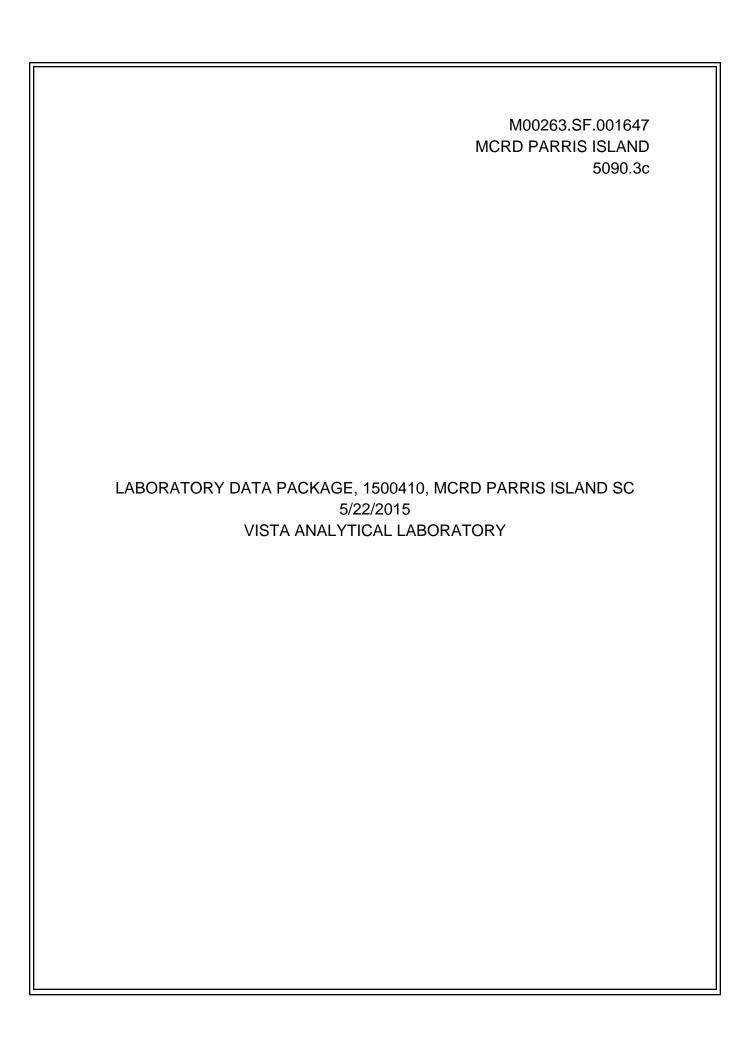


Groundwater Sample Results,
Combined Level 2 and Level 4 Laboratory Report,
Electronic Data Deliverable, Data Validation Report,
and the Sample Location Report, SDG 1500410

Marine Corps Recruit Depot Parris Island
South Carolina

August 2019





May 22, 2015

Vista Project I.D.: 1500410

Ms. Peggy Churchill Tetra Tech Inc. 11 Riverside Drive, Suite 206 Cocoa, FL 32922

Dear Ms. Churchill,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on May 06, 2015. This sample set was analyzed on a standard turn-around time, under your Project Name '112G01509'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier Laboratory Director



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 95762 ph: 916-673-1520 fx: 916-673-0106 www.vista-analytical.com

Project 1500410 Page 1 of 333

### Vista Work Order No. 1500410 Case Narrative

#### **Sample Condition on Receipt:**

Two soil samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

#### **Analytical Notes:**

#### VAL-PFAS

The solid samples were extracted and analyzed for PFOA and PFOS using VAL Method PFAS.

#### **Holding Times**

The samples were extracted and analyzed within the hold times.

#### **Quality Control**

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above the LOD. The OPR recoveries were within the method acceptance criteria.

The recoveries of all internal standards for the QC and field samples were within the acceptance criteria.

Project 1500410 Page 2 of 333

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Sample Inventory	4
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Extraction Information	14
Sample Data - VAL - PFAS	20
Continuing Calibration	51
Initial Calibration	140

# **Sample Inventory Report**

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1500410-01	PA104-SB28-0608	03-May-15 12:30	06-May-15 08:56	HDPE Bottle
1500410-02	PA113C-SB11-0103	04-May-15 11:15	06-May-15 08:56	HDPE Bottle

Vista Project: 1500410 Client Project: 112G01509

Project 1500410 Page 4 of 333

# ANALYTICAL RESULTS

Project 1500410 Page 5 of 333

Sample ID	: Method Blank							VA	L - PFAS
Matrix: Sample Size:	Solid 1.00 g	QC Batch: B5E0032 Date Extracted: 07-May-201	5 15:31		Lab Sample: Date Analyzed	B5E0032-BLK1 : 08-May-15 23:2		H C18 Analyst: 1	AC
Analyte	Conc. (ng/g)	LOD	LOQ	Qualifiers	Labeled St	andard	%R	LCL-UCL	Qualifiers
PFOS PFOA	ND ND	0.500 0.500	1.00 1.00		IS 13C2-PI IS 13C8-PI		114 104	60 - 150 60 - 150	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to the LOD.

Project 1500410 Page 6 of 333

Sample ID: OPR							VAL - PFAS
Matrix: Solid Sample Size: 1.00 g	QC Batch: Date Extracted	B5E0032 : 07-May-201	5 15:31		Lab Sample: B5E0032-BS1 Date Analyzed: 08-May-15 23:09 Colum	n: BEH C18 Analyst: AC	
Analyte Ar	nt Found (ng/g )	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
PFOS PFOA	2.11 2.02	2.00 2.00	106 101	50 - 150 70 - 130	IS 13C2-PFOA IS 13C8-PFOS	109 100	60 - 150 60 - 150

LCL-UCL - Lower control limit - upper control limit

Project 1500410 Page 7 of 333

Sample ID:	PA104-SB28-0608							VA	L - PFAS
Client Data		Sample Data			Laborat	ory Data			
Name:	Tetra Tech Inc.	Matrix:	Soil		Lab Sa	mple: 1500410-01	Date Received:	06-May-201	5 8:56
Project:	112G01509	Sample Size:	1.46 g		QC Ba	tch: B5E0032	Date Extracted:	07-May-201	5 15:31
Date Collected:	03-May-2015 12:30	% Solids:	% Solids: 77.6 Date Analyzed: 08-May-15 23:35 Column: BEH C18 Analyzed:				lyst: AC		
Location:	SB28					12-May-15 18:46	Column: BEH C18 Ana	lyst: AC	
Analyte	Conc. (ng/g)	LOD	LOQ	Qualifi	iers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFOS	0.541	0.441	0.883	J	IS	13C2-PFOA	95.3	60 - 150	
PFOA	2.04	0.441	0.883		IS	13C8-PFOS	62.1	60 - 150	

DL - Sample specifc estimated detection limit

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to the LOD.

Page 8 of 333 Project 1500410

EMPC - Estimated maximum possible concentration

Sample ID:	PA113C-SB11-0103								VA	L - PFAS
Client Data		Sample Data			Labo	ratory	Data			
Name:	Tetra Tech Inc.	Matrix:	Soil		Lab	Samp	le: 1500410-02	Date Received:	06-May-20	15 8:56
Project:	112G01509	Sample Size:	1.53 g		QC	Batch:	B5E0032	Date Extracted:	07-May-20	15 15:31
Date Collected:	04-May-2015 11:15	% Solids:	56.9		Dat	e Analy	yzed: 08-May-15 23:47 Co	olumn: BEH C18 Ana	ılyst: AC	
Location:	SB11						12-May-15 18:59 Co	olumn: BEH C18 Ana	ılyst: AC	
Analyte	Conc. (ng/g)	LOD	LOQ	Qual	lifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
PFOS	4.31	0.575	1.15			IS	13C2-PFOA	90.9	60 - 150	
PFOA	ND	0.575	1.15			IS	13C8-PFOS	67.1	60 - 150	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to the LOD.

Page 9 of 333 Project 1500410

## **DATA QUALIFIERS & ABBREVIATIONS**

This compound was also detected in the method blank.

D Dilution

E The associated compound concentration exceeded the calibration range of the instrument.

H Recovery and/or RPD was outside laboratory acceptance limits.

I Chemical Interference

J The amount detected is below the Lower Calibration Limit of the instrument.

\* See Cover Letter

Conc. Concentration

В

DL Sample-specific estimated detection limit

MDL The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested.

**EMPC** Estimated Maximum Possible Concentration

NA Not applicable

RL Reporting Limit – concentrations that correspond to low calibration point

ND Not Detected

**TEQ** Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

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# **CERTIFICATIONS**

Accrediting Authority	Certificate Number
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2014022
Michigan Department of Natural Resources	9932
Nevada Division of Environmental Protection	CA004132015-1
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
North Carolina Department of Health & Human Services	06700
Oregon Laboratory Accreditation Program	4042-003
Pennsylvania Department of Environmental Protection	011
South Carolina Department of Health	87002001
Tennessee Department of Environment & Conservation	TN02996
Texas Commission on Environmental Quality	T104704189-15-6
Virginia Department of General Services	3138
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

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**CHAIN OF CUSTODY** 

| NUMBER Nº 927853 1.00 PAGE / OF /

PROJECT NO: 112601509	FACILITY:	rd	PROJE P.Q	CT MA	NAGER	LEADER	PH 3	ONE NL	MBER 23(e-	647	0 1	ABORA	ha	NAME A	ND COL	NTACT: Stu Av	nalytical L
SAMPLERS (SIGNATURE)			S-H	Hò		IUMBER	19	73	, ( <sub>С</sub> О	1-79	88/	OH SITY, ST	ATE	itti	eld Hills	Man	95762
	apai ann an								AINER TIC (P)	TYPE or GLAS	SS (G)	/	5/	/	/	//	
STANDARD TAT RUSH TAT CONTROL	2 hr. □ 7 dav □ 1	14 dav			ib, ac			PRES USED	ERVATI	IVE	/.	3	//	//	//		
EAR	SAMPLE ID	LOCATION ID	ТОР DЕРТН (FT)	ВОТТОМ DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TIPE	OF ANALY	35						// a	OMMENTS
5B151230 PA104-	SB28-0603	5628	6	8	50	G	(	1					10000				
545 115 PA1130	-SB11-6103	SBU	l	3	SO	6	)	1									
											_						
																	7
							1819)										241
	X																
						100											
				<u> </u>			T . ==									rz /	TIME
1. RELINQUISHED BY			DATE 5/5	15		IME 700	1. RE	CEIVE	S BY	_					DAT 5/	5/15	THEOD
2. RELINQUISHED BY FE	lox		DATE!			IME \	Be	Hi	XB	lnec	lie	t			DAT	5/06/15	TIME 7858
3. RELINQUISHED BY			DATE		1	IME	3. RE	CEIVE	 \( \text{R} \)						DAI	I C	THVIE
COMMENTS  DISTRIBUTION: WHI	TE (ACCOMPANIES SAI	MPLE)			YELLO	W (FIELD	COPY				PIN	K (FILE	COPY				4/02R

Project 1500410

WHITE (ACCOMPANIES SAMPLE)

4/02R FORM NO. THNUS-001 Page 12 of 333

## SAMPLE LOG-IN CHECKLIST



1500410

Vista Project #:	1.0	OU TI	0		TAT	250						
	Date/Time		Initials:		Locati	on:	NR	- 7				
Samples Arrival:	05/06/15	085k	B	OB	Shelf/l	Rack:	NA					
	Date/Time		Initials:	Locati	on: $W$	R-2						
Logged In:	05/06/15	1343	Bo	1B	Shelf/l	A5						
Delivered By:	FedEx	UPS	On Trac	DHL		Hand elivered	Oth	ner				
Preservation:	Ice	В	lue Ice	Dr	y Ice		None					
Temp °C: O.9	(uncorrected)	Time:	0857		Therm	ometer I	n· IR-	1				
Temp °C:	(corrected)	11110.	4		11101111		D. 11\					
						YES	NO	NA				
Adequate Sample	Volume Receive	ed3				120	110	IVA				
Holding Time Acce												
Shipping Container												
Shipping Custody S		V 194 112 11				1						
Shipping Documen						1						
Airbill	Trk# 80	79 5	480 6	376	5	/						
Sample Container		P				V						
Sample Custody S	eals Intact?							V				
Chain of Custody /		entation P	resent?			V						
COC Anomaly/San	COC Anomaly/Sample Acceptance Form completed?											
If Chlorinated or Dr	inking Water Sa	ımples, Ac	ceptable Pre	eservatio	n?			V				
Na₂S₂O₃ Preservat			coc		Sample		None					
Shipping Container	_	Vista	Client	Reta		Return	Dier	2000				

Comments:

# **EXTRACTION INFORMATION**

Project 1500410 Page 14 of 333

#### **Process Sheet**

Workorder: 1500410

Prep Expiration: 05/17/2015

Client: Tetra Tech Inc.

Workorder Due: 27-May-15 00:00

TAT: 21

Method: VAL - PFAS Analyte List DOD (LOQ as mRL)

Matrix: Solid

Client Matrix: Soil

Also run: Percent Solids

Prep Batch:

Prep Data Entered: BP 5

Initial Sequence: \_

LabSampleID	Recon ClientSampleID	Date Received	Location Co	omments
1500410-01	PA104-SB28-0608	06-May-15 08:56	WR-2 A-5	
1500410-02	PA113C-SB11-0103	06 <b>-M</b> ay-15 08:56	WR-2 A-5	

WO Comments: 14-day Hold Time.

PFOA and PFOS only

Vista PM:Martha Maier

Sample Reconciled By:

A. Clarke 5,7,15

Page 1 of 1

Vial Box ID: \_\_

## Percent Moisture/ Percent Solids

D2216-90

**BATCH ID** 

B5E0033

Analyst: AC

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C+/-5°C

HRMS-2

Date/Time IN: Date/Time OUT 5/8/15 9115 811112 14:48

	В	C	: D	E	,, , , F	G	Н	K	M	N	, 0	Р
				Intial and Date:	ES 5/8/15	BR S/11/LS				<u> N</u>		
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	CI-
	1500410-01		Sample	1,29	7.22	5.89			NY	MY	L.A.	<i>U</i> A
	1500410-02		Sample	1.28	7.33	4.72	_		¥	V	$\lambda$	1/20/
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## Percent Moisture/ Percent Solids

D2216-90

**BATCH ID** 

B5E0033

Analyst: AC

Test Code: %Moist/%Solids

Analyte:

HRMS-2

Units: %

Dried at 110°C+/-5°C

Date/Time IN:

5/8/15 9:15

Date/Time OUT 5/11/15 14:48

В	C	D	· E	F	G	Н	K	M	N <sub>.</sub>	0	P
			Intial and Date:	ES 5/8/15	BR 5/11/15						
SamplD	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	CI-
1500410-01		Sample	1.2900	7.2200	5.8900	4.6000	77.57	NA	NA	NA	NA
1500410-02		Sample	1.2800	7.3300	4.7200	3.4400	56.86	NA_	NA	NA	NA
_								+			+
-											+
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				_					+		+-
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_							_		+-		+
				_							+
<del>                                     </del>				_			<u> </u>				+
	SamplD 1500410-01	SampiD Source ID	SampID Source ID SampType 1500410-01 Sample	Intial and Date:   SampID	Intial and Date:   ES 5/8/15	Intial and Date:   ES 5/8/15   BR 5/11/15     SampID   Source ID   SampI   SampIVpe   Pan   Tare Wt. (gms)   Weight (g)   Weight (g)   Weight (g)   Weight (g)   T7.57   NA   NA   NA   NA   NA   NA   NA   N	Intial and Date:   ES 5/8/15   BR 5/11/15   N	SampID   Source ID   SampType   SampType   SampID   Sample   Sam			

#### PREPARATION BENCH SHEET

Matrix: Solid

B5E0032

Chemist: A · Clarke

Method: VAL - PFAS 6 Analyte ]

Prepared using: LCMS - Sonication/SPE Extraction

Prep Date/Time: 07-May-15 15:31

					NX	NA	CSE0031	
С	VISTA Sample ID	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	Pre-Ext	Extraction	SPE	RS CHEM/WIT DATE
	1500410-02	1.53	R& 5/1/15	NIA	N 5 MIS	80 2/8/12	EN 2121/2	28 82 3/8/15

IS Name	NS Name	CRS Name	RS Name	Cycle Time	Ext SOLV: 1:1 Me04/Mecv Strata X4W 331	Check Out: AChemist/Date: AC 5115
1502703, 20,L	1501922,12ml	NA	1502201, 20pl	Start Date/Time	SPE Chem: 20 mg/LmL 0.51 WHYOH Ele SOLV: MEOIT	Check In: Chemist/Date:
					Final Volume(s) 1mL	Balance ID: HRMS-2
				VA		

#### PREPARATION BENCH SHEET

Matrix:	Solid
ITIGUE SA.	DUILU

B5E0032

Prep Date/Time: 07-May-15 15:31

Method: VAL - PFAS 6 Analyte

Prepared using: LCMS - Sonication/SPE Extraction

				AI.		Α	CSE0031	
C VISTA Sample ID	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	Pre-Ext	Ex	traction	SPE	RS CHEM/WIT DATE
☐ B5E0032-BLK1	(1.00)	W8 5115	NIA	N 5/11		5/8/15	E8 218/13	- 20 DE 3/8/15
B5E0032-BS1	V			-	<u> </u>			•
B5E0032-DUP1 1400880-07RE4	1.42							
B5E0032-DUP2	1.11							
B5E0032-DUP3	1.19							
B5E0032-DUP4 1500203-01RE4	1.15							
B5E0032-DUP	3.03							
B5E0032-MS1 1400880-07RE4	1.29							
B5E0032-MSD1 1400880-07RE4	1.35							
1400880-07RE4	1.29							
1400944-03RE1	1.22							
1400952-02RE1	1.55							
1500203-01RE4	1.10							
1500209-05RE5	2.16							
1500410-01	1.46	V	$\downarrow$		\	<u> </u>		
IS Name	NS Name	CRS Name	RS Name	e	Cycle Time	Ext SOLV: 11	cha X.AW 334 Ch	eck Out: AC 5/7/15
1502307,20pl	150192211	Ala_ NIA	[2	D2201, 20,L	Start Date/Time	SPE Chem: _0.5 Ele SOLV:	Micht/Neil Ch cota X.Au 334 Ch cmg/bml 2 N4464 Ch Mealt Ch	eck In:

IS Name	NS Name	CRS Name	RS Name	Cycle Time	Ext SOLV: 1:\ MOH/MECN	Check Out: Chemist/Date: AC 5/1/15
1502307,20pl	15C192210mL	NA	1502201, 20pl	Start Date/Time	SPE Chem: 2004/bml Ele SOLV: 0.52 N4464 MEDH	Check In: Chemist/Date:
				Stop Date/Time		Balance ID: <u>HRMS-</u> 2
				-nb		

Project 1500 (3) 30th on Neuro befor 1 ML PV. SI STOLLS

@ Pre-ext. actually performed 5/7/15. NCS/11/15

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# SAMPLE DATA – VAL - PFAS

Project 1500410 Page 20 of 333

MassLynx 4.1

Page 1 of 1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_37.qld

Last Altered: Printed:

Thursday, May 14, 2015 14:18:47 Pacific Daylight Time Thursday, May 14, 2015 14:20:36 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_37, Date: 08-May-2015, Time: 23:22:30, ID: B5E0032-BLK1 Method Blank 1, Description: Method Blank

	# Name	Trace	Response	IS Resp	RRF	Wt/Vol.	RT	Conc. %Re
1*	8 PFOA	413 > 368.7	5.69e1	2.60e4	ALCONOMISTOR OF THE POPE	1.000	4.77	0.115
2	56 Total PFOS	499 > 98.7		6.08e3		1.000		0.0443
3	31 13C2-PFOA	414.9 > 369.7	2.60e4	1.97e4	1.160	1.000	4.77	56.9 113.9
4	32 13C8-PFOS	507.1 > 98.6	6.08e3	6.23e3	0.939	1.000	5.05	52.0 104.0
5	47 13C8-PFOA	421.3 > 376	1.97e4	1.97e4	1.000	1.000	4.77	50.0 100.0
6	48 13C4-PFOS	503.2 > 98.6	6.23e3	6.23e3	1.000	1.000	5.05	50.0 100.0

5/14/15

Quantify Totals Report MassLynx 4.1

Vista Analytical Laboratory Q1

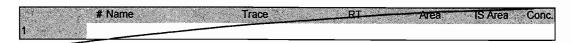
Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_37.qld

Last Altered: Thursday, May 14, 2015 14:18:47 Pacific Daylight Time Printed: Thursday, May 14, 2015 14:20:36 Pacific Daylight Time

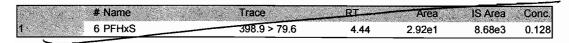
Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_37, Date: 08-May-2015, Time: 23:22:30, ID: B5E0032-BLK1 Method Blank 1, Description: Method Blank

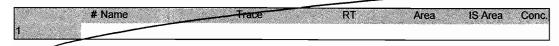
#### **Total PFBS**



#### **Total PFHxS**



#### **Total PFHpS**



#### **Total PFOS**

# Name	Trace	RT	Area	IS Area	Conc.
1 10 PFOS	499 > 98.7	5.05	5.62e0	6.08e3	0.0443

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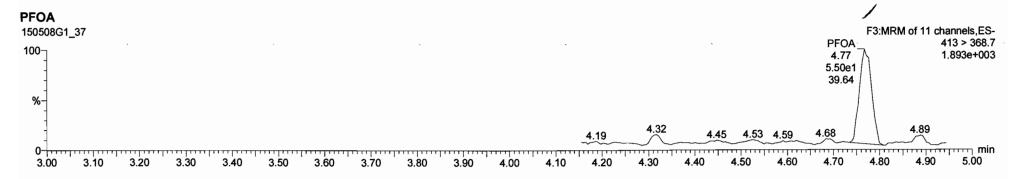
Vista Analytical Laboratory Q1

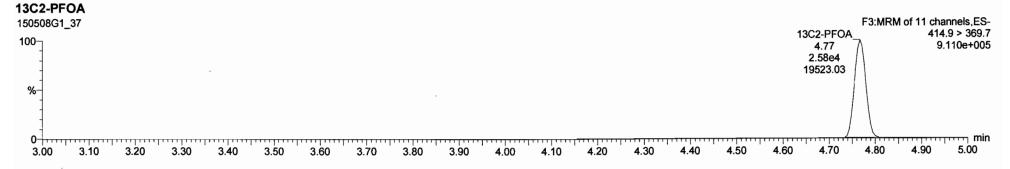
Dataset:

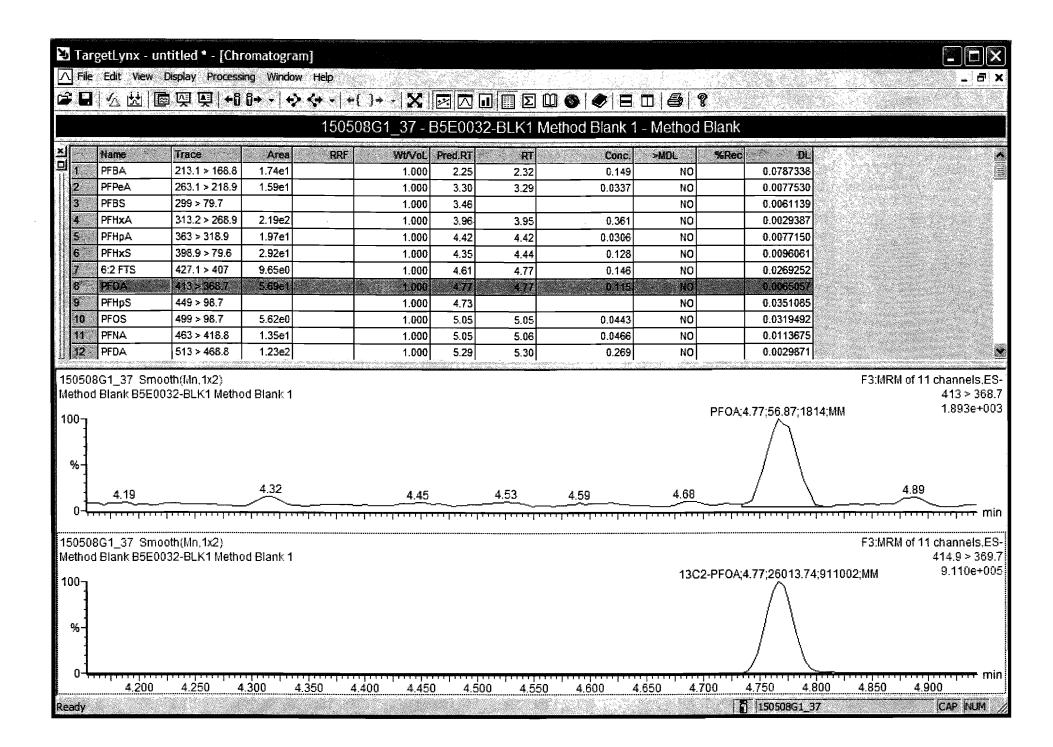
Untitled

Last Altered: Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time Printed: Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time

#### Name: 150508G1\_37, Date: 08-May-2015, Time: 23:22:30, ID: B5E0032-BLK1 Method Blank 1, Description: Method Blank







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4.00

4.10

4.30

4.40

4.50

4.60

4.70

4.80

4.90

5.00

5.10

5.20

5.30

5.40

5.50

5.60

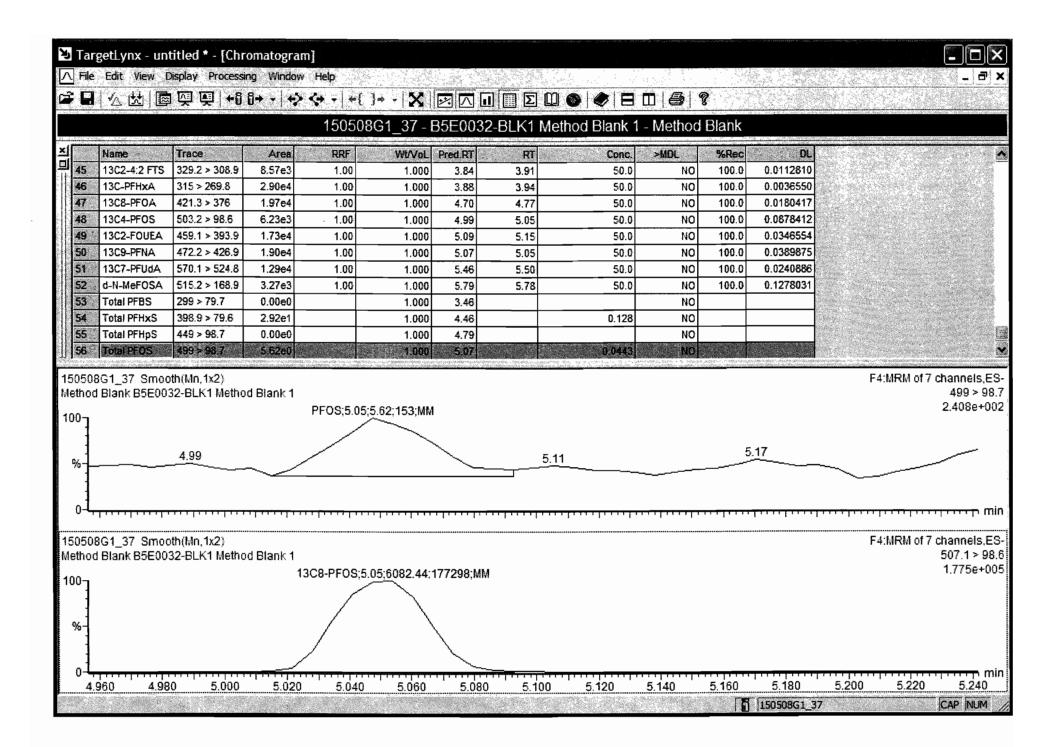
5.70

5.80

5.90

6.00

4.20



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5.10

5.20

5.30

5.40

5.50

5.60

5.70

5.80

5.90

6.00

4.00

4.10

4.20

4.30

4.40

4.50

4.60

4.70

4.80

4.90

5.00

MassLynx 4.1

Page 1 of 1

Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_36.qld

Last Altered: Printed:

Thursday, May 14, 2015 12:07:06 Pacific Daylight Time Thursday, May 14, 2015 14:22:14 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_36, Date: 08-May-2015, Time: 23:09:50, ID: B5E0032-BS1 OPR 1, Description: OPR

	# Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT .	Conc. %Rec
1	8 PFOA	413 > 368.7	1.63e3	4.25e4	ununcouse que escoce est	1.000	4.77	2.02
2	56 Total PFOS	499 > 98.7		1.07e4		1.000		2.11
3	31 13C2-PFOA	414.9 > 369.7	4.25e4	3.36e4	1.160	1.000	4.77	54.6 109.1
4	32 13C8-PFOS	507.1 > 98.6	1.07e4	1.14e4	0.939	1.000	5.05	50.2 100.4
5	47 13C8-PFOA	421.3 > 376	3.36e4	3.36e4	1.000	1.000	4.77	50.0 100.0
6	48 13C4-PFOS	503.2 > 98.6	1.14e4	1.14e4	1.000	1.000	5.05	50.0 100.0

15/14/15 1/5/20/11 **Quantify Totals Report MassLynx 4.1** 

Vista Analytical Laboratory Q1

Page 1 of 1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_36.qld

Last Altered: Printed:

Thursday, May 14, 2015 12:07:06 Pacific Daylight Time Thursday, May 14, 2015 14:22:14 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_36, Date: 08-May-2015, Time: 23:09:50, ID: B5E0032-BS1 OPR 1, Description: OPR

#### **Total PFBS**

	# Name	e	Trace	RT	Area	IS Area	Conc.
1	53 Total	PFBS	299 > 79.7	3.28	<del>- 1.07e</del> 1	1.79e4	0.0204
2	3 PFBS	3	<del>299 &gt; 7</del> 9.7	3.44	1.39e3	1.79e4	2.62

#### **Total PFHxS**

# Name Trace	DT	Company of the Company of the Company	S	Conc
	KL	- Area	1S Area	CONCI
1 6 DELIVS 200 5 70 6	4 4 4	4 44-2	4.70-4	2.26
6 PFHXS390.9 > 79.6	4.44	1.11e3	1.79e4	2.36

#### **Total PFHpS**

# Name	Trace	RT	Area	IS Area	Conc.
1 9 PFHpS	449 > 98.7	4.78	3.66e2	1.79e4	1.70

#### **Total PFOS**

# Name	Trace	RT	Area	IS Area	Conc.
1 10 PFOS	499 > 98.7	5.05	4.74e2	1.07e4	2.11

Project 1500410 Page 29 of 333

Dataset:

Untitled

Last Altered:

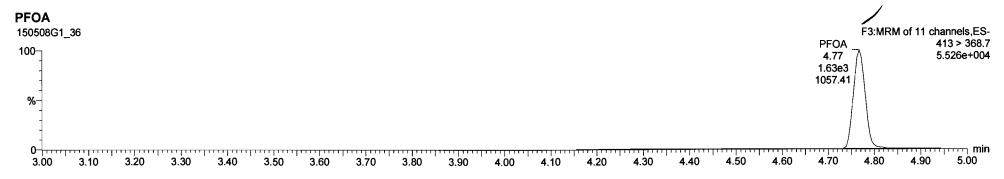
Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time

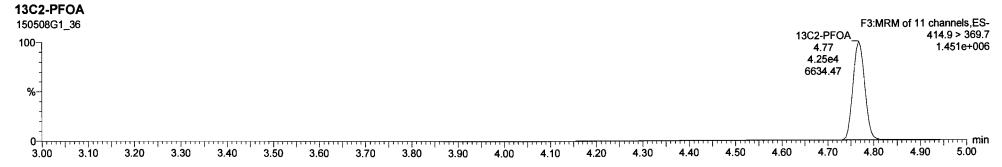
Printed:

Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_36, Date: 08-May-2015, Time: 23:09:50, ID: B5E0032-BS1 OPR 1, Description: OPR





MassLynx 4.1

Page 2 of 12

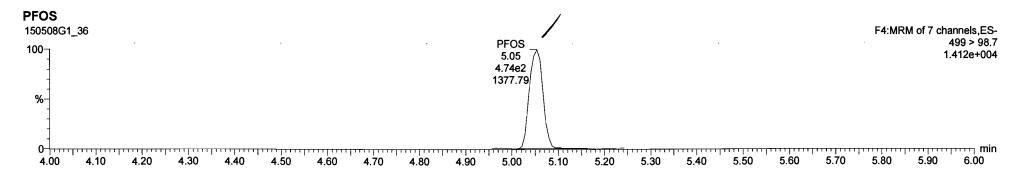
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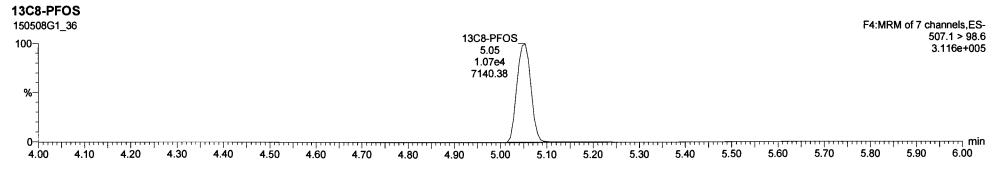
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Last Altered: Printed:

Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time

Name: 150508G1\_36, Date: 08-May-2015, Time: 23:09:50, ID: B5E0032-BS1 OPR 1, Description: OPR





MassLynx 4.1

Page 3 of 12

Dataset:

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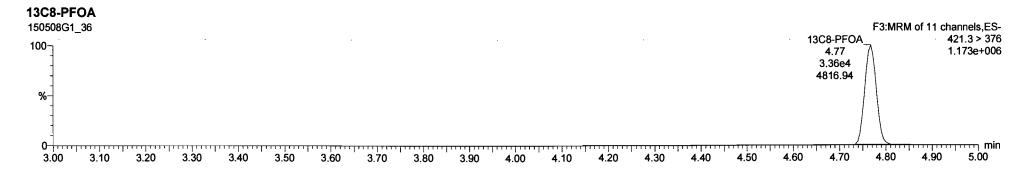
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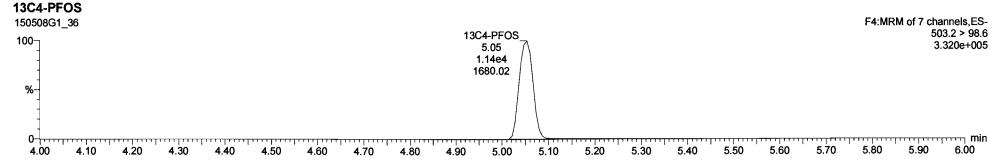
Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time

Printed:

Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time

Name: 150508G1\_36, Date: 08-May-2015, Time: 23:09:50, ID: B5E0032-BS1 OPR 1, Description: OPR





**Quantify Sample Summary Report** 

MassLynx 4.1

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Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 38.qld

Last Altered:

Thursday, May 14, 2015 15:20:10 Pacific Daylight Time

Printed:

Thursday, May 14, 2015 15:20:52 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS Longlist QUAD2.mdb 12 May 2015 09:14:14

Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_38, Date: 08-May-2015, Time: 23:35:12, ID: 1500410-01 PA104-SB28-0608 1.46, Description: PA104-SB28-0608

1.0	# Name	Trace	Response	IS Resp	RRF	· Wt/Vol	RT	Conc.	%Rec	
1	8 PFOA	413 > 368.7	1.78e3	4.04e4		1.133	4.77	2.04		
2	56-Total PFOS	499 > 98.7		8.20e3		1.133		0.420		*
3	31 13C2-PFOA	414.9 > 369.7	4.04e4	3.66e4	1.160	1.133	4.77	42.1	95.3	
4	32 13C8-PFOS	507.1 > 98.6	8.20e3	1.35e4	0.939	1.133	5.05	28.5	64.7	,
5	47 13C8-PFOA	421.3 > 376	3.66e4	3.66e4	1.000	1.133	4.77	44.2	100.0	
6	48 13C4-PFOS	503.2 > 98.6	1.35e4	1.35e4	1.000	1.133	5.05	44.2	100.0	

42.1 95.3 28.5 64.7 44.2 100.0 44.2 100.0 Y SEERE S/20//1

Quantify Totals Report MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_38.qld

Last Altered: Printed:

Thursday, May 14, 2015 15:20:10 Pacific Daylight Time Thursday, May 14, 2015 15:20:52 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14
Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_38, Date: 08-May-2015, Time: 23:35:12, ID: 1500410-01 PA104-SB28-0608 1.46, Description: PA104-SB28-0608

Page 1 of 1

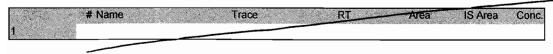
#### **Total PFBS**

# Name Trace	Area	IS Area Conc.
# Name	TIT Alea	io Alea Colic.
1 2 DEBS		PRODUCTOR CONTROL AND
3 PFBS299 >	79.7 3.29 5.22e0	1.78e4 0.00876
A. A. C. A. C. A. C.		

