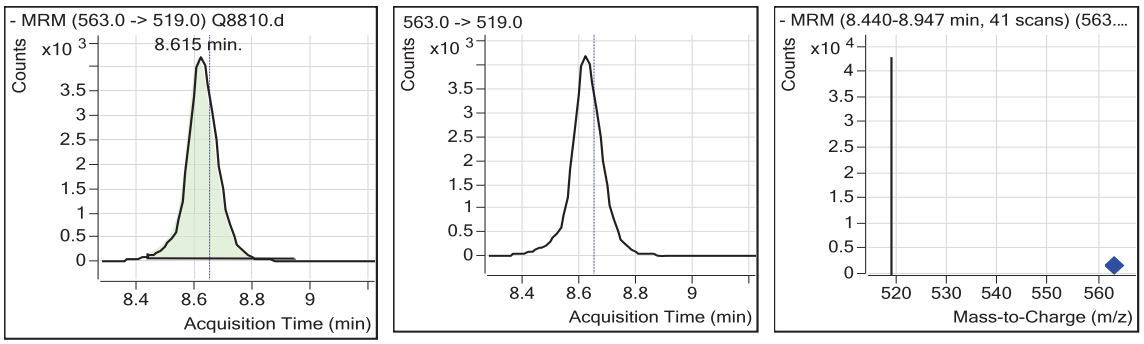
PFDA



PFDS



PFUnDA



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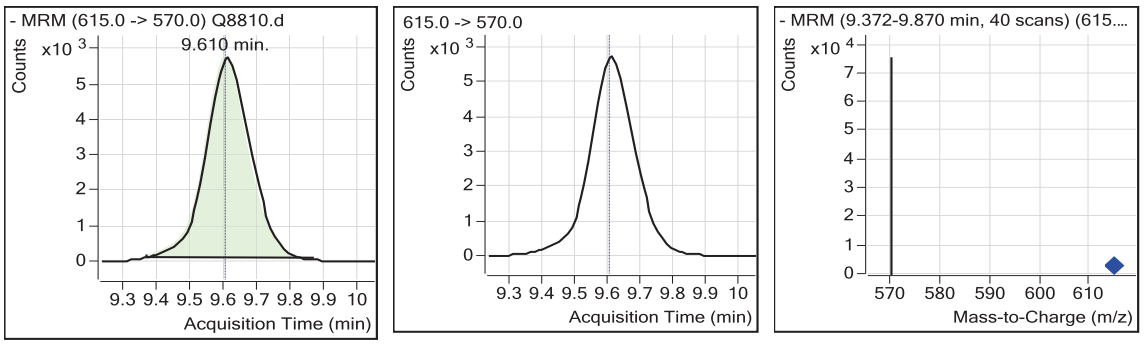
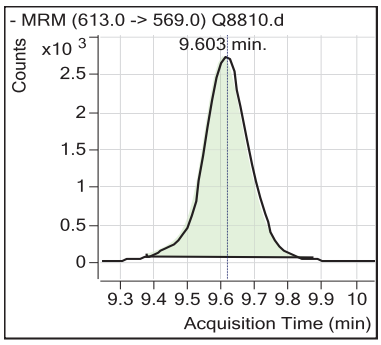
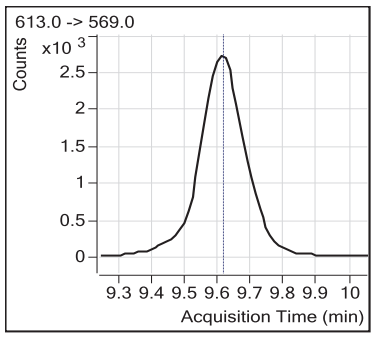
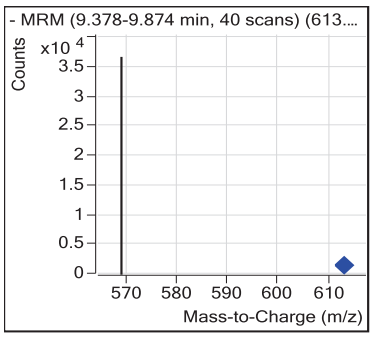


Perfluorinated Compounds by LC/MS/MS.

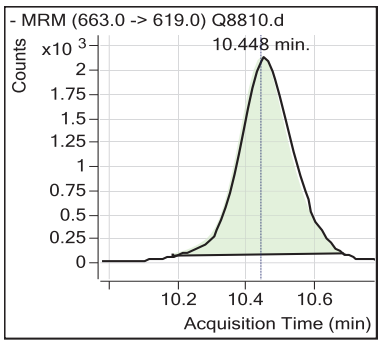
PFDoDA

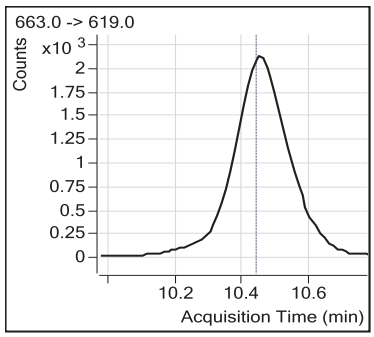


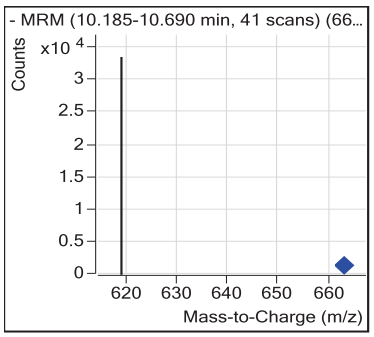




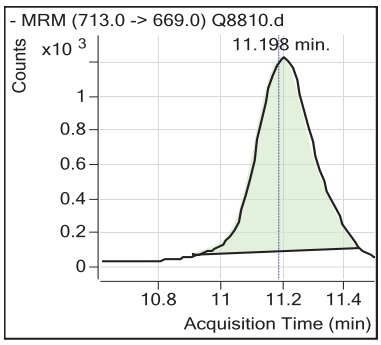
PFTrDA

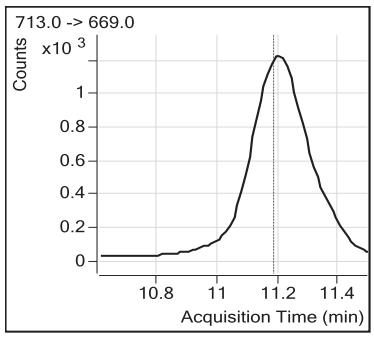


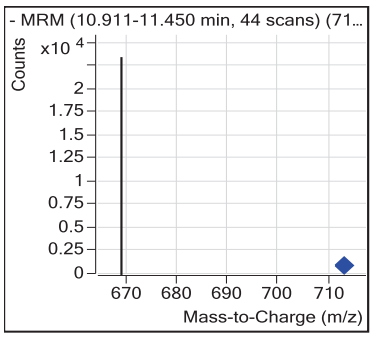




PFTeDA







ACCUTEST LABORATORIES SE

DATE:	12/8/14
COLUMN TYPE:	Peroshell EC-C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	4/14

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA, PFOS
ACQ. METHOD:	AMRM_PFOA_PFOS
PROC. METHOD:	PFC_120B_SQ280
CALIB. DATE:	12/8/14
RUN BATCH:	SQ 280

ANALYST:	MS FWTS
SOLVENT A LOT #:	084023
SOLVENT B LOT #:	081052
WATER LOT #:	140432
ISTD Lot #:	LC488

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 86 28	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	IC280.2.5		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	IC280-30			300/500				✓
Q 39	7	" -40			400/500				✓
Q 40	8	" -50		"	1				✓ mass
Q 41	9	ICV280.20		7047	5/500				✓ mass c13,c14 high
Q 42	10	ICV280.20		LC485	40/500			sp	✓ mass
Q 43	11	op54108-135		54105	1			sp	✓ Last 4 low RR
Q 44	12	FA20136-1		"	5/500			sp	✓ RR
Q 45	13	FA20172.16		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:

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:	2NURM-PFOA.PFOS
PROC. METHOD:	PFC-1208.5@280
CALIB. DATE:	12/8/14
RUN BATCH: SQ	280

ANALYST:	
SOLVENT A LOT #:	95/5 084023/066640
SOLVENT B LOT #:	081521
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 8C 48	16	FA20172-29	PFC	54058	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		—	—				
Q 55	21	op54121-BS		54121	1				
Q 56	22	" -MB						SP	✓
Q 57	23	C37320-1							BDL
Q 58	24	op54121-MS						SP	✓
Q 59	25	" -MSD						50	—
Q 60 60	26	C37320-2						SP	✓
Q 61	27	" -3							BDL
Q 62	28	" -5							BDL
Q 63	29	C37352-1		54121	1				BDL
Q 64	30	op54121-MS2		"	"			SP	✓
Q 65	5	CC280.20		LC487	200/500			SP	✓
Q 66	1	CCB		—	—				
Q 67	31	op54121-MSD2		54121	1				MPS
									MD
								SP	✓ high RTD

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:

ACCUTEST LABORATORIES SE

DATE:	12/8/14
COLUMN TYPE:	Poroshell HP-C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	414

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA . PFOS
ACQ. METHOD:	QMRM-PFOA-PFOS
PROC. METHOD:	PFC-12pt-SQ280
CALIB. DATE:	12/8/14
RUN BATCH: SQ	280

ANALYST:	MRS
SOLVENT A LOT #:	064023 / 066640
SOLVENT B LOT #:	~~066605~~ 081052
WATER LOT #:	064032
ISTD Lot #:	LC488

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 8668	32	MP 12/8/14 C37352.2	PFC	54121	1		•	SP	✓
Q 69	33	-3							✓
Q 70	34	-4							✓
Q 71	35	-5							BR ✓
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				MRS
Q 78	1	CCB		—	—				BDL
Q 79	41	FA20328-2		54121	1				BDL
Q 80	43	C37304-8		54058	"				LAST ISTD out, ND
Q 81	42	ECC280.20	"	LC487	2nd/400				MRS PFDA P
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: MRS

ACCUTEST LABORATORIES SE

DATE:	12-15-14
COLUMN TYPE:	Poroshell EC018
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	391

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA PFOS
ACQ. METHOD:	LMRM PFOA-PFOS
PROC. METHOD:	PFC 1208 SQ280
CALIB. DATE:	12-8-14
RUN BATCH: SQ	284

ANALYST:	NMS MRE
SOLVENT A LOT #:	95 / 5 084623 / 084646
SOLVENT B LOT #:	081052
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 8763	1	ccb	PFC	—	—				✓
Q 64	1	ccb		—	—				✓
Q 65	2	A+ check		LC487	200/100				✓
Q 66	1	ccb		—	—				✓
Q 67	1	ccb		—	—				✓
Q 68	2	CL 280-20		LC487	200/100				Pass
Q 69	1	ccb		—	—				✓
Q 70	3	FA20172-7		0054151	200/100 2F			SP	✓
Q 71	4	FA20402-2			2F/100 20F				✓
Q 72	5	-3			↓				✓
Q 73	6	-4			*				K Double IS Area, RR
Q 74	2	CCL280-20		LC487	200/100				Pass PFOS T
Q 75	1	ccb		—	—				✓
Q 76	7	005420 4-BS		0054204	1X			SP	✓
Q 77	8	-MB							✓
Q 78	9	FA20473-3						SP	✓
Q 79	10	-4							✓
Q 80	11	-5							✓
Q 81	12	0054204-MS							✓
Q 82	13	-MSD	↓	↓	↓			↓	✓

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:

ACCUTEST LABORATORIES SE

DATE:	12-15-14
COLUMN TYPE:	Poroshell EC C18
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	391

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA PFOS
ACQ. METHOD:	LMAM PFOA PFOS
PROC. METHOD:	PFC 1104 SQ280
CALIB. DATE:	12-08-14
RUN BATCH: SQ	284

ANALYST:	NAS MAE
SOLVENT A LOT #:	054632/066640
SOLVENT B LOT #:	081052
WATER LOT #:	054623
ISTD Lot #:	LC488

	DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q	87 03	14	FA20472-7	PFC	0P54204	1X			SP	✓
Q	04	15	-8							✓ Rm 5X
Q	05	16	-9							✓
Q	06	2	CC 280-20		LC487	200/100				PASS PFOS, PFHxDA↑
Q	07	1	CCB							✓
Q	08	6	FA20402-4		0P54151	1X			SP	✓
Q	09	17	FA20472-10		0P54204					✓
Q	90	18	-11							✓
Q	91	19	-12							X SS↑ Rm 20X, 5X
Q	92	20	-13							✓ Rm 2X
Q	93	2	CC 280-20		LC487	200/100				PASS PFOS, PFHxDA↑
Q	94	1	CCB							✓
Q	95	21	FA20472-1		0P54204	1X			SP	✓
Q	96	22	-2							✓
Q	97	23	-6							✓1X, Rm 5X ISS↑
Q	98	2	ECC 280-20		LC487	200/100				PASS PFOS, PFHxDA↑
Q										
Q										
Q							NAS	12-16-14		
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:

ACCUTEST LABORATORIES SE

DATE:	12/16/14
COLUMN TYPE:	Peroshell
AMOUNT INJECTED:	7.5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	4417

LCMS1-Q ANALYSIS LOG

METHODS:	PFOA, PFOS
ACQ. METHOD:	LWRM_PFOA_PFOS
PROC. METHOD:	PFC_1205_SQ285
CALIB. DATE:	12/8/14 1
RUN BATCH:	SQ 285

ANALYST:	M.S / NMS
SOLVENT A LOT #:	95/5 DB4623/DB4640
SOLVENT B LOT #:	DB4652
WATER LOT #:	DB4623
ISTD Lot #:	LC488

	DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q	8799	1	cals	PFC	—	—				—
Q	8800	7	rt check							✓
Q	01	1	cals		—	—				✓
Q	02	2	cc280-20		LC487	200/500				PFOS ✓, C11 ✓ PASS
Q	03	3	FA20472-6		OP54209	1			SP	1570 ✓, 5007 ✓
Q	04	4	FA20472-6			100/500			SP	✓
Q	05	5	FA20472-8			100/500			SP	✓
Q	06	6	FA20472-12			100/500			SP	✓
Q	07	7	FA20472-12			25/100			SP	✓
Q	08	8	FA20472-13			200/500			SP	✓
Q	09	9	FA20472-6			250/500			SP	✓ use 5x only
Q	10	2	cc280-20		LC487					PFOS ✓, C11 ✓ PASS
Q										
Q										
Q										
Q										
Q										
Q										
Q										
Q										

MS 12/17/14

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:

ACCUTEST LABORATORIES SE

SPE LIQUID SAMPLE PREP REPORT

Date/Time: 12/11/14 1000 Started {mm/dd/yy 24:00}

Date/Time: 12/11/14 1530 Finished {mm/dd/yy 24:00}

Prep Method: 3535A .or (Method) (circle)

Analytical Method: LC 537

Batch#: OP54204

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 54204 MB	X	125	6	N/A	20ul		1ml	
OP 54204 BS	X	125				80ul		
FA 20472-1	1	125						
-2	1	125						
-3	1	120						
-4	1	120						
-5	1	120						
-6	1	120						POSSIBLE 2X SURR.
-7	1	125						
-8	1	120						
-9	1	125						
-10	1	125						
-11	1	125						
-12	1	120						
-13	1	120	11					
				MB	12/11/14			
FA20472-5 MS	2	60	6	N/A	20ul	80ul	1ml	
-5 MSD	2	60	"	"	"	"	"	
DUP								

Comments:

Surr. ID: LC 486 Conc: 1ppm Exp. Date: 05/19/15 Inj. By: MB Ver. By MB

Spk.1 ID: LC 485 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 #: / 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: 12/11/14

Accepted By: [signature] Date: 12/11/14

NF rev. 09/14/12 extwater_spe 091412.xls

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	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
N6247010801	WE79		NORFOLK_NB	NB520-MW58-1214	NONE	VOA	8260B	VDA	ELAB7	ENVIRONICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 10:20	12/05/2014			20141209	22:33:00	20141209	22:33:00	NB520-MW58-1214-MS01	20	1			1,2-Dichloroethane	107-06-2	95.4	95.4	PCT	D	D	MS	TRG		

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	Analysis_ID	Analyte_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
N6247010180I2	WE79		NORFOLK_NB	N8520-MW07-1214	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/01/2014 12:55	12/05/2014			20141211	10:00:00	20141215	21:23:00	FA20972-1	1	1			Perfluorooctanesulfonate (PFOS)	3763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412120	OPS4204		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120214	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120314	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120414	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW101-1214	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120214	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120314	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW101-1214	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	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	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120214	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120314	NONS	SVOA	537_MOD	ORG	ACUT_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	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW101-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141217	11:00:00	20141219	23:40:00	FA20501-5	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120314	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW101-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141217	11:00:00	20141219	23:40:00	FA20501-5	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120314	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	SP1231532	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	18:51:00	OP54254-MB	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	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	SP1231532	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	18:51:00	OP54254-MB	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	SP1231532	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	18:51:00	OP54254-MB	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	SP1231532	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	18:51:00	OP54254-MB	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	SP1231532	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	18:51:00	OP54254-MB	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	SP1231074	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/17/2014 11:00				20141217	11:00:00	20141219	18:25:00	OP54279-MB	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	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	SP1231074	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/17/2014 11:00				20141217	11:00:00	20141219	18:25:00	OP54279-MB	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	SP1231074	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/17/2014 11:00				20141217	11:00:00	20141219	18:25:00	OP54279-MB	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	SP1231532	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	18:51:00	OP54254-MB	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	SP1231074	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BLK	W	UNK	12/17/2014 11:00	12/04/2014			20141217	11:00:00	20141219	18:25:00	OP54279-MB	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8501-EB01-120314	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8501-A1-MW24B-R15	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 14:20	12/06/2014			20141215	21:41:00	20141219	21:41:00	FA20462-4	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.0081	0.017	0.021	1412119	OPS4151		
N6247010180I2	WE79		NORFOLK_NB	N8501-EB01-120314	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:00	12/06/2014			20141208	10:00:00	20141208	18:48:00	FA20462-5	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.0081	0.017	0.021	1412119	OPS4151		
N6247010180I2	WE79		NORFOLK_NB	N8501-EB01-120314	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 16:15	12/06/2014			20141208	10:00:00	20141209	18:48:00	FA20462-5	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.0081	0.017	0.021	1412119	OPS4151		
N6247010180I2	WE79		NORFOLK_NB	N8501-A1-MW24B-R15	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 14:20	12/06/2014			20141215	21:41:00	20141219	21:41:00	FA20462-4	1	1			Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.0081	0.017	0.021	1412119	OPS4151		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8501-EB01-120314	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 12:00	12/06/2014			20141208	10:00:00	20141208	18:48:00	FA20462-5	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.0081	0.017	0.021	1412119	OPS4151		
N6247010180I2	WE79		NORFOLK_NB	N8501-EB01-120314	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 16:15	12/06/2014			20141208	10:00:00	20141209	18:48:00	FA20462-5	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.0081	0.017	0.021	1412119	OPS4151		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW101-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120314	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW101-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141217	11:00:00	20141219	23:40:00	FA20501-5	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-EB120314	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4254		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW101-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.008	0.016	0.02	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8501-EB01-120314	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 16:15	12/06/2014			20141208	10:00:00	20141209	18:48:00	FA20462-5	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.016	0.016	UG_L	U	U	PR	TRG									4.2	0.0081	0.017	0.021	1412119	OPS4151		
N6247010180I2	WE79		NORFOLK_NB	N8501-MW34-1214	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141215	18:54:00	20141219	18:54:00	FA20472-5	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.033	0.033	UG_L	U	U	PR	TRG									4.2	0.017	0.033	0.042	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW30-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluoroheptanoic Acid (PFHpA)	335-67-1	0.033	0.033	UG_L	U	U	PR	TRG									4.2	0.017	0.033	0.042	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluorooctanoic Acid (PFOA)	335-67-1	0.033	0.033	UG_L	U	U	PR	TRG									4.2	0.017	0.033	0.042	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8501-EB01-120314	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/03/2014 16:15	12/06/2014			20141208	10:00:00	20141209	18:48:00	FA20462-5	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.033	0.033	UG_L	U	U	PR	TRG									4.2	0.0081	0.017	0.021	1412119	OPS4151		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW34-1214	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/05/2014 14:35	12/06/2014			20141215	18:54:00	20141219	18:54:00	FA20472-5	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1	0.033	0.033	UG_L	U	U	PR	TRG									4.2	0.017	0.033	0.042	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW30-1214	NONS	SVOA	537_MOD	ORG	ACUT_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			Perfluoroheptanoic Acid (PFHpA)	335-67-1	0.033	0.033	UG_L	U	U	PR	TRG									4.2	0.017	0.033	0.042	1412121	OPS4279		
N6247010180I2	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	537_MOD	ORG	ACUT_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