#### **Total PFHxS**

# Name	Trace	RT	Area	IS Area	Conc.
1 54 Total PFHxS	398.9 > <u>79.6</u>	4.31	1.03e1	1.78e4	0.0194
2 6 PFHxS	398.9 > 79.6	4.44	8.73e1	1.78e4	0.165

## **Total PFHpS**



#### **Total PFOS**

# Name	Trace	RT -	Area	IS Area	Conc.
1 10 PFOS	499 > 98.7	5.05	8.14e1	8.20e3	0.420

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Untitled

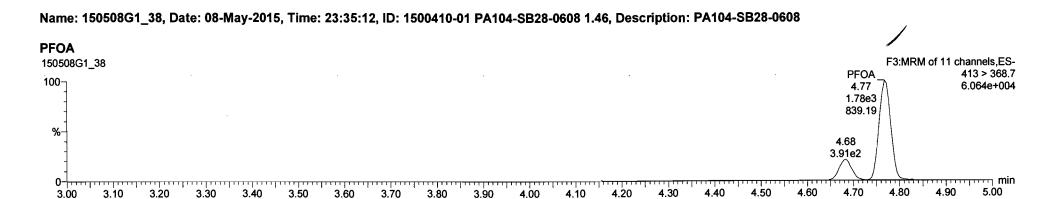
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3.10

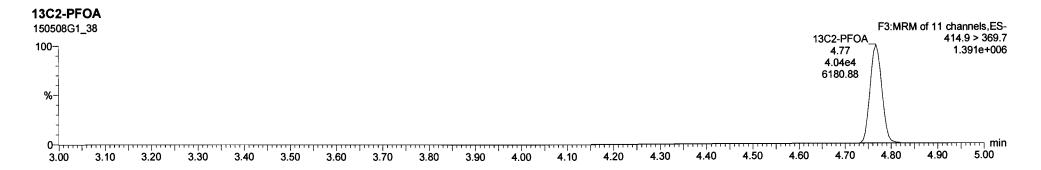
3.20

Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time



3.90

3.70



4.00

MassLynx 4.1

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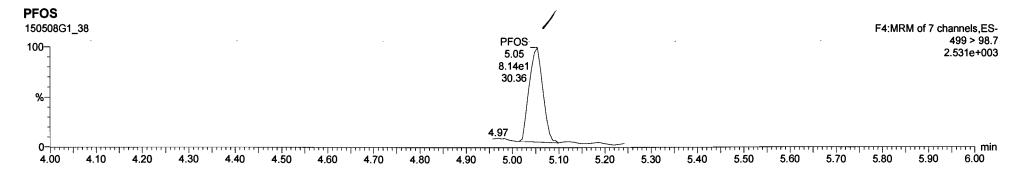
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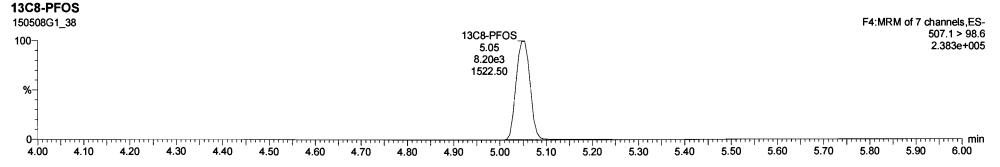
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Last Altered: Printed:

Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time

# Name: 150508G1\_38, Date: 08-May-2015, Time: 23:35:12, ID: 1500410-01 PA104-SB28-0608 1.46, Description: PA104-SB28-0608





MassLynx 4.1

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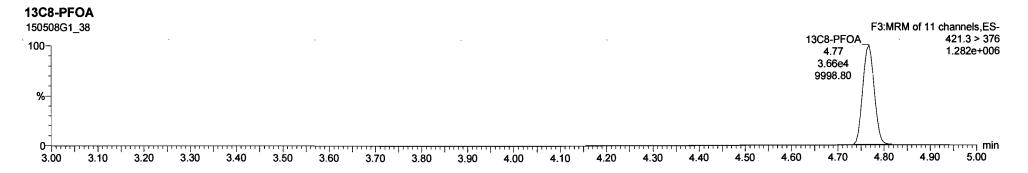
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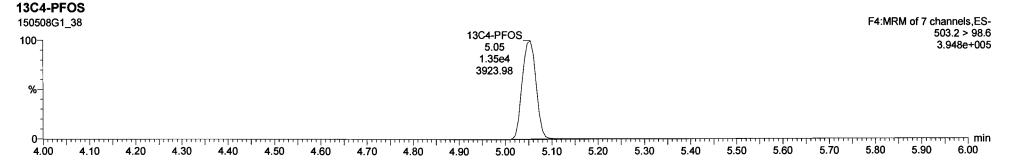
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Last Altered: Printed:

Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time

Name: 150508G1\_38, Date: 08-May-2015, Time: 23:35:12, ID: 1500410-01 PA104-SB28-0608 1.46, Description: PA104-SB28-0608





Vista Analytical Laboratory Q1

MassLynx 4.1

Page 1 of 1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G2\150512G1 3.qld

Last Altered: Printed:

Friday, May 15, 2015 13:10:25 Pacific Daylight Time Friday, May 15, 2015 13:10:56 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14

Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150512G2\_3, Date: 12-May-2015, Time: 18:46:25, ID: 1500410-01 PA104-SB28-0608 1.46, Description: PA104-SB28-0608

# Name	Trace	Response	IS Resp.	RRF	Wt/Vol	RT	Conc.	%Rec
1 56 Total PFOS	499 > 98.7		8.15e3		1.133		0.541	
2 32 13C8-PFOS	507.1 > 98.6	8.15e3	1.40e4	0.939	1.133	5.05	27.4	62.1
3 48 13C4-PFOS	503.2 > 98.6	1.40e4	1.40e4	1.000	1.133	5.05	44.2	100.0

AC 5/5/15

# **Quantify Totals Report MassLynx 4.1**

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150512G2\150512G1\_3.qld

Last Altered: Printed:

Friday, May 15, 2015 13:10:25 Pacific Daylight Time Friday, May 15, 2015 13:10:56 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150512G2\_3, Date: 12-May-2015, Time: 18:46:25, ID: 1500410-01 PA104-SB28-0608 1.46, Description: PA104-SB28-0608

#### **Total PFBS**

# Name Trace R	The second second	IO A.L.	0.00
# Name Hate R	ı Area	is Area	COHC.
	Contract of the State of the St	いいたいしん しんれいしん しんしん しんしん しんしん	SEESTIMEST PROGESTOR
1 3 PFBS 299 > 79 7	3.28 8.95e0	1 77≥4	0.0151
299 - 79.7	3.20 0.3300	1.7764	0.0101

## **Total PFHxS**

	# Name	Trace	RT	Area	IS Area	Conc.
1	54 Total PFHxS	398.9 > 79.6	4.31	8.42e0	1.77e4	0.0160
2	6 PFHxS	398.9 > 79.6	4.44	1.09e2	1.77e4	0.207
Total PFHpS		-				
1 1	# Name	Trace	RT	Area	IS Area	Conc.

## **Total PFOS**

# Name	Trace	RT	Area	IS Area	Conc.
1 56 Total PFOS	499 > 98.7	4.96	1.73e1	8.15e3	0.0901
2 10 PFOS	499 > 98.7	5.05	8.68e1	8.15e3	0.451

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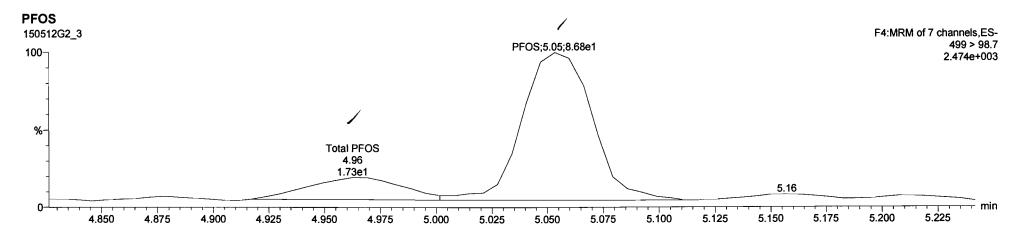
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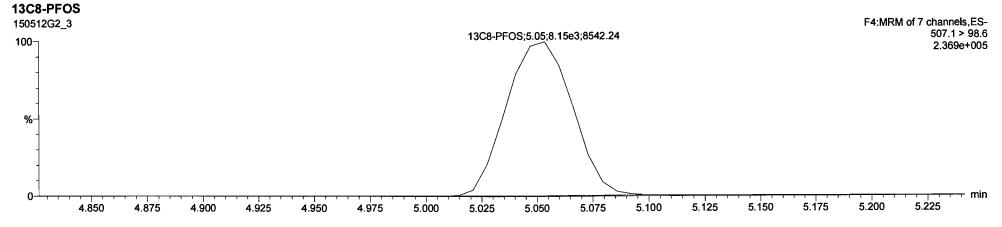
Last Altered: Printed:

Friday, May 15, 2015 12:59:17 Pacific Daylight Time Friday, May 15, 2015 13:00:22 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14
Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150512G2\_3, Date: 12-May-2015, Time: 18:46:25, ID: 1500410-01 PA104-SB28-0608 1.46, Description: PA104-SB28-0608





Quantify Sample Report Vista Analytical Laboratory Q1

Dataset:

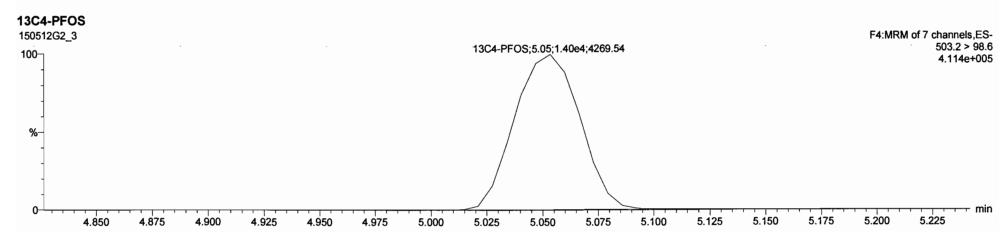
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Last Altered:

Friday, May 15, 2015 12:59:17 Pacific Daylight Time

Printed: Friday, May 15, 2015 13:00:22 Pacific Daylight Time

Name: 150512G2\_3, Date: 12-May-2015, Time: 18:46:25, ID: 1500410-01 PA104-SB28-0608 1.46, Description: PA104-SB28-0608



Quantify Sample Summary Report Vista Analytical Laboratory Q1 MassLynx 4.1

Page 1 of 1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_39.qld

Last Altered: Printed:

Thursday, May 14, 2015 15:21:37 Pacific Daylight Time Thursday, May 14, 2015 15:22:51 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14

Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_39, Date: 08-May-2015, Time: 23:47:52, ID: 1500410-02 PA113C-SB11-0103 1.53, Description: PA113C-SB11-0103

	# Name	Trace	Response	IS Resp	RRF	√Wt/Vol ±	or* RT ∷	Conc.	%Rec		
de la companya de la	8 PFOA	413 > 368.7	2.76e2	4.14e4		0.870	4.77	0.404			
	56-Total PFOS	499 > 98.7		8.71e3		0.870		4.26		*	$\mathcal{W}$ .
3	31 13C2-PFOA	414.9 > 369.7	4.14e4	3.93e4	1.160	0.870	4.77	52.2	90.9		6114115
	32 13C8-PFOS	507.1 > 98.6	8.71e3	1.34e4	0.939	0.870	5.05	39.9	69.3	*	2/17/19
	47 13C8-PFOA	421.3 > 376	3.93e4	3.93e4	1.000	0.870	4.77	57.5	100.0		
4	48 13C4-PFOS	503.2 > 98.6	1.34e4	1.34e4	1.000	0.870	5.05	57.5	100.0		4
								¥ 500	116	ſ	NVIO
								¥ 50°			/ 5/2 1

# **Quantify Totals Report MassLynx 4.1**

Page 1 of 1

Vista Analytical Laboratory Q1

Dataset:

Printed:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_39.qld

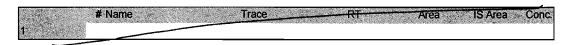
Last Altered:

Thursday, May 14, 2015 15:21:37 Pacific Daylight Time Thursday, May 14, 2015 15:22:51 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14
Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_39, Date: 08-May-2015, Time: 23:47:52, ID: 1500410-02 PA113C-SB11-0103 1.53, Description: PA113C-SB11-0103

#### **Total PFBS**



## **Total PFHxS**

	# Name	Trace	RT	Area	IS Area	Conc.
1 5	4 Total PFHxS	398.9 > 79.6	<del>4:35</del>	8.09e0	1.79e4	0.0198
2	6 PFHxS	<del>398.9 &gt;</del> 79.6	4.44	1.41e2	1.79e4	0.345
3 5	4 Total PEHx3	398.9 > 79.6	4.54	5.52e0	1.79e4	0.0135

# Total PFHpS

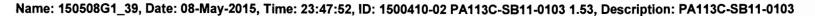


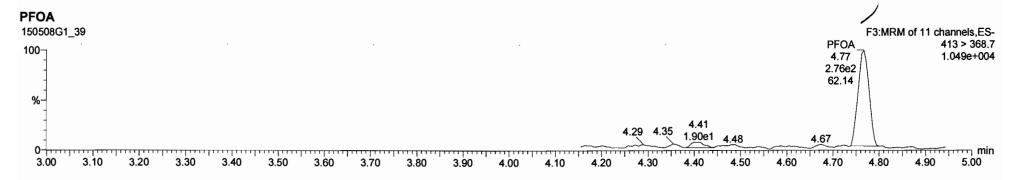
#### **Total PFOS**

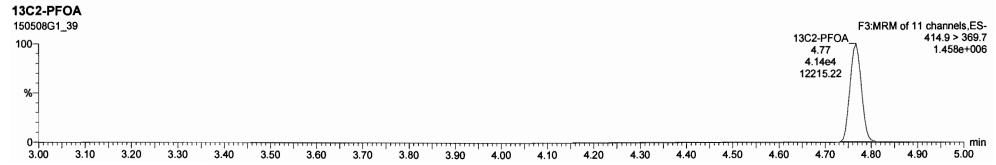
# Name	Trace	RT	Area	IS Area	Conc.
1 10 PFOS	499 > 98.7	5.05	6.74e2	8.71e3	4.26

Untitled

Last Altered: Printed: Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time







MassLynx 4.1

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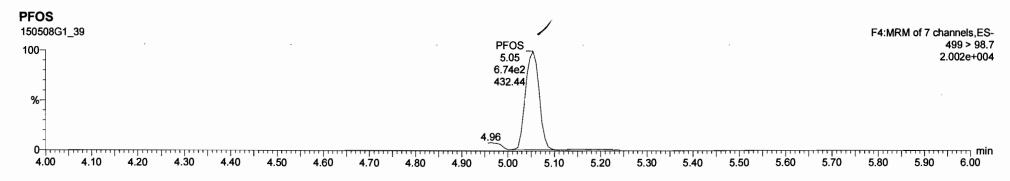
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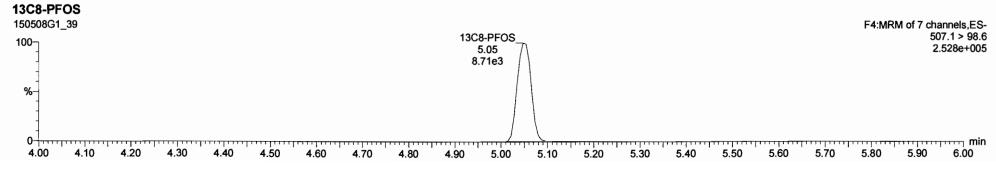
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Last Altered: Printed:

Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time

# Name: 150508G1\_39, Date: 08-May-2015, Time: 23:47:52, ID: 1500410-02 PA113C-SB11-0103 1.53, Description: PA113C-SB11-0103





MassLynx 4.1

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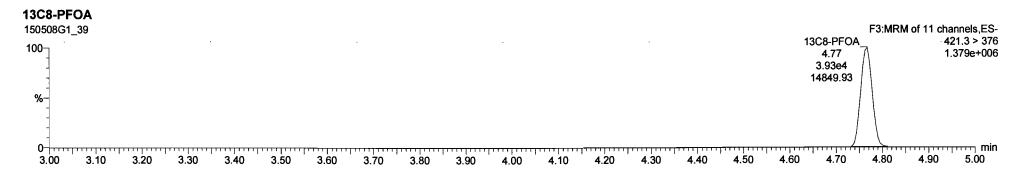
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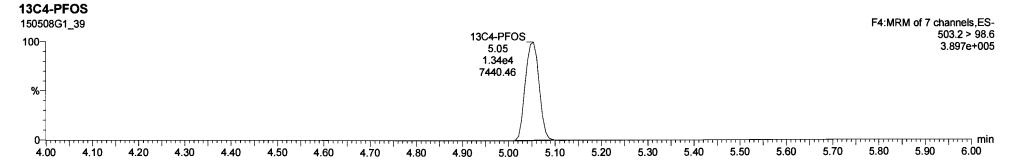
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Last Altered: Printed:

Tuesday, May 12, 2015 09:25:05 Pacific Daylight Time Tuesday, May 12, 2015 09:27:45 Pacific Daylight Time

Name: 150508G1\_39, Date: 08-May-2015, Time: 23:47:52, ID: 1500410-02 PA113C-SB11-0103 1.53, Description: PA113C-SB11-0103





Vista Analytical Laboratory Q1

MassLynx 4.1

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G2\150512G1\_4.qld

Last Altered: Printed:

Friday, May 15, 2015 13:16:03 Pacific Daylight Time Friday, May 15, 2015 13:16:16 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14

Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150512G2\_4, Date: 12-May-2015, Time: 18:59:05, ID: 1500410-02 PA113C-SB11-0103 1.53, Description: PA113C-SB11-0103

# Name	Trace	Response	IS Resp	RRF	Wt∕Vol	RT	Conc.	%Rec
1 56 Total PFOS	499 > 98.7		8.97e3		0.870		4.31	
2 32 13C8-PFOS	507.1 > 98.6	8.97e3	1.42e4	0.939	0.870	5.05	38.6	67.1
3 48 13C4-PFOS	503.2 > 98.6	1.42e4	1.42e4	1.000	0.870	5.05	57.5	100.0

15/15/15

5/21/10

Quantify Totals Report MassLynx 4.1

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Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G2\150512G1\_4.qld

Last Altered: Printed:

Friday, May 15, 2015 13:16:03 Pacific Daylight Time Friday, May 15, 2015 13:16:16 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150512G2\_4, Date: 12-May-2015, Time: 18:59:05, ID: 1500410-02 PA113C-SB11-0103 1.53, Description: PA113C-SB11-0103

#### **Total PFBS**

	# Name	Trace	RT	Area	15 Area	Conc.
1	3 Total PFBS	299 > 79.7	3.29	8.12e0	1.71e4	0.0185
2 5	3 Total PFBS	299 > 79.7	3.59	7.61e0	1.71e4	0.0174
3 5	3 Total PFBS	<del>29</del> 9 > 79.7	3.68	1.05e1	1.71e4	0.0239
4	3 PFBS	299 > 79.7	3.76	1.79e1	1.71e4	0.0408

## **Total PFHxS**

	and the second s	San Programme and the second second	Company of the Compan	Section 1985	August 1998
# Name	Irace		Area	IS Area	Lone
# Name 1 6 PFHxS					
STATE OF THE STATE	от нево окультовнико подыство по ососновное при става	and an industrial and industrial and	eduliani funtioni arangement alega common antioni con u	any non-payment way-ye-arguest suprocession	COLUMN TO THE TOTAL TO THE TOTA
# 6 PFHxS	308 0 > 70-0	4 44	1.26e2	1.71e4	ก วววไ
O FITIAS	0.00.0	7.77	1.2002	1.7 104	0.020

## Total PFHpS

# Name	Trace	RT	Area	IS Area	Conc.
1 9 PFHpS	449 > 98.7	4.47	1.06e1	1.71e4	0.0594
2 55 Total PFH	lpS 449 > 98.7	4.78	9.29e0	1.71e4	0.0520

## **Total PFOS**

# Name.	Trace	ret RT	Area	IS Area	Conc.
1 56 Total PFOS	499 > 98.7	4.98	7.07e1	8.97e3	0.435
2 10 PFOS	499 > 98.7	5.05	6.31e2	8.97e3	3.88

5.100

5.075

5.125

5.175

5.150

5.200

5.225

Quantify Sample Report Vista Analytical Laboratory Q1

4.850

4.875

4.900

4.925

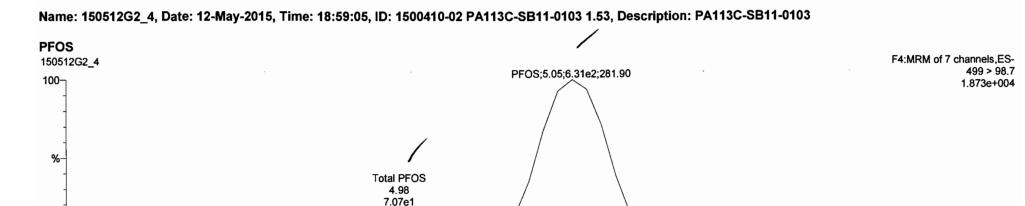
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Last Altered: Printed:

Friday, May 15, 2015 12:59:17 Pacific Daylight Time Friday, May 15, 2015 13:00:22 Pacific Daylight Time



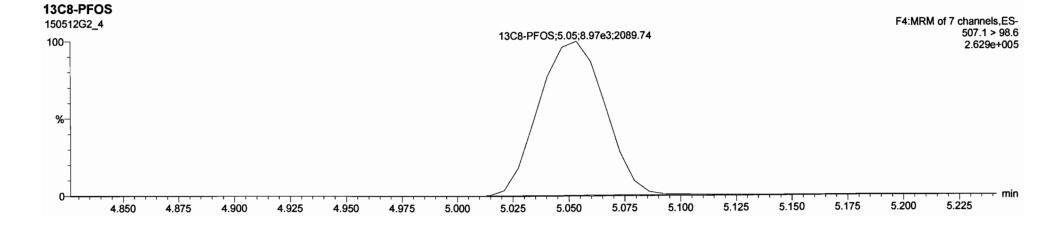
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4.975

5.000



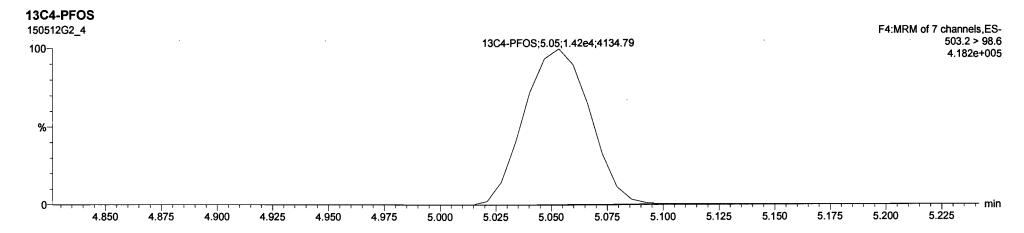
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Friday, May 15, 2015 12:59:17 Pacific Daylight Time Friday, May 15, 2015 13:00:22 Pacific Daylight Time

Name: 150512G2\_4, Date: 12-May-2015, Time: 18:59:05, ID: 1500410-02 PA113C-SB11-0103 1.53, Description: PA113C-SB11-0103



# **CONTINUING CALIBRATION**

Project 1500410 Page 51 of 333

 $C: \label{lem:condition} C: \label{lem:condition} C: \label{lem:condition} C: \label{lem:condition} PRO \label{lem:condition} Results \label{lem:condition} I = 150508G1 \label{lem:condition$ 

Last Altered: Printed:

Tuesday, May 12, 2015 15:29:49 Pacific Daylight Time Tuesday, May 12, 2015 15:30:14 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_33, Date: 08-May-2015, Time: 22:31:45, ID: ST150508G1-10 PFC CS4 15E0807, Description: PFC CS4 15E0807

	# Name	Trace	CONTRACTOR OF STREET AND STREET S	S Resp	RRF	Wt/Vol	RT	Conc.	%	Rec	Doutside method limits. Okper MM.
1	1 PFBA	213.1 > 168.8	6.21e3	3.01e4		1.000	2.28	37.8		75.6 70 71 80	DI OOK MM
2	2 PFPeA	263.1 > 218.9	1.78e4	2.22e4		1.000	3.29	46.8	, ,	93.6	limits, oxpering
3	3 PFBS	299 > 79.7	1.43e4	9.28e3		1.000	3.44	50.1			
4	4 PFHxA	313.2 > 268.9	2.07e4	2.12e4		1.000	3.95	40.0		30.0	
5	5 PFHpA	363 > 318.9	2.70e4	2.12e4		1.000	4.41	49.9	) 9	99.7	
6	6 PFHxS	398.9 > 79.6	1.29e4	9.28e3		1.000	4.44	51.4	- 10	02.8	
7	7 6:2 FTS	427.1 > 407	2.95e3	6.31e3		1.000	4.76	49.4	. 9	98.8	
8	8 PFOA	413 > 368.7	2.28e4	2.55e4		1.000	4.77	47.3		94.5	<b>A</b> C .
9	9 PFHpS	449 > 98.7	5.61e3	9.28e3		1.000	4.78	48.9	) !	97.8	14.15
10	10 PFOS	499 > 98.7	6.87e3	7.08e3		1.000	5.05	45.9	) !	91.7	45/12/15 45/19/11
11	11 PFNA	463 > 418.8	1.71e4	1.73e4		1.000	5.06	53.4	10	06.9	
12	12 PFDA	513 > 468.8	2.21e4	2.10e4		1.000	5.30	46.2	: !	92.3	1 /
13 14	13 8:2 FTS	527 > 506.9	6.00e3	6.68e3		1.000	5.32	47.8	; ;	95.5	11-111
	14 FOSA	498.1 > 77.8	3.28e3	6.28e3		1.000	5.40	45.6		91.2	7 5//1111
15	15 PFDS	598.8 > 98.7	7.63e2	2.10e4		1.000	5.49	19.0	) ;	38.0	
16	16 PFUdA	563 > 518.9	1.00e4	9.99e3		1.000	5.50	48.9	) !	97.9	
17	17 PFDoA	612.9 > 568.8	2.76e3	3.24e3		1.000	5.68	47.6		95.2	
18	18 N-MeFOSA	512.1 > 168.9	9.74e2	8.67e0		1.000	5.78	1440	2	38.8	
19 20	19 N-MeFOSE	616.1>58.9	1.73e2	8.67e0		1.000	5.79	1040	20	07.6	
20	20 PFTrDA	662.9 > 618.9	8.67e2	9.99e3		1.000	5.84	42.8	; ;	35.5	
21	21 N-EtFOSE	630.1>58.9	2.50e2	2.15e1		1.000	5.90	542		08.4	
22 23	22 N-EtFOSA	526.1>168.9	1.01e3	1.46e2		1.000	5.90	326	5 (	55.2(1)	
	23 PFTeDA	712.9 > 668.8	9.06e2	1.06e3		1.000	5.97	47.0	) !	94.1	
24 25	24 PFHxDA	813.1>768.6	1.19e4	1.21e4		1.000	6.20	53.9		07.7	
25	25 PFODA	913.1>868.8	3.48e4	1.21e4		1.000	6.44	84.6	5 10	59.1 <b>(k)</b>	
26	26 13C3-PFBA	216.1 > 171.8	3.01e4	2.50e4	1.039	1.000	2.28	57.9	11	15.7 60-150	
27	27 13C3-PFPeA	266>221.8	2.22e4	2.47e4	0.976	1.000	3.29	46.0		91.9	
28	28 13C4-PFHpA	367.2 > 321.8	2.12e4	2.47e4	0.850	1.000	4.41	50.4	10	00.8	
29	29 18O2-PFHxS	403 > 102.6	9.28e3	2.47e4	0.420	1.000	4.44	44.7	<b>'</b>	89.4	
30	30 13C2-6:2 FTS	429.1 > 408.9	6.31e3	8.34e3	0.739	1.000	4.76	51.2	. 10	02.5 40-150	
31.	31 13C2-PFOA	414.9 > 369.7	2.55e4	2.05e4	1.160	1.000	4.77	53.7	' 1	07.5 60-150	,

Project 1500410

MassLynx 4.1

Page 2 of 2

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_33.qld

Last Altered: Printed:

Tuesday, May 12, 2015 15:29:49 Pacific Daylight Time Tuesday, May 12, 2015 15:30:14 Pacific Daylight Time

Name: 150508G1\_33, Date: 08-May-2015, Time: 22:31:45, ID: ST150508G1-10 PFC CS4 15E0807, Description: PFC CS4 15E0807

The Contract of the Contract o	# Name	Trace	Response	IS Resp	RRF	. Wt∕Vol ∞	RT	Conc. %Rec
32	32 13C8-PFOS	507.1 > 98.6	7.08e3	7.83e3	0.939	1.000	5.05	48.1 96.2 60-150
33	33 13C5-PFNA	468.2 > 422.9	1.73e4	2.08e4	0.939	1.000	5.05	45.4 90.8 50-150
THE CONTRACTOR OF THE PARTY OF	34 13C2-PFDA	515.1 > 469.9	2.10e4	2.08e4	1.149	1.000	5.30	44.0 88.0 60-150
34 35	35 13C2-8:2 FTS	529.1 > 508.7	6.68e3	8.34e3	0.918	1.000	5.32	[ 100
36	36 13C8-FOSA	506.1 > 77.7	6.28e3	8.92e3	0.728	1.000		43.6 87.3 40-150 48.4 96.8 20-150
	37 13C2-PFUdA	565 > 519.8					5.40	1. 100
37 38	38 13C2-PFD0A	615 > 569.7	9.99e3	8.92e3	1.148	1.000	5.50	0 - 100
August State Committee of	39 d7-N-MeFOSE	623.1 > 58.9	3.24e3	8.92e3	0.827	1.000	5.67	-   -   -   -   -   -   -   -   -   -
39	40 d9-N-EtFOSE	623.1 > 56.9	8.67e0	1.32e2	0.597	1.000	5.78	5.50 11.0 5-150
40 41			2.15e1	1.32e2	0.656	1.000	5.89	12.5 24.9
ALSO CONTRACTOR CONTRACTOR	41 d5-N-EtFOSA	531.1>168.9	1.46e2	1.32e2	0.970	1.000	5.90	57.2 114.4 V 4.22 (R) 8.4 30-150
42	42 13C2-PFTeDA	715 > 669.7	1.06e3	8.92e3	1.415	1.000	5.97	ا ريخ
43	43 13C2-PFHxDA	815.0>769.7	1.21e4	8.92e3	2.520	1.000	6.20	27.0 (36) 55.9
44	44 13C4-PFBA	217 > 171.8	2.50e4	2.50e4	1.000	1.000	2.28	50.0 400.0
45	45 13C2-4:2 FTS	329.2 > 308.9	8.34e3	8.34e3	1.000	1.000	3.91	50.0 <sup>\$\frac{1}{2}</sup> 100.0
46	46 13C-PFHxA	315 > 269.8	2.47e4	2.47e4	1.000	1.000	3.94	50.0 100.0
47 48	47 13C8-PFOA	421.3 > 376	2.05e4	2.05e4	1.000	1.000	4.77	50.0 100.0
10 A	48 13C4-PFOS	503.2 > 98.6	7.83e3	7.83e3	1.000	1.000	5.05	50.0 100.0
49	49 13C2-FOUEA	459.1 > 393.9	2.15e4	2.15e4	1.000	1.000	5.15	50.0 100.0
50	50 13C9-PFNA	472.2 > 426.9	2.08e4	2.08e4	1.000	1.000	5.05	50.0 100.0
51	51 13C7-PFUdA	570.1 > 524.8	8.92e3	8.92e3	1.000	1.000	5.50	50.0 100.0
52	52 d-N-MeFOSA	515.2 > 168.9	1.32e2	1.32e2	1.000	1.000	5.78	50.0 100.0

A)outside method limits, oxperMM.