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	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
N62470110801	WE79		NORFOLK_NB	NB1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 00:43	12/15/2014			20141215	09:42:00	20141215	09:42:00	4135015-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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4135026-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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4135026-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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4135026-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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4135026-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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4135026-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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4135026-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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-TB102214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5010		
N62470110801	WE79		NORFOLK_NB	NB520-TB102214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5010		
N62470110801	WE79		NORFOLK_NB	NB520-TB102214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5010		
N62470110801	WE79		NORFOLK_NB	NB520-MW54-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW54-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW54-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW54-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW54-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW54-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW58-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW58-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW58-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	0.500	0.500	UG_L	U	U	MS	TRG										4.1	0.250	0.500	1.00	1412066	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW58-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW58-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NB520-MW58-1214	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL 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	ALI5011		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4135025-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	ALI5006		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4135025-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	ALI5006		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4135025-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	ALI5006		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4135025-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	ALI5006		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4135025-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	ALI5006		
N62470110801	WE79		NORFOLK_NB	NL1502S-BLK1	NONE	VOA	8260B	VDA	ELAT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/15/2014 10:11	12/15/2014			20141215	10:11:00	20141215	10:11:00	4135025-BLK1	1	1			cis-1,2-Dichloroethene	156-59-2

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CKSM_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	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
N6247010801	WE79		NORFOLK_NB	N8520-MW97-15-1214-MS2	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	MS	W	4	12/05/2014 11:10	12/06/2014			20141212	10:15:00	20141230	15:57:00	N8520-MW97-15-1214-MS2	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	AL36519		
N6247010801	WE79		NORFOLK_NB	N8520-MW103P-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	0.0480	0.196	0.392	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW97-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW52-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	0.0481	0.185	0.370	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW60-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-SW01-1214-MS01	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	MSD	W	4	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141229	23:03:00	N8520-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	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-MW105-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	BSD	W	4	12/04/2014 16:30	12/06/2014			20141209	16:30:00	20141226	11:44:00	4109027-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	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW58-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	0.0481	0.185	0.370	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-BS020314	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	0.0474	0.190	0.381	1412066	AL34616		
N6247010801	WE79		NORFOLK_NB	N-150326-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 10:15	12/16/2014			20141225	10:15:00	20141225	20:59:00	N1526-B01	1	1			1,2-Dichloroethane	107-06-2	120	120	PCT	X	X	MS	TRG		130	70	20080107				4.1	0.250	0.500	1.00	1412066	AL35010		
N6247010801	WE79		NORFOLK_NB	N-150315-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141225	07:47:00	20141225	07:47:00	4115015-B51	1	1			1,2-Dichloroethane	107-06-2	120	120	PCT	X	X	MS	TRG		130	70	20080107				4.1	0.250	0.500	1.00	1412066	AL35010		
N6247010801	WE79		NORFOLK_NB	N-060904-B02	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/10/2014 16:50	12/10/2014			20141212	16:50:00	20141212	11:47:00	4109034-BS2	1	1			2,4,6-Tribromophenol	118-79-6	56.9	56.9	PCT	X	X	MS	SURR	LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	AL34616		
N6247010801	WE79		NORFOLK_NB	N-060904-BLK2	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/10/2014 16:50	12/10/2014			20141212	16:50:00	20141212	11:47:00	4109034-BLK2	1	1			2,4,6-Tribromophenol	118-79-6	70.9	70.9	PCT	X	X	MS	SURR	LSA	125	40	20080107				4.1	0.0500	0.200	0.400	1412073	AL34616		
N6247010801	WE79		NORFOLK_NB	N8520-MW69-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/04/2014 15:50	12/05/2014			20141212	10:15:00	20141229	14:23:00	1412073-13	10	10			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	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-MW103-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-MW97-20-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/05/2014 15:10	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	0.0481	0.185	0.370	1412073	AL36519		
N6247010801	WE79		NORFOLK_NB	N8520-MW103-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	AL36519		
N6247010801	WE79		NORFOLK_NB	N-110102-BLK1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	BLK	W	4	12/12/2014 10:15	12/12/2014			20141229	10:15:00	20141229	16:12:00	4110102-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	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-TW02-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/05/2014 16:00	12/06/2014			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	0.0461	0.185	0.370	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-EB120214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	EB	W	4	12/14/2014 16:30	12/16/2014			20141225	16:30:00	20141225	16:30:00	4115015-EB1	1	1			1,2-Dichloroethane	107-06-2	92.4	92.4	PCT	X	X	MS	TRG		130	75	20080107				4.1	0.250	0.500	1.00	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW103P-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	0.0474	0.190	0.381	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW55-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/04/2014 09:30	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	AL36402		
N6247010801	WE79		NORFOLK_NB	N-110202-B51	NONE	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	BS	W	4	12/12/2014 10:15	12/12/2014			20141212	10:15:00	20141229	16:37:00	4110102-B51	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	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-SW01-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141229	14:23:00	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	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-EB120414	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	EB	W	4	12/04/2014 17:00	12/06/2014			20141210	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	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/05/2014 14:55	12/06/2014			20141212	10:15:00	20141230	01:53:00	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	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-MW60-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/05/2014 15:40	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	AL36519		
N6247010801	WE79		NORFOLK_NB	N8520-MW55-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/04/2014 09:30	12/05/2014			20141212	10:15:00	20141229	13:43:00	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	0.0481	0.192	0.385	1412073	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-MW104-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/04/2014 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	0.0481	0.185	0.370	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW54-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	95.4	95.4	PCT_REC	X	X	MS	SURR	LSA	125	40	20080107				4.1	0.0476	0.190	0.381	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW34-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/02/2014 14:25	12/05/2014			20141209	16:30:00	20141226	09:56:00	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	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW102-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/04/2014 13:05	12/05/2014			20141210	15:00:00	20141226	12:01:00	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	0.0481	0.192	0.385	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW56-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/04/2014 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	0.0461	0.185	0.370	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N-060927-BLK1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/09/2014 16:30	12/09/2014			20141209	16:30:00	20141226	18:38:00	4109027-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	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW100-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/04/2014 09:10	12/05/2014			20141212	10:15:00	20141229	13:50:00	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	AL36507		
N6247010801	WE79		NORFOLK_NB	N-060927-B51	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/09/2014 16:30	12/09/2014			20141209	16:30:00	20141226	11:17:00	4109027-B51	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	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	0.0480	0.196	0.392	1412073	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-MW97-15-1214-MS02	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	MS	W	4	12/04/2014 15:10	12/05/2014			20141212	10:15:00	20141230	02:10:00	N8520-MW97-15-1214-MS02	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	1412073	AL36507		
N6247010801	WE79		NORFOLK_NB	N8520-MW13-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW105-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	000	REG	W	4	12/03/2014 13:40	12/05/2014			20141210	15:00:00	20141226	11:06:00	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	0.0476	0.190	0.381	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N8520-MW59-1214	NONS	SVOA	8270D	SVOA	ELABT	ENVIRONICAL LABS		WET	SW5550C	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	0.0480	0.196	0.392	1412066	AL36402		
N6247010801	WE79		NORFOLK_NB	N-150315-B101	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141225	07:47:00	20141225	20:11:00	4115015-B101	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	AL35010		
N6247010801	WE79		NORFOLK_NB	N-150326-B101	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 09:42	12/15/2014			20141225	09:42:00	20141225	09:42:00	4115015-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	AL35010		
N6247010801	WE79		NORFOLK_NB	N-150326-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 09:42	12/15/2014			20141225	09:42:00	20141225	09:42:00	4115015-B01	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	AL35010		
N6247010801	WE79		NORFOLK_NB	N8520-MW34-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	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	107-06-2	0.500	0.500	UG_L	XU	XU	MS	TRG								4.1	0.250	0.500	1.00	1412066	AL35010		
N6247010801	WE79		NORFOLK_NB	N8520-MW104-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 09:10	12/05/2014			20141216	01:08:00	20141216	01:08:00	1412066-04	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	AL35011		
N6247010801	WE79		NORFOLK_NB	N8520-MW58-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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	AL35011		
N6247010801	WE79		NORFOLK_NB	N8520-MW102-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 13:05	12/05/2014			20141215	23:12:00	20141215	23:12:00	1412066-01	1	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	AL35011		
N6247010801	WE79		NORFOLK_NB	N8520-MW100P-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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	AL35011		
N6247010801	WE79		NORFOLK_NB	N8520-MW51-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 11:50	12/05/2014			20141216	00:10:00	20141216	00:10:00	1412066-05	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	AL35011		
N6247010801	WE79		NORFOLK_NB	N8520-MW52-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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	AL35011		
N6247010801	WE79		NORFOLK_NB	N8520-MW60-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 15:40	12/05/2014			20141216	02:07:00	20141216	02:07:00	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	AL35010		
N6247010801	WE79		NORFOLK_NB	N8520-MW59-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 10:25	12/05/2014			20141216	12:36:00	20141216	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	AL35010		
N6247010801	WE79		NORFOLK_NB	N8520-MW56-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 14:05	12/05/2014			20141216	13:33:00	20141216	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	AL35010		
N6247010801	WE79		NORFOLK_NB	N8520-MW53-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 12:55	12/05/2014			20141215	13:05:00	20141216	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	AL35010		
N6247010801	WE79		NORFOLK_NB	N8520-MW105-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 13:40	12/05/2014			20141216	15:58:00	20141216	15:58:00	1412066-11	5	1			1,2-Dichloroethane	107-06-2	1.25	2.50	UG_L	XU	XU	MS	TRG								4.1	1.25	2.50	5.00	1412066	AL35011		
N6247010801	WE79		NORFOLK_NB	N8520-MW13-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2

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	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
N62470110B012	WE79		NORFOLK_NB	N8520-MW13-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 12:15	12/06/2014			20141217	14:58:00	20141217	14:58:00	1412073-02	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N1-09021-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/05/2014 12:02	12/06/2014			20141209	12:02:00	20141209	12:02:00	4109021-851	1	1			Tetrachloroethene	127-18-4	104	104	PCT			MS	TRG	LSA	350	45	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-10153-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BLK	W	4	12/10/2014 08:43	12/10/2014			20141210	08:43:00	20141210	08:43:00	4-10153-BLK1	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-15015-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4-15015-851	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-15015-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4-15015-851	1	1			Vinyl chloride	75-01-4	104	104	PCT			MS	TRG	LSA	145	50	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-15015-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4-15015-851	1	1			Vinyl chloride	75-01-4	104	104	PCT			MS	TRG	LSA	145	50	20080107																		
N62470110B012	WE79		NORFOLK_NB	SP5204-05	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/11/2014 10:00				20141211	10:00:00	20141215	17:33:00	SP54204-05	1	1			13C2-PFDA	13C2-PFDA	104	104	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW14-1214	NONE	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-PFHxA	13C2-PFHxA	104	104	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW14-1214	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	DLI	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	LSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N8520-E8120214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/02/2014 14:45	12/06/2014			20141216	10:00:00	20141218	21:48:00	FA20321-6	1	1			13C2-PFDA	13C2-PFDA	104	104	PCT			MS	SURR	LSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N-15025-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/15/2014 08:21	12/15/2014			20141215	08:21:00	20141215	08:21:00	4-15025-851	1	1			Trichloroethene	79-01-6	104	104	PCT			MS	TRG	LSA	125	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-16001-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/16/2014 08:24	12/16/2014			20141216	08:24:00	20141216	08:24:00	4-16001-851	1	1			Trichloroethene	79-01-6	104	104	PCT			MS	TRG	LSA	125	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW10-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/04/2014 14:27	12/06/2014			20141216	16:31:00	20141216	16:31:00	FA20472-1	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW11-1214	NONE	VOA	8260B	VOA	ELAT	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																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW07-20-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 11:15	12/06/2014			20141217	15:25:00	20141217	15:25:00	1412073-11	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-SW01-1214	NONE	VOA	8260B	VOA	ELAT	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																		
N62470110B012	WE79		NORFOLK_NB	N8520-SW01-1214-MS1	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	MS	W	4	12/05/2014 13:10	12/06/2014			20141216	16:31:00	20141216	16:31:00	N8520-SW01-1214-MS1	20	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-TB120514	NONE	VOA	8260B	VOA	ELAT	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																		
N62470110B012	WE79		NORFOLK_NB	N-09021-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4109021-851	1	1			1,1,1-Trichloroethane	71-55-6	104	104	PCT			MS	TRG	LSA	130	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-09021-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4109021-851	1	1			Trichloroethene	79-01-6	104	104	PCT			MS	TRG	LSA	125	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-10015-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/10/2014 08:43	12/10/2014			20141210	08:43:00	20141210	08:43:00	4-10015-851	1	1			1,1,1-Trichloroethane	71-55-6	104	104	PCT			MS	TRG	LSA	130	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8502-A-AIW12P-R15	NONE	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS				WET	SW5330C	000	REG	W	4	12/02/2014 15:10	12/04/2014			20141208	11:45:00	20141209	17:40:00	141204S-06	1	1			2,4,6-Tribromophenol	118-79-6	105	105	PCT			MS	SURR	LSA	125	40	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW508-1214	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:25	12/05/2014			20141211	10:00:00	20141215	19:02:00	FA20472-10	1	1			13C2-PFHxA	13C2-PFHxA	105	105	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N-16001-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/16/2014 08:24	12/16/2014			20141216	08:24:00	20141216	08:24:00	4-16001-851	1	1			cis-1,2-Dichloroethene	156-59-2	105	105	PCT			MS	TRG	LSA	125	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-17001-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/17/2014 08:04	12/17/2014			20141217	08:04:00	20141217	08:04:00	4-17001-851	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW07-20-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 11:15	12/06/2014			20141217	17:42:00	20141217	17:42:00	1412073-13	100	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW08-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 10:55	12/06/2014			20141217	11:45:00	20141217	11:45:00	1412073-10	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW09-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 10:55	12/06/2014			20141217	17:15:00	20141217	17:15:00	1412073-06	5	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW07-1S-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 12:30	12/06/2014			20141217	11:16:00	20141217	11:16:00	1412073-12	20	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW07-1S-1214-MS1	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	MS	W	4	12/05/2014 12:30	12/06/2014			20141217	18:37:00	20141217	18:37:00	N8520-MW07-1S-1214-MS1	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-SW01-1214-MS01	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	MS	W	4	12/05/2014 13:10	12/06/2014			20141216	16:59:00	20141216	16:59:00	N8520-SW01-1214-MS01	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-09021-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4109021-851	1	1			Ethylbenzene	100-41-4	106	106	PCT			MS	TRG	LSA	125	75	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW03-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/04/2014 14:27	12/06/2014			20141216	16:31:00	20141216	16:31:00	FA20472-2	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW05-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 10:25	12/05/2014			20141215	12:07:00	20141215	12:07:00	1412066-13	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW07-1214	NONE	VOA	8260B	VOA	ELAT	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			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW08-1214	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:25	12/05/2014			20141211	10:00:00	20141216	11:10:00	FA20472-12	1	1			13C2-PFDA	13C2-PFDA	106	106	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N-16001-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BLK	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4-16001-BLK1	1	1			Dibromofluoromethane	1868-53-7	106	106	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-17001-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/17/2014 08:04	12/17/2014			20141217	08:04:00	20141217	08:04:00	4-17001-851	1	1			trans-1,2-Dichloroethene	156-60-5	106	106	PCT			MS	TRG	LSA	140	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-17001-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/17/2014 08:04	12/17/2014			20141217	08:04:00	20141217	08:04:00	4-17001-851	1	1			Trichloroethene	79-01-6	106	106	PCT			MS	TRG	LSA	125	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW03-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 13:10	12/06/2014			20141216	16:31:00	20141216	16:31:00	FA20472-3	1	1			Dibromofluoromethane	1868-53-7	104	104	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-09021-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/09/2014 12:02	12/09/2014			20141209	12:02:00	20141209	12:02:00	4109021-851	1	1			Vinyl chloride	75-01-4	107	107	PCT			MS	TRG	LSA	145	50	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-16013-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/16/2014 08:14	12/16/2014			20141216	08:14:00	20141216	08:14:00	4-16013-851	1	1			1,2-Dichloroethane	107-06-2	107	107	PCT			MS	TRG	LSA	140	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW10-1214	NONE	VOA	8260B	VOA	ELAT	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			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW10P-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/04/2014 14:45	12/05/2014			20141215	23:41:00	20141215	23:41:00	1412066-03	1	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW14-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/02/2014 14:25	12/05/2014			20141215	11:38:00	20141215	11:38:00	1412066-13	1	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW07-1S-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/04/2014 10:25	12/05/2014			20141216	23:12:00	20141216	23:12:00	1412066-09	1	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW05-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/04/2014 10:25	12/05/2014			20141215	12:36:00	20141215	12:36:00	1412066-15	2	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW06-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/03/2014 13:10	12/05/2014			20141215	13:33:00	20141215	13:33:00	1412066-17	1	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW02-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/04/2014 10:25	12/05/2014			20141216	23:41:00	20141216	23:41:00	1412066-08	1	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW59-1214	NONE	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/03/2014 15:40	12/05/2014			20141215	12:36:00	20141215	12:36:00	1412066-10	10	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8502-TB120214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/04/2014 08:30	12/05/2014			20141215	10:11:00	20141215	10:11:00	1412066-04	1	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8502-CB01-120314	NONE	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	FA20402-1	1	1			13C2-PFHxA	13C2-PFHxA	107	107	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	SP1200602	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	BLK	REG	W	UNK	12/04/2014 10:25	12/05/2014			20141208	10:00:00	20141209	10:54:00	SP54151-MB	1	1			13C2-PFHxA	13C2-PFHxA	107	107	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW08-1214	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:25	12/05/2014			20141211	10:00:00	20141216	11:50:00	FA20472-6	5	2			13C2-PFHxA	13C2-PFHxA	107	107	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	SP1207584	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	MB	REG	W	UNK	12/11/2014 10:00	12/05/2014			20141211	10:00:00	20141215	17:53:00	SP54204-MB	1	1			13C2-PFDA	13C2-PFDA	107	107	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW07-1S-1214-MS01	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	MSD	W	4	12/05/2014 12:30	12/06/2014			20141217	19:05:00	20141217	19:05:00	N8520-MW07-1S-1214-MS01	1	1			Dibromofluoromethane	1868-53-7	107	107	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8504-EB01-120514	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/05/2014 16:15	12/06/2014			20141216	18:38:00	20141216	18:38:00	1412065-11	1	1			Dibromofluoromethane	1868-53-7	108	108	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-15025-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BLK	W	4	12/15/2014 09:42	12/15/2014			20141215	09:42:00	20141215	09:42:00	4-15015-BLK1	1	1			Dibromofluoromethane	1868-53-7	108	108	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N-15015-851	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	BS	W	4	12/15/2014 07:47	12/15/2014			20141215	07:47:00	20141215	07:47:00	4-15015-851	1	1			Trichloroethene	79-01-6	108	108	PCT			MS	TRG	LSA	125	70	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW13-1214	NONE	VOA	8260B	VOA	ELAT	EMPIRICAL LABS				WET	SW5030B	000	REG	W	4	12/04/2014 12:25	12/05/2014			20141216	09:32:00	20141216	09:32:00	1412066-09	5	1			Dibromofluoromethane	1868-53-7	108	108	PCT_REC			MS	SURR	LSA	115	85	20080107																		
N62470110B012	WE79		NORFOLK_NB	N8520-MW508-1214	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:25	12/05/2014			20141211	10:00:00	20141216	10:39:00	FA20472-11	1	1			13C2-PFHxA	13C2-PFHxA	108	108	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	SP54151-MS	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	MS	REG	W	UNK	12/08/2014 10:00	12/04/2014			20141208	10:00:00	20141209	15:41:00	SP54151-MS	1	1			13C2-PFHxA	13C2-PFHxA	108	108	PCT			PR	SURR	SLSA	130	70	20131112																		
N62470110B012	WE79		NORFOLK_NB	N8520-A1-MW08A-R15	NONE	SVOA	537_MOD	ORG	ACCUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	REG	W	UNK	12/04/2014 10:25	12/05/2014