Page 1 of 2

Dataset:

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Last Altered:

Wednesday, May 13, 2015 09:03:01 Pacific Daylight Time

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Wednesday, May 13, 2015 09:03:32 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

# Compound name: PFBA

Company of the	Name:	<b>ID</b>	Acq.Date	Acq.Time
1	150508G1_1	ST150508G1-1 PFC CS-1 15E0809	08-May-15	15:45:33
2	150508G1_2	ST150508G1-2 PFC CS0 15E0810	08-May-15	15:58:17
3	150508G1_3	ST150508G1-3 PFC CS1 15E0811	08-May-15	16:10:59
4	150508G1_4	ST150508G1-4 PFC CS2 15E0812	08-May-15	16:23:40
5	150508G1_5	ST150508G1-5 PFC CS3 15E0813	08-May-15	16:36:21
6	150508G1_6	ST150508G1-6 PFC CS4 15E0807	08-May-15	16:49:03
7	150508G1_7	ST150508G1-7 PFC CS5 15E0814	08-May-15	17:01:44
8	150508G1_8	ST150508G1-8 PFC CS6 15E0815	08-May-15	17:14:26
9	150508G1_9	SS150508G1-1 PFC SSS 15D2417	08-May-15	17:27:08
10	150508G1_10	B5E0029-BS1 OPR 1	08-May-15	17:39:49
11	150508G1_11	B5E0030-BS1 OPR 0.125	08-May-15	17:52:30
12	150508G1_12	Methanol	08-May-15	18:05:11
13	150508G1_13	Methanol	08-May-15	18:17:53
14	150508G1_14	B5E0029-BLK1 Method Blank 1	08-May-15	18:30:34
15	150508G1_15	B5E0030-BLK1 Method Blank 0.125	08-May-15	18:43:16
16	150508G1_16	1500395-01RE2 Resin C1-R 0.0005	08-May-15	18:55:59
17	150508G1_17	1500395-04RE2 Resin C2-R 0.0005	08-May-15	19:08:40
18	150508G1_18	B5E0029-DUP1 Duplicate 1.03	08-May-15	19:21:21
19	150508G1_19	B5E0029-DUP2 Duplicate 1.02	08-May-15	19:34:03
20	150508G1_20	B5E0029-DUP3 Duplicate 1.02	08-May-15	19:46:41
21	150508G1_21	1400880-07RE3 BERGS-SO-018 1.06	08-May-15	19:59:24
22	150508G1_22	Methanol	08-May-15	20:12:05
23	150508G1_23	Methanol	08-May-15	20:24:47
24	150508G1_24	ST150508G1-9 PFC CS4 15E0807	08-May-15	20:37:29
25	150508G1_25	Methanol	08-May-15	20:50:09
26	150508G1_26	Methanol	08-May-15	21:02:52
27	150508G1_27	1500203-01RE3 MARCH-SO-018s 1.08	08-May-15	21:15:34
28	150508G1_28	1500209-05RE4 MCCLN-SD-007 1.13	08-May-15	21:28:15
29	150508G1_29	B5E0029-MS1 Matrix Spike 1.14	08-May-15	21:40:56
30	150508G1_30	B5E0029-MSD1 Matrix Spike Dup 1.13	08-May-15	21:53:39
31	150508G1_31	Methanol	08-May-15	22:06:21

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Dataset: Untitled

Wednesday, May 13, 2015 09:03:01 Pacific Daylight Time Wednesday, May 13, 2015 09:03:32 Pacific Daylight Time Last Altered: Printed:

# Compound name: PFBA

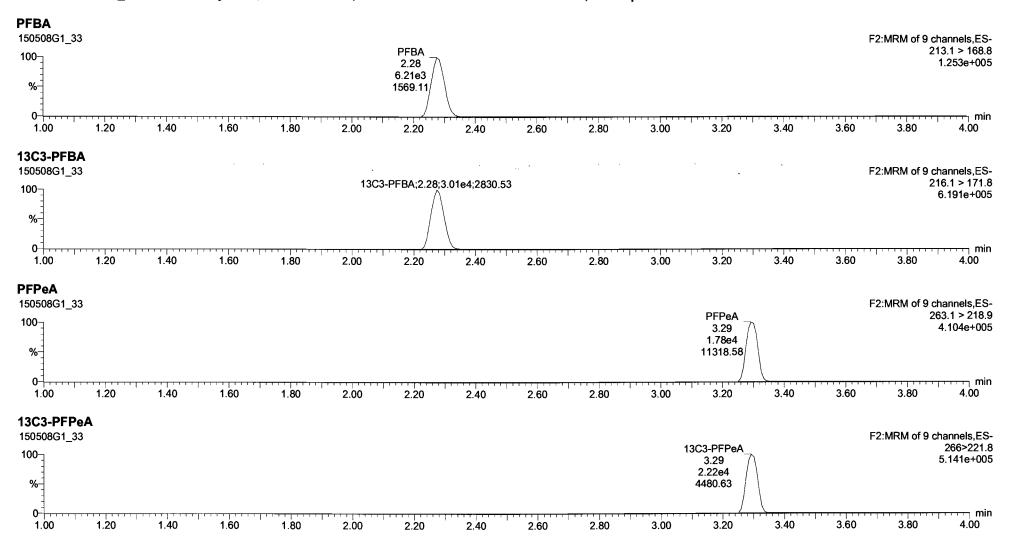
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33	150508G1_32	ST150508G1-10 PFC CS4 15E0807	08-May-15	22:31:45
34	150508G1_33	Methanol	08-May-15	22:44:25
Tarana da San	<u> </u>	Methanol	•	
35	150508G1_35		08-May-15	22:57:07
36	150508G1_36	B5E0032-BS1 OPR 1	08-May-15	23:09:50
37	150508G1_37	B5E0032-BLK1 Method Blank 1	08-May-15	23:22:30
38	150508G1_38	1500410-01 PA104-SB28-0608 1.46	08-May-15	23:35:12
39	150508G1_39	1500410-02 PA113C-SB11-0103 1.53	08-May-15	23:47:52
40	150508G1_40	B5E0032-DUP1 Duplicate 1.42	09-May-15	00:00:34
41	150508G1_41	B5E0032-DUP2 Duplicate 1.11	09-May-15	00:13:16
42	150508G1_42	B5E0032-DUP3 Duplicate 1.19	09-May-15	00:25:58
43	150508G1_43	B5E0032-DUP4 Duplicate 1.15	09-May-15	00:38:40
44	150508G1_44	B5E0032-DUP5 Duplicate 3.03	09-May-15	00:51:22
45	150508G1_45	1400880-07RE4 BERGS-SO-018 1.29	09-May-15	01:04:05
46	150508G1_46	Methanol	09-May-15	07:15:04
47	150508G1_47	Methanol	09-May-15	07:27:44
48	150508G1_48	ST150508G1-11 PFC CS4 15E0807	09-May-15	07:40:25
49	150508G1_49	Methanol	09-May-15	07:53:06
50	150508G1_50	Methanol	09-May-15	08:05:48
51	150508G1_51	1400944-03RE1 LOWRY-SO-011 1.22	09-May-15	08:18:30
52	150508G1_52	1400952-02RE1 CHNTE-SD-001 1.55	09-May-15	08:31:09
53	150508G1_53	1500203-01RE4 MARCH-SO-018s 1.1	09-May-15	08:43:51
54	150508G1_54	1500209-05RE5 MCCLN-SD-007 2.76	09-May-15	08:56:33
55	150508G1_55	B5E0032-MS1 Matrix Spike 1.29	09-May-15	09:09:14
56	150508G1_56	B5E0032-MSD1 Matrix Spike Dup 1.35	09-May-15	09:21:55
57	150508G1_57	Methanol	09-May-15	09:34:36
58	150508G1_58	Methanol	09-May-15	09:47:18
59	150508G1_59	ST150508G1-12 PFC CS4 15E0807	09-May-15	09:59:58
60	150508G1_60	Methanol	09-May-15	10:12:39
61 /	150508G1_61	Methanol	09-May-15	10:25:22

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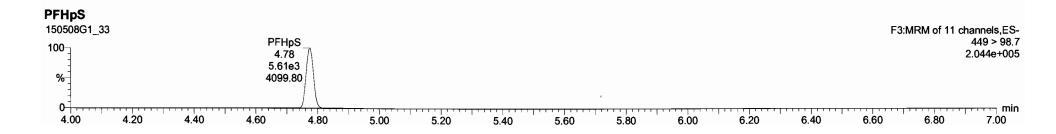
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Name: 150508G1\_33, Date: 08-May-2015, Time: 22:31:45, ID: ST150508G1-10 PFC CS4 15E0807, Description: PFC CS4 15E0807



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5.60

5.80

6.00

5.40

**%**-

0-

4.00

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4.40

7833.55

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6.80

#### **PFDS** 598.8 > 98.7 100 2.838e+004 5.49 7.63e2 %-1675.93 ¬¬ min 4.00 4.20 4.40 4.60 4.80 5.00 5.20 5.40 5.60 5.80 6.00 6.20 6.40 6.60 6.80 7.00

2233.80

5.60

5.80

6.00

6.20

5.40

0

4.00

4.20

4.40

4.60

4.80

5.00

5.20

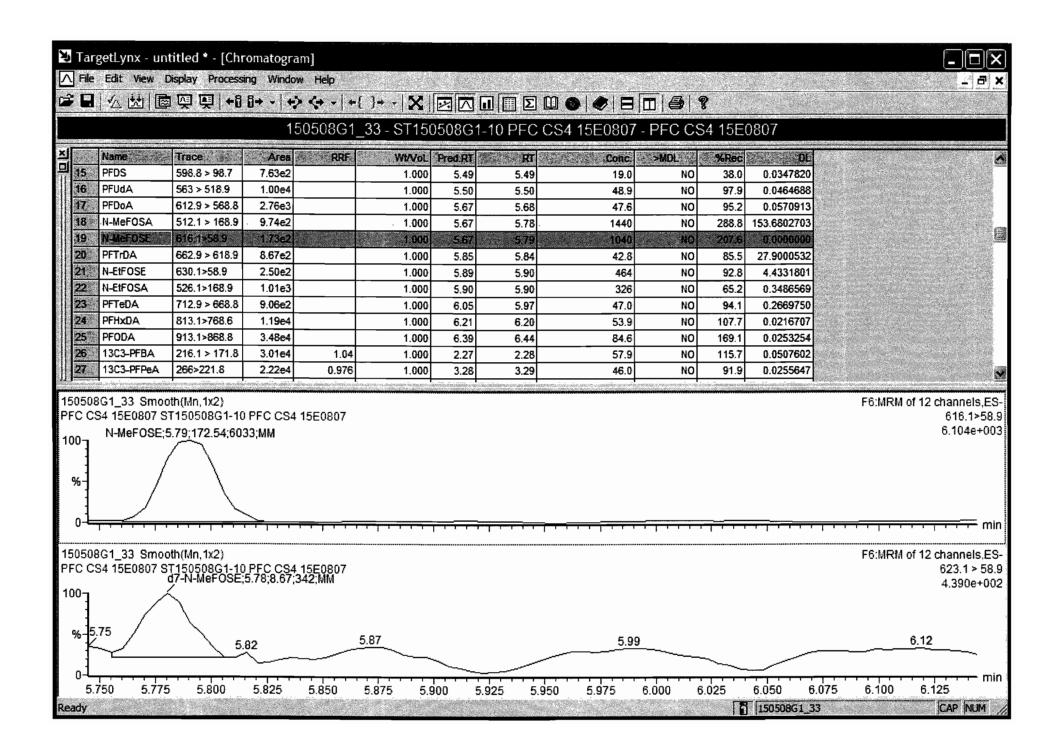
6.40

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¬¬ min

7.00



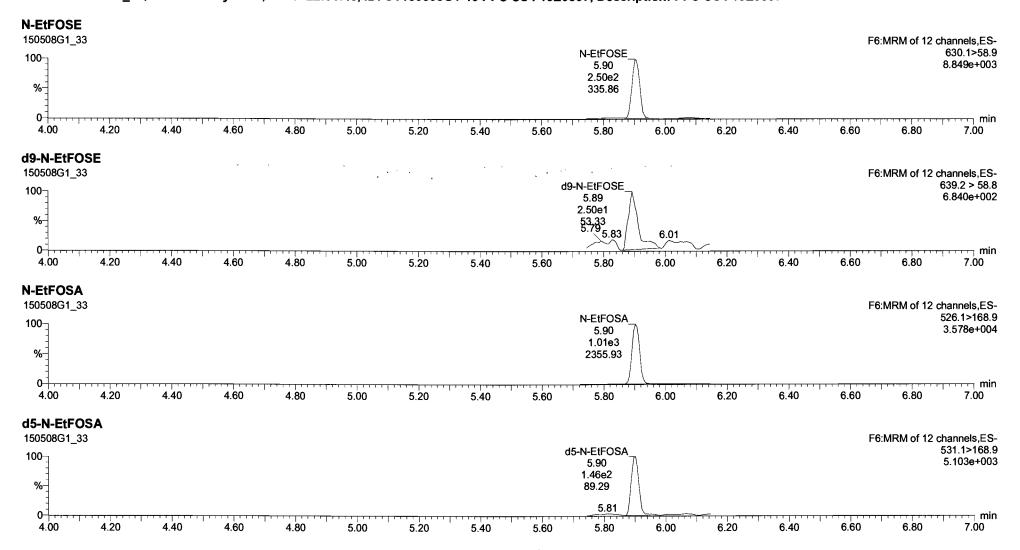
Project 1500410 Page 65 of 333

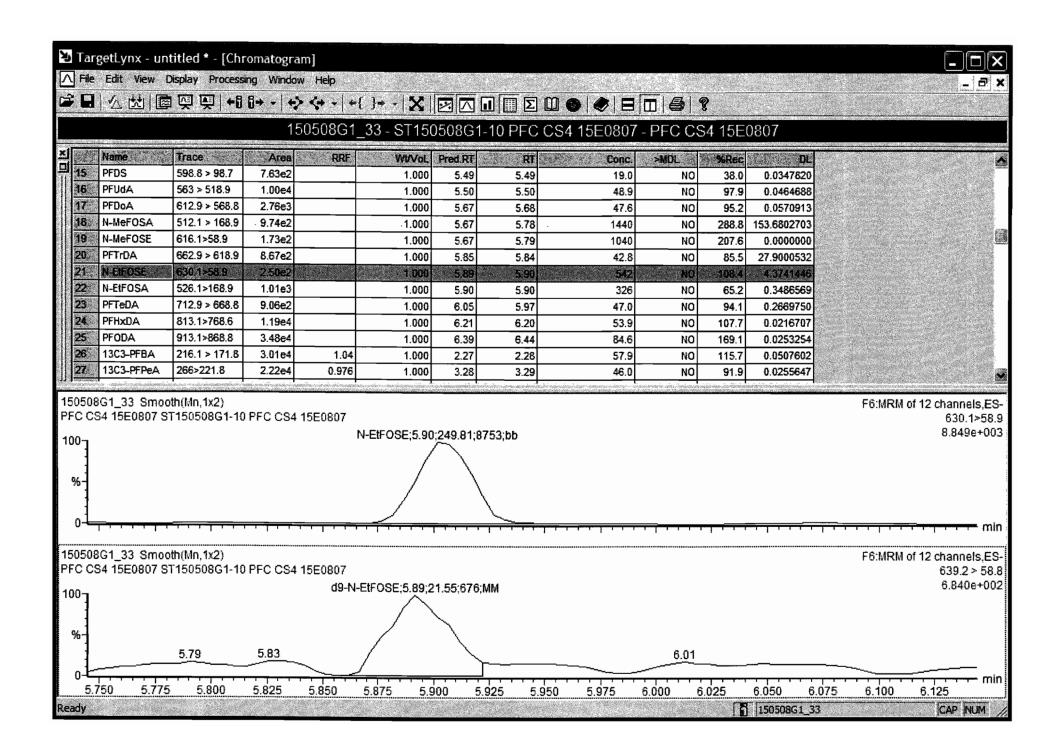
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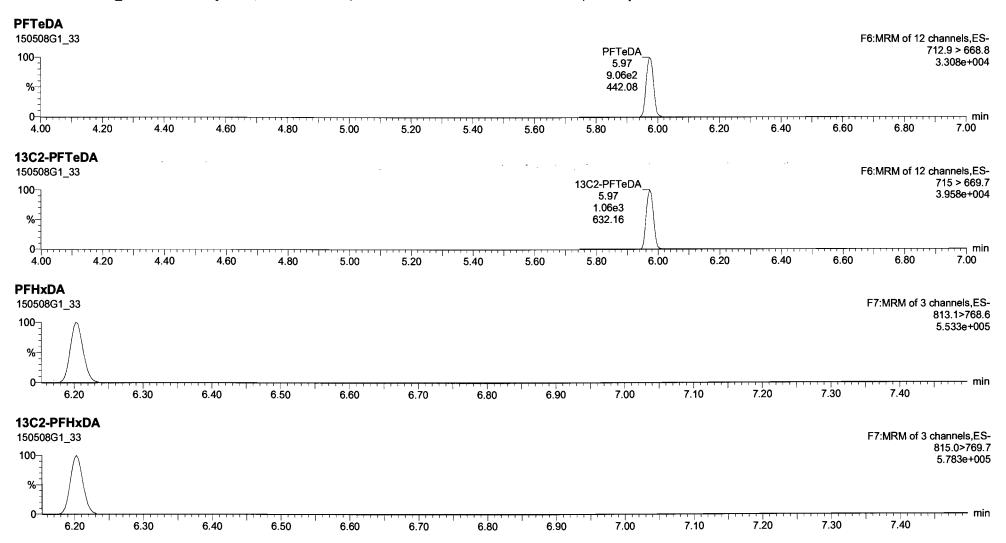
Project 1500410 Page 67 of 333

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Last Altered: Printed:

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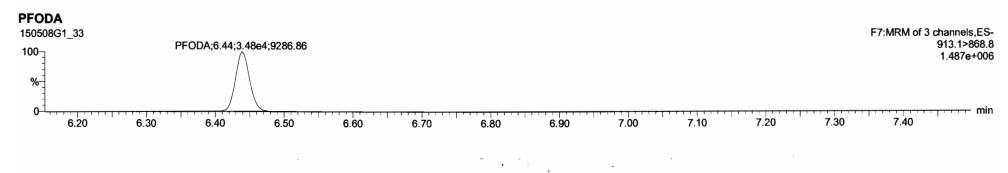


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Tuesday, May 12, 2015 13:32:55 Pacific Daylight Time Tuesday, May 12, 2015 13:49:47 Pacific Daylight Time

Name: 150508G1\_33, Date: 08-May-2015, Time: 22:31:45, ID: ST150508G1-10 PFC CS4 15E0807, Description: PFC CS4 15E0807



4.20

4.40

4.60

4.80

5.00

5.20

5.40

5.60

5.80

6.00

6.20

7.00

6.60

6.80

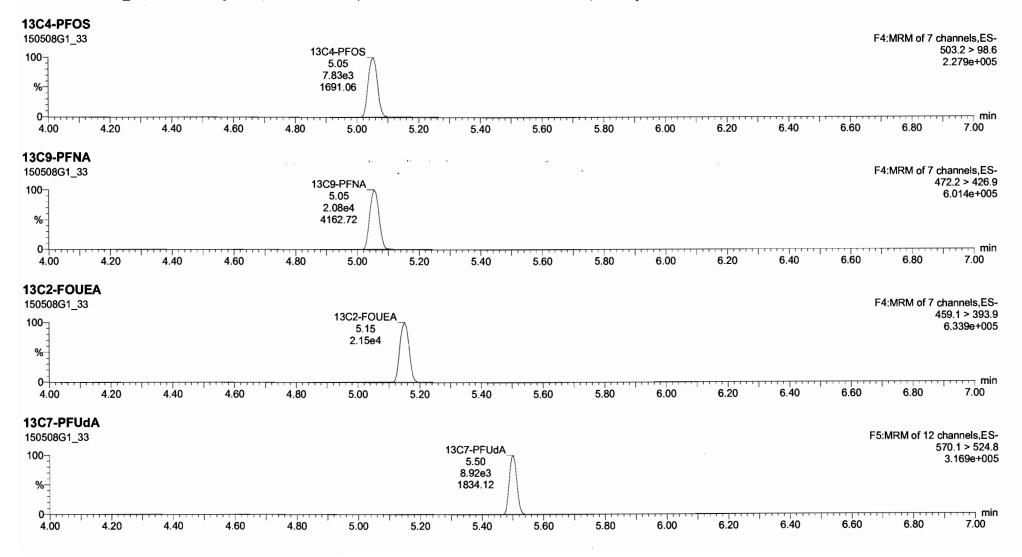
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Last Altered: Printed:

Tuesday, May 12, 2015 13:32:55 Pacific Daylight Time Tuesday, May 12, 2015 13:49:47 Pacific Daylight Time

Name: 150508G1\_33, Date: 08-May-2015, Time: 22:31:45, ID: ST150508G1-10 PFC CS4 15E0807, Description: PFC CS4 15E0807

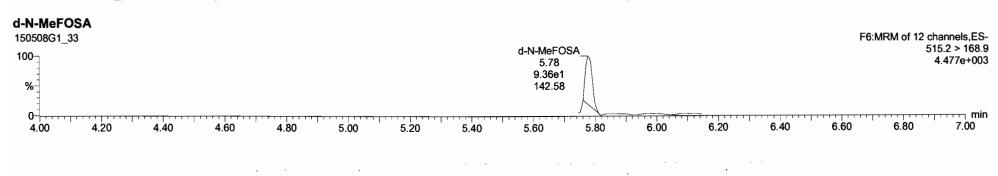


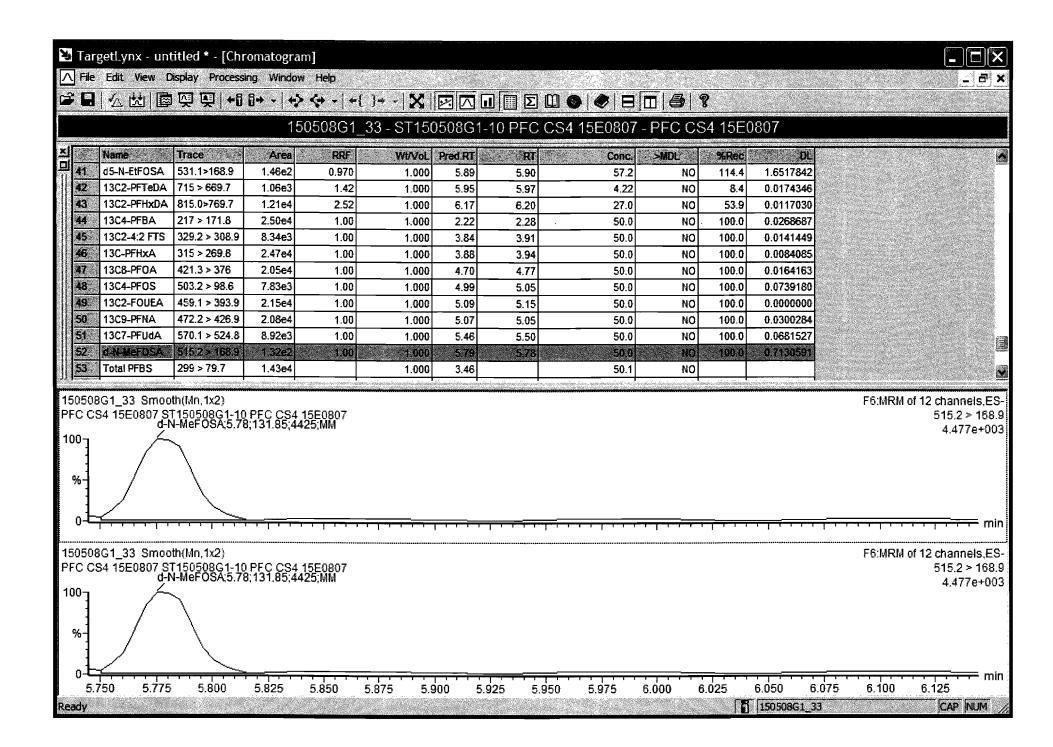
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Last Altered: Printed:

Tuesday, May 12, 2015 13:32:55 Pacific Daylight Time Tuesday, May 12, 2015 13:49:47 Pacific Daylight Time

Name: 150508G1\_33, Date: 08-May-2015, Time: 22:31:45, ID: ST150508G1-10 PFC CS4 15E0807, Description: PFC CS4 15E0807





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Vista Analytical Laboratory Q1

MassLynx 4.1

Page 1 of 2

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_48.qld

Last Altered: Printed:

Tuesday, May 12, 2015 15:38:02 Pacific Daylight Time Tuesday, May 12, 2015 15:38:52 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_48, Date: 09-May-2015, Time: 07:40:25, ID: ST150508G1-11 PFC CS4 15E0807, Description: PFC CS4 15E0807

				.0, 10. 0 1 1	00000		004 10	Loudi, Description: 110 004 1020	Doutside method imits. Ox per MM
	# Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc. %Rec	(A) outside metrica
1	1 PFBA	213.1 > 168.8	6.28e3	3.02e4		1.000	2.28	38.1 76.2 70-130	June 14 per MM
2	2 PFPeA	263.1 > 218.9	1.76e4	2.14e4		1.000	3.29	47.9 95.9	MMIS OF L.
3	3 PFBS	299 > 79.7	1.49e4	9.73e3		1.000	3.45	49.8 99.7	
4	4 PFHxA	313.2 > 268.9	1.97e4	2.15e4		1.000	3.95	37.4 74.7	
5	5 PFHpA	363 > 318.9	2.62e4	2.15e4		1.000	4.41	47.6 95.1	
6	6 PFHxS	398.9 > 79.6	1.26e4	9.73e3		1.000	4.44	48.1 96.1	DC5/14/15
7	7 6:2 FTS	427.1 > 407	2.97e3	6.60e3		1.000	4.76	47.5 95.0	
8 9	8 PFOA	413 > 368.7	2.24e4	2.48e4		1.000	4.77	47.6 95.3	•
9	9 PFHpS	449 > 98.7	5.24e3	9.73e3		1.000	4.78	43.7 87.4	$\mu \nu$
10	10 PFOS	499 > 98.7	6.87e3	6.87e3		1.000	5.05	47.2 94.4	VI walls
10 11	11 PFNA	463 > 418.8	1.73e4	1.70e4		1.000	5.06	54.7 109.5	9/(111)
12	12 PFDA	513 > 468.8	2.05e4	1.87e4		1.000	5.30	48.0 96.0	
13 🔻	13 8:2 FTS	527 > 506.9	5.59e3	6.22e3		1.000	5.32	47.7 95.5	
14	14 FOSA	498.1 > 77.8	2.29e3	4.61e3		1.000	5.40	43.4 86.8	
15	15 PFDS	598.8 > 98.7	6.12e2	1.87e4		1.000	5.49	17.3 🚯 34.7	
16	16 PFUdA	563 > 518.9	7.55e3	8.08e3		1.000	5.50	45.5 91.1	
17	17 PFDoA	612.9 > 568.8	1.87e3	2.34e3		1.000	5.68	44.9 89.7	
18	18 N-MeFOSA	512.1 > 168.9	5.89e2	1.05e1		1.000	5.78	1040 🕟 207.5	
19	19 N-MeFOSE	616.1>58.9	1.35e2	1.05e1		1.000	5.79	731 146.2	
20	20 PFTrDA	662.9 > 618.9	6.61e2	8.08e3		1.000	5.84	42.1 84.3	
21	21 N-EtFOSE	630.1>58.9	2.05e2	3.09e1		1.000	5.90	305 🕟 61.0	
22 23	22 N-EtFOSA	526.1>168.9	6.93e2	5.37e1		1.000	5.90	617 123.4	
23	23 PFTeDA	712.9 > 668.8	6.65e2	7.77e2		1.000	5.97	47.3 94.6	
24	24 PFHxDA	813.1>768.6	8.86e3	9.06e3		1.000	6.20	53.7 107.4	
25	25 PFODA	913.1>868.8	3.43e4	9.06e3		1.000	6.44	106 (1)212.6	
26 27 28	26 13C3-PFBA	216.1 > 171.8	3.02e4	2.48e4	1.039	1.000	2.28	58.7 117.4 60-160	
27	27 13C3-PFPeA	266>221.8	2.14e4	2.44e4	0.976	1.000	3.29	44.9 89.8	
	28 13C4-PFHpA	367.2 > 321.8	2.15e4	2.44e4	0.850	1.000	4.41	52.0 104.0	
29	29 18O2-PFHxS	403 > 102.6	9.73e3	2.44e4	0.420	1.000	4.44	47.5 95.1	
30	30 13C2-6:2 FTS	429.1 > 408.9	6.60e3	7.42e3	0.739	1.000	4.76	60.2 120.5 40-150	
31	31 13C2-PFOA	414.9 > 369.7	2.48e4	2.06e4	1.160	1.000	4.77	51.9 103.8 60-150	

Project 1500410

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_48.gld

Last Altered: Printed:

Tuesday, May 12, 2015 15:38:02 Pacific Daylight Time Tuesday, May 12, 2015 15:38:52 Pacific Daylight Time

Name: 150508G1\_48, Date: 09-May-2015, Time: 07:40:25, ID: ST150508G1-11 PFC CS4 15E0807, Description: PFC CS4 15E0807

age of the second	# Name	Trace	Response	IS Resp	RRF	- Wt/Vol	. RT	Conc	%Rec
32	32 13C8-PFOS	507.1 > 98.6	6.87e3	7.63e3	0.939	1.000	5.05	47.9	95.9 🚱
33	33 13C5-PFNA	468.2 > 422.9	1.70e4	2.00e4	0.915	1.000	5.05	46.5	92.9 50-
34	34 13C2-PFDA	515.1 > 469.9	1.87e4	2.00e4	1.149	1.000	5.30	40.8	81.5
35	35 13C2-8:2 FTS	529.1 > 508.7	6.22e3	7.42e3	0.918	1.000	5.32	45.7	91.4 40
36 37	36 13C8-FOSA	506.1 > 77.7	4.61e3	6.73e3	0.728	1.000	5.40	47.0	94.1 20
37	37 13C2-PFUdA	565 > 519.8	8.08e3	6.73e3	1.148	1.000	5.50	52.3	104.5 60
38	38 13C2-PFDoA	615 > 569.7	2.34e3	6.73e3	0.827	1.000	5.68	21.0	42.0 30
39	39 d7-N-MeFOSE	623.1 > 58.9	1.05e1	5.99e1	0.597	1.000	5.79	14.7	29.4 5-
10	40 d9-N-EtFOSE	639.2 > 58.8	3.09e1	5.99e1	0.656	1.000	5.90	39.4	78.8
11	41 d5-N-EtFOSA	531.1>168.9	5.37e1	5.99e1	0.970	1.000	5.90	46.2	92.4
12	42 13C2-PFTeDA	715 > 669.7	7.77e2	6.73e3	1.415	1.000	5.97	4.08	8.2 30
13	43 13C2-PFHxDA	815.0>769.7	9.06e3	6.73e3	2.520	1.000	6.20	26.7	53.4
4	44 13C4-PFBA	217 > 171.8	2.48e4	2.48e4	1.000	1.000	2.28	50.0	100.0
15	45 13C2-4:2 FTS	329.2 > 308.9	7.42e3	7.42e3	1.000	1.000	3.91	50.0	100.0
16	46 13C-PFHxA	315 > 269.8	2.44e4	2.44e4	1.000	1.000	3.95	50.0	100.0
17	47 13C8-PFOA	421.3 > 376	2.06e4	2.06e4	1.000	1.000	4.77	50.0	100.0
48	48 13C4-PFOS	503.2 > 98.6	7.63e3	7.63e3	1.000	1.000	5.05	50.0	100.0
19	49 13C2-FOUEA	459.1 > 393.9	2.17e4	2.17e4	1.000	1.000	5.15	50.0	100.0
50	50 13C9-PFNA	472.2 > 426.9	2.00e4	2.00e4	1.000	1.000	5.05	50.0	100.0
51	51 13C7-PFUdA	570.1 > 524.8	6.73e3	6.73e3	1.000	1.000	5.50	50.0	100.0
52	52 d-N-MeFOSA	515.2 > 168.9	5.99e1	5.99e1	1.000	1.000	5.78	50.0	100.0

Doutside method limits oxper MM. MS/12/115 Quantify Compound Summary Report MassLynx 4.1 Page 1 of 2
Vista Analytical Laboratory VG-9

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Dataset: Untitled

Last Altered: Wednesday, May 13, 2015 09:03:01 Pacific Daylight Time Printed: Wednesday, May 13, 2015 09:03:35 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

### Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	150508G1_1	ST150508G1-1 PFC CS-1 15E0809	08-May-15	15:45:33
2	150508G1_2	ST150508G1-2 PFC CS0 15E0810	08-May-15	15:58:17
3	150508G1_3	ST150508G1-3 PFC CS1 15E0811	08-May-15	16:10:59
4	150508G1_4	ST150508G1-4 PFC CS2 15E0812	08-May-15	16:23:40
5	150508G1_5	ST150508G1-5 PFC CS3 15E0813	08-May-15	16:36:21
6	150508G1_6	ST150508G1-6 PFC CS4 15E0807	08-May-15	16:49:03
7	150508G1_7	ST150508G1-7 PFC CS5 15E0814	08-May-15	17:01:44
8	150508G1_8	ST150508G1-8 PFC CS6 15E0815	08-May-15	17:14:26
9	150508G1_9	SS150508G1-1 PFC SSS 15D2417	08-May-15	17:27:08
10	150508G1_10	B5E0029-BS1 OPR 1	08-May-15	17:39:49
11	150508G1_11	B5E0030-BS1 OPR 0.125	08-May-15	17:52:30
12	150508G1_12	Methanol	08-May-15	18:05:11
13	150508G1_13	Methanol	08-May-15	18:17:53
14	150508G1_14	B5E0029-BLK1 Method Blank 1	08-May-15	18:30:34
15	150508G1_15	B5E0030-BLK1 Method Blank 0.125	08-May-15	18:43:16
16	150508G1_16	1500395-01RE2 Resin C1-R 0.0005	08-May-15	18:55:59
17	150508G1_17	1500395-04RE2 Resin C2-R 0.0005	08-May-15	19:08:40
18	150508G1_18	B5E0029-DUP1 Duplicate 1.03	08-May-15	19:21:21
19	150508G1_19	B5E0029-DUP2 Duplicate 1.02	08-May-15	19:34:03
20	150508G1_20	B5E0029-DUP3 Duplicate 1.02	08-May-15	19:46:41
21	150508G1_21	1400880-07RE3 BERGS-SO-018 1.06	08-May-15	19:59:24
22	150508G1_22	Methanol	08-May-15	20:12:05
23	150508G1_23	Methanol	08-May-15	20:24:47
24	150508G1_24	ST150508G1-9 PFC CS4 15E0807	08-May-15	20:37:29
25	150508G1_25	Methanol	08-May-15	20:50:09
26	150508G1_26	Methanol	08-May-15	21:02:52
27	150508G1_27	1500203-01RE3 MARCH-SO-018s 1.08	08-May-15	21:15:34
28	150508G1_28	1500209-05RE4 MCCLN-SD-007 1.13	08-May-15	21:28:15
29	150508G1_29	B5E0029-MS1 Matrix Spike 1.14	08-May-15	21:40:56
30	150508G1_30	B5E0029-MSD1 Matrix Spike Dup 1.13	08-May-15	21:53:39
31	150508G1_31	Methanol	08-May-15	22:06:21

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Dataset:

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Last Altered:

Wednesday, May 13, 2015 09:03:01 Pacific Daylight Time Wednesday, May 13, 2015 09:03:35 Pacific Daylight Time

Printed:

## Compound name: PFBA

	Name	ID TO THE TOTAL OF	Acq.Date	Acq.Time
32	150508G1_32	Methanol	08-May-15	22:19:03
33	150508G1_32	ST150508G1-10 PFC CS4 15E0807	08-May-15	22:31:45
34	150508G1_33	Methanol	08-May-15	22:44:25
35	150508G1_34 150508G1_35	Methanol	•	
36	150508G1_35 150508G1_36	B5E0032-BS1 OPR 1	08-May-15	22:57:07
WELL SHOW THE REAL PROPERTY.	· -		08-May-15	23:09:50
37	150508G1_37	B5E0032-BLK1 Method Blank 1	08-May-15	23:22:30
38	150508G1_38	1500410-01 PA104-SB28-0608 1.46	08-May-15	23:35:12
39	150508G1_39	1500410-02 PA113C-SB11-0103 1.53	08-May-15	23:47:52
40	150508G1_40	B5E0032-DUP1 Duplicate 1.42	09-May-15	00:00:34
41	150508G1_41	B5E0032-DUP2 Duplicate 1.11	09-May-15	00:13:16
42	150508G1_42	B5E0032-DUP3 Duplicate 1.19	09-May-15	00:25:58
43	150508G1_43	B5E0032-DUP4 Duplicate 1.15	09-May-15	00:38:40
44	150508G1_44	B5E0032-DUP5 Duplicate 3.03	09-May-15	00:51:22
45	150508G1_45	1400880-07RE4 BERGS-SO-018 1.29	09-May-15	01:04:05
46	150508G1_46	Methanol	09-May-15	07:15:04
47	150508G1_47	Methanol	09-May-15	07:27:44
48	150508G1_48	ST150508G1-11 PFC CS4 15E0807	09-May-15	07:40:25
49	150508G1_49	Methanol	09-May-15	07:53:06
50	150508G1_50	Methanol	09-May-15	08:05:48
51	150508G1_51	1400944-03RE1 LOWRY-SO-011 1.22	09-May-15	08:18:30
52	150508G1_52	1400952-02RE1 CHNTE-SD-001 1.55	09-May-15	08:31:09
53	150508G1_53	1500203-01RE4 MARCH-SO-018s 1.1	09-May-15	08:43:51
54	150508G1_54	1500209-05RE5 MCCLN-SD-007 2.76	09-May-15	08:56:33
55	150508G1_55	B5E0032-MS1 Matrix Spike 1.29	09-May-15	09:09:14
56	150508G1_56	B5E0032-MSD1 Matrix Spike Dup 1.35	09-May-15	09:21:55
57	150508G1_57	Methanol	09-May-15	09:34:36
58	150508G1_58	Methanol	09-May-15	09:47:18
59	150508G1_59	ST150508G1-12 PFC CS4 15E0807	09-May-15	09:59:58
60	150508G1_60	Methanol	09-May-15	10:12:39
61	150508G1_61	Methanol	09-May-15	10:25:22