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CKSM_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	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	CKM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N62470108012	WE79		NORFOLK_NB	NB2814-B01	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/08/2014 11:45	12/08/2014			20141208	11:45:00	20141209	11:36:00	4128014-B01	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	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-MW97-20-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	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	14120273	4L36519		
N62470108012	WE79		NORFOLK_NB	NB520-MW102-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	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	73.1	73.1	PCT_REC		MS	SURR	LSA	110	50	20080107						4.1	0.0500	0.100	0.200	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW52-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	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	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW58-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:55	12/05/2014			20141212	10:15:00	20141229	21:20:00	1412073-06	1	1			2-Fluorobiphenyl	321-60-8	71.4	71.4	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0498	0.0980	0.196	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-A1-MW64-R15-MSD1	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MSD	W	4	12/03/2014 14:20	12/04/2014			20141208	11:45:00	20141209	19:49:00	NB501-A1-MW64-R15-MS01	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	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB501-A-MW12P-R15	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/03/2014 15:10	12/04/2014			20141208	11:45:00	20141209	17:40:00	1412045-01	1	1			2-Fluorobiphenyl	321-60-8	71.7	71.7	PCT_REC		MS	SURR	LSA	110	50	20080107						4.1	0.0498	0.0980	0.196	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB501-A-MW32-R15	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/02/2014 15:05	12/04/2014			20141208	11:45:00	20141209	17:14:00	1412045-05	1	1			2-Fluorobiphenyl	321-60-8	72.1	72.1	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0472	0.0943	0.189	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-EB120414	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	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	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB501-EB01-120314	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	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	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-MW31-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/05/2014 13:10	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	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-A1-MW64-R15-MS	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MS	W	4	12/03/2014 15:45	12/04/2014			20141208	11:45:00	20141209	19:23:00	NB501-A1-MW64-R15-MS01	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	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-MW58-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MS	W	4	12/04/2014 10:55	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	0.0498	0.0980	0.196	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-EB120214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/02/2014 14:45	12/04/2014			20141209	16:30:00	20141226	19:56:00	1412073-03	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	14120273	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW97-15-1214-MS2	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MS	W	4	12/04/2014 10:30	12/05/2014			20141212	10:15:00	20141230	01:57:00	NB520-MW97-15-1214-MS2	1	1			2-Fluorobiphenyl	321-60-8	75.0	75.0	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0500	0.100	0.200	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-NW103P-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:55	12/05/2014			20141210	15:00:00	20141226	15:55:00	1412066-05	1	1			2-Fluorobiphenyl	321-60-8	75.7	75.7	PCT_REC		MS	SURR	LSA	110	50	20080107						4.1	0.0498	0.0980	0.196	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-NW103-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:55	12/05/2014			20141210	15:00:00	20141226	16:39:00	1412066-04	1	1			2-Fluorobiphenyl	321-60-8	75.8	75.8	PCT_REC		MS	SURR	LSA	110	50	20080107						4.1	0.0498	0.0980	0.196	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW55P-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	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	0.0498	0.0980	0.196	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NL1102-B01	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/12/2014 10:15	12/13/2014			20141229	16:37:00	20141230	06:16:00	4L1102-B01	1	1			2-Fluorobiphenyl	321-60-8	75.8	75.8	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0500	0.100	0.200	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-SW01-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141229	22:11:00	1412073-09	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	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-MW97-15-1214-MSD2	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MSD	W	4	12/04/2014 10:30	12/05/2014			20141212	10:15:00	20141230	02:22:00	NB520-MW97-15-1214-MSD2	1	1			2-Fluorobiphenyl	321-60-8	76.1	76.1	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-MW51-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	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	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW103P-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:55	12/05/2014			20141210	15:00:00	20141226	15:37:00	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	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW102-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 09:55	12/05/2014			20141210	15:00:00	20141226	12:10:00	1412066-01	1	1			Terphenyl-d14	1718-51-0	76.8	76.8	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0500	0.100	0.200	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB501-A-MW36B-R15	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:55	12/05/2014			20141208	11:45:00	20141209	15:57:00	1412045-04	1	1			Terphenyl-d14	1718-51-0	77.1	77.1	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-A2-MW29-R15	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/02/2014 11:50	12/04/2014			20141208	11:45:00	20141209	16:49:00	1412045-04	1	1			Terphenyl-d14	1718-51-0	77.8	77.8	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0498	0.0980	0.196	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NL0603A-B12	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/12/2014 16:50:00	12/13/2014			20141229	16:37:00	20141230	06:44:00	4L0603-B12	1	1			2-Fluorobiphenyl	321-60-8	77.9	77.9	PCT_REC		MS	SURR	LSA	110	50	20080107						4.1	0.0500	0.100	0.200	14120273	4L34616		
N62470108012	WE79		NORFOLK_NB	DP5425B-B1	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	BS	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	18:31:00	DP5425A-B1	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	78	78	PCT		PR	TRG	MSA	130	70	20131112						4.2	0.008	0.016	0.02	14121221	DP5425A		
N62470108012	WE79		NORFOLK_NB	NB501-A1-MW28B-R15	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/02/2014 15:05	12/04/2014			20141208	11:45:00	20141209	19:06:00	1412045-02	1	1			Terphenyl-d14	1718-51-0	78.0	78.0	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-MW55-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/05/2014 10:20	12/06/2014			20141212	10:15:00	20141229	17:22:00	1412066-14	1	1			Terphenyl-d14	1718-51-0	78.0	78.0	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW97-20-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:30	12/05/2014			20141210	15:00:00	20141226	16:30:00	1412066-16	1	1			2-Fluorobiphenyl	321-60-8	78.1	78.1	PCT_REC		MS	SURR	LSA	110	50	20080107						4.1	0.0498	0.0980	0.196	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW103P-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 14:45	12/05/2014			20141210	15:00:00	20141226	13:55:00	1412066-05	1	1			Terphenyl-d14	1718-51-0	78.2	78.2	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0498	0.0980	0.196	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB520-MW105-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 12:50	12/05/2014			20141210	15:00:00	20141226	16:31:00	1412066-11	1	1			Terphenyl-d14	1718-51-0	78.2	78.2	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120066	4L36402		
N62470108012	WE79		NORFOLK_NB	NB501-A1-MW64-R15-MS1	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MS	W	4	12/03/2014 10:30	12/04/2014			20141208	11:45:00	20141209	19:23:00	NB501-A1-MW64-R15-MS1	1	1			Terphenyl-d14	1718-51-0	78.7	78.7	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0926	0.185	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB501-A1-MW64-R15	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		N	METHOD	000	MS	W	UNK	12/03/2014 10:30	12/04/2014			20141208	11:45:00	20141209	19:23:00	NB501-A1-MW64-R15-MS1	1	1			Terphenyl-d14	1718-51-0	78.7	78.7	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0926	0.185	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	DP5425-B1	NONS	SVOA	537_MOD	ORG	ACUT_O	ACCUTEST, ORLANDO, FL		N	METHOD	000	MS	W	UNK	12/16/2014 10:00				20141216	10:00:00	20141218	19:16:00	DP5425A-B1	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	79	79	PCT		PR	TRG	MSA	130	70	20131112						4.2	0.008	0.016	0.02	14121221	DP5425A		
N62470108012	WE79		NORFOLK_NB	NB520-MW55-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:55	12/05/2014			20141210	15:00:00	20141230	03:13:00	1412073-14	1	1			Terphenyl-d14	1718-51-0	79.1	79.1	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120273	4L36519		
N62470108012	WE79		NORFOLK_NB	NL2603-B12	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	BS	W	4	12/12/2014 16:50:00	12/13/2014			20141229	16:37:00	20141230	06:44:00	4L0603-B12	1	1			Terphenyl-d14	1718-51-0	79.3	79.3	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0500	0.100	0.200	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-MW100-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 09:55	12/05/2014			20141210	15:00:00	20141225	20:54:00	1412073-05	1	1			Terphenyl-d14	1718-51-0	79.3	79.3	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB501-A1-MW64-R15-MSD1	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MSD	W	UNK	12/03/2014 10:30	12/04/2014			20141208	11:45:00	20141209	20:06:00	NB501-A1-MW64-R15-MSD1	1	1			Terphenyl-d14	1718-51-0	79.4	79.4	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0926	0.185	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-SW01-1214-MSD1	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MSD	W	UNK	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141230	00:40:00	1412073-10	1	1			Terphenyl-d14	1718-51-0	79.6	79.6	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120273	4L36519		
N62470108012	WE79		NORFOLK_NB	NB520-A2-MW29-R15	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/02/2014 11:50	12/04/2014			20141208	11:45:00	20141209	16:49:00	1412045-04	1	1			Terphenyl-d14	1718-51-0	79.7	79.7	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0498	0.0980	0.196	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NL2601-B12	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/12/2014 16:50:00	12/13/2014			20141229	16:37:00	20141230	06:44:00	4L0603-B12	1	1			Terphenyl-d14	1718-51-0	79.7	79.7	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0500	0.100	0.200	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-MW100-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 09:55	12/05/2014			20141210	15:00:00	20141225	23:12:00	1412066-01	1	1			Toluene-d8	2037-26-5	79.8	79.8	PCT_REC		MS	SURR	LSA	120	85	20080107						4.1	0.250	0.500	30.0	14120066	4L35011		
N62470108012	WE79		NORFOLK_NB	NB520-MW31-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/05/2014 13:10	12/06/2014			20141212	10:15:00	20141230	00:40:00	1412073-10	1	1			Terphenyl-d14	1718-51-0	79.8	79.8	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120273	4L36519		
N62470108012	WE79		NORFOLK_NB	NB520-SW01-1214-MSD1	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MSD	W	UNK	12/04/2014 10:30	12/05/2014			20141210	15:00:00	20141226	16:19:00	NB520-SW01-1214-MSD1	1	1			1,2-Dichloroethane-d4	17060-07-0	79.8	79.8	PCT_REC		MS	SURR	LSA	120	70	20080107						4.1	0.250	0.500	30.0	14120066	4L35011		
N62470108012	WE79		NORFOLK_NB	NL1603-B01	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	BS	W	4	12/08/2014 10:00	12/09/2014			20141208	11:45:00	20141209	15:43:00	1412045-03	1	1			Toluene-d8	2037-26-5	79.9	79.9	PCT_REC		MS	SURR	LSA	120	85	20080107						4.1	0.250	0.500	30.0	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-A-MW12-R15	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/02/2014 15:05	12/04/2014			20141209	16:30:00	20141209	18:26:00	1412045-05	1	1			1,2-Dichloroethane-d4	17060-07-0	79.9	79.9	PCT_REC		MS	SURR	LSA	120	70	20080107						4.1	0.250	0.500	30.0	14120045	4L34611		
N62470108012	WE79		NORFOLK_NB	NB520-MW59-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:25	12/05/2014			20141210	15:00:00	20141226	12:36:00	1412066-10	1	1			1,2-Dichloroethane-d4	17060-07-0	79.9	79.9	PCT_REC		MS	SURR	LSA	120	70	20080107						4.1	0.250	0.500	30.0	14120066	4L35010		
N62470108012	WE79		NORFOLK_NB	NB520-MW56-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/03/2014 14:05	12/05/2014			20141215	13:33:00	20141226	13:33:00	1412066-17	2	1			1,2-Dichloroethane-d4	17060-07-0	79.9	79.9	PCT_REC		MS	SURR	LSA	120	70	20080107						4.1	0.250	0.500	30.0	14120066	4L35010		
N62470108012	WE79		NORFOLK_NB	NL1603-B01	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/08/2014 10:00	12/09/2014			20141208	11:45:00	20141209	15:43:00	1412045-03	1	1			Toluene-d8	2037-26-5	80.0	80.0	PCT_REC		MS	SURR	LSA	120	85	20080107						4.1	0.250	0.500	30.0	14120945	4L34407		
N62470108012	WE79		NORFOLK_NB	NB520-MW97-20-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/05/2014 11:10	12/06/2014			20141212	10:15:00	20141230	01:05:00	1412073-11	1	1			Toluene-d8	2037-26-5	80.1	80.1	PCT_REC		MS	SURR	LSA	120	85	20080107						4.1	0.250	0.500	30.0	14120273	4L36519		
N62470108012	WE79		NORFOLK_NB	NB520-MW97-15-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/05/2014 11:10	12/06/2014			20141212	10:15:00	20141229	21:28:00	1412073-09	1	1			Terphenyl-d14	1718-51-0	80.6	80.6	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0481	0.0962	0.192	14120273	4L36507		
N62470108012	WE79		NORFOLK_NB	NB520-SW01-1214-MS1	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	MS	W	4	12/04/2014 10:30	12/05/2014			20141210	15:00:00	20141226	11:44:00	4L0927-B01	1	1			1,2-Dichloroethane-d4	17060-07-0	80.6	80.6	PCT_REC		MS	SURR	LSA	120	70	20080107						4.1	0.250	0.500	30.0	14120066	4L35010		
N62470108012	WE79		NORFOLK_NB	NB520-MW103-1214	NONS	SVOA	8270D	SVOA	ELAT	EMPIRICAL LABS		WET	SW5510C	000	RSG	W	4	12/04/2014 10:55	12/05/2014			20141210	15:00:00	20141226	15:37:00	1412066-02	1	1			Terphenyl-d14	1718-51-0	80.7	80.7	PCT_REC		MS	SURR	LSA	135	50	20080107						4.1	0.0476