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1.00

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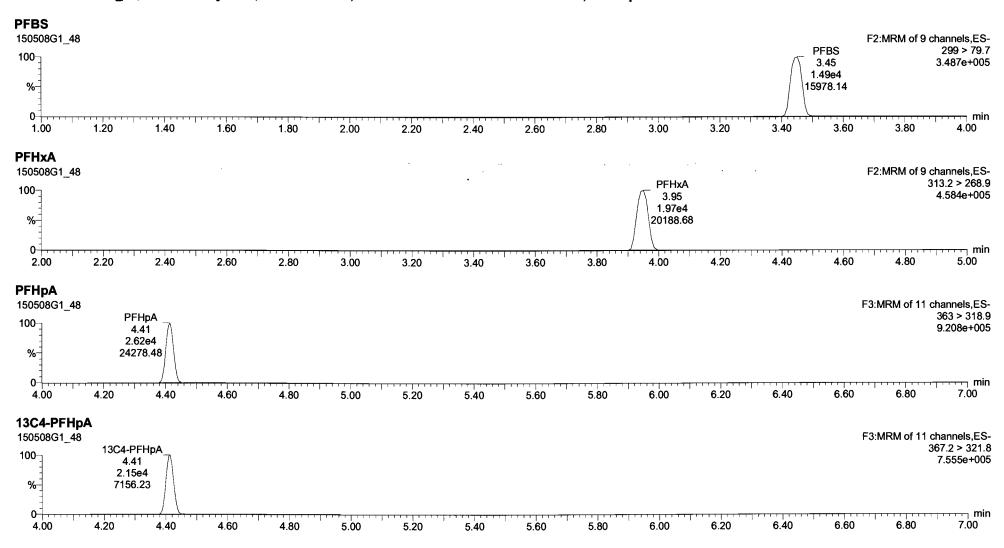
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Last Altered: Printed:

Tuesday, May 12, 2015 13:32:55 Pacific Daylight Time Tuesday, May 12, 2015 13:49:47 Pacific Daylight Time

Name: 150508G1\_48, Date: 09-May-2015, Time: 07:40:25, ID: ST150508G1-11 PFC CS4 15E0807, Description: PFC CS4 15E0807



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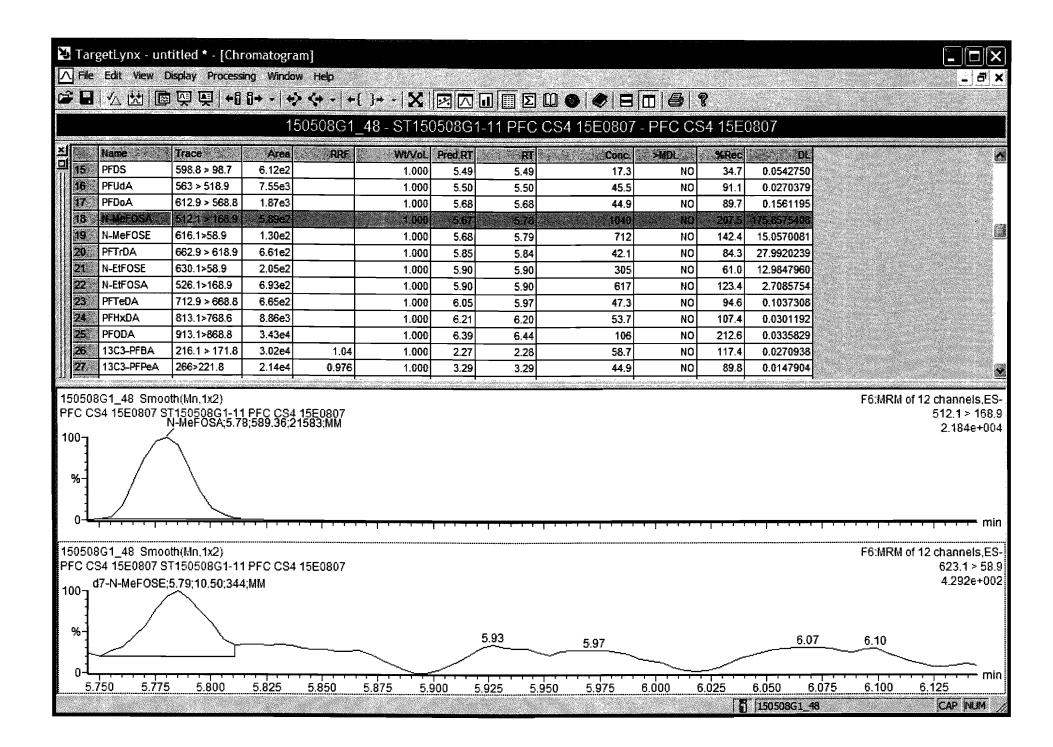
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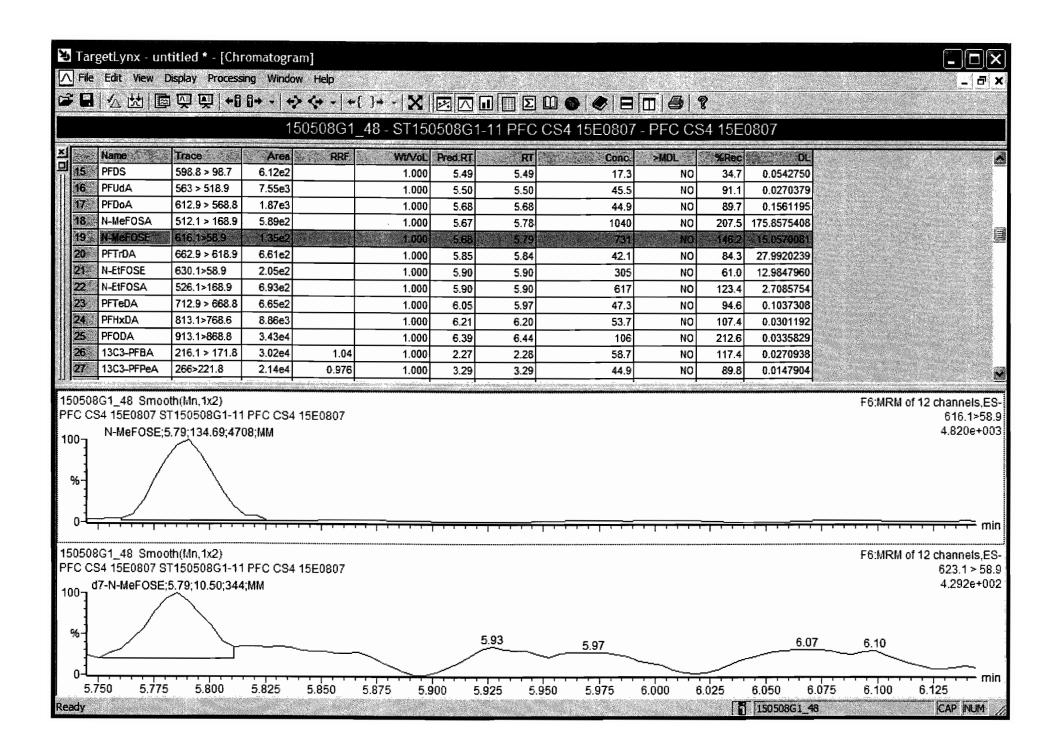
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6.60

6.80



Project 1500410 Page 87 of 333



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Page 582 of 750

Dataset:

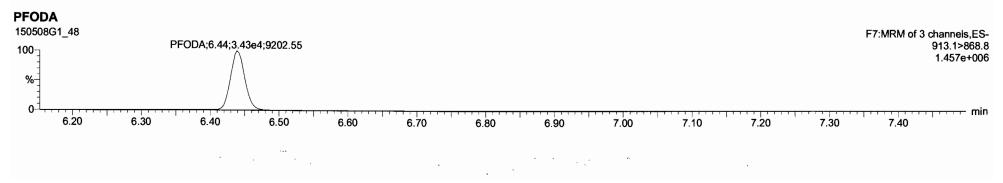
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Last Altered:

Tuesday, May 12, 2015 13:32:55 Pacific Daylight Time

Printed: Tuesday, May 12, 2015 13:49:47 Pacific Daylight Time

## Name: 150508G1\_48, Date: 09-May-2015, Time: 07:40:25, ID: ST150508G1-11 PFC CS4 15E0807, Description: PFC CS4 15E0807



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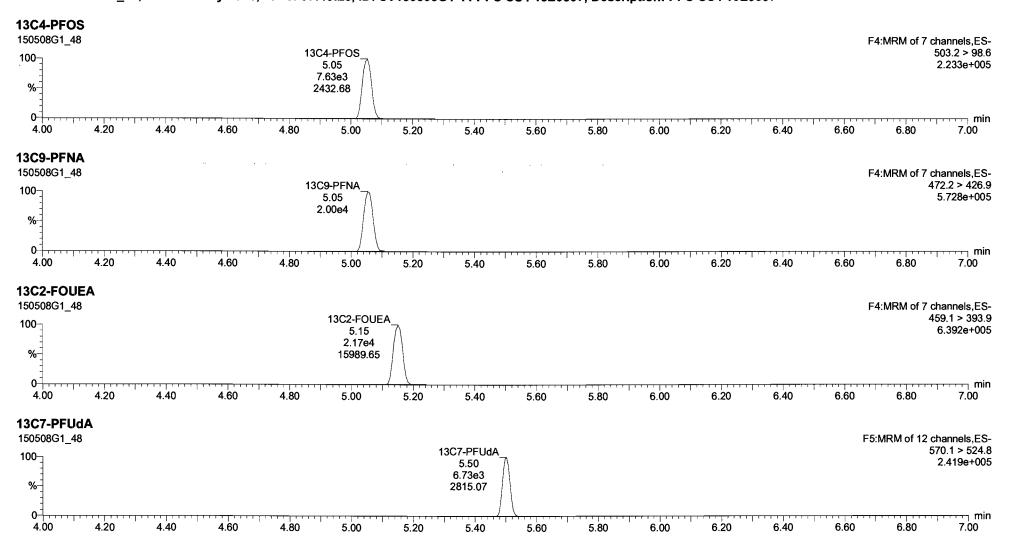
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Last Altered: Printed:

Tuesday, May 12, 2015 13:32:55 Pacific Daylight Time Tuesday, May 12, 2015 13:49:47 Pacific Daylight Time

Name: 150508G1\_48, Date: 09-May-2015, Time: 07:40:25, ID: ST150508G1-11 PFC CS4 15E0807, Description: PFC CS4 15E0807



Vista Analytical Laboratory Q1

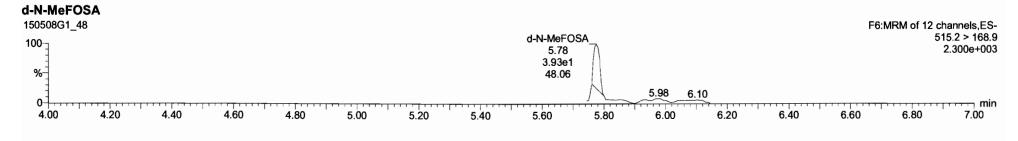
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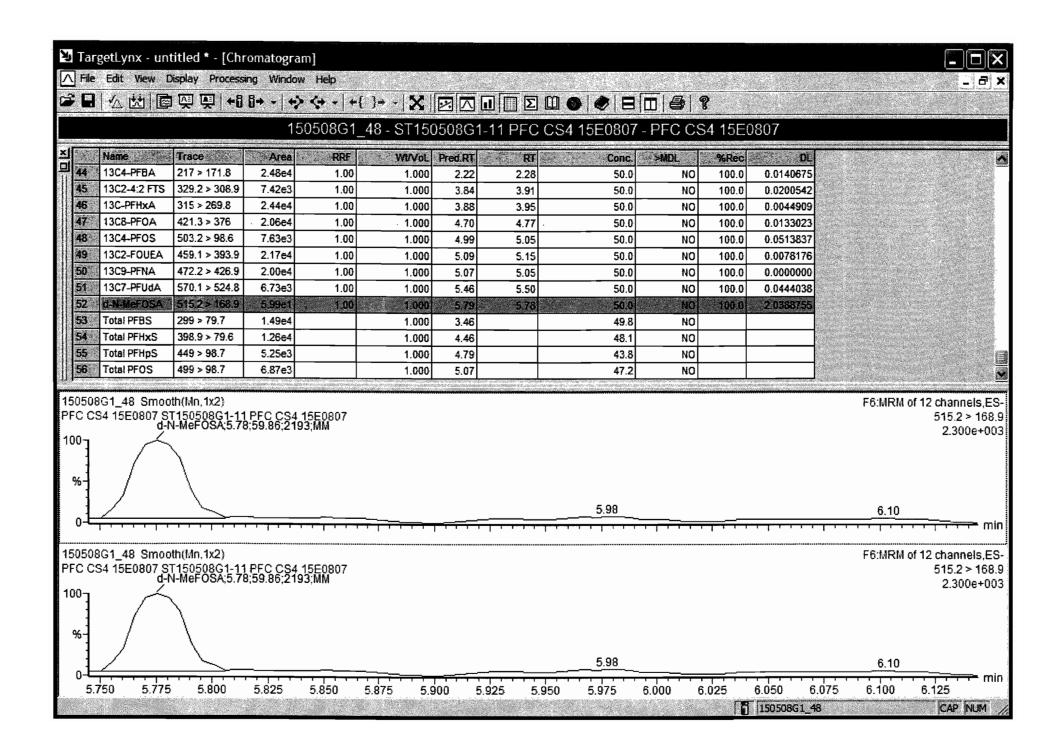
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Last Altered: Printed:

Tuesday, May 12, 2015 13:32:55 Pacific Daylight Time Tuesday, May 12, 2015 13:49:47 Pacific Daylight Time

Name: 150508G1\_48, Date: 09-May-2015, Time: 07:40:25, ID: ST150508G1-11 PFC CS4 15E0807, Description: PFC CS4 15E0807





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Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G1\150512G1\_1.qld

Last Altered: Printed: Wednesday, May 13, 2015 10:40:58 Pacific Daylight Time Wednesday, May 13, 2015 10:42:46 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150512G1\_1, Date: 12-May-2015, Time: 09:11:03, ID: ST150512G1-1 PFC CS4 15E1201, Description: PFC CS4 15E1201

	# Name	Trace	Response	IS Resp. I	RRF WIVO	RT	Conc. %Rec	A Recoveryoutside method timits.
1.	1 PFBA	213.1 > 168.8	1.16e4	3.8 <del>4e4</del>	1.000	2.30	55.1 110.2 70-130	(A) Recoveryous in
2	2 PFPeA	263.1 > 218.9	3.03e4	3.42e4	1.000	3.32	51.5 102.9	mathod timits.
3	3 PFBS	299 > 79.7	2.77e4	1.56e4	1.000	3.48	57.3 114.7	Melvacini
4	4 PFHxA	313.2 > 268.9	3.28e4	2.49e4	1.000	3.98	53.7 107.4	
5	5 PFHpA	363 > 318.9	3.43e4	2.49e4	1.000	4.44	53.8 107.7	
3	6 PFHxS	398.9 > 79.6	2.2 <del>4e4</del>	1.56e4	1.000	4.47	53.1 106.1	
	7 6:2 FTS	427.1 > 407	4.89e3	1.10e4	1.000	4.79	46.6 93.3	
	8 PFOA	413 > 368.7	3.14e4	3.12e4	1.000	4.79	53.3 106.5	
	9 PFHpS	449 > 98.7	1.05e4	1.56e4	1.000	4.79	54.1 108.2	<b>^</b>
10	10 PFOS	499 > 98.7	1.48e4	1.31e4	1.000	5.07	53.1 106.2	$\aleph$ $\nearrow$
11	11 PFNA	463 > 418.8	2.70e4	2.74e4	1.000	5.08	53.1 106.2	100115
11 12 13	12 PFDA	513 > 468.8	4.58e4	4.09e4	1.000	5.32	49.1 98.2	51/21/
13	13 8:2 FTS	527 > 506.9	1.74e4	1.78e4	1.000	5.33	52.1 104.2	2 (12 )
14 🤲 💮	14 FOSA	498.1 > 77.8	1.59e4	2.62e4	1.000	5.42	52.8 105.7	1/2/14/W
15	15 PFDS	598.8 > 98.7	5.65e3	4.09e4	1.000	5.50	56.5 112.9	5/13/15 1/V 5/14/1
15 16	16 PFUdA	563 > 518.9	3.18e4	2.91e4	1.000	5.52	53.3 106.6	~/
17:	17 PFDoA	612.9 > 568.8	2.01e4	2.09e4	1.000	5.70	53.6 107.1	
18	18 N-MeFOSA	512.1 > 168.9	1.63e4	5.92e2	1.000	5.80	744 🕟 148.8	
9	19 N-MeFOSE	616.1>58.9	5.82e3	5.92e2	1.000	5.81	586 117.3	
19 20	20 PFTrDA	662.9 > 618.9	1.85e4	2.91e4	1.000	5.85	83.6 (167.3	
21 22	21 N-EtFOSE	630.1>58.9	7.84e3	6.69e2	1.000	5.92	548 109.6	
22 .	22 N-EtFOSA	526.1>168.9	2.15e4	2.06e3	1.000	5.92	495 99.1	
	23 PFTeDA	712.9 > 668.8	3.57e4	3.85e4	1.000	5.99	51.2 102.3	
23 24	24 PFHxDA	813.1>768.6	7.94e4	7.97e4	1.000	6.22	54.7 109.3	
25	25 PFODA	913.1>868.8	1.13e5	7.97e4	1.000	6.46	45.8 91.5	
?5 ?6	26 13C3-PFBA	216.1 > 171.8	3.84e4	3.66e4 1	1.039 1.000	2.29	50.4 100.7 <del>66</del> 750	
7	27 13C3-PFPeA	266>221.8	3.42e4	3.26e4 0	0.976 1.000	3.32	53.8 107.6	
28	28 13C4-PFHpA	367.2 > 321.8	2.49e4	3.26e4 0	0.850 1.000	4.44	44.9 89.7	
9	29 18O2-PFHxS	403 > 102.6	1.56e4	3.26e4 C	0.420 1.000	4.46	57.1 114.2	
30	30 13C2-6:2 FTS	429.1 > 408.9	1.10e4	1.62e4 (	0.739 1.000	4.79	46.1 92.2 40-150	
<b>31</b>	31 13C2-PFOA	414.9 > 369.7	3.12e4	2.73e4 1	1.160 1.000	4.79	49.3 98.6 60-150	

**Quantify Sample Summary Report** Vista Analytical Laboratory Q1

MassLynx 4.1

Page 2 of 2

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C:\Projects\Method\_1694.PRO\Results\150512G1\150512G1\_1.qld

Last Altered: Printed:

Dataset:

Wednesday, May 13, 2015 10:40:58 Pacific Daylight Time Wednesday, May 13, 2015 10:42:46 Pacific Daylight Time

Name: 150512G1\_1, Date: 12-May-2015, Time: 09:11:03, ID: ST150512G1-1 PFC CS4 15E1201, Description: PFC CS4 15E1201

75-46-76-55	# Name	Trace	Response	IS Resp	RRF	Wt/Vol	· RT	Conc.	%Rec
32 33	32 13C8-PFOS	507.1 > 98.6	1.31e4	1.45e4	0.939	1.000	5.07	48.1	96.2 60-150
33	33 13C5-PFNA	468.2 > 422.9	2.74e4	3.10e4	0.915	1.000	5.08	48.4	96.7 50-150
34	34 13C2-PFDA	515.1 > 469.9	4.09e4	3.10e4	1.149	1.000	5.32	57.5	115.0 60-150
35	35 13C2-8:2 FTS	529.1 > 508.7	1.78e4	1.62e4	0.918	1.000	5.33	59.9	119.9 40-150
36	36 13C8-FOSA	506.1 > 77.7	2.62e4	2.47e4	0.728	1.000	5.42	72.9	145.7 (20-150
37	37 13C2-PFUdA	565 > 519.8	2.91e4	2.47e4	1.148	1.000	5.52	51.3	102.6 360-150
38	38 13C2-PFDoA	615 > 569.7	2.09e4	2.47e4	0.827	1.000	5.70	51.1	102.2 30-150
39	39 d7-N-MeFOSE	623.1 > 58.9	5.92e2	2.37e3	0.597	1.000	5.80	20.9	41.9 5-150
40	40 d9-N-EtFOSE	639.2 > 58.8	6.69e2	2.37e3	0.656	1.000	5.91	21.5	43.1
41	41 d5-N-EtFOSA	531.1>168.9	2.06e3	2.37e3	0.970	1.000	5.92	44.9	89.8
42	42 13C2-PFTeDA	715 > 669.7	3.85e4	2.47e4	1.415	1.000	5.99	55.0	110.0 30-150
43	43 13C2-PFHxDA	815.0>769.7	7.97e4	2.47e4	2.520	1.000	6.22	64.0	128.1
44	44 13C4-PFBA	217 > 171.8	3.66e4	3.66e4	1.000	1.000	2.29	50.0	100.0
45	45 13C2-4:2 FTS	329.2 > 308.9	1.62e4	1.62e4	1.000	1.000	3.93	50.0	100.0
46	46 13C-PFHxA	315 > 269.8	3.26e4	3.26e4	1.000	1.000	3.98	50.0	100.0
47	47 13C8-PFOA	421.3 > 376	2.73e4	2.73e4	1.000	1.000	4.79	50.0	100.0
48	48 13C4-PFOS	503.2 > 98.6	1.45e4	1.45e4	1.000	1.000	5.07	50.0	100.0
49	49 13C2-FOUEA	459.1 > 393.9	3.25e4	3.25e4	1.000	1.000	5.17	50.0	100.0
50	50 13C9-PFNA	472.2 > 426.9	3.10e4	3.10e4	1.000	1.000	5.08	50.0	100.0
51	51 13C7-PFUdA	570.1 > 524.8	2.47e4	2.47e4	1.000	1.000	5.52	50.0	100.0
52	52 d-N-MeFOSA	515.2 > 168.9	2.37e3	2.37e3	1.000	1.000	5.80	50.0	100.0

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# LC CALIBRATION STANDARDS REVIEW CHECKLIST, Q1

	ION Ratio	Concentration	C-Cal Name	<u>Sign/</u> <u>Date</u>	Correct I-Cal	Manual Integrations	
Calibration ID: 5 T 150 S 12 G 1-1 L M H	NA						NA
Calibration ID:L M H					/		
Calibration ID:L M H							$\Box$
Calibration ID:L M H							Щ
Calibration ID:L 🐠 H	V					4	<u> </u>
Calibration ID:L M H							
Calibration ID:L M H	·				Ц		
Calibration ID:L M H		, ,		Ш			
Calibration ID:L M H			Ц				
Calibration ID:L M H							
	•	Fı	ull Mass C	al. Date:_	1111119	_	
,			Comment several		Hside met	thed limits BP	5/13/15
Reviewed by: S/M// S/Initials & Date							

Vista Analytical Laboratory El Dorado Hills, CA 95762 Vista Analytical Laboratory Q1

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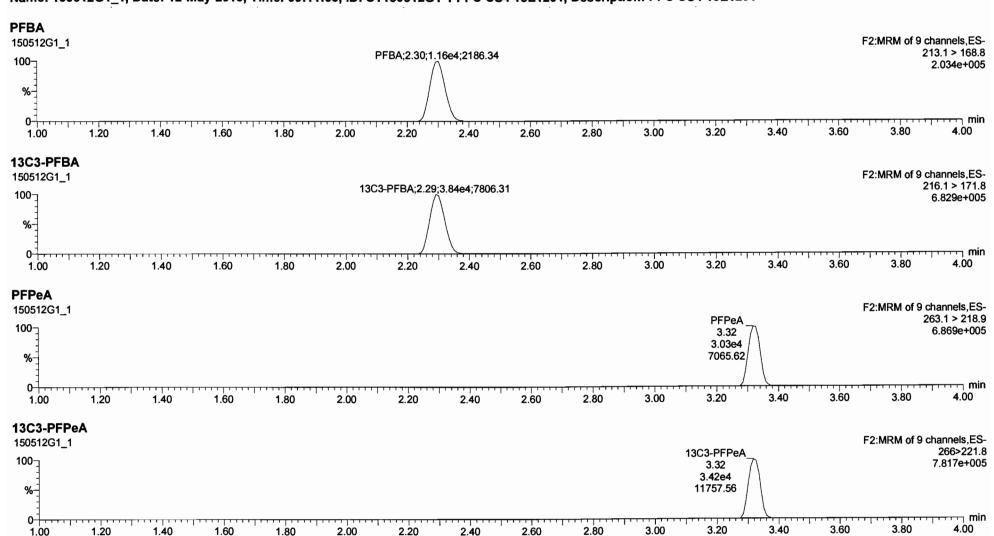
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Name: 150512G1\_1, Date: 12-May-2015, Time: 09:11:03, ID: ST150512G1-1 PFC CS4 15E1201, Description: PFC CS4 15E1201



#### 150512G1\_1 100-%-4178.06 · · · min 4.20 4.40 4.60 4.80 4.00 5.00 5.20 5.40 6.00 6.20 6.40 6.60 6.80 7.00 5.60 5.80

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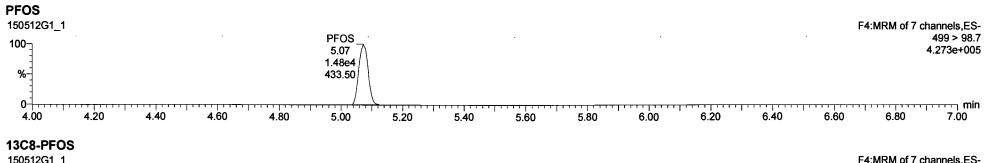
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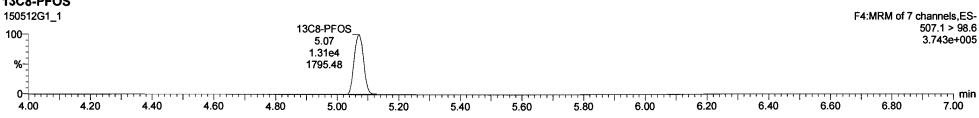
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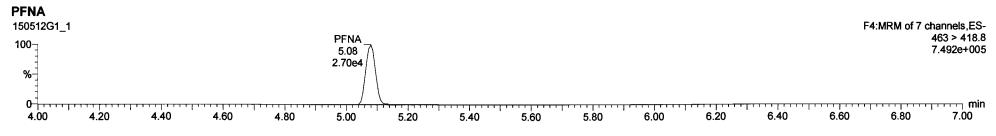
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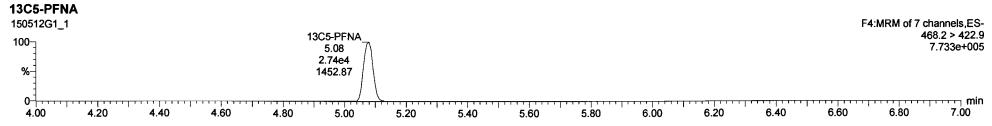
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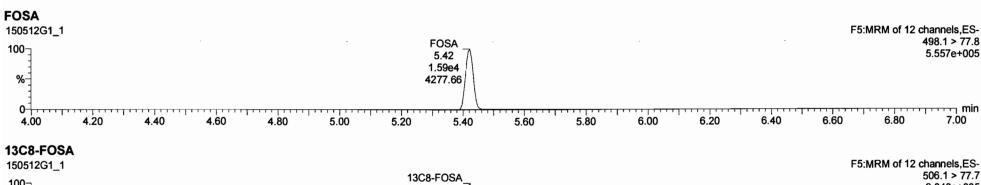


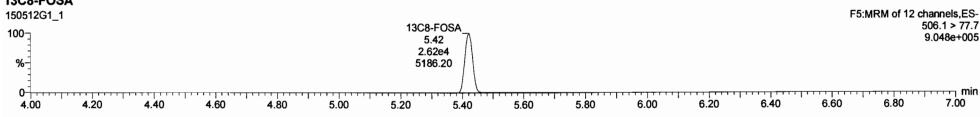
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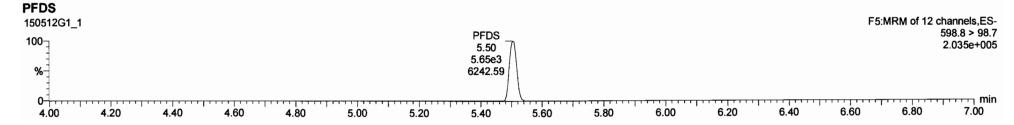
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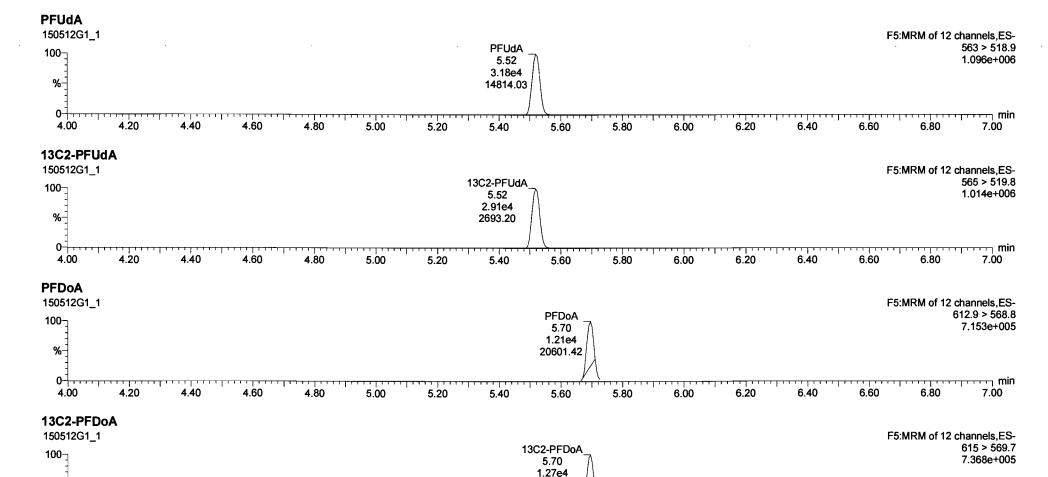


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Name: 150512G1\_1, Date: 12-May-2015, Time: 09:11:03, ID: ST150512G1-1 PFC CS4 15E1201, Description: PFC CS4 15E1201



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5.40

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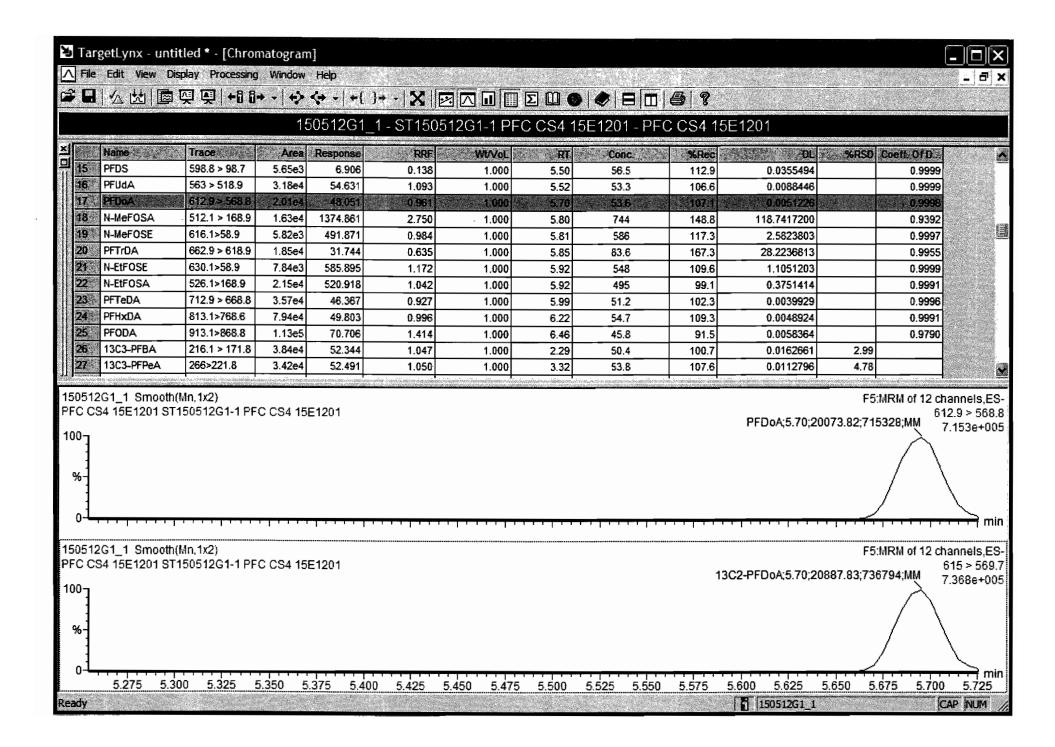
6.40

6.60

6.80

6.20

⊸ min

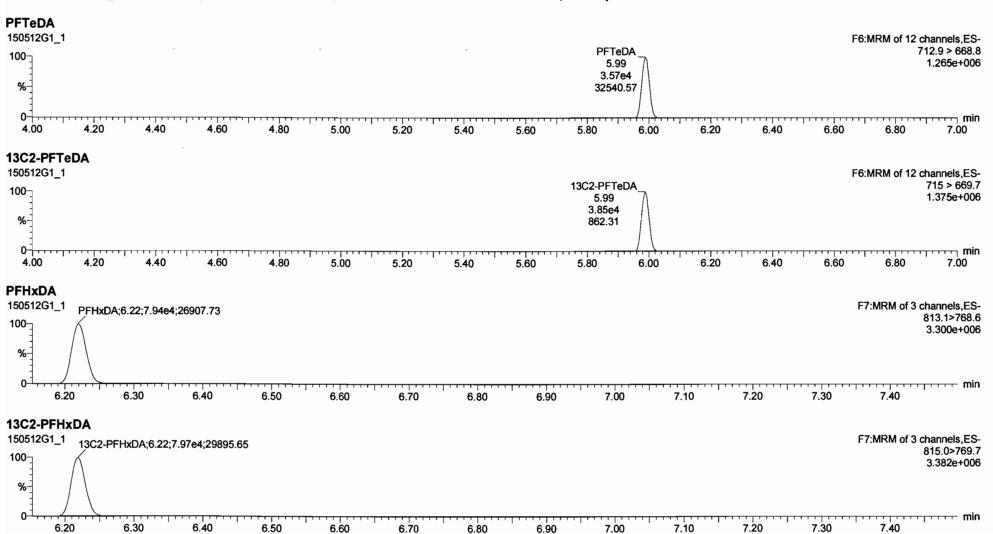


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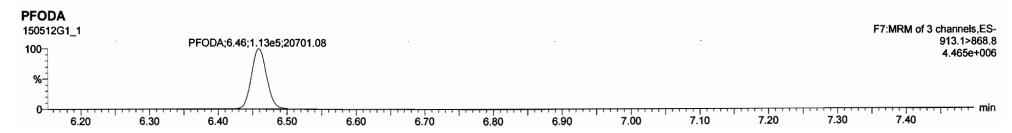


Vista Analytical Laboratory Q1

Dataset:

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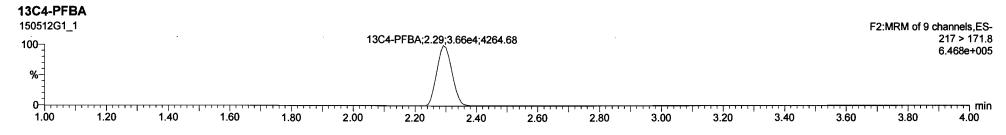


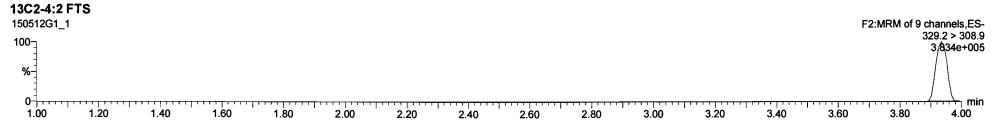
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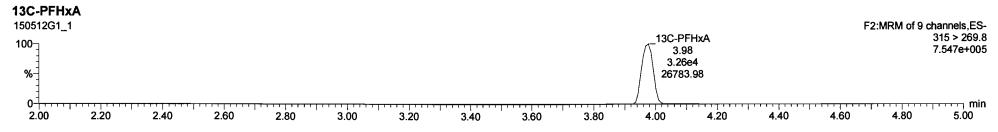
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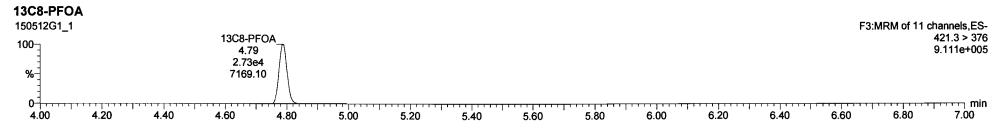
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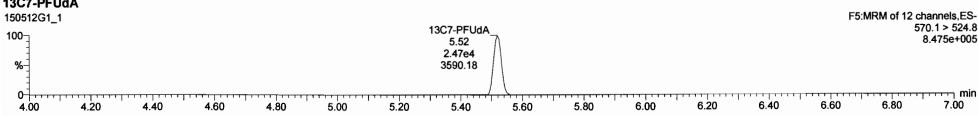
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**Quantify Sample Report** Vista Analytical Laboratory Q1 MassLynx 4.1

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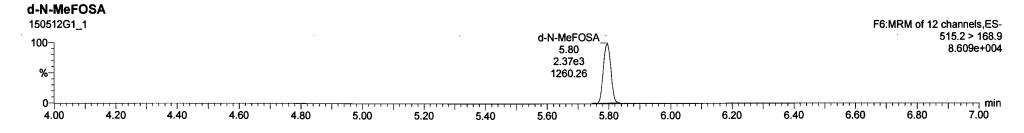
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Wednesday, May 13, 2015 10:34:01 Pacific Daylight Time



Vista Analytical Laboratory Q1

MassLynx 4.1

Page 1 of 2

Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G1\150512G1\_16.qld

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Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

5 PFHpA 363 > 318.9 4.11e4 3.24e4 1.000 4.41 49.6 99.2 6 PFHxS 398.9 > 79.6 2.21e4 1.59e4 1.000 4.44 51.6 103.1 7 6:2 FTS 427.1 > 407 4.98e3 9.91e3 1.000 4.76 53.3 106.5 8 PFOA 413 > 368.7 3.52e4 3.59e4 1.000 4.77 51.9 103.7	very outside nod limits.
5 PFHpA 363 > 318.9 4.11e4 3.24e4 1.000 4.41 49.6 99.2 6 PFHxS 398.9 > 79.6 2.21e4 1.59e4 1.000 4.44 51.6 103.1 7 6:2 FTS 427.1 > 407 4.98e3 9.91e3 1.000 4.76 53.3 106.5 8 PFOA 413 > 368.7 3.52e4 3.59e4 1.000 4.77 51.9 103.7	
5 PFHpA 363 > 318.9 4.11e4 3.24e4 1.000 4.41 49.6 99.2 6 PFHxS 398.9 > 79.6 2.21e4 1.59e4 1.000 4.44 51.6 103.1 7 6.2 FTS 427.1 > 407 4.98e3 9.91e3 1.000 4.76 53.3 106.5 8 PFOA 413 > 368.7 3.52e4 3.59e4 1.000 4.77 51.9 103.7	
5 PFHpA 363 > 318.9 4.11e4 3.24e4 1.000 4.41 49.6 99.2 6 PFHxS 398.9 > 79.6 2.21e4 1.59e4 1.000 4.44 51.6 103.1 7 6:2 FTS 427.1 > 407 4.98e3 9.91e3 1.000 4.76 53.3 106.5 8 PFOA 413 > 368.7 3.52e4 3.59e4 1.000 4.77 51.9 103.7	
6 PFHxS 398.9 > 79.6 2.21e4 1.59e4 1.000 4.44 51.6 103.1 7 6:2 FTS 427.1 > 407 4.98e3 9.91e3 1.000 4.76 53.3 106.5 8 PFOA 413 > 368.7 3.52e4 3.59e4 1.000 4.77 51.9 103.7	
7 6:2 FTS 427.1 > 407 4.98e3 9.91e3 1.000 4.76 53.3 106.5 8 PFOA 413 > 368.7 3.52e4 3.59e4 1.000 4.77 51.9 103.7	1.
8 PFOA 413 > 368.7 3.52e4 3.59e4 1.000 4.77 51.9 103.7	1.00
	1.00
	1.0
9 PFHpS 449 > 98.7 1.06e4 1.59e4 1.000 4.77 54.0 107.9	1./
10 PFOS 499 > 98.7 1.56e4 1.45e4 1.000 5.05 50.6 101.2	
11 PFNA 463 > 418.8 2.92e4 3.10e4 1.000 5.06 50.7 101.4	- 61411
12 PFDA 513 > 468.8 5.01e4 4.20e4 1.000 5.30 52.3 104.6	15/14/15 N/14/15
13 8:2 FTS 527 > 506.9 1.53e4 1.52e4 1.000 5.31 53.6 107.2	
14 FOSA 498.1 > 77.8 1.49e4 2.51e4 1.000 5.40 52.0 104.0	1 -
15 PFDS 598.8 > 98.7 4.53e3 4.20e4 1.000 5.49 46.7 93.3	M
16 PFUdA 563 > 518.9 2.88e4 2.75e4 1.000 5.50 51.1 102.2	114/1
17 PFDoA 612.9 > 568.8 1.25e4 1.34e4 1.000 5.68 52.1 104.1	5711
18 N-MeFOSA 512.1 > 168.9 1.08e4 1.61e2 1.000 5.78 1130 (2) 226.0	
19 N-MeFOSE 616.1>58.9 1.82e3 1.61e2 1.000 5.79 659(1) 131.7	
20 PFTrDA 662.9 > 618.9 4.91e3 2.75e4 1.000 5.84 52.7 105.5	
21 N-EtFOSE 630.1>58.9 2.67e3 2.18e2 1.000 5.91 574 114.8	
22 N-EtFOSA 526.1>168.9 1.25e4 1.27e3 1.000 5.91 466 93.3	
23 PFTeDA 712.9 > 668.8 6.56e3 6.80e3 1.000 5.97 53.2 106.4	
24 PFHxDA 813.1>768.6 4.15e4 4.36e4 1.000 6.20 52.1 104.3	
25 PFODA 913.1>868.8 8.76e4 4.36e4 1.000 6.43 62.4 124.8	
26 13C3-PFBA 216.1 > 171.8 3.99e4 4.34e4 1.039 1.000 2.26 44.3 88.7 (40) 15()	
27 13C3-PFPeA 266>221.8 3.49e4 3.59e4 0.976 1.000 3.28 49.8 99.7	
28 13C4-PFHpA 367.2 > 321.8 3.24e4 3.59e4 0.850 1.000 4.41 53.0 106.0	
29 18O2-PFHxS 403 > 102.6 1.59e4 3.59e4 0.420 1.000 4.44 52.8 105.5	
30 13C2-6:2 FTS 429.1 > 408.9 9.91e3 1.36e4 0.739 1.000 4.76 49.3 98.6 40づらし	
31 13C2-PFOA 414.9 > 369.7 3.59e4 3.31e4 1.160 1.000 4.76 46.8 93.6 60-150	

Vista Analytical Laboratory Q1

MassLynx 4.1

Page 2 of 2

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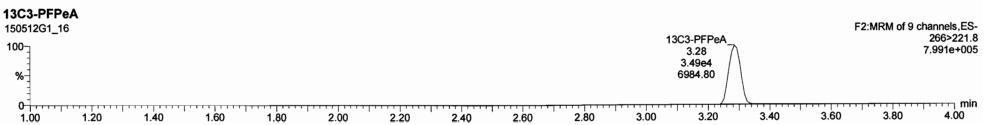
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	# Name*	Trace	Response	IS Resp	RRF	:Wt∕Vol.	RT	Conc.	100
3	32 13C8-PFOS	507.1 > 98.6	1.45e4	1.58e4	0.939	1.000	5.05	48.7	97.4
	33 13C5-PFNA	468.2 > 422.9	3.10e4	3.44e4	0.915	1.000	5.05	49.3	98.6
	34 13C2-PFDA	515.1 > 469.9	4.20e4	3.44e4	1.149	1.000	5.30	53.2	106.4
	35 13C2-8:2 FTS	529.1 > 508.7	1.52e4	1.36e4	0.918	1.000	5.31	60.8	121.7
	36 13C8-FOSA	506.1 > 77.7	2.51e4	2.46e4	0.728	1.000	5.40	69.9	139.8
	37 13C2-PFUdA	565 > 519.8	2.75e4	2.46e4	1.148	1.000	5.50	48.6	97.3
	38 13C2-PFDoA	615 > 569.7	1.34e4	2.46e4	0.827	1.000	5.68	32.9	65.7
	39 d7-N-MeFOSE	623.1 > 58.9	1.61e2	1.71e3	0.597	1.000	5.78	7.88	15.8
	40 d9-N-EtFOSE	639.2 > 58.8	2.18e2	1.71e3	0.656	1.000	5.90	9.68	19.4
	41 d5-N-EtFOSA	531.1>168.9	1.27e3	1.71e3	0.970	1.000	5.90	38.2	76.5
	42 13C2-PFTeDA	715 > 669.7	6.80e3	2.46e4	1.415	1.000	5.97	9.75	19.5
	43 13C2-PFHxDA	815.0>769.7	4.36e4	2.46e4	2.520	1.000	6.20	35.1	70.2
i di Sanca di P	44 13C4-PFBA	217 > 171.8	4.34e4	4.34e4	1.000	1.000	2.26	50.0	100.0
	45 13C2-4:2 FTS	329.2 > 308.9	1.36e4	1.36e4	1.000	1.000	3.91	50.0	100.0
	46 13C-PFHxA	315 > 269.8	3.59e4	3.59e4	1.000	1.000	3.94	50.0	100.0
	47 13C8-PFOA	421.3 > 376	3.31e4	3.31e4	1.000	1.000	4.76	50.0	100.0
	48 13C4-PFOS	503.2 > 98.6	1.58e4	1.58e4	1.000	1.000	5.05	50.0	100.0
	49 13C2-FOUEA	459.1 > 393.9	4.73e4	4.73e4	1.000	1.000	5.15	50.0	100.0
	50 13C9-PFNA	472.2 > 426.9	3.44e4	3.44e4	1.000	1.000	5.05	50.0	100.0
	51 13C7-PFUdA	570.1 > 524.8	2.46e4	2.46e4	1.000	1.000	5.50	50.0	100.0
	52 d-N-MeFOSA	515.2 > 168.9	1.71e3	1.71e3	1.000	1.000	5.78	50.0	100.0

Drecovery outside method limits.

ACS/13/15

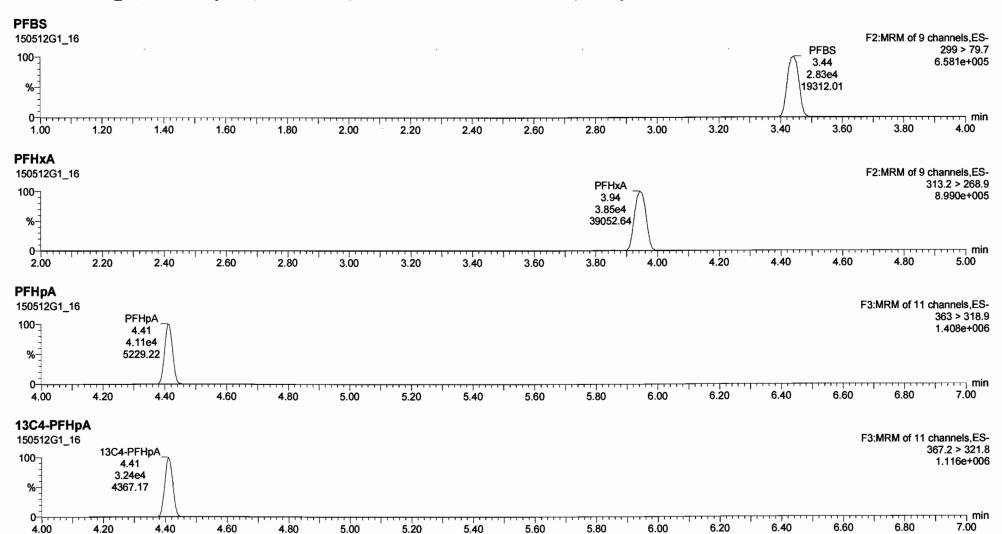


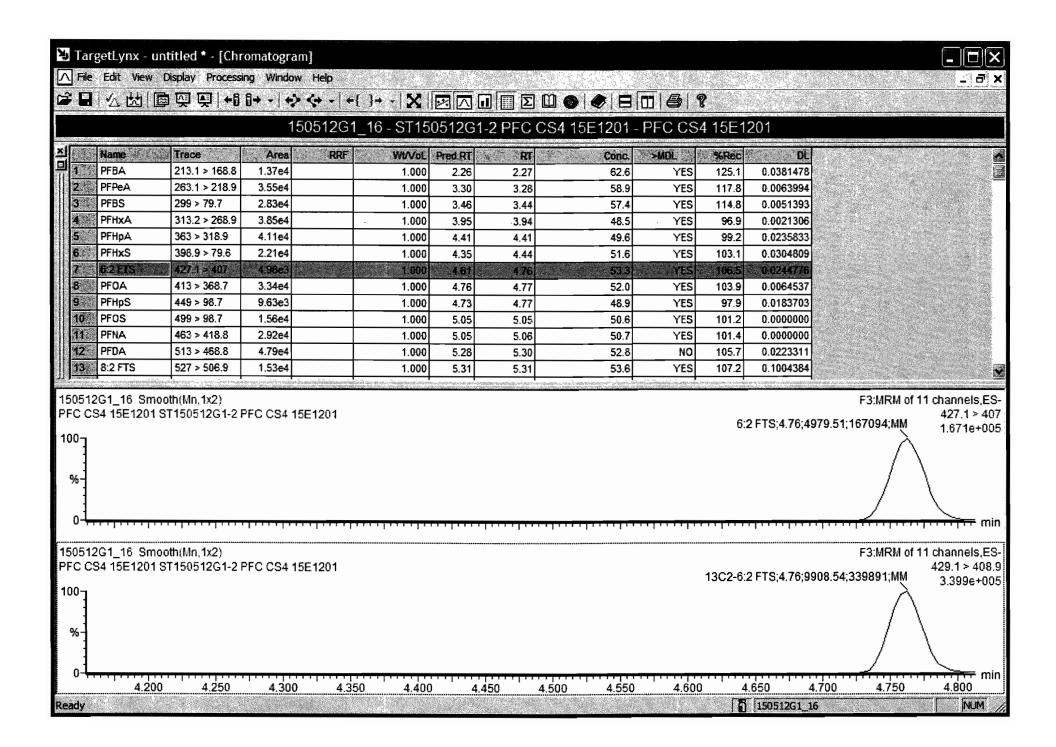
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Wednesday, May 13, 2015 10:34:17 Pacific Daylight Time





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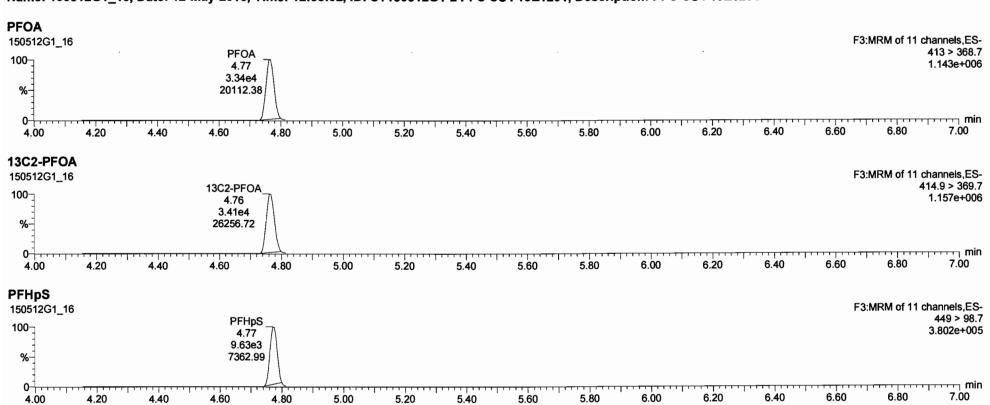
**Quantify Sample Report** Vista Analytical Laboratory Q1

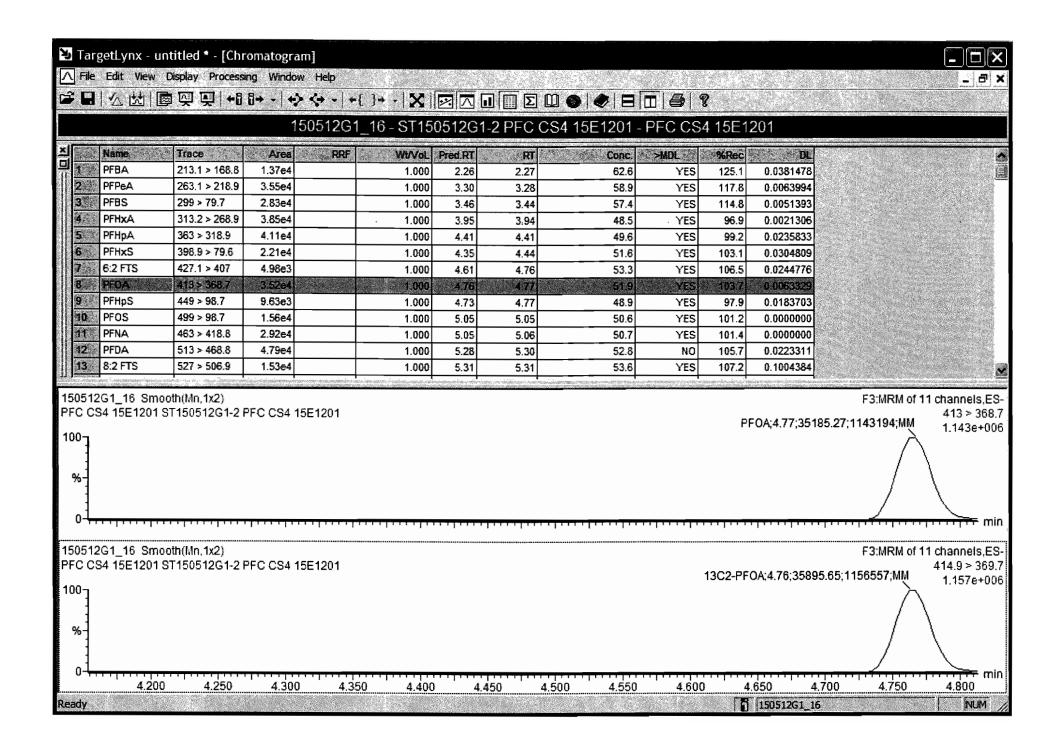
Dataset:

Untitled

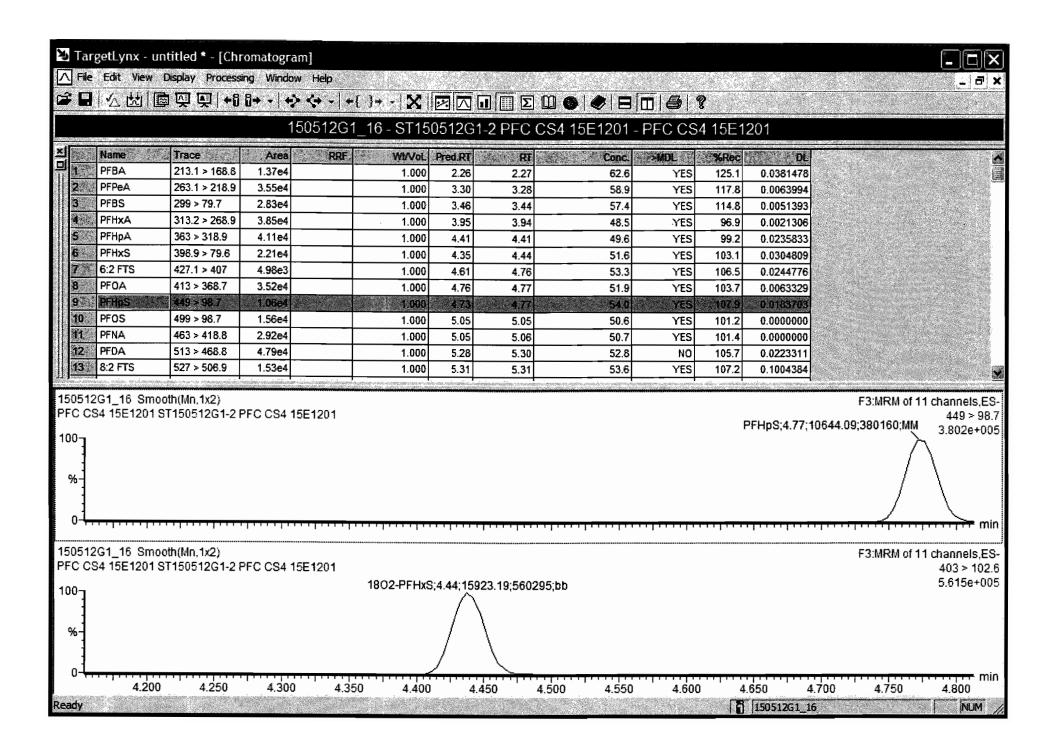
Last Altered: Printed:

Wednesday, May 13, 2015 10:34:11 Pacific Daylight Time Wednesday, May 13, 2015 10:34:17 Pacific Daylight Time

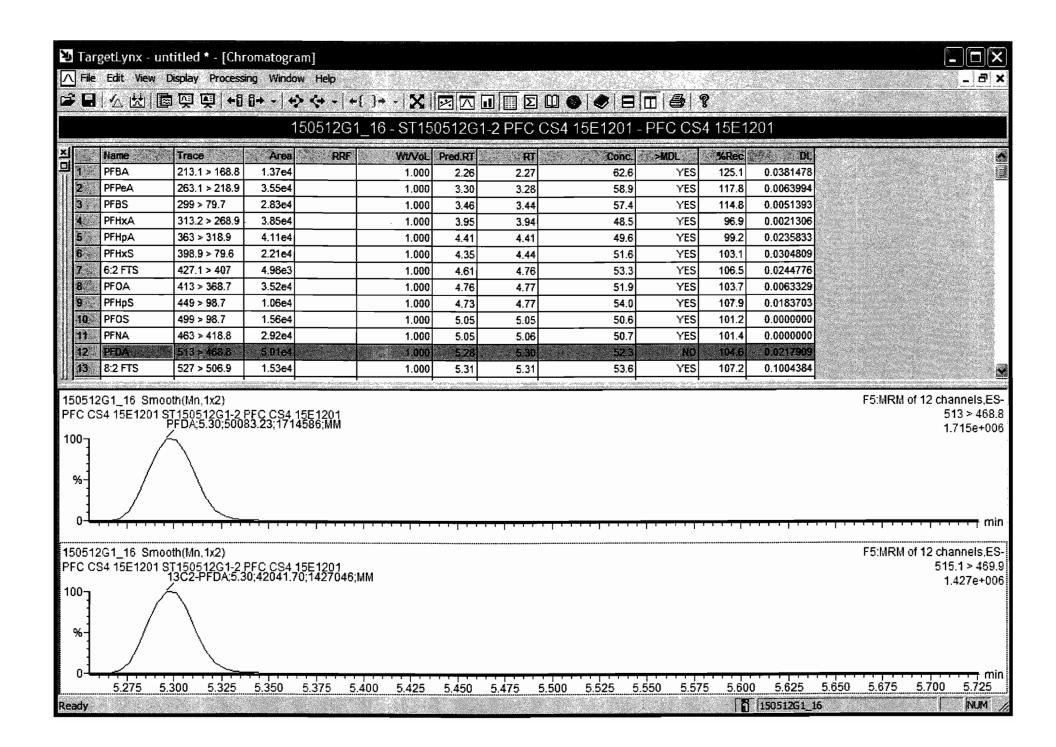




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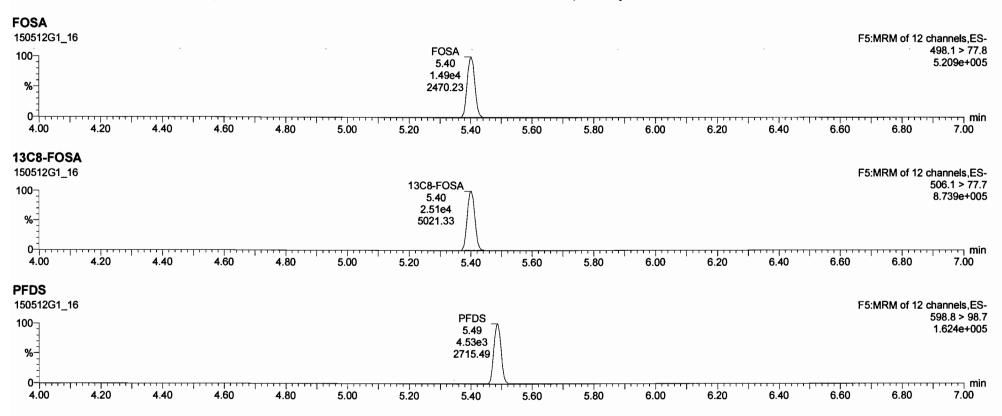


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Untitled

Last Altered: Printed:

Wednesday, May 13, 2015 10:34:11 Pacific Daylight Time Wednesday, May 13, 2015 10:34:17 Pacific Daylight Time



5.80

6.00

6.20

5.60

6.40

6.60

6.80

0

4.00

4.20

4.40

4.60

4.80

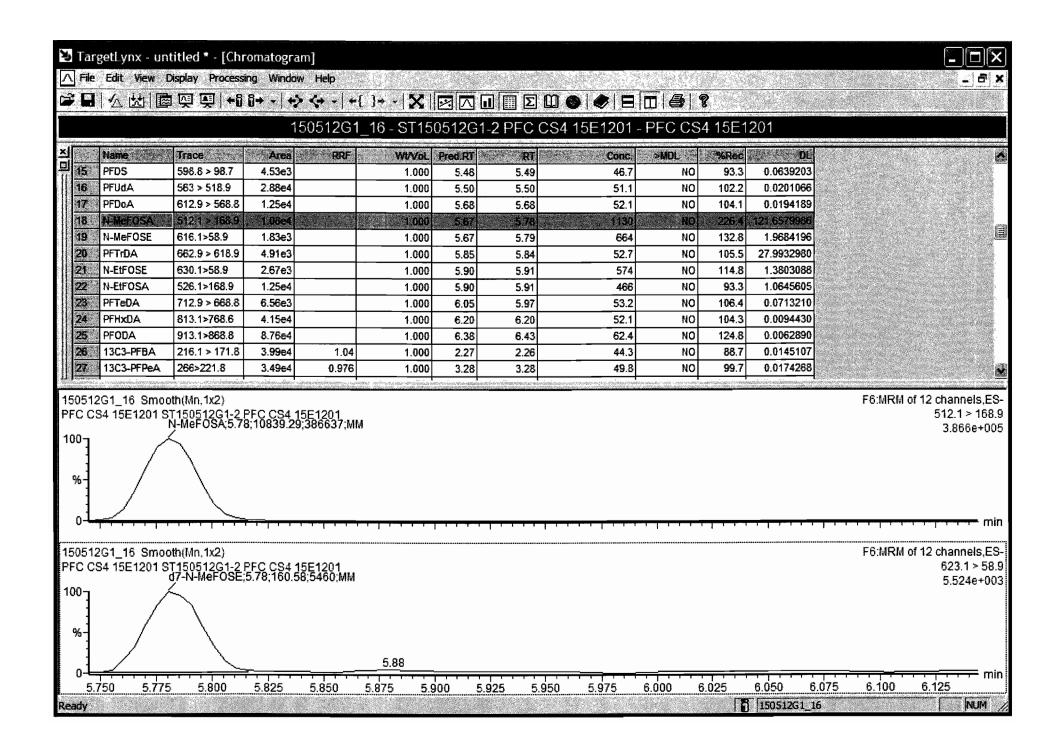
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5.20

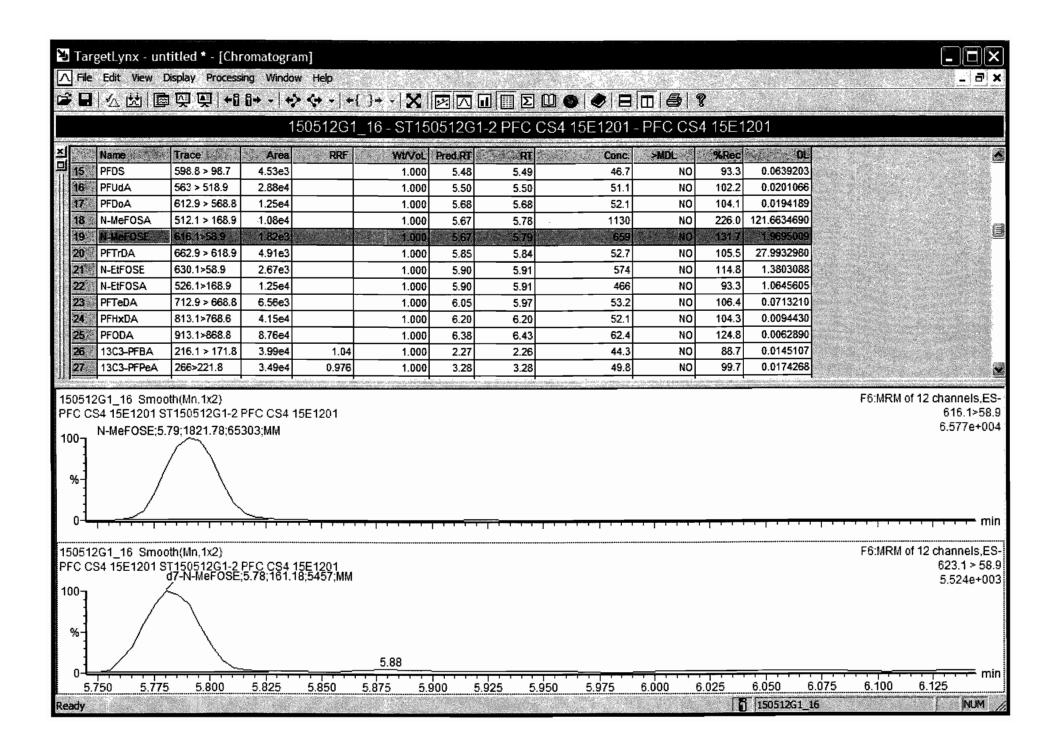
5.40

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7.00



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6.80

6.90

7.00

7.10

7.20

7.30

7.40

6.20

6.30

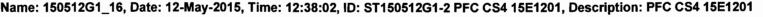
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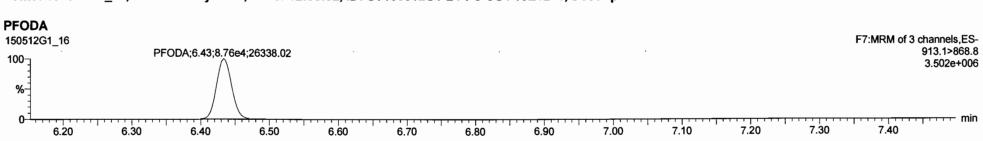
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6.60

6.70

**Quantify Sample Report** Page 12 of 15 MassLynx 4.1 Vista Analytical Laboratory Q1 Untitled Dataset: Last Altered: Wednesday, May 13, 2015 10:34:11 Pacific Daylight Time Wednesday, May 13, 2015 10:34:17 Pacific Daylight Time Printed: Name: 150512G1\_16, Date: 12-May-2015, Time: 12:38:02, ID: ST150512G1-2 PFC CS4 15E1201, Description: PFC CS4 15E1201





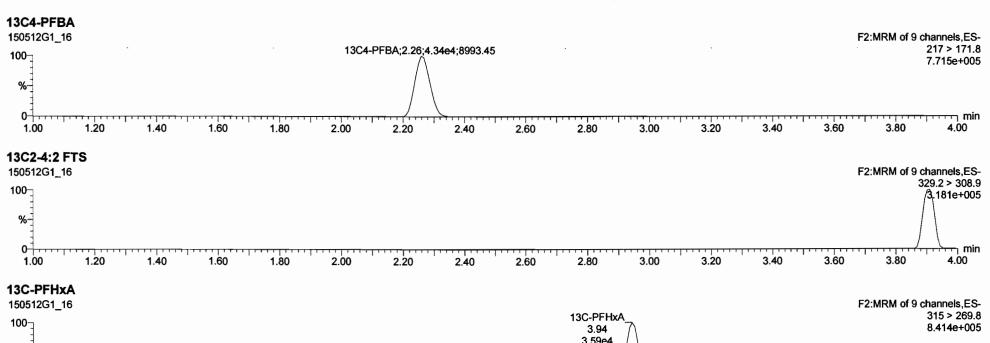
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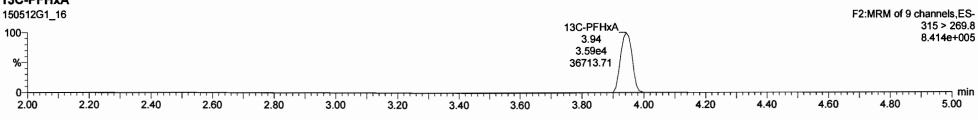
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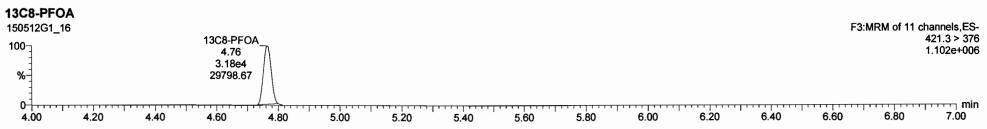
Last Altered:

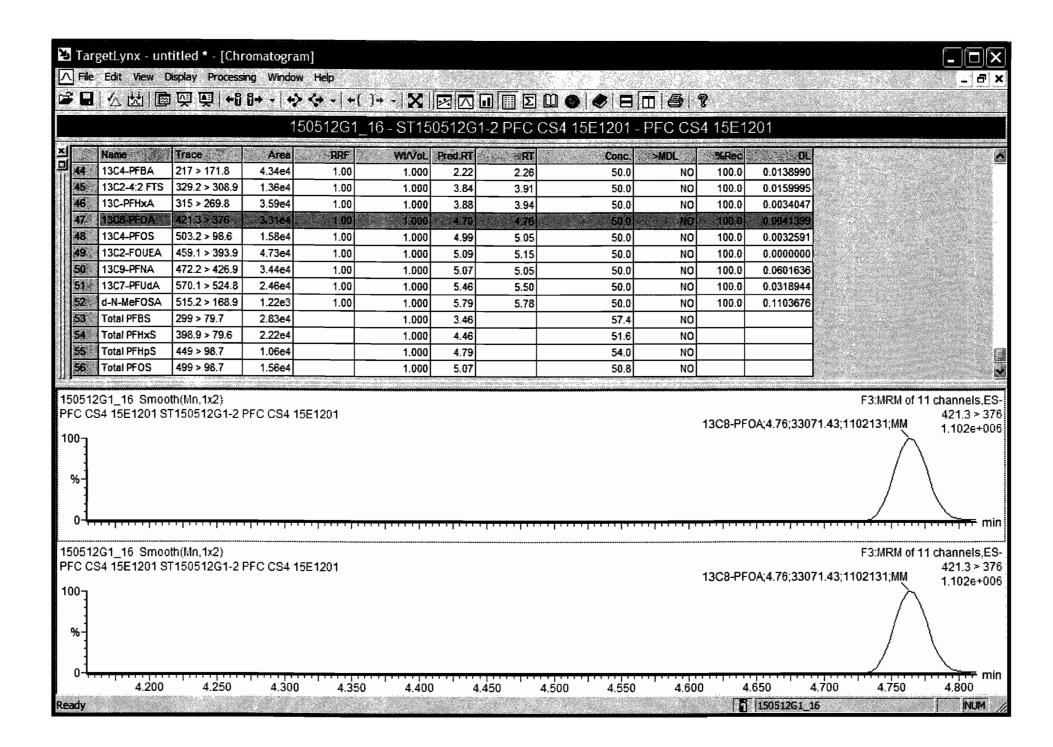
Wednesday, May 13, 2015 10:34:11 Pacific Daylight Time