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	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	CSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N62470110B012	WE79		NORFOLK_NB	NB920-MW52-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 10:30	12/05/2014			20141216	10:03:00	20141216	10:03:00	1412066-02	1	1			1,2-Dichloroethane-d4	17060-07-0	96.1	96.1	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB920-MW51-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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			1,2-Dichloroethane-d4	17060-07-0	96.1	96.1	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412073	ALJ5207	
N62470110B012	WE79		NORFOLK_NB	NB921-A1-MW6A-R15-MS02	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	MSD	W	4	12/01/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	NB921-A1-MW6A-R15-MS02	1	1			Dibromofluoromethane	1868-53-7	96.5	96.4	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB921-TB01-12014	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	14:19:00	20141209	14:19:00	1412045-03	1	1			Dibromofluoromethane	1868-53-7	96.5	96.4	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB920-MW54-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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-d4	17060-07-0	96.4	96.4	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB920-SW01-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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			1,2-Dichloroethane-d4	17060-07-0	96.4	96.4	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412073	ALJ5207	
N62470110B012	WE79		NORFOLK_NB	NB920-A-MW12P-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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			Dibromofluoromethane	1868-53-7	96.5	96.5	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB921-A-MW12-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:05	12/04/2014			20141209	18:36:00	20141209	18:36:00	1412045-05	2	1			Dibromofluoromethane	1868-53-7	96.5	96.5	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB920-MW53-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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			Bromofluorobenzene	460-00-4	96.7	96.7	PCT_REC			MS	SURR		LSA	120	75	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB920-EB120214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:45	12/04/2014			20141209	10:38:00	20141209	10:38:00	1412073-01	1	1			Bromofluorobenzene	460-00-4	96.7	96.7	PCT_REC			MS	SURR		LSA	120	75	20080107		4.1	0.250	0.500	10.0	1412073	ALJ5006	
N62470110B012	WE79		NORFOLK_NB	NB920-A-MW12-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB-1015-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 22:20	12/15/2014			20141215	07:47:00	20141215	07:47:00	4131015-B15	1	1			Bromofluorobenzene	460-00-4	97.2	97.2	PCT_REC			MS	SURR		LSA	120	80	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NL1526-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4131526-B51	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	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB920-MW56-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	04:01:00	20141216	04:01:00	1412066-09	10	1			1,2-Dichloroethane-d4	17060-07-0	99.4	99.4	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	50.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NB921-A-MW6A-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	20:16:00	20141209	20:16:00	1412045-09	2	1			Bromofluorobenzene	460-00-4	96.9	96.9	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB-1015-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 22:20	12/15/2014			20141215	07:47:00	20141215	07:47:00	4131015-B15	1	1			Bromofluorobenzene	460-00-4	97.2	97.2	PCT_REC			MS	SURR		LSA	120	80	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NL1526-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4131526-B51	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	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB920-MW56-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	04:01:00	20141216	04:01:00	1412066-09	10	1			1,2-Dichloroethane-d4	17060-07-0	99.4	99.4	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	50.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NB921-A-MW6A-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	20:16:00	20141209	20:16:00	1412045-09	2	1			Bromofluorobenzene	460-00-4	98.7	98.7	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB921-TB01-12014	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	14:19:00	20141209	14:19:00	1412045-03	1	1			Dibromofluoromethane	1868-53-7	96.9	96.9	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB920-MW54-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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-d4	17060-07-0	96.4	96.4	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB920-MW53-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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			Bromofluorobenzene	460-00-4	96.7	96.7	PCT_REC			MS	SURR		LSA	120	75	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB920-EB120214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:45	12/04/2014			20141209	10:38:00	20141209	10:38:00	1412073-01	1	1			Bromofluorobenzene	460-00-4	96.8	96.8	PCT_REC			MS	SURR		LSA	120	75	20080107		4.1	0.250	0.500	10.0	1412073	ALJ5006	
N62470110B012	WE79		NORFOLK_NB	NB920-MW57-15-1214-MS1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 12:30	12/06/2014			20141217	18:37:00	20141217	18:37:00	NB920-MW57-15-1214-MS1	1	1			1,2-Dichloroethane-d4	17060-07-0	99.5	99.5	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412073	ALJ5207	
N62470110B012	WE79		NORFOLK_NB	NB921-TB01-12014	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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			Bromofluorobenzene	460-00-4	96.6	96.6	PCT_REC			MS	SURR		LSA	120	75	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB921-TB01-12014	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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			Toluene-d8	2037-26-5	99.6	99.6	PCT_REC			MS	SURR		LSA	120	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NL1526-BLK1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 22:15	12/15/2014			20141215	22:15:00	20141215	22:15:00	4131526-BLK3	1	1			1,2-Dichloroethane-d4	17060-07-0	99.6	99.6	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NL1526-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4131526-B51	1	1			Vinyl chloride	75-01-4	99.6	99.6	PCT			MS	TRG		LSA	145	50	20080107		4.1	0.250	0.500	1.00	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NL1705-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/17/2014 08:04	12/17/2014			20141217	08:04:00	20141217	08:04:00	4131703-B51	1	1			1,1-Dichloroethene	75-35-4	99.6	99.6	PCT			MS	TRG		LSA	130	70	20080107		4.1	0.250	0.500	1.00	1412073	ALJ5207	
N62470110B012	WE79		NORFOLK_NB	NB920-MW57-15-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	MS	W	4	12/05/2014 12:30	12/06/2014			20141217	18:37:00	20141217	18:37:00	NB920-MW57-15-1214-MS1	1	1			1,2-Dichloroethane-d4	17060-07-0	99.5	99.5	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412073	ALJ5207	
N62470110B012	WE79		NORFOLK_NB	NB921-A1-MW6A-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	22:06:00	20141209	22:06:00	NB921-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	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB921-A-MW28B-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 07:40	12/04/2014			20141209	19:21:00	20141209	19:21:00	1412045-07	1	1			Bromofluorobenzene	460-00-4	98.0	98.0	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NL1505-BLK1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 09:42	12/15/2014			20141215	09:42:00	20141215	09:42:00	4131015-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	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NL1505-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4131505-B51	1	1			cis-1,2-Dichloroethene	156-59-2	98.4	98.4	PCT			MS	TRG		LSA	120	80	20080107		4.1	0.250	0.500	1.00	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NL1705-BLK1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/17/2014 09:54	12/17/2014			20141217	09:54:00	20141217	09:54:00	4131703-BLK1	1	1			Bromofluorobenzene	460-00-4	98.0	98.0	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412073	ALJ5207	
N62470110B012	WE79		NORFOLK_NB	NB920-MW53-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/05/2014 13:10	12/06/2014			20141216	15:53:00	20141216	15:53:00	1412066-11	1	1			Bromofluorobenzene	460-00-4	98.0	98.0	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB921-EB01-120314	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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	10.0	1412045	ALJ4608	
N62470110B012	WE79		NORFOLK_NB	NB920-EB120214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:45	12/04/2014			20141209	08:14:00	20141209	08:14:00	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	10.0	1412073	ALJ5006	
N62470110B012	WE79		NORFOLK_NB	NB920-EB120214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:45	12/04/2014			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	10.0	1412073	ALJ5006	
N62470110B012	WE79		NORFOLK_NB	NB921-A-MW6A-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	12:03:00	20141209	12:03:00	1412045-01	1	1			1,2-Dichloroethane	107-06-2	98.2	98.2	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB920-MW54-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/04/2014 16:35	12/05/2014			20141216	20:15:00	20141216	20:15:00	1412066-13	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	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NB921-A-MW6A-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	22:33:00	20141209	22:33:00	1412045-10	1	1			Dibromofluoromethane	1868-53-7	98.2	98.2	PCT_REC			MS	SURR		LSA	115	85	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB920-A-MW12P-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB921-A-MW6A-R15-MSD1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	MSD	W	4	12/01/2014 14:20	12/04/2014			20141209	22:49:00	20141209	22:49:00	NB921-A1-MW6A-R15-MSD1	1	1			1,2-Dichloroethane-d4	17060-07-0	98.3	98.3	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB920-MW59-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 10:25	12/05/2014			20141216	12:36:00	20141216	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	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NL1505-B1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 11:50	12/15/2014			20141215	11:38:00	20141215	11:38:00	1412066-13	1	1			Bromofluorobenzene	460-00-4	99.9	99.9	PCT_REC			MS	SURR		LSA	120	75	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NL1505-B1A1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4131505-B51	1	1			1,2-Dichloroethane-d4	17060-07-0	99.9	99.9	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB921-A1-MW28-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	20:44:00	20141209	20:44:00	1412045-10	1	1			Bromofluorobenzene	460-00-4	99.8	99.8	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB920-MW59-1214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/03/2014 10:25	12/05/2014			20141216	12:36:00	20141216	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	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NL1505-B1A1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BLK	W	4	12/15/2014 11:50	12/15/2014			20141215	11:38:00	20141215	11:38:00	1412066-13	1	1			Bromofluorobenzene	460-00-4	99.9	99.9	PCT_REC			MS	SURR		LSA	120	75	20080107		4.1	0.250	0.500	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NL1505-B1	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/15/2014 09:42	12/15/2014			20141215	09:42:00	20141215	09:42:00	4131015-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	10.0	1412066	ALJ5010	
N62470110B012	WE79		NORFOLK_NB	NL1526-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4131526-B51	1	1			trans-1,2-Dichloroethene	156-60-5	98.4	98.4	PCT			MS	TRG		LSA	120	80	20080107		4.1	0.250	0.500	1.00	1412066	ALJ5011	
N62470110B012	WE79		NORFOLK_NB	NB920-EB120214	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/02/2014 15:45	12/04/2014			20141209	10:38:00	20141209	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	10.0	1412073	ALJ5006	
N62470110B012	WE79		NORFOLK_NB	NB921-A-MW28-R15	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	REG	W	4	12/01/2014 14:20	12/04/2014			20141209	17:04:00	20141209	17:04:00	1412045-01	1	1			1,2-Dichloroethane-d4	17060-07-0	98.8	98.8	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4611	
N62470110B012	WE79		NORFOLK_NB	NB921-EB01-120314	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL 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	98.8	98.8	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412045	ALJ4608	
N62470110B012	WE79		NORFOLK_NB	NL1505-B01	NONE	VOA	8260B	VOA	ELABT	ENVIRONICAL LABS		WET	SW5030B	000	BS	W	4	12/15/2014 20:19	12/15/2014			20141215	20:19:00	20141215	20:19:00	4131505-B51	1	1			1,2-Dichloroethane-d4	17060-07-0	98.8	98.8	PCT_REC			MS	SURR		LSA	120	70	20080107		4.1	0.250	0.500	10.0	1412066