Printed: Wednesday, May 13, 2015 10:34:17 Pacific Daylight Time







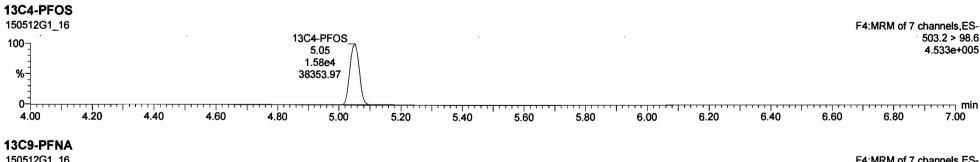


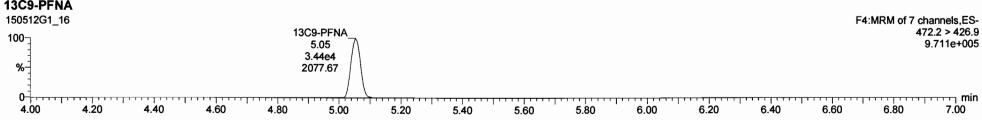
Project 1500410 Page 136 of 333

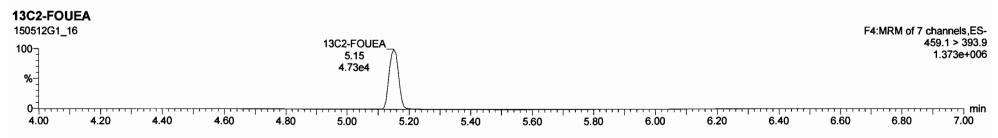
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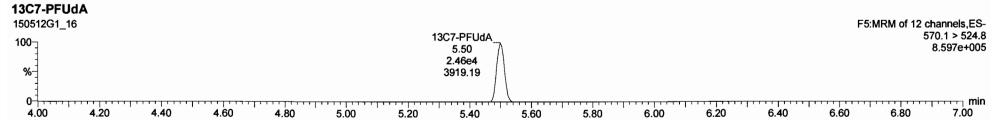
Last Altered: Wednesday, May 13, 2015 10:34:11 Pacific Daylight Time Printed: Wednesday, May 13, 2015 10:34:17 Pacific Daylight Time











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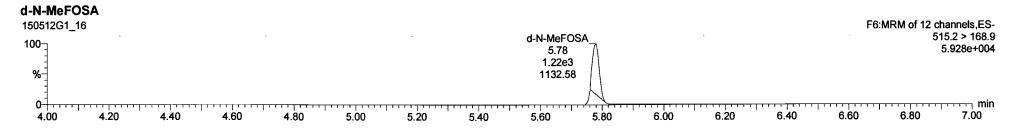
Dataset:

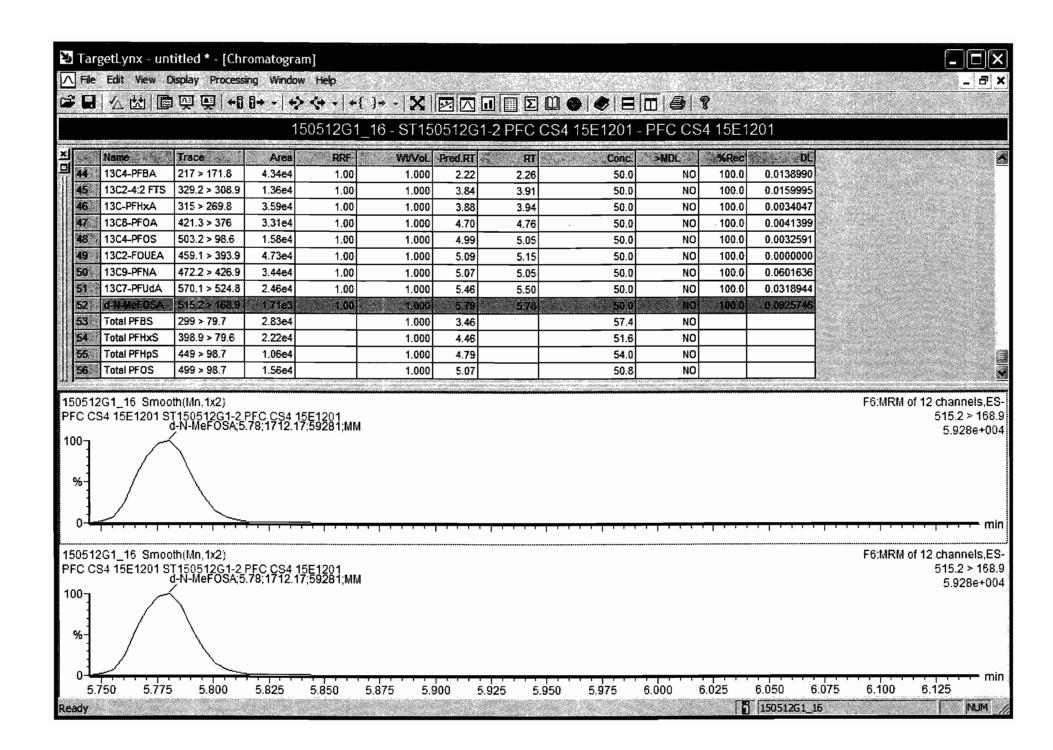
Untitled

Last Altered: Printed:

Wednesday, May 13, 2015 10:34:11 Pacific Daylight Time

Wednesday, May 13, 2015 10:34:17 Pacific Daylight Time





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# INITIAL CALIBRATION

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Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.gld

MassLynx 4.1

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Method: Untitled 11 May 2015 13:08:22 PFAS - Longlist QUAD2

Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Compound name: PFBA

Coefficient of Determination:  $R^2 = 0.999550$ Calibration curve:  $5.65713e-005 * x^2 + 0.27087 * x$ 

Response type: Internal Std ( Ref 26 ), Area \* ( 1S Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	-IS Resp.	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	2.30	1.49e2	3.90e4	0.702	0.9996
2	2 150508G1_2	1.00	2.28	2.66e2	4.03e4	1.22	0.9996
3	3 150508G1_3	2.00	2.28	4.69e2	4.28e4	2.03	0.9996
4	4 150508G1_4	5.00	2.28	1.01e3	4.01e4	4.65	0.9996
5	5 150508G1_5	10.0	2.28	2.57e3	4.07e4	11.6	0.9996
6	6 150508G1_6	50.0	2.28	1.16e4	4.52e4	46.9	0.9996
7	7 150508G1_7	100	2.28	2.03e4	3.60e4	102	0.9996
8	8 150508G1_8	200	2.26	4.16e4	3.69e4	200	0.9996

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Conjerning Stills

Compound name: PFPeA

Coefficient of Determination: R^2 = 0.999650 Calibration curve: 0.00027275 \* x^2 + 0.846594 \* x

Response type: Internal Std (Ref 27), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	3.32	5.22e2	4.03e4	0.765	0.9997
2	2 150508G1_2	1.00	3.30	8.23e2	3.94e4	1.23	0.9997
3	3 150508G1_3	2.00	3.30	1.43e3	4,21e4	2.01	0.9997
4	4 150508G1_4	5.00	3.29	3.23e3	3.68e4	5.16	0.9997
5	5 150508G1_5	10.0	3.29	7.07e3	3.70e4	11.3	0.9997
6	6 150508G1_6	50.0	3.29	3.35e4	3.71e4	52.6	0.9997
7	7 150508G1_7	100	3.29	5.30e4	3.10e4	97.9	0.9997
8	8 150508G1_8	200	3.29	9.70e4	2.69e4	200	0.9997

## Quantify Compound Summary Report

oort MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.gld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

**Compound name: PFBS** 

Coefficient of Determination: R^2 = 0.998263 Calibration curve: 0.00120471 \* x^2 + 1.47667 \* x

Response type: Internal Std ( Ref 29 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

17277	# Name	Std. Conc	RT	Resp	IS Resp	Conc	Coeff, Of D
1	1 150508G1_1	0.500	3.48	3.80e2	1.71e4	0.752	0.9983
2	2 150508G1_2	1.00	3.45	4.73e2	1.70e4	0.939	0.9983
3	3 150508G1_3	2.00	3.45	1.23e3	1.75e4	2.37	0.9983
4	4 150508G1_4	5.00	3.45	2.58e3	1.61e4	5.40	0.9983
5	5 150508G1_5	10.0	3.44	6.37e3	1.63e4	13.1	0.9983
6	6 150508G1_6	50.0	3.44	2.75e4	1.59e4	55.9	0.9983
7	7 150508G1_7	100	3.44	4.29e4	1.42e4	95.3	0.9983
8	8 150508G1_8	200	3.44	7.65e4	1.11e4	201	0.9983

Compound name: PFHxA

Coefficient of Determination:  $R^2 = 0.999469$ Calibration curve:  $0.00035657 * x^2 + 1.21033 * x$ 

Response type: Internal Std (Ref 28), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT.	Resp	IS Resp	Conc.	Coeff, Of D
1	1 150508G1_1	0.500	3.98	6.94e2	3.30e4	0.869	0.9995
2	2 150508G1_2	1.00	3.95	1.04e3	3.91e4	1.10	0.9995
3	3 150508G1_3	2.00	3.95	1.75e3	3.95e4	1.84	0.9995
4	4 150508G1_4	5.00	3.95	3.78e3	3.54e4	4.41	0.9995
5	5 150508G1_5	10.0	3.95	8.59e3	3.49e4	10.1	0.9995
6	6 150508G1_6	50.0	3.95	3.57e4	3.12e4	46.5	0.9995
7	7 150508G1_7	100	3.95	6.04e4	2.36e4	103	0.9995
8	8 150508G1_8	200	3.94	1.01e5	1.96e4	200	0.9995

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Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFHpA

Coefficient of Determination: R^2 = 0.999825 Calibration curve: -5.59448e-006 \* x^2 + 1.27986 \* x

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	₩ RT ·	Resp	IS Resp	Conc.	Coeff, Of D
1	1 150508G1_1	0.500	4.44	4.70e2	3.30e4	0.556	0.9998
2	2 150508G1_2	1.00	4.42	1.02e3	3.91e4	1.02	0.9998
3.	3 150508G1_3	2.00	4.42	1.80e3	3.95e4	1.78	0.9998
4	4 150508G1_4	5.00	4.41	4.25e3	3.54e4	4.69	0.9998
5	5 150508G1_5	10.0	4.41	9.49e3	3.49e4	10.6	0.9998
6	6 150508G1_6	50.0	4.41	3.84e4	3.12e4	48.1	0.9998
7	7 150508G1_7	100	4.41	6.13e4	2.36e4	101	0.9998
8	8 150508G1_8	200	4.41	1.00e5	1.96e4	200	0.9998

Compound name: PFHxS

Coefficient of Determination: R^2 = 0.999768
Calibration curve: 0.000684891 \* x^2 + 1.31306 \* x

Response type: Internal Std (Ref 29), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	- IS Resp	Conc.	Coeff, Of D
1	1 150508G1_1	0.500	4.46	3.42e2	1.71e4	0.761	0.9998
2	2 150508G1_2	1.00	4.45	5.72e2	1.70e4	1.28	0.9998
3	3 150508G1_3	2.00	4.44	9.66e2	1.75e4	2.11	0.9998
4	4 150508G1_4	5.00	4.44	2.17e3	1.61e4	5.12	0.9998
5	5 150508G1_5	10.0	4.44	5.06e3	1.63e4	11.8	0.9998
6	6 150508G1_6	50.0	4.44	2.22e4	1.59e4	51.8	0.9998
7	7 150508G1_7	100	4.44	3.85e4	1.42e4	98.4	0.9998
8	8 150508G1_8	200	4.44	6.44e4	1.11e4	200	0.9998

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Vista Analytical Laboratory Q1

Dataset: C:\

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.gld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: 6:2 FTS

Coefficient of Determination:  $R^2 = 0.999008$ Calibration curve:  $-0.00041331 * x^2 + 0.493707 * x$ 

Response type: Internal Std ( Ref 30 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

1.07	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	4.78	9.16e1	1.52e4	0.612	0.9990
2	2 150508G1_2	1.00	4.77	1.11e2	1.05e4	1.08	0.9990
3	3 150508G1_3	2.00	4.77	2.12e2	1.14 <del>e4</del>	1.89	0.9990
4	4 150508G1_4	5.00	4.77	5.39e2	1.10e4	4.96	0.9990
5	5 150508G1_5	10.0	4.76	1.15e3	1.08e4	10.9	0.9990
6	6 150508G1_6	50.0	4.76	4.78e3	1.10e4	45.6	0.9990
7	7 150508G1_7	100	4.76	8.32e3	8.92e3	103	0.9990
8,	8 150508G1_8	200	4.76	1.41e4	8.62e3	199	0.9990

Compound name: PFOA

Coefficient of Determination: R^2 = 0.999872

Calibration curve: -0.000103446 \* x^2 + 0.950371 \* x

Response type: Internal Std (Ref 31), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name :	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	4.79	5.74e2	4.02e4	0.752	0.9999
2	2 150508G1_2	1.00	4.77	8.60e2	4.49e4	1.01	0.9999
3	3 150508G1_3	2.00	4.77	1.60e3	4.42e4	1.90	0.9999
4	4 150508G1_4	5.00	4.77	3.56e3	3.93e4	4.76	0.9999
5	5 150508G1_5	10.0	4.77	8.25e3	3.94e4	11.0	0.9999
6	6 150508G1_6	50.0	4.77	3.33e4	3.64e4	48.5	0.9999
7.600	7 150508G1_7	100	4.77	5.33e4	2.81e4	101	0.9999
8	8 150508G1_8	200	4.77	8.87e4	2.39e4	200	0.9999

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C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFHpS

Coefficient of Determination: R^2 = 0.998871 Calibration curve: 0.000328508 \* x^2 + 0.601622 \* x

Response type: Internal Std (Ref 29), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

A Marine	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff: Of D
177	1 150508G1_1	0.500	4.79	1.03e2	1.71e4	0.503	0.9989
2	2 150508G1_2	1.00	4.78	1.66e2	1.70e4	0.811	0.9989
3 1/2	3 150508G1_3	2.00	4.78	4.40e2	1.75e4	2.09	0.9989
4	4 150508G1_4	5.00	4.78	9.78e2	1.61e4	5.03	0.9989
5	5 150508G1_5	10.0	4.78	2.30e3	1.63e4	11.7	0.9989
6	6 150508G1_6	50.0	4.78	1.08e4	1.59e4	54.9	0.9989
7	7 150508G1_7	100	4.78	1.72e4	1.42e4	96.2	0.9989
8	8 150508G1_8	200	4.78	2.97e4	1.11e4	201	0.9989

Compound name: PFOS

Coefficient of Determination:  $R^2 = 0.999903$ Calibration curve:  $0.000368843 * x^2 + 1.04217 * x$ 

Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
13/12	1 150508G1_1	0.500	5.07	9.58e1	1.18e4	0.390	0.9999
2	2 150508G1_2	1.00	5.06	2.11e2	1.13e4	0.901	0.9999
3	3 150508G1_3	2.00	5.05	4.74e2	1.23e4	1.84	0.9999
4	4 150508G1_4	5.00	5.05	1.12e3	1.15e4	4.69	0.9999
5	5 150508G1_5	10.0	5.05	2.76e3	1.21e4	11.0	0.9999
6	6 150508G1_6	50.0	5.05	1.52e4	1.48e4	48.6	0.9999
7	7 150508G1_7	100	5.05	2.51e4	1.15e4	101	0.9999
8	8 150508G1_8	200	5.05	4.92e4	1.10e4	200	0.9999

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C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFNA

Coefficient of Determination: R^2 = 0.999547 Calibration curve: 0.000330257 \* x^2 + 0.909529 \* x

Response type: Internal Std (Ref 33), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff, Of D
1	1 150508G1_1	0.500	5.08	3.64e2	2.82e4	0.708	0.9995
2	2 150508G1_2	1.00	5.06	6.19e2	2.92e4	1.17	0.9995
3	3 150508G1_3	2.00	5.06	1.10e3	2.99e4	2.02	0.9995
4	4 150508G1_4	5.00	5.06	2.64e3	2.79e4	5.20	0.9995
5	5 150508G1_5	10.0	5.06	6.40e3	2.90e4	12.1	0.9995
6	6 150508G1_6	50.0	5.06	2.74e4	3.15e4	46.9	0.9995
7	7 150508G1_7	100	5.06	4.95e4	2.58e4	102	0.9995
8	8 15 <u>0508G1_</u> 8	200	5.06	9.16e4	2.35e4	200	0.9995

Compound name: PFDA

Coefficient of Determination:  $R^2 = 0.999783$ Calibration curve:  $-0.000311293 * x^2 + 1.15525 * x$ 

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

1.33	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.32	6.12e2	3.28e4	0.806	0.9998
2	2 150508G1_2	1.00	5.31	8.23e2	3.18e4	1.12	0.9998
3	3 150508G1_3	2.00	5.30	1.62e3	3.60e4	1.94	0.9998
4	4 150508G1_4	5.00	5.30	3.79e3	3.50e4	4.69	0.9998
5	5 150508G1_5	10.0	5.30	8.80e3	3.40e4	11.2	0.9998
6	6 150508G1_6	50.0	5.30	4.79e4	4.37e4	48.0	0.9998
7	7 150508G1_7	100	5.30	7.20e4	3.16e4	101	0.9998
8	8 150508G1_8	200	5.30	1.62e5	3.72e4	200	0.9998

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C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: 8:2 FTS

Coefficient of Determination:  $R^2 = 0.999830$ Calibration curve:  $-0.000475814 * x^2 + 0.963198 * x$ 

Response type: Internal Std (Ref 35), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.33	1.36e2	1.47e4	0.481	0.9998
2	2 150508G1_2	1.00	5.32	2.46e2	1.06e4	1.20	0.9998
3	3 150508G1_3	2.00	5.32	4.76e2	1.33e4	1.86	0.9998
4	4 150508G1_4	5.00	5.32	1.24e3	1.23e4	5.28	0.9998
5	5 150508G1_5	10.0	5.32	2.62e3	1.23e4	11.1	0.9998
6	6 150508G1_6	50.0	5.32	1.49e4	1.64e4	48.3	0.9998
7	7 150508G1_7	100	5.32	2.32e4	1.25e4	101	0.9998
8	8 150508G1_8	200	5.32	5.01e4	1.44e4	200	0.9998

@ Excluded, 15 not linear. Ac 5/11/15

Compound name: FOSA

Coefficient of Determination: R^2 = 0.999724

Calibration curve: 7.04969e-005 \* x^2 + 0.568845 \* x

Response type: Internal Std (Ref 36), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.42	1.04e2	1.67e4	0.547	0.9997
2	2 150508G1_2	1.00	5.41	9.53e1	1.09e4	0.767	0.9997
3	3 150508G1_3	2.00	5.40	3.05e2	1.29e4	2.08	0.9997
4	4 150508G1_4	5.00	5.40	6.54e2	1.28e4	4.48	0.9997
5	5 150508G1_5	10.0	5.40	1.46e3	1.13e4	11.4	0.9997
6	6 150508G1_6	50.0	5.40	1.41e4	2.49e4	49.6	0.9997
7	7 150508G1_7	100	5.40	1.90e4	1.65 <del>e4</del>	100	0.9997
8	8 150508G1_8(📐 )	200	5.40	1.05e5	4.48e4	200	0.9997

Project 1500410

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFDS

Coefficient of Determination:  $R^2 = 0.999927$ Calibration curve:  $0.00071702 \times x^2 + 0.0818658 \times x$ 

Response type: Internal Std (Ref 34), Area \* (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc	Coeff. Of D
1	1 150508G1_1	0.500	5.50	4.32e1	3.28e4	0.798	0.9999
2	2 150508G1_2	1.00	5.50	7.90e1	3.18e4	1.50	0.9999
3	3 150508G1_3	2.00	5.49	1.18e2	3.60e4	1.97	0.9999
4	4 150508G1_4	5.00	5.49	3.16e2	3.50e4	5.28	0.9999
5	5 150508G1_5	10.0	5.49	7.80e2	3.40e4	12.6	0.9999
6	6 150508G1_6	50.0	5.49	4.96e3	4.37e4	48.6	0.9999
7	7 150508G1_7	100	5.49	9.79e3	3.16e4	100	0.9999
8	8 150508G1_8	200	5.49	3.35e4	3.72e4	200	0.9999

Compound name: PFUdA

Coefficient of Determination:  $R^2 = 0.999874$ Calibration curve:  $-8.50084e-005 * x^2 + 1.02996 * x$ 

Response type: Internal Std (Ref 37), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT v	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.52	5.29e2	2.14e4	1.20	0.9999
2	2 150508G1_2	1.00	5.51	6.68e2	1.93e4	1.68	0.9999
3	3 150508G1_3	2.00	5.50	1.22e3	2.40e4	2.46	0.9999
4	4 150508G1_4	5.00	5.50	2.47e3	2.41e4	4.98	0.9999
5.	5 150508G1_5	10.0	5.50	5.07e3	2.13e4	11.6	0.9999
6	6 150508G1_6	50.0	5.50	2.96e4	2.93e4	49.2	0.9999
73: 32:35	7 150508G1_7	100	5.50	4.95e4	2.42e4	100	0.9999
8	8 150508G1_8	200	5.50	1.40e5	3.45e4	200	0.9999

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Quantify Compound Summary Report

MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFDoA

Coefficient of Determination: R^2 = 0.999831 Calibration curve: 0.000736243 \* x^2 + 0.857671 \* x

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

Salar Section	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff, Of D
1	1 150508G1_1	0.500	5.69	2.14e2	1.68e4	0.741	0.9998
2	2 150508G1_2	1.00	5.68	2.03e2	1.14e4	1.04	0.9998
3	3 150508G1_3	2.00	5.68	5.42e2	1.59e4	1.99	0.9998
4	4 150508G1_4	5.00	5.68	1.29e3	1.37e4	5.47	0.9998
5	5 150508G1_5	10.0	5.68	2.77e3	1.37e4	11.7	0.9998
6	6 150508G1_6	50.0	5.68	1.49e4	1.61e4	51.4	0.9998
7	7 150508G1_7	100	5.68	3.09e4	1.68e4	98.7	0.9998
8	8 150508G1_8	200	5.68	1.73e5	4.31e4	200	0.9998

@coD outside method limits. AC5/11/15

Compound name: N-MeFOSA

Coefficient of Determination: R^2 = 0.939196 (x)
Calibration curve: 0.00291862 \* x^2 + -0.323442 \* x

Response type: Internal Std (Ref 39), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	** RT	Resp	IS Resp	Conc.	Coeff. Of D
1 2 3 8 3 9	1 150508G1_1	5.00	5.80	2.68e2	2.17e3	127	0.9392
2	2 150508G1_2	10.0	5.79	1.16e2	1.07e3	126	0.9392
3	3 150508G1_3	20.0	5.78	6.98e2	1.71e3	156	0.9392
4	4 150508G1_4	50.0	5.78	1.23e3	1.52e3	186	0.9392
5	5 150508G1_5	100	5.78	5.46e3	2.57e3	254	0.9392
6	6 150508G1_6	500	5.78	8.75e3	1.70e2	997	0.9392
7. 40.0	7 150508G1_7	1000	5.78	2.29e4	1.08e3	661	0.9392
8 1 1 1 1 1 1	8 150508G1_8	2000	5.78	2.23e5	9.88e2	2020	0.9392

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: N-MeFOSE

Coefficient of Determination: R^2 = 0.999662 Calibration curve: 0.000266129 \* x^2 + 0.682944 \* x

Response type: Internal Std (Ref 39), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

A transfer of	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	5.00	5.81	2.18e2	2.17e3	7.35	0.9997
2	2 150508G1_2	10.0	5.80	1.70e2	1.07e3	11.6	0.9997
3	3 150508G1_3	20.0	5.79	6.80e2	1.71e3	28.7	0.9997
4	4 150508G1_4	50.0	5.79	1.29e3	1.52e3	60.7	0.9997
5	5 150508G1_5	100	5.79	5.61e3	2.57e3	151	0.9997
6	6 150508G1_6	500	5.79	1.39e3	1.70e2	503	0.9997
7	7 150508G1_7	1000	5.79	2.03e4	1.08e3	991	0.9997
8	8 150508G1_8	2000	5.80	4.81e4	9.88e2	2000	0.9997

Compound name: PFTrDA

Coefficient of Determination:  $R^2 = 0.995540$ Calibration curve:  $0.00680653 * x^2 + -0.189616 * x$ 

Response type: Internal Std (Ref 37), Area \* (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp.	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.85	3.36e2	2.14e4	31.5	0.9955
2	2 150508G1_2	1.00	5.84	2.87e2	1.93e4	31.3	0.9955
3	3 150508G1_3	2.00	5.84	7.22e2	2.40e4	34.3	0.9955
4	4 150508G1_4	5.00	5.84	1.44e3	2.41e4	39.1	0.9955
5	5 150508G1_5	10.0	5.84	5.06e3	2.13e4	58.0	0.9955
6	6 150508G1_6	50.0	5.84	4.85e3	2.93e4	51.5	0.9955
7	7 150508G1_7	100	5.84	2.20e4	2.42e4	96.9	0.9955
8	8 150508G1_8	200	5.84	1.62e5	3.45e4	200	0.9955

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Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: N-EtFOSE

Coefficient of Determination: R^2 = 0.999864 Calibration curve: -5.91536e-005 \* x^2 + 1.10198 \* x

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	, RT	Resp	IS Resp	Conc.	Coeff, Of D
160 (180	1 150508G1_1	5.00	5.92	2.34e2	2.28e3	4.65	0.9999
2	2 150508G1_2	10.0	5.91	2.62e2	1.09e3	10.9	0.9999
3	3 150508G1_3	20.0	5.91	8.03e2	2.08e3	17.5	0.9999
4	4 150508G1_4	50.0	5.91	1.62e3	1.64e3	45.1	0.9999
5	5 150508G1_5	100	5.91	7.13e3	2.81e3	116	0.9999
6	6 150508G1_6	500	5.91	2.10e3	1.93e2	508	0.9999
7	7 150508G1_7	1000	5.91	2.47e4	1.20e3	991	0.9999
8	8 150508G1_8	2000	5.91	5.93e4	1.51e3	2000	0.9999

Compound name: N-EtFOSA

Coefficient of Determination:  $R^2 = 0.999060$ Calibration curve:  $-3.43571e-005 * x^2 + 1.0684 * x$ 

Response type: Internal Std (Ref 41), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT RT	Resp	IS Resp	Conc.	Coeff. Of D
1,	1 150508G1_1	5.00	5.92	3.07e2	3.01e3	4.77	0.9991
2	2 150508G1_2	10.0	5.91	2.42e2	1.17e3	9.70	0.9991
3	3 150508G1_3	20.0	5.91	1.09e3	2.63e3	19.4	0.9991
4	4 150508G1_4	50.0	5.91	1.94e3	1.75e3	52.0	0.9991
5	5 150508G1_5	100	5.90	8.48e3	3.78e3	105	0.9991
6	6 150508G1_6	500	5.90	9.84e3	1.03e3	455	0.9991
7	7 150508G1_7	1000	5.90	3.58e4	1.68e3	1030	0.9991
8.	8 150508G1_8	2000	5.90	2.90e5	7.26e3	1990	0.9991

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C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.gld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFTeDA

Coefficient of Determination: R^2 = 0.999613 Calibration curve: 0.000418872 \* x^2 + 0.88467 \* x

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.99	9.65e2	4.87e4	1.12	0.9996
2	2 150508G1_2	1.00	5.98	8.92e2	3.01e4	1.68	0.9996
3	3 150508G1_3	2.00	5.98	1.44e3	3.13e4	2.60	0.9996
4	4 150508G1_4	5.00	5.98	2.83e3	2.62e4	6.08	0.9996
5	5 150508G1_5	10.0	5.97	7.99e3	3.56e4	12.6	0.9996
6	6 150508G1_6	50.0	5.97	3.97e3	4.60e3	47.7	0.9996
7	7 150508G1_7	100	5.97	3.70e4	1.98e4	101	0.9996
8	8 150508G1_8	200	5.97	1.11e5	2.85e4	200	0.9996

Compound name: PFHxDA

Coefficient of Determination: R^2 = 0.999107

Calibration curve: -0.000284561 \* x^2 + 0.926696 \* x

Response type: Internal Std (Ref 43), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	6.22	4.19e3	8.05e4	2.81	0.9991
2	2 150508G1_2	1.00	6.21	3.05e3	5.48e4	3.01	0.9991
3	3 150508G1_3	2.00	6.21	4.29e3	5.83e4	3.97	0.9991
4	4 150508G1_4	5.00	6.21	6.47e3	5.08e4	6.89	0.9991
5	5 150508G1_5	10.0	6.21	1.38e4	5.65e4	13.2	0.9991
6	6 150508G1_6	50.0	6.21	3.02e4	3.33e4	49.8	0.9991
7	7 150508G1_7	100	6.20	8.31e4	4.66e4	99.2	0.9991
8	8 150508G1_8	200	6.20	6.27e4	1.80e4	200	0.9991

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFODA

Coefficient of Determination:  $R^2 = 0.979018$ Calibration curve:  $0.00392936 * x^2 + 1.36541 * x$ 

Response type: Internal Std (Ref 43), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	6.46	1.30e3	8.05e4	0.591	0.9790
2	2 150508G1_2	1.00	6.44	1.40e3	5.48e4	0.930	0.9790
3	3 150508G1_3	2.00	6.44	2.96e3	5.83e4	1.85	0.9790
4	4 150508G1_4	5.00	6.44	6.46e3	5.08e4	4.59	0.9790
5	5 150508G1_5	10.0	6.44	1.75e4	5.65e4	11.0	0.9790
6	6 150508G1_6	50.0	6.44	8.25e4	3.33e4	74.8	0.9790
7	7 150508G1_7	100	6.44	1.32e5	4.66e4	83.4	0.9790
8	8 150508G1_8	200	6.44	1.57e5	1.80e4	202	0.9790

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Method: Untitled 11 May 2015 13:08:22

Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Compound name: 13C3-PFBA

Response Factor: 1.03917

RRF SD: 0.031068, Relative SD: 2.98971

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	2.30	3.90e4	3.93e4	47.8	0.993
2	2 150508G1_2	50.0	2.28	4.03e4	3.92e4	49.5	1.03
3	3 150508G1_3	50.0	2.28	4.28e4	4.16e4	49.5	1.03
4	4 150508G1_4	50.0	2.28	4.01e4	3.76e4	51.4	1.07
5	5 150508G1_5	50.0	2.28	4.07e4	3.79e4	51.7	1.07
6	6 150508G1_6	50.0	2.27	4.52e4	4.51e4	48.2	1.00
7	7 150508G1_7	50.0	2.27	3.60e4	3.37e4	51.3	1.07
8	8 150508G1_8	50.0	2.26	3.69e4	3.51e4	50.7	1.05

Compound name: 13C3-PFPeA

Response Factor: 0.975838

RRF SD: 0.0466711, Relative SD: 4.78267

Response type: Internal Std (Ref 46), Area \* (IS Conc. / IS Area)

17. 18. 19. 1	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	3.32	4.03e4	4.02e4	51.5	1.00
2	2 150508G1_2	50.0	3.30	3.94e4	4.08e4	49.5	0.965
3	3 150508G1_3	50.0	3.29	4.21e4	4.24e4	50.8	0.992
4	4 150508G1_4	50.0	3.29	3.68e4	3.96e4	47.7	0.931
5	5 150508G1_5	50.0	3.29	3.70e4	3.90e4	48.5	0.947
6.7	6 150508G1_6	50.0	3.29	3.71e4	4.07e4	46.7	0.911
7	7 150508G1_7	50.0	3.29	3.10e4	3.11e4	51.2	0.998
8	8 150508G1_8	50.0	3.28	2.69e4	2.54e4	54.2	1.06

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Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C4-PFHpA

Response Factor: 0.849971

RRF SD: 0.0785916, Relative SD: 9.24638

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc	RRF
1	1 150508G1_1	50.0	4.43	3.30e4	4.02e4	48.3	0.822
2	2 150508G1_2	50.0	4.42	3.91e4	4.08e4	56.3	0.958
3	3 150508G1_3	50.0	4.41	3.95e4	4.24e4	54.7	0.930
4	4 150508G1_4	50.0	4.41	3.54e4	3.96e4	52.6	0.895
5	5 150508G1_5	50.0	4.41	3.49e4	3.90e4	52.6	0.894
6	6 150508G1_6	50.0	4.41	3.12e4	4.07e4	45.2	0.768
7	7 150508G1_7	50.0	4.41	2.36e4	3.11e4	44.7	0.760
8.	8 150508G1_8	50.0	4.41	1.96e4	2.54e4	45.5	0.773

Compound name: 1802-PFHxS

Response Factor: 0.42031

RRF SD: 0.0193569, Relative SD: 4.6054

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std, Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	4.46	1.71e4	4.02e4	50.7	0.426
2	2 150508G1_2	50.0	4.45	1.70e4	4.08e4	49.6	0.417
3	3 150508G1_3	50.0	4.44	1.75e4	4.24e4	48.9	0.411
4	4 150508G1_4	50.0	4.44	1.61e4	3.96e4	48.5	0.408
5	5 150508G1_5	50.0	4.44	1.63e4	3.90e4	49.6	0.417
6	6 150508G1_6	50.0	4.44	1.59e4	4.07e4	46.6	0.392
7	7 150508G1_7	50.0	4.44	1.42e4	3.11e4	54.2	0.456
8	8 150508G1_8	50.0	4.44	1.11e4	2.54e4	51.9	0.437

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Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C2-6:2 FTS

Response Factor: 0.738727

RRF SD: 0.0408691, Relative SD: 5.53237

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	4.78	1.52e4	2.16e4	47.5	0.702
2	2 150508G1_2	50.0	4.77	1.05e4	1.39e4	50.9	0.753
3	3 150508G1_3	50.0	4.77	1.14e4	1.57e4	49.0	0.725
4	4 150508G1_4	50.0	4.77	1.10e4	1.40e4	53.5	0.791
5	5 150508G1_5	50.0	4.76	1.08e4	1.34e4	54.4	0.804
6	6 150508G1_6	50.0	4.76	1.10e4	1.55e4	48.1	0.711
7	7 150508G1_7	50.0	4.76	8.92e3	1.29e4	46.9	0.693
8	8 150508G1_8	50.0	4.76	8.62e3	1.18e4	49.5	0.731

Compound name: 13C2-PFOA

Response Factor: 1.15963

RRF SD: 0.058011, Relative SD: 5.00254

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	4.79	4.02e4	3.45e4	50.2	1.16
2	2 150508G1_2	50.0	4.77	4.49e4	3.62e4	53.4	1.24
3	3 150508G1_3	50.0	4.77	4.42e4	3.71e4	51.4	1.19
4	4 150508G1_4	50.0	4.77	3.93e4	3.33e4	51.0	1.18
5	5 150508G1_5	50.0	4.77	3.94e4	3.28e4	51.8	1.20
6	6 150508G1_6	50.0	4.77	3.64e4	3.45e4	45.4	1.05
7	7 150508G1_7	50.0	4.77	2.81e4	2.50e4	48.4	1.12
8	8 150508G1_8	50.0	4.77	2.39e4	2.13e4	48.4	1.12

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Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

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Compound name: 13C8-PFOS Response Factor: 0.939383

RRF SD: 0.0454519, Relative SD: 4.83849

Response type: Internal Std ( Ref 48 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
10	1 150508G1_1	50.0	5.07	1.18e4	1.21e4	51.9	0.975
2	2 150508G1_2	50.0	5.05	1.13e4	1.20e4	49.8	0.935
3. //-	3 150508G1_3	50.0	5.05	1.23 <del>e4</del>	1.32e4	49.6	0.931
4	4 150508G1_4	50.0	5.05	1.15e4	1.21e4	50.7	0.953
5	5 150508G1_5	50.0	5.05	1.21e4	1.20e4	53.4	1.00
6	6 150508G1_6	50.0	5.05	1.48e4	1.74e4	45.1	0.847
7	7 150508G1_7	50.0	5.05	1.15e4	1.22e4	50.4	0.947
8-0-2-5	8 150508G1_8	50.0	5.05	1.10e4	1.20e4	49.1	0.923

Compound name: 13C5-PFNA

Response Factor: 0.914519

RRF SD: 0.0398454, Relative SD: 4.35698

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.07	2.82e4	2.96e4	52.1	0.953
2	2 150508G1_2	50.0	5.06	2.92e4	3.04e4	52.5	0.960
3	3 150508G1_3	50.0	5.06	2.99e4	3.29e4	49.7	0.910
4	4 150508G1_4	50.0	5.06	2.79e4	2.96e4	51.5	0.941
5	5 150508G1_5	50.0	5.06	2.90e4	3.14e4	50.4	0.922
6	6 150508G1_6	50.0	5.06	3.15e4	3.76e4	45.8	0.838
7	7 150508G1_7	50.0	5.06	2.58e4	2.84e4	49.6	0.907
8	8 150508G1_8	50.0	5.06	2.35e4	2.66e4	48.4	0.885

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Compound name: 13C2-PFDA

Response Factor: 1.14857

RRF SD: 0.110012, Relative SD: 9.57822

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.32	3.28e4	2.96e4	48.3	1.11
2	2 150508G1_2	50.0	5.31	3.18e4	3.04e4	45.6	1.05
3	3 150508G1_3	50.0	5.31	3.60e4	3.29e4	47.6	1.09
4	4 150508G1_4	50.0	5.30	3.50e4	2.96e4	51.4	1.18
5	5 150508G1_5	50.0	5.30	3.40e4	3.14e4	47.1	1.08
6	6 150508G1_6	50.0	5.30	4.37e4	3.76e4	50.7	1.16
7	7 150508G1_7	50.0	5.30	3.16e4	2.84e4	48.4	1.11
8	8 150508G1_8	50.0	5.30	3.72e4	2.66e4	60.9	1.40

Compound name: 13C2-8:2 FTS

Response Factor: 0.917614

RRF SD: 0.170212, Relative SD: 18.5494

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc	RRF
1	1 150508G1_1	50.0	5.33	1.47e4	2.16e4	37.1	0.681
2	2 150508G1_2	50.0	5.32	1.06e4	1.39e4	41.6	0.764
3	3 150508G1_3	50.0	5.32	1.33e4	1.57e4	46.2	0.847
4	4 150508G1_4	50.0	5.32	1.23e4	1.40e4	47.8	0.878
5	5 150508G1_5	50.0	5.32	1.23e4	1.34e4	50.0	0.917
6	6 150508G1_6	50.0	5.32	1.64e4	1.55e4	57.6	1.06
7	7 150508G1_7	50.0	5.32	1.25e4	1.29e4	53.0	0.972
8 - 4	8 150508G1_8	50.0	5.32	1.44e4	1.18e4	66.7	1.22

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Compound name: 13C8-FOSA

Response Factor: 0.728043

RRF SD: 0.131802, Relative SD: 18.1037

Response type: Internal Std (Ref 51), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp 4.	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.42	1.67e4	1.79e4	64.1	0.933
2	2 150508G1_2	50.0	5.41	1.09e4	1.64e4	45.6	0.664
3	3 150508G1_3	50.0	5.40	1.29e4	2.10e4	42.0	0.612
4	4 150508G1_4	50.0	5.40	1.28e4	2.02e4	43.7	0.636
5	5 150508G1_5	50.0	5.40	1.13e4	1.88e4	41.2	0.600
6	6 150508G1_6	50.0	5.40	2.49e4	2.96e4	57.7	0.841
7 3/3	7 150508G1_7	50.0	5.40	1.65e4	2.03e4	55.7	0.811
8,	8 150508G1_8	50.0	5.40	4.48e4	2.96e4	104	1.51

Compound name: 13C2-PFUdA

Response Factor: 1.14796

RRF SD: 0.0682511, Relative SD: 5.94544

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT ·	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.52	2.14e4	1.79e4	52.1	1.20
2	2 150508G1_2	50.0	5.51	1.93e4	1.64e4	51.1	1.17
3	3 150508G1_3	50.0	5.50	2.40e4	2.10e4	49.8	1.14
4	4 150508G1_4	50.0	5.50	2.41e4	2.02e4	52.0	1.19
5	5 150508G1_5	50.0	5.50	2.13e4	1.88e4	49.4	1.13
6	6 150508G1_6	50.0	5.50	2.93e4	2.96e4	43.1	0.989
7	7 150508G1_7	50.0	5.50	2.42e4	2.03e4	51.8	1.19
8	8 150508G1_8	50.0	5.50	3.45e4	2.96e4	50.8	1.17

Excluded, not linear. AC 5/11/15

# Quantify Compound Summary Report

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Dataset:

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MassLynx 4.1

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Compound name: 13C2-PFDoA

Response Factor: 0.827404

RRF SD: 0.2789, Relative SD: 33.7078

Response type: Internal Std (Ref 51), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.70	1.68e4	1.79e4	56.8	0.941
2	2 150508G1_2	50.0	5.68	1.14e4	1.64e4	41.8	0.691
3	3 150508G1_3	50.0	5.68	1.59e4	2.10e4	45.6	0.755
4	4 150508G1_4	50.0	5.68	1.37e4	2.02e4	40.9	0.677
5	5 150508G1_5	50.0	5.68	1.37e4	1.88e4	44.0	0.728
6	6 150508G1_6	50.0	5.68	1.61e4	2.96e4	32.9	0.544
7	7 150508G1_7	50.0	5.68	1.68e4	2.03e4	50.0	0.827
8	8 150508G1_8	50.0	5.67	4.31e4	2.96e4	88.0	1.46

DRSDontside method limits. AC5/11/15

Compound name: d7-N-MeFOSE

Response Factor: 0.597018

RRF SD: 0.309698, Relative SD: 51.8742

Response type: Internal Std (Ref 52), Area \* (IS Conc. / IS Area)

	# Name	Std. Conc	- RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.80	2.17e3	3.12e3	58.2	0.695
2	2 150508G1_2	50.0	5.79	1.07e3	1.09e3	82.6	0.986
3	3 150508G1_3	50.0	5.79	1.71e3	2.74e3	52.5	0.626
4	4 150508G1_4	50.0	5.79	1.52e3	1.96e3	65.0	0.776
5***	5 150508G1_5	50.0	5.79	2.57e3	3.32e3	64.8	0.774
6	6 150508G1_6	50.0	5.79	1.70e2	1.30e3	10.9	0.130
7	7 150508G1_7	50.0	5.79	1.08e3	1.63e3	55.6	0.664
8	8 150508G1_8	50.0	5.79	9.88e2	7.95e3	10.4	0.124

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Compound name: d9-N-EtFOSE

Response Factor: 0.656249

RRF SD: 0.313488, Relative SD: 47.7697 (Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.91	2.28e3	3.12e3	55.7	0.732
2	2 150508G1_2	50.0	5.90	1.09e3	1.09e3	76.4	1.00
3	3 150508G1_3	50.0	5.90	2.08e3	2.74e3	57.9	0.760
4	4 150508G1_4	50.0	5.90	1.64e3	1.96e3	63.8	0.838
5	5 150508G1_5	50.0	5.90	2.81e3	3.32e3	64.5	0.847
6	6 150508G1_6	50.0	5.90	1.93e2	1.30e3	11.3	0.148
7	7 150508G1_7	50.0	5.90	1.20e3	1.63e3	55.9	0.734
8	8 150508G1_8	50.0	5.90	1.51e3	7.95e3	14.4	0.190

@ RSD outside method 11mits. AC 5/11/15

Compound name: d5-N-EtFOSA

Response Factor: 0.970495

RRF SD: 0.110608, Relative SD: 11.3971

Response type: Internal Std (Ref 52), Area \* (IS Conc. / IS Area)

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
140.31	1 150508G1_1	50.0	5.91	3.01e3	3.12e3	49.8	0.966
2	2 150508G1_2	50.0	5.90	1.17e3	1.09e3	55.4	1.07
30 1860	3 150508G1_3	50.0	5.90	2.63e3	2.74e3	49.5	0.961
4 / 4 / 5 / 5 / 5	4 150508G1_4	50.0	5.90	1.75e3	1.96e3	46.0	0.893
5	5 150508G1_5	50.0	5.90	3.78e3	3.32e3	58.7	1.14
6	6 150508G1_6	50.0	5.90	1.03e3	1.30e3	40.6	0.787
7	7 150508G1_7	50.0	5.90	1.68e3	1.63e3	53.0	1.03
8	8 150508G1_8	50.0	5.90	7.26e3	7.95e3	47.1	0.914

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Compound name: 13C2-PFTeDA

Response Factor: 1.41518

RRF SD: 0.766009, Relative SD: 54.128

Response type: Internal Std (Ref 51), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.99	4.87e4	1.79e4	96.1	2.72
2	2 150508G1_2	50.0	5.98	3.01e4	1.64e4	64.6	1.83
3	3 150508G1_3	50.0	5.98	3.13e4	2.10e4	52.6	1.49
4	4 150508G1_4	50.0	5.97	2.62e4	2.02e4	45.9	1.30
5	5 150508G1_5	50.0	5.97	3.56e4	1.88e4	66.9	1.89
6	6 150508G1_6	50.0	5.97	4.60e3	2.96e4	5.48	0.155
7	7 150508G1_7	50.0	5.97	1.98e4	2.03e4	34.4	0.973
8	8 150508G1_8	50.0	5.97	2.85e4	2.96e4	34.1	0.964

Compound name: 13C2-PFHxDA

Response Factor: 2.51962

RRF SD: 1.2268, Relative SD: 48.6901

Response type: Internal Std (Ref 51), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp'	IS Resp	Conc	RRF
1	1 150508G1_1	50.0	6.22	8.05e4	1.79 <del>e4</del>	89.3	4.50
2	2 150508G1_2	50.0	6.21	5.48e4	1.64e4	66.2	3.33
3	3 150508G1_3	50.0	6.21	5.83e4	2.10e4	55.1	2.78
4	4 150508G1_4	50.0	6.21	5.08e4	2.02e4	50.0	2.52
5	5 150508G1_5	50.0	6.20	5.65e4	1.88e4	59.7	3.01
6	6 150508G1_6	50.0	6.20	3.33e4	2.96e4	22.3	1.12
7	7 150508G1_7	50.0	6.20	4.66e4	2.03e4	45.5	2.29
8	8 1505 <u>0</u> 8G1_8	50.0	6.20	1.80e4	2.96e4	12.1	0.608

ARSD ontside method limits. ACS/11/15

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Compound name: 13C4-PFBA

Response Factor: 1

RRF SD: 9.3831e-017, Relative SD: 9.3831e-015

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

10	# Name 41	Std. Conc	RT.	Resp	IS Resp	Conc.	RRF
<b>1</b> 303	1 150508G1_1	50.0	2.30	3.93e4	3.93e4	50.0	1.00
2	2 150508G1_2	50.0	2.28	3.92e4	3.92e4	50.0	1.00
3	3 150508G1_3	50.0	2.28	4.16e4	4.16e4	50.0	1.00
4	4 150508G1_4	50.0	2.28	3.76e4	3.76e4	50.0	1.00
5	5 150508G1_5	50.0	2.28	3.79e4	3.79e4	50.0	1.00
6	6 150508G1_6	50.0	2.27	4.51e4	4.51e4	50.0	1.00
7.	7 150508G1_7	50.0	2.27	3.37e4	3.37e4	50.0	1.00
8	8 150508G1_8	50.0	2.25	3.51e4	3.51e4	50.0	1.00

Compound name: 13C2-4:2 FTS

Response Factor: 1

RRF SD: 1.32697e-016, Relative SD: 1.32697e-014

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	3.93	2.16e4	2.16e4	50.0	1.00
2	2 150508G1_2	50.0	3.92	1.39e4	1.39e4	50.0	1.00
3	3 150508G1_3	50.0	3.91	1.57e4	1.57e4	50.0	1.00
4	4 150508G1_4	50.0	3.91	1.40e4	1.40e4	50.0	1.00
5	5 150508G1_5	50.0	3.91	1.34e4	1.34e4	50.0	1.00
6	6 150508G1_6	50.0	3.91	1.55e4	1.55e4	50.0	1.00
7	7 150508G1_7	50.0	3.91	1.29e4	1.29e4	50.0	1.00
8.	8 150508G1_8	50.0	3.91	1.18e4	1.18e4	50.0	1.00

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Compound name: 13C-PFHxA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 46), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1 3 4 4	1 150508G1_1	50.0	3.97	4.02e4	4.02e4	50.0	1.00
2	2 150508G1_2	50.0	3.95	4.08e4	4.08e4	50.0	1.00
3	3 150508G1_3	50.0	3.95	4.24e4	4.24e4	50.0	1.00
4	4 150508G1_4	50.0	3.95	3.96e4	3.96e4	50.0	1.00
5	5 150508G1_5	50.0	3.94	3.90e4	3.90e4	50.0	1.00
6	6 150508G1_6	50.0	3.95	4.07e4	4.07e4	50.0	1.00
7	7 150508G1_7	50.0	3.95	3.11e4	3.11e4	50.0	1.00
8.	8 150508G1_8	50.0	3.94	2.54e4	2.54e4	50.0	1.00

Compound name: 13C8-PFOA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Service Services	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1 30 40 400	1 150508G1_1	50.0	4.79	3.45e4	3.45e4	50.0	1.00
2	2 150508G1_2	50.0	4.77	3.62e4	3.62e4	50.0	1.00
3	3 150508G1_3	50.0	4.77	3.71e4	3.71e4	50.0	1.00
4 = 2	4 150508G1_4	50.0	4.77	3.33e4	3.33e4	50.0	1.00
5	5 150508G1_5	50.0	4.77	3.28e4	3.28e4	50.0	1.00
6	6 150508G1_6	50.0	4.77	3.45e4	3.45e4	50.0	1.00
7	7 150508G1_7	50.0	4.77	2.50e4	2.50e4	50.0	1.00
8	8 150508G1_8	50.0	4.77	2.13e4	2.13e4	50.0	1.00

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Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C4-PFOS

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std (Ref 48), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.07	1.21e4	1.21e4	50.0	1.00
2	2 150508G1_2	50.0	5.06	1.20e4	1.20e4	50.0	1.00
3	3 150508G1_3	50.0	5.05	1.32e4	1.32e4	50.0	1.00
4	4 150508G1_4	50.0	5.05	1.21e4	1.21e4	50.0	1.00
5	5 150508G1_5	50.0	5.05	1.20e4	1.20e4	50.0	1.00
6	6 150508G1_6	50.0	5.05	1.74e4	1.7 <del>4e4</del>	50.0	1.00
7	7 150508G1_7	50.0	5.05	1.22e4	1.22e4	50.0	1.00
8	8 150508G1_8	50.0	5.05	1.20e4	1.20e4	50.0	1.00

Compound name: 13C2-FOUEA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 49 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp.	Conc.	RRF
1	1 150508G1_1	50.0	5.17	2.45e4	2.45e4	50.0	1.00
2	2 150508G1_2	50.0	5.16	3.18e4	3.18e4	50.0	1.00
3	3 150508G1_3	50.0	5.16	3.27e4	3.27e4	50.0	1.00
4	4 150508G1_4	50.0	5.15	2.99e4	2.99e4	50.0	1.00
5	5 150508G1_5	50.0	5.15	3.14e4	3.14e4	50.0	1.00
6	6 150508G1_6	50.0	5.15	4.56e4	4.56e4	50.0	1.00
7	7 150508G1_7	50.0	5.15	3.66e4	3.66e4	50.0	1.00
8	8 150508G1_8	50.0	5.15	4.23e4	4.23e4	50.0	1.00

Project 1500410

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

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Compound name: 13C9-PFNA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.07	2.96e4	2.96e4	50.0	1.00
2	2 150508G1_2	50.0	5.06	3.04e4	3.04e4	50.0	1.00
3	3 150508G1_3	50.0	5.06	3.29e4	3.29e4	50.0	1.00
4	4 150508G1_4	50.0	5.06	2.96e4	2.96e4	50.0	1.00
5	5 150508G1_5	50.0	5.05	3.14e4	3.14e4	50.0	1.00
6	6 150508G1_6	50.0	5.05	3.76e4	3.76e4	50.0	1.00
7	7 150508G1_7	50.0	5.05	2.84e4	2.84e4	50.0	1.00
8	8 150508G1_8	50.0	5.05	2.66e4	2.66e4	50.0	1.00

Compound name: 13C7-PFUdA

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

April 18 September 19	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.52	1.79e4	1.79 <del>e4</del>	50.0	1.00
2	2 150508G1_2	50.0	5.51	1.64e4	1.64e4	50.0	1.00
3	3 150508G1_3	50.0	5.50	2.10e4	2.10e4	50.0	1.00
4	4 150508G1_4	50.0	5.50	2.02e4	2.02e4	50.0	1.00
5	5 150508G1_5	50.0	5.50	1.88e4	1.88 <del>e4</del>	50.0	1.00
6	6 150508G1_6	50.0	5.50	2.96e4	2.96e4	50.0	1.00
7.00	7 150508G1_7	50.0	5.50	2.03e4	2.03e4	50.0	1.00
8	8 150508G1_8	50.0	5.50	2.96e4	2.96e4	50.0	1.00

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: d-N-MeFOSA

Response Factor: 1

RRF SD: 1.18688e-016, Relative SD: 1.18688e-014

Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

	# Name	Std. Conc	RT.	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.79	3.12e3	3.12e3	50.0	1.00
2	2 150508G1_2	50.0	5.78	1.09e3	1.09e3	50.0	1.00
3	3 150508G1_3	50.0	5.78	2.74e3	2.74e3	50.0	1.00
4	4 150508G1_4	50.0	5.78	1.96e3	1.96e3	50.0	1.00
5	5 150508G1_5	50.0	5.78	3.32e3	3.32e3	50.0	1.00
6	6 150508G1_6	50.0	5.78	1.30e3	1.30e3	50.0	1.00
7	7 150508G1_7	50.0	5.78	1.63e3	1.63e3	50.0	1.00
8	8 150508G1_8	50.0	5.78	7.95e3	7.95e3	50.0	1.00

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Dataset: Untitled

Last Altered: Monday, May 11, 2015 15:57:14 Pacific Daylight Time Printed: Monday, May 11, 2015 15:57:33 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 11 May 2015 13:08:22 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

### **Compound name: PFBA**

	Name	ID	Acq.Date	Acq.Time
1	150508G1_1	ST150508G1-1 PFC CS-1 15E0809	08-May-15	15:45:33
2	150508G1 2	ST150508G1-2 PFC CS0 15E0810	08-May-15	15:58:17
3	150508G1 3	ST150508G1-3 PFC CS1 15E0811	08-May-15	16:10:59
4	150508G1 4	ST150508G1-4 PFC CS2 15E0812	08-May-15	16:23:40
5	150508G1 5	ST150508G1-5 PFC CS3 15E0813	08-May-15	16:36:21
6	150508G1 6	ST150508G1-6 PFC CS4 15E0807	08-May-15	16:49:03
7	150508G1_7	ST150508G1-7 PFC CS5 15E0814	08-May-15	17:01:44
8	150508G1_8	ST150508G1-8 PFC CS6 15E0815	08-May-15	17:14:26
9	150508G1_9	SS150508G1-1 PFC SSS 15D2417	08-May-15	17:27:08
10	150508G1_10	B5E0029-BS1 OPR 1	08-May-15	17:39:49
11	150508G1_11	B5E0030-BS1 OPR 0.125	08-May-15	17:52:30
12	150508G1_12	Methanol	08-May-15	18:05:11
13	150508G1_13	Methanol	08-May-15	18:17:53
14	150508G1_14	B5E0029-BLK1 Method Blank 1	08-May-15	18:30:34
15	150508G1_15	B5E0030-BLK1 Method Blank 0.125	08-May-15	18:43:16
16	150508G1_16	1500395-01RE2 Resin C1-R 0.0005	08-May-15	18:55:59
17	150508G1_17	1500395-04RE2 Resin C2-R 0.0005	08-May-15	19:08:40
18	150508G1_18	B5E0029-DUP1 Duplicate 1.03	08-May-15	19:21:21
19	150508G1_19	B5E0029-DUP2 Duplicate 1.02	08-May-15	19:34:03
20	150508G1_20	B5E0029-DUP3 Duplicate 1.02	08-May-15	19:46:41
21	150508G1_21	1400880-07RE3 BERGS-SO-018 1.06	08-May-15	19:59:24
22	150508G1_22	Methanol	08-May-15	20:12:05
23	150508G1_23	Methanol	08-May-15	20:24:47
24	150508G1_24	ST150508G1-9 PFC CS4 15E0807	08-May-15	20:37:29
25	150508G1_25	Methanol	08-May-15	20:50:09
26	4.50508G1_26	Methanol	08-May-15	21:02:52
27	150508G1_27	1500203-01RE3 MARCH-SO-018s 1.08	08-May-15	21:15:34
28	150508G1_28	1500209-05RE4 MCCLN-SD-007 1.13	08-May-15	21:28:15
29	150508G1_29	B5E0029-MS1 Matrix Spike 1.14	08-May-15	21:40:56
30	150508G1_30	B5E0029-MSD1 Matrix Spike Dup 1.13	08-May-15	21:53:39
31	150508G1_31	Methanol	08-May-15	22:06:21