MEMORANDUM 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 1412120.

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-MW103-1214	Water
NBS20-MW55P-1214	Water
NBS20-MW57-1214	Water
NBS20-MW58-1214	Water
NBS20-MW60-1214	Water
NBS20-MW103P-1214	Water
NBS20-MW105-1214	Water
NBS20-MW13-1214	Water
NBS20-MW14-1214	Water
NBS20-MW08-1214	Water
NBS20-MW52-1214	Water
NBS20-MW54-1214	Water
NBS20-MW55-1214	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 12/4/14. Samples were received at the laboratory on 12/5/14. All sample preparation and analyses were performed within holding time requirements.

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-MW54	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127446.85	3510733.63	Perfluoroalkyl Compounds	NBS20-MW54-1214	WG	Ground water	04-Dec-14
NBS20-MW60	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127130.28	3511410.01	Perfluoroalkyl Compounds	NBS20-MW60-1214	WG	Ground water	03-Dec-14
NBS20-MW-8	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126543	3510473	Perfluoroalkyl Compounds	NBS20-MW08-1214	WG	Ground water	04-Dec-14
NBS20-MW-13	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126553	3510993.5	Perfluoroalkyl Compounds	NBS20-MW13-1214	WG	Ground water	04-Dec-14
NBS20-MW57	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127410.7	3512072.83	Perfluoroalkyl Compounds	NBS20-MW57-1214	WG	Ground water	03-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103-1214	WG	Ground water	04-Dec-14
NBS20-MW-105	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126700	3510500	Perfluoroalkyl Compounds	NBS20-MW105-1214	WG	Ground water	03-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55P-1214	WG	Ground water	03-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55-1214	WG	Ground water	03-Dec-14
NBS20-MW52	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126841.22	3511399.83	Perfluoroalkyl Compounds	NBS20-MW52-1214	WG	Ground water	04-Dec-14
NBS20-MW60	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127130.28	3511410.01	Perfluoroalkyl Compounds	NBS20-MW60-1214	WG	Ground water	03-Dec-14
NBS20-MW58	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127645.13	3511050.32	Perfluoroalkyl Compounds	NBS20-MW58-1214	WG	Ground water	04-Dec-14
NBS20-MW60	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127130.28	3511410.01	Perfluoroalkyl Compounds	NBS20-MW60-1214	WG	Ground water	03-Dec-14
NBS20-MW58	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127645.13	3511050.32	Perfluoroalkyl Compounds	NBS20-MW58-1214	WG	Ground water	04-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55P-1214	WG	Ground water	03-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55P-1214	WG	Ground water	03-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103-1214	WG	Ground water	04-Dec-14
NBS20-MW-14	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126480	3511002.25	Perfluoroalkyl Compounds	NBS20-MW14-1214	WG	Ground water	02-Dec-14
NBS20-MW-14	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126480	3511002.25	Perfluoroalkyl Compounds	NBS20-MW14-1214	WG	Ground water	02-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103P-1214	WG	Ground water	04-Dec-14
NBS20-MW52	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126841.22	3511399.83	Perfluoroalkyl Compounds	NBS20-MW52-1214	WG	Ground water	04-Dec-14
NBS20-MW-14	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126480	3511002.25	Perfluoroalkyl Compounds	NBS20-MW14-1214	WG	Ground water	02-Dec-14
NBS20-MW52	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126841.22	3511399.83	Perfluoroalkyl Compounds	NBS20-MW52-1214	WG	Ground water	04-Dec-14
NBS20-MW-8	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126543	3510473	Perfluoroalkyl Compounds	NBS20-MW08-1214	WG	Ground water	04-Dec-14
NBS20-MW-13	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126553	3510993.5	Perfluoroalkyl Compounds	NBS20-MW13-1214	WG	Ground water	04-Dec-14
NBS20-MW57	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127410.7	3512072.83	Perfluoroalkyl Compounds	NBS20-MW57-1214	WG	Ground water	03-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103P-1214	WG	Ground water	04-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55P-1214	WG	Ground water	03-Dec-14
NBS20-MW-13	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126553	3510993.5	Perfluoroalkyl Compounds	NBS20-MW13-1214	WG	Ground water	04-Dec-14
NBS20-MW60	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127130.28	3511410.01	Perfluoroalkyl Compounds	NBS20-MW60-1214	WG	Ground water	03-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103-1214	WG	Ground water	04-Dec-14
NBS20-MW-13	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126553	3510993.5	Perfluoroalkyl Compounds	NBS20-MW13-1214	WG	Ground water	04-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103-1214	WG	Ground water	04-Dec-14
NBS20-MW-13	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126553	3510993.5	Perfluoroalkyl Compounds	NBS20-MW13-1214	WG	Ground water	04-Dec-14
NBS20-MW-8	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126543	3510473	Perfluoroalkyl Compounds	NBS20-MW08-1214	WG	Ground water	04-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55P-1214	WG	Ground water	03-Dec-14
NBS20-MW57	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127410.7	3512072.83	Perfluoroalkyl Compounds	NBS20-MW57-1214	WG	Ground water	03-Dec-14
NBS20-MW-105	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126700	3510500	Perfluoroalkyl Compounds	NBS20-MW105-1214	WG	Ground water	03-Dec-14
NBS20-MW-105	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126700	3510500	Perfluoroalkyl Compounds	NBS20-MW105-1214	WG	Ground water	03-Dec-14
NBS20-MW58	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127645.13	3511050.32	Perfluoroalkyl Compounds	NBS20-MW58-1214	WG	Ground water	04-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103-1214	WG	Ground water	04-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55-1214	WG	Ground water	03-Dec-14
NBS20-MW58	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127645.13	3511050.32	Perfluoroalkyl Compounds	NBS20-MW58-1214	WG	Ground water	04-Dec-14
NBS20-MW-14	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126480	3511002.25	Perfluoroalkyl Compounds	NBS20-MW14-1214	WG	Ground water	02-Dec-14
NBS20-MW60	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127130.28	3511410.01	Perfluoroalkyl Compounds	NBS20-MW60-1214	WG	Ground water	03-Dec-14
NBS20-MW-13	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126553	3510993.5	Perfluoroalkyl Compounds	NBS20-MW13-1214	WG	Ground water	04-Dec-14
NBS20-MW58	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127645.13	3511050.32	Perfluoroalkyl Compounds	NBS20-MW58-1214	WG	Ground water	04-Dec-14
NBS20-MW-105	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126700	3510500	Perfluoroalkyl Compounds	NBS20-MW105-1214	WG	Ground water	03-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55-1214	WG	Ground water	03-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103P-1214	WG	Ground water	04-Dec-14
NBS20-MW-105	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126700	3510500	Perfluoroalkyl Compounds	NBS20-MW105-1214	WG	Ground water	03-Dec-14
NBS20-MW-8	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126543	3510473	Perfluoroalkyl Compounds	NBS20-MW08-1214	WG	Ground water	04-Dec-14
NBS20-MW57	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127410.7	3512072.83	Perfluoroalkyl Compounds	NBS20-MW57-1214	WG	Ground water	03-Dec-14
NBS20-MW57	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127410.7	3512072.83	Perfluoroalkyl Compounds	NBS20-MW57-1214	WG	Ground water	03-Dec-14
NBS20-MW54	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127446.85	3510733.63	Perfluoroalkyl Compounds	NBS20-MW54-1214	WG	Ground water	04-Dec-14
NBS20-MW52	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126841.22	3511399.83	Perfluoroalkyl Compounds	NBS20-MW52-1214	WG	Ground water	04-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55-1214	WG	Ground water	03-Dec-14
NBS20-MW58	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127645.13	3511050.32	Perfluoroalkyl Compounds	NBS20-MW58-1214	WG	Ground water	04-Dec-14
NBS20-MW52	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126841.22	3511399.83	Perfluoroalkyl Compounds	NBS20-MW52-1214	WG	Ground water	04-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55-1214	WG	Ground water	03-Dec-14
NBS20-MW-14	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126480	3511002.25	Perfluoroalkyl Compounds	NBS20-MW14-1214	WG	Ground water	02-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103P-1214	WG	Ground water	04-Dec-14
NBS20-MW-8	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126543	3510473	Perfluoroalkyl Compounds	NBS20-MW08-1214	WG	Ground water	04-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-MW60	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127130.28	3511410.01	Perfluoroalkyl Compounds	NBS20-MW60-1214	WG	Ground water	03-Dec-14
NBS20-MW54	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127446.85	3510733.63	Perfluoroalkyl Compounds	NBS20-MW54-1214	WG	Ground water	04-Dec-14
NBS20-MW54	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127446.85	3510733.63	Perfluoroalkyl Compounds	NBS20-MW54-1214	WG	Ground water	04-Dec-14
NBS20-MW-14	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126480	3511002.25	Perfluoroalkyl Compounds	NBS20-MW14-1214	WG	Ground water	02-Dec-14
NBS20-MW57	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127410.7	3512072.83	Perfluoroalkyl Compounds	NBS20-MW57-1214	WG	Ground water	03-Dec-14
NBS20-MW-105	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126700	3510500	Perfluoroalkyl Compounds	NBS20-MW105-1214	WG	Ground water	03-Dec-14
NBS20-MW-8	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126543	3510473	Perfluoroalkyl Compounds	NBS20-MW08-1214	WG	Ground water	04-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103P-1214	WG	Ground water	04-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103P-1214	WG	Ground water	04-Dec-14
NBS20-MW54	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127446.85	3510733.63	Perfluoroalkyl Compounds	NBS20-MW54-1214	WG	Ground water	04-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55-1214	WG	Ground water	03-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103-1214	WG	Ground water	04-Dec-14
NBS20-MW52	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126841.22	3511399.83	Perfluoroalkyl Compounds	NBS20-MW52-1214	WG	Ground water	04-Dec-14
NBS20-MW-103	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126100	3510500	Perfluoroalkyl Compounds	NBS20-MW103-1214	WG	Ground water	04-Dec-14
NBS20-MW55	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126127.78	3510483.32	Perfluoroalkyl Compounds	NBS20-MW55P-1214	WG	Ground water	03-Dec-14
NBS20-MW54	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12127446.85	3510733.63	Perfluoroalkyl Compounds	NBS20-MW54-1214	WG	Ground water	04-Dec-14
NBS20-MW-13	SITE 00020	NORFOLK_NB	WLM	Monitoring well	1412120	12126553	3510993.5	Perfluoroalkyl Compounds	NBS20-MW13-1214	WG	Ground water	04-Dec-14