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**Compound name: PFBA** 

Name   ID   Acq, Date   Acq, Time   32   150508G1_32   Methanol   08-May-15   22:19:03   33   150508G1_33   ST150508G1-10 PFC CS4 15E0807   08-May-15   22:31:45   150508G1_34   Methanol   08-May-15   22:44:25   35   150508G1_35   Methanol   08-May-15   22:37:07   36   150508G1_36   B5E0032-BLK1 Method Blank 1   08-May-15   23:29:30   37   150508G1_37   B5E0032-BLK1 Method Blank 1   08-May-15   23:32:30   38   150508G1_38   1500410-01 PA104-SB28-0608 1.46   08-May-15   23:35:12   23:47:52   39   150508G1_39   1500410-02 PA113-CSB11-0103 1.53   08-May-15   23:347:52   39   150508G1_40   B5E0032-DUP2 Duplicate 1.42   09-May-15   00:00:34   41   150508G1_41   B5E0032-DUP2 Duplicate 1.11   09-May-15   00:13:16   42   150508G1_42   B5E0032-DUP2 Duplicate 1.19   09-May-15   00:25:58   43   150508G1_42   B5E0032-DUP2 Duplicate 1.15   09-May-15   00:38:40   44   150508G1_44   B5E0032-DUP5 Duplicate 1.15   09-May-15   00:38:40   44   150508G1_44   B5E0032-DUP5 Duplicate 1.15   09-May-15   00:38:40   44   150508G1_44   B5E0032-DUP5 Duplicate 1.15   09-May-15   00:38:40   44   150508G1_45   1400880-07RE4 BERGS-SO-018 1.29   09-May-15   07:15:04   46   150508G1_45   Methanol   09-May-15   07:15:04   47   150508G1_47   Methanol   09-May-15   07:27:44   48   150508G1_48   ST150508G1-11 PFC CS4 15E0807   09-May-15   07:30:06   49   150508G1_50   Methanol   09-May-15   09-May-15   08:05:48   150508G1_51   1400944-03RE1 LOWRY-SO-011 1.22   09-May-15   08:18:30   09-May-15   08:36:33   150508G1_51   1400952-02RE1 CHNTE-SD-001 1.55   09-May-15   08:36:33   150508G1_53   1500203-01RE4 MARCH-SO-018 1.1   09-May-15   09:34:36   150508G1_56   B5E0032-MSD1 Matrix Spike Dup 1.35   09-May-15   09:34:36   150508G1_58   Methanol   09-May-15   09:43:56   09:43:36   09:43:56   09:43:36   09	-				
33		Name ,	ID 1	Acq.Date	Acq.Time
34       150508G1_34       Methanol       08-May-15       22:44:25         35       150508G1_35       Methanol       08-May-15       22:57:07         36       150508G1_36       B5E0032-BS1 OPR 1       08-May-15       23:09:50         37       150508G1_37       B5E0032-BLK1 Method Blank 1       08-May-15       23:22:30         38       150508G1_38       1500410-01 PA104-SB28-0608 1.46       08-May-15       23:35:12         39       150508G1_40       B5E0032-DUP1 Duplicate 1.42       09-May-15       00:00:34         40       150508G1_40       B5E0032-DUP2 Duplicate 1.11       09-May-15       00:03:4         41       150508G1_41       B5E0032-DUP2 Duplicate 1.19       09-May-15       00:25:58         43       150508G1_42       B5E0032-DUP3 Duplicate 1.15       09-May-15       00:38:40         44       150508G1_43       B5E0032-DUP5 Duplicate 3.03       09-May-15       00:51:22         45       150508G1_45       1400880-07RE4 BERGS-SO-018 1.29       09-May-15       07:15:04         47       150508G1_48       ST150508G1-11 PFC CS4 15E0807       09-May-15       07:27:44         48       150508G1_50       Methanol       09-May-15       09:35:04         50       150508G1_50 <td< td=""><td>32</td><td>150508G1_32</td><td>Methanol</td><td>08-May-15</td><td>22:19:03</td></td<>	32	150508G1_32	Methanol	08-May-15	22:19:03
150508G1_35	Manager State (1885)	150508G1_33	ST150508G1-10 PFC CS4 15E0807	08-May-15	22:31:45
36         150508G1_36         B5E0032-BS1 OPR 1         08-May-15         23:09:50           37         150508G1_37         B5E0032-BLK1 Method Blank 1         08-May-15         23:22:30           38         150508G1_38         1500410-01 PA104-SB28-0608 1.46         08-May-15         23:35:12           39         150508G1_39         1500410-02 PA113C-SB11-0103 1.53         08-May-15         23:47:52           40         150508G1_40         B5E0032-DUP1 Duplicate 1.42         09-May-15         00:00:34           41         150508G1_41         B5E0032-DUP2 Duplicate 1.11         09-May-15         00:13:16           42         150508G1_42         B5E0032-DUP3 Duplicate 1.19         09-May-15         00:25:58           43         150508G1_43         B5E0032-DUP4 Duplicate 3.03         09-May-15         00:38:40           44         150508G1_45         1400880-07RE4 BERGS-SO-018 1.29         09-May-15         00:51:22           45         150508G1_46         Methanol         09-May-15         07:27:44           47         150508G1_48         ST150508G1-11 PFC CS4 15E0807         09-May-15         07:40:25           49         150508G1_49         Methanol         09-May-15         08:05:48           51         150508G1_50         Methanol	34 ,	150508G1_34	Methanol	08-May-15	22:44:25
37	35	150508G1_35	Methanol	08-May-15	22:57:07
38         150508G1_38         1500410-01 PA104-SB28-0608 1.46         08-May-15         23:35:12           39         150508G1_39         1500410-02 PA113C-SB11-0103 1.53         08-May-15         23:347:52           40         150508G1_40         B5E0032-DUP1 Duplicate 1.42         09-May-15         00:00:34           41         150508G1_41         B5E0032-DUP2 Duplicate 1.11         09-May-15         00:13:16           42         150508G1_42         B5E0032-DUP3 Duplicate 1.15         09-May-15         00:25:58           43         150508G1_43         B5E0032-DUP4 Duplicate 3.03         09-May-15         00:51:22           45         150508G1_44         B5E0032-DUP5 Duplicate 3.03         09-May-15         00:51:22           46         150508G1_45         1400880-07RE4 BERGS-SO-018 1.29         09-May-15         07:15:04           47         150508G1_46         Methanol         09-May-15         07:27:44           48         150508G1_48         ST150508G1-11 PFC CS4 15E0807         09-May-15         07:53:06           50         150508G1_50         Methanol         09-May-15         08:05:48           51         150508G1_51         1400944-03RE1 LOWRY-SO-011 1.22         09-May-15         08:31:09           53         150508G1_52	36	150508G1_36	B5E0032-BS1 OPR 1	08-May-15	23:09:50
150508G1_39	37	150508G1_37	B5E0032-BLK1 Method Blank 1	08-May-15	23:22:30
40 150508G1_40 B5E0032-DUP1 Duplicate 1.42 09-May-15 00:00:34 41 150508G1_41 B5E0032-DUP2 Duplicate 1.11 09-May-15 00:13:16 42 150508G1_42 B5E0032-DUP3 Duplicate 1.19 09-May-15 00:25:58 43 150508G1_43 B5E0032-DUP4 Duplicate 1.15 09-May-15 00:38:40 44 150508G1_44 B5E0032-DUP5 Duplicate 3.03 09-May-15 00:51:22 45 150508G1_45 1400880-07RE4 BERGS-SO-018 1.29 09-May-15 07:15:04 46 150508G1_46 Methanol 09-May-15 07:27:44 47 150508G1_48 ST150508G1-11 PFC CS4 15E0807 09-May-15 07:40:25 49 150508G1_49 Methanol 09-May-15 07:53:06 50 150508G1_50 Methanol 09-May-15 08:05:48 51 150508G1_51 1400944-03RE1 LOWRY-SO-011 1.22 09-May-15 08:05:48 51 150508G1_52 1400952-02RE1 CHNTE-SD-001 1.55 09-May-15 08:31:09 53 150508G1_53 1500203-01RE4 MARCH-SO-018s 1.1 09-May-15 08:31:09 53 150508G1_54 1500209-05RE5 MCCLN-SD-007 2.76 09-May-15 08:36:33 55 150508G1_55 B5E0032-MS1 Matrix Spike Dup 1.35 09-May-15 09:09:14 56 150508G1_58 Methanol 09-May-15 09:09:14 56 150508G1_59 ST150508G1-12 PFC CS4 15E0807 09-May-15 09:34:36 59 150508G1_59 ST150508G1-12 PFC CS4 15E0807 09-May-15 09:59:58 60 150508G1_59 Methanol 09-May-15 09:59:58 60 150508G1_59 Methanol 09-May-15 09-May-15 09:59:58 60 150508G1_60 Methanol 09-May-15 10:12:39	38	150508G1_38	1500410-01 PA104-SB28-0608 1.46	08-May-15	23:35:12
41 150508G1_41 B5E0032-DUP2 Duplicate 1.11 09-May-15 00:13:16 42 150508G1_42 B5E0032-DUP3 Duplicate 1.19 09-May-15 00:25:58 43 150508G1_43 B5E0032-DUP4 Duplicate 1.15 09-May-15 00:38:40 44 150508G1_44 B5E0032-DUP5 Duplicate 3.03 09-May-15 00:51:22 45 150508G1_45 1400880-07RE4 BERGS-SO-018 1.29 09-May-15 07:15:04 46 150508G1_46 Methanol 09-May-15 07:27:44 47 150508G1_47 Methanol 09-May-15 07:27:44 48 150508G1_48 ST150508G1-11 PFC CS4 15E0807 09-May-15 07:40:25 49 150508G1_49 Methanol 09-May-15 07:53:06 50 150508G1_50 Methanol 09-May-15 08:05:48 51 150508G1_51 1400944-03RE1 LOWRY-SO-011 1.22 09-May-15 08:18:30 52 150508G1_52 1400952-02RE1 CHNTE-SD-001 1.55 09-May-15 08:31:09 53 150508G1_53 1500203-01RE4 MARCH-SO-018s 1.1 09-May-15 08:43:51 54 150508G1_55 B5E0032-MS1 Matrix Spike 1.29 09-May-15 09:09:14 56 150508G1_56 B5E0032-MSD1 Matrix Spike Dup 1.35 09-May-15 09:21:55 57 150508G1_58 Methanol 09-May-15 09-May-15 09:34:36 58 150508G1_59 ST150508G1-12 PFC CS4 15E0807 09-May-15 09:34:36 59 150508G1_59 ST150508G1-12 PFC CS4 15E0807 09-May-15 09:59:58 60 150508G1_59 ST150508G1-12 PFC CS4 15E0807 09-May-15 09:59:58 60 150508G1_60 Methanol 09-May-15 10:12:39	39	150508G1_39	1500410-02 PA113C-SB11-0103 1.53	08-May-15	23:47:52
42 150508G1_42 B5E0032-DUP3 Duplicate 1.19 09-May-15 00:25:58 43 150508G1_43 B5E0032-DUP4 Duplicate 1.15 09-May-15 00:38:40 44 150508G1_44 B5E0032-DUP5 Duplicate 3.03 09-May-15 00:51:22 45 150508G1_45 1400880-07RE4 BERGS-SO-018 1.29 09-May-15 07:15:04 46 150508G1_46 Methanol 09-May-15 07:27:44 48 150508G1_47 Methanol 09-May-15 07:27:44 48 150508G1_48 ST150508G1-11 PFC CS4 15E0807 09-May-15 07:40:25 49 150508G1_49 Methanol 09-May-15 07:53:06 50 150508G1_50 Methanol 09-May-15 08:05:48 51 150508G1_51 1400944-03RE1 LOWRY-SO-011 1.22 09-May-15 08:18:30 52 150508G1_52 1400952-02RE1 CHNTE-SD-001 1.55 09-May-15 08:31:09 53 150508G1_53 1500203-01RE4 MARCH-SO-018s 1.1 09-May-15 08:43:51 54 150508G1_55 B5E0032-MS1 Matrix Spike 1.29 09-May-15 09:09:14 56 150508G1_56 B5E0032-MSD1 Matrix Spike Dup 1.35 09-May-15 09:09:14 56 150508G1_57 Methanol 09-May-15 09:47:18 59 150508G1_58 Methanol 09-May-15 09-May-15 09:47:18 59 150508G1_59 ST150508G1-12 PFC CS4 15E0807 09-May-15 09:59:58 60 150508G1_60 Methanol 09-May-15 09-May-15 09:59:58	40	150508G1_40	B5E0032-DUP1 Duplicate 1.42	09-May-15	00:00:34
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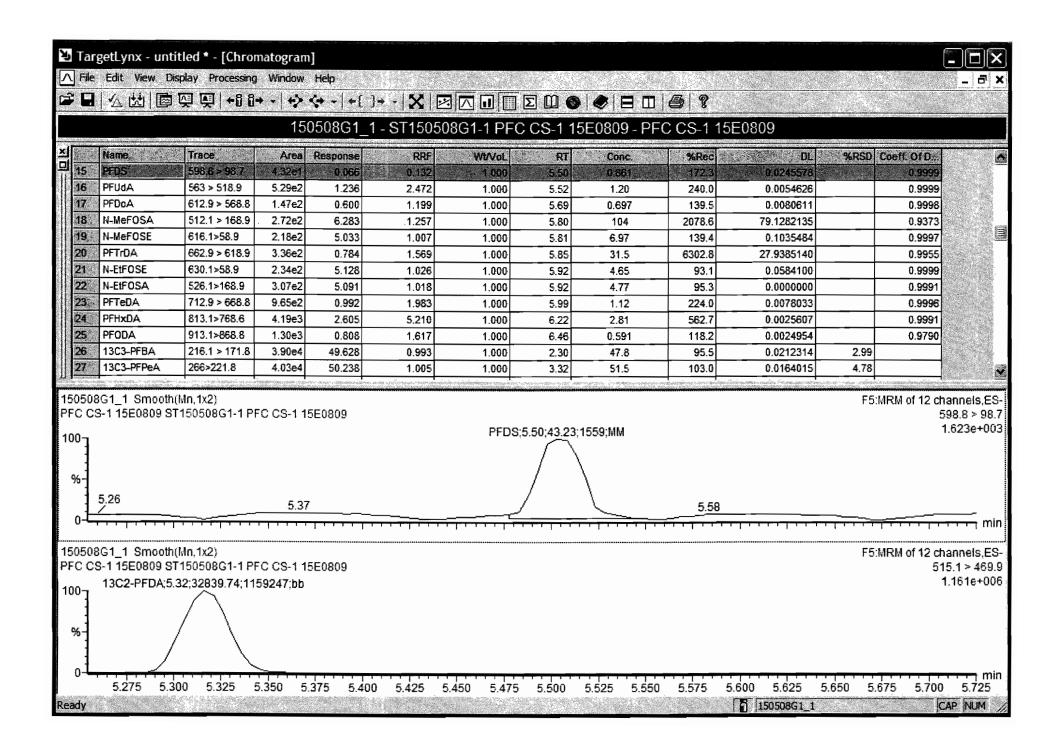
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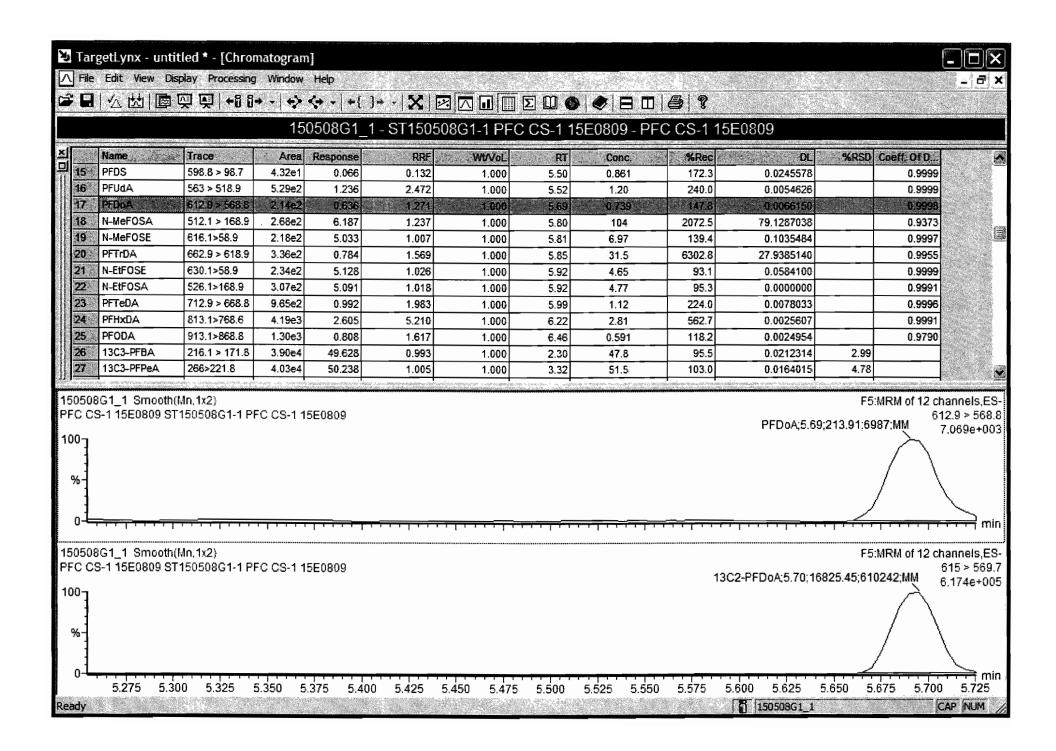
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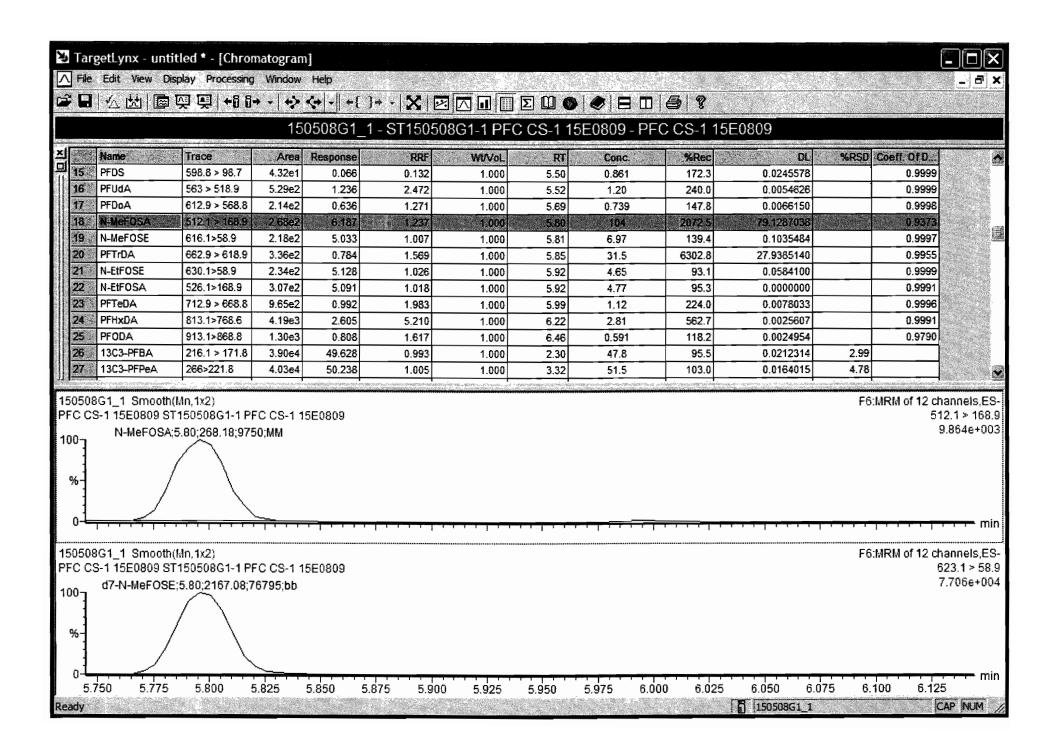
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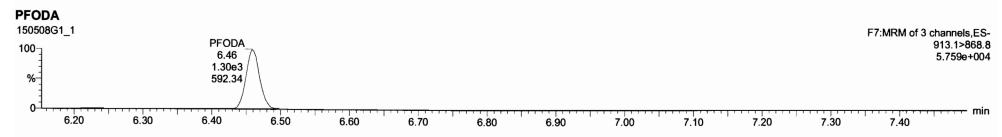
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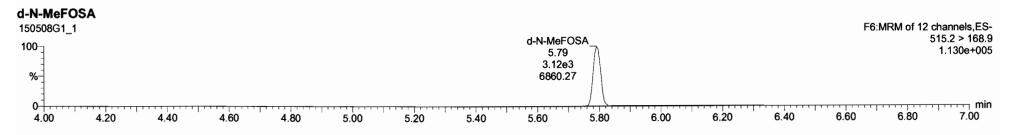
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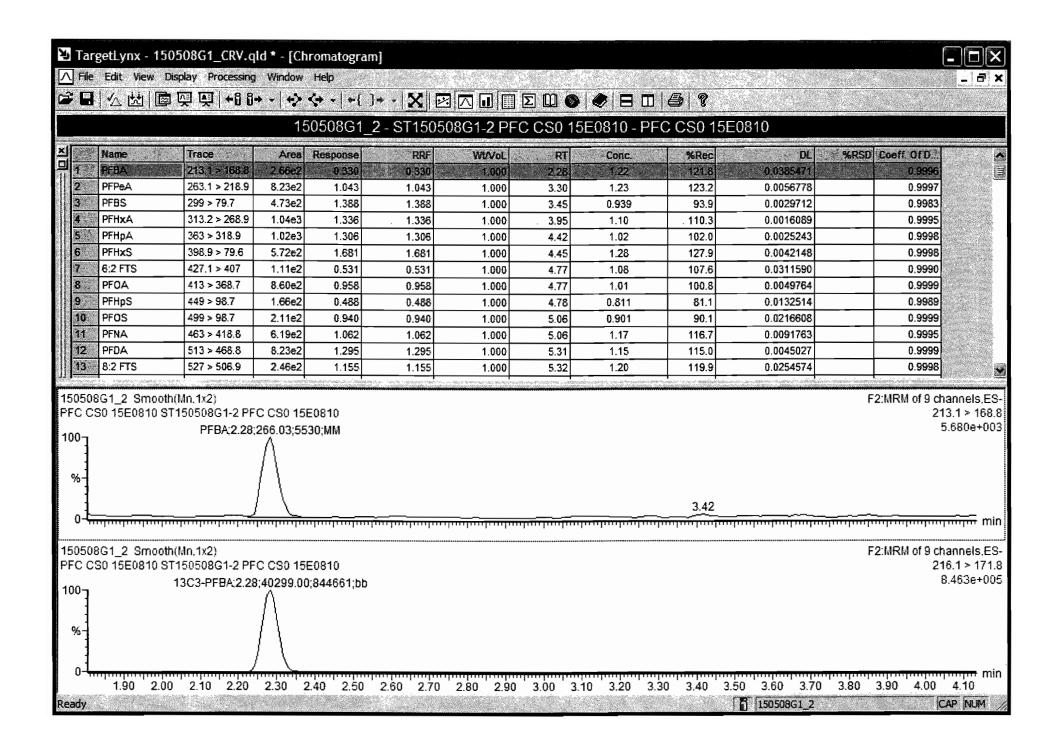
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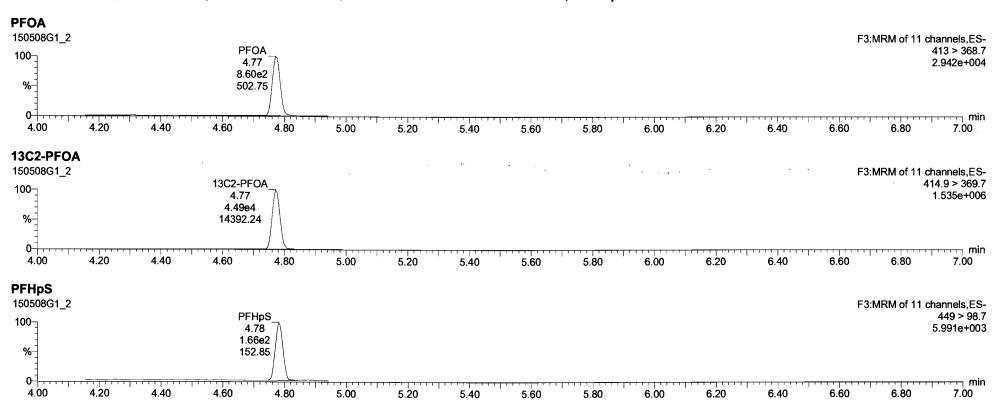
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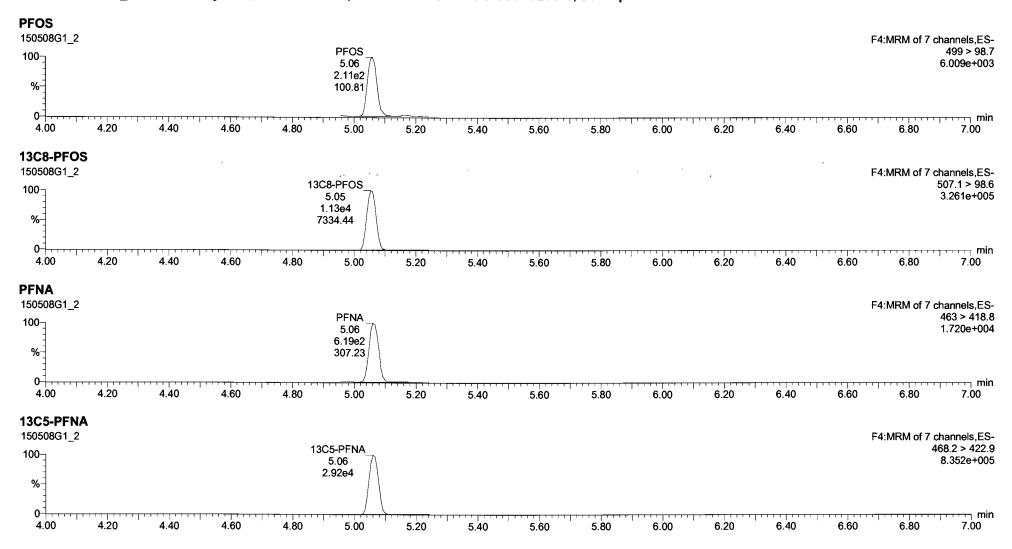
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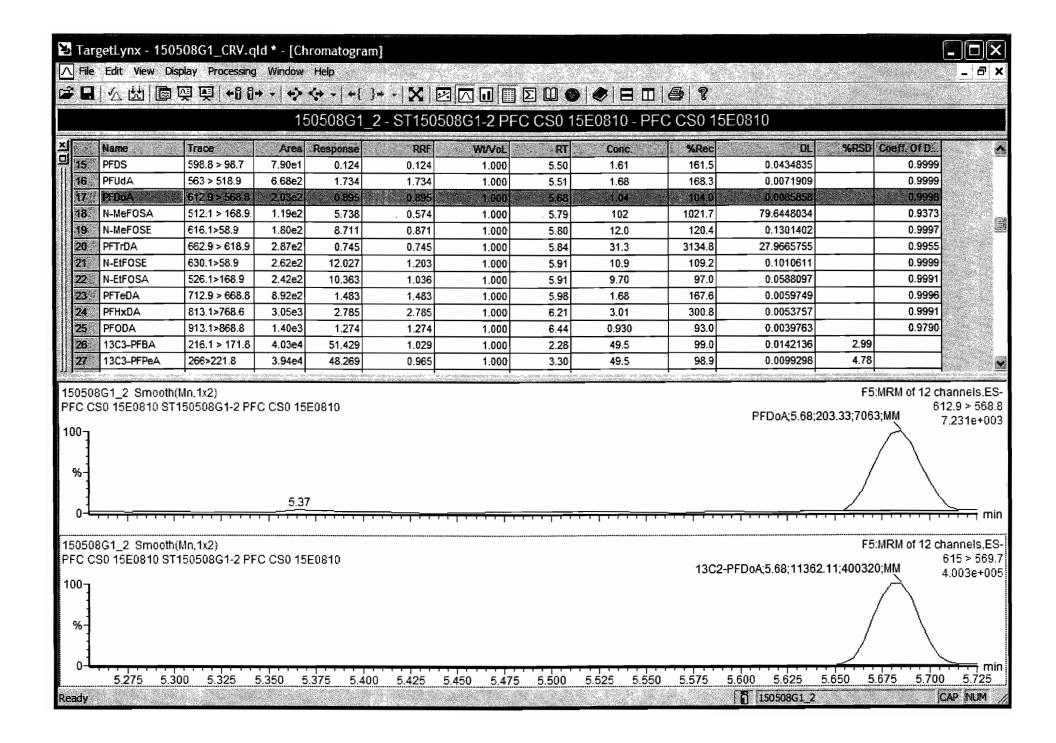
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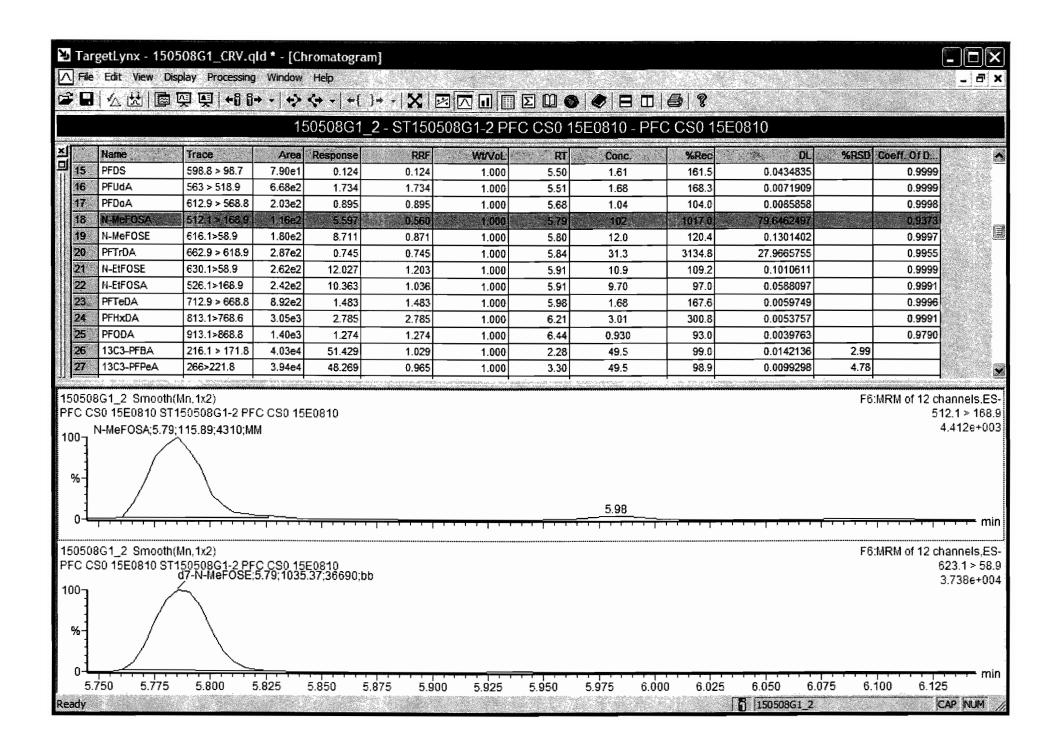
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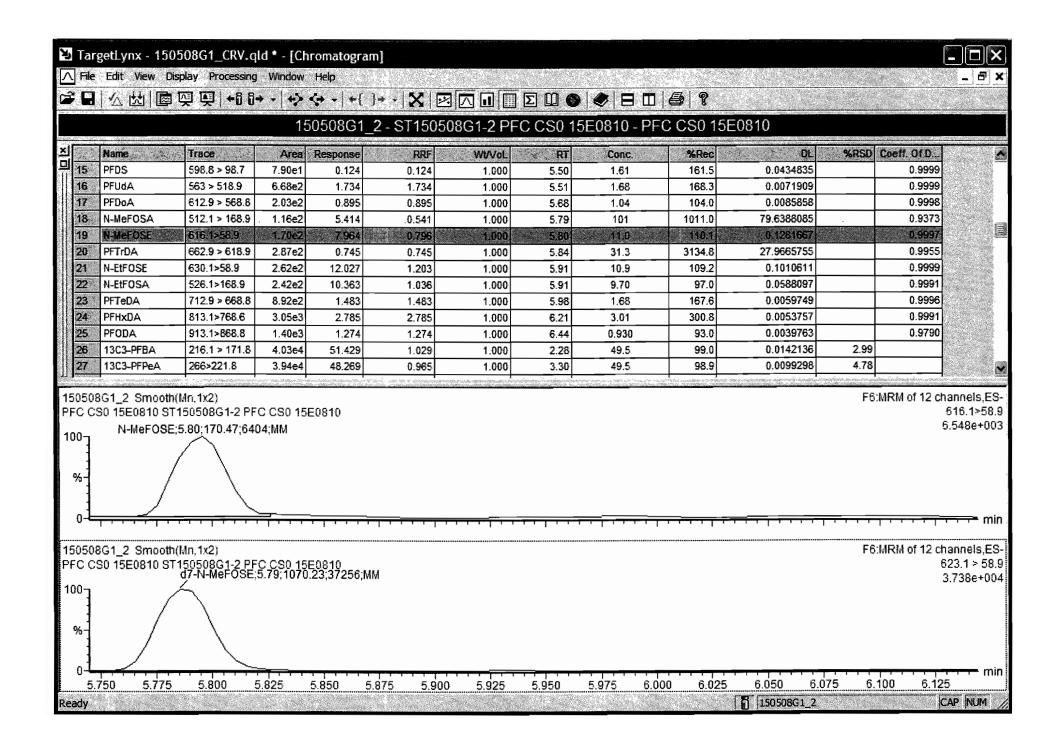




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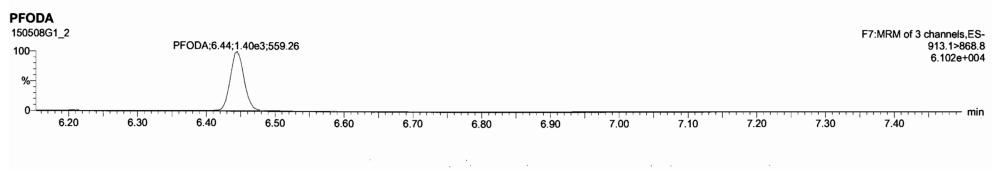
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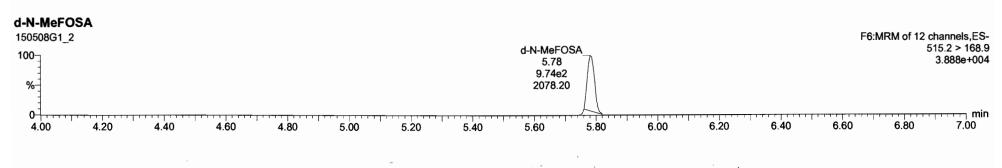
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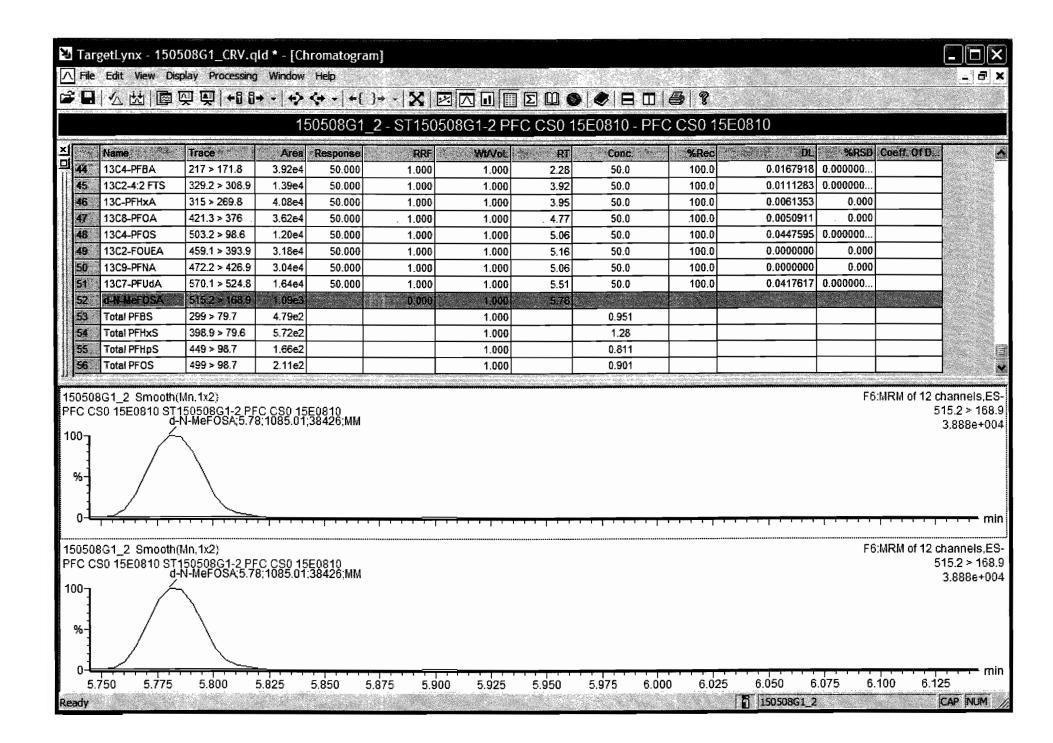
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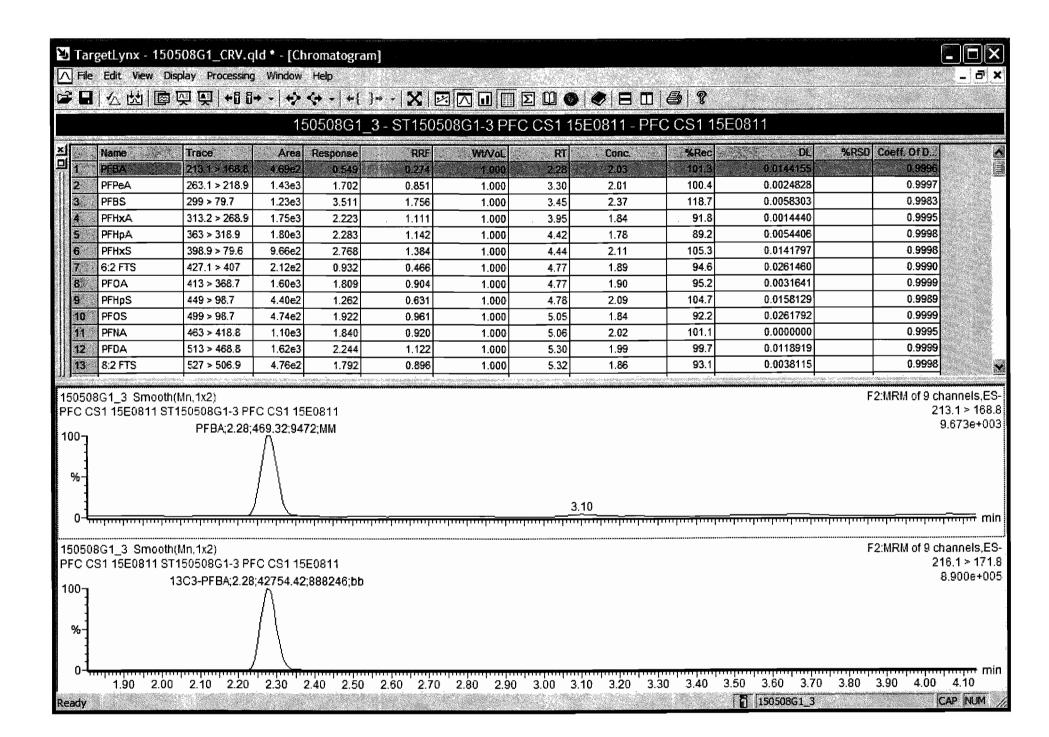
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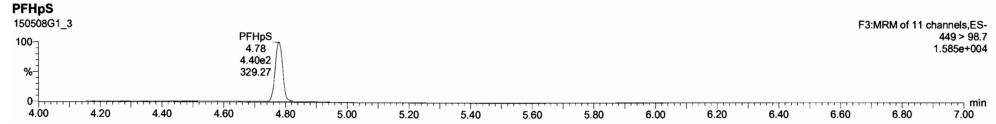




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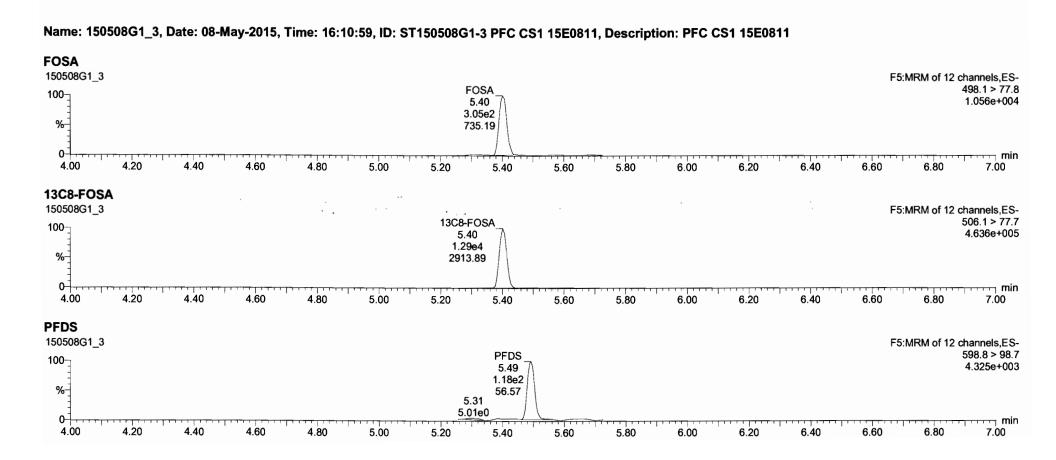


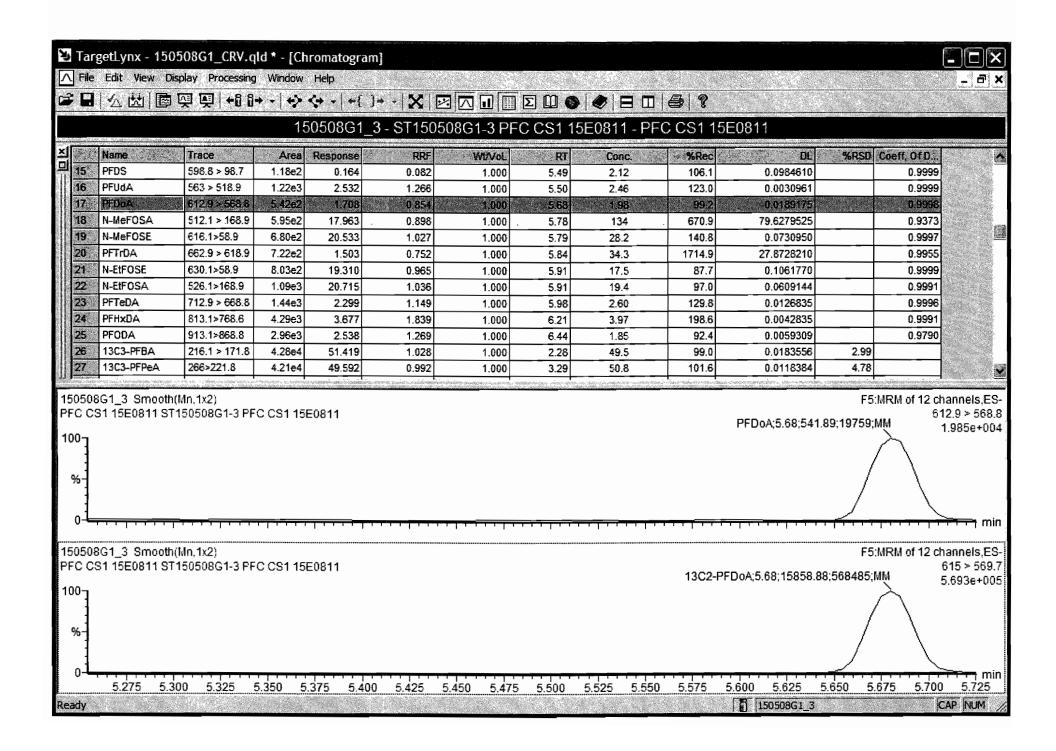
Project 1500410 Page 209 of 333



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Project 1500410 Page 214 of 333





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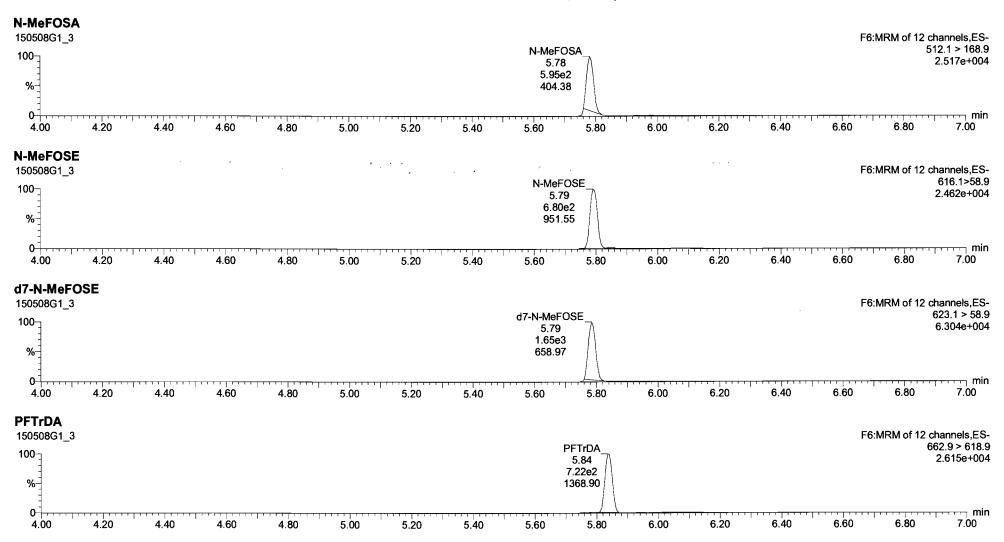
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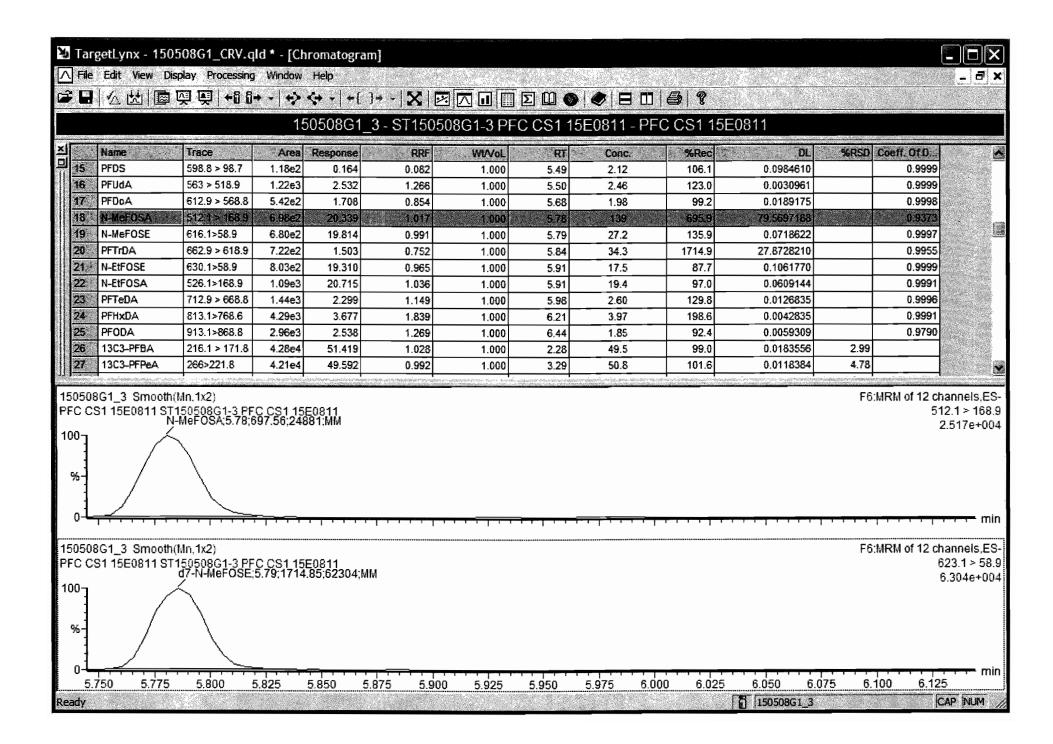
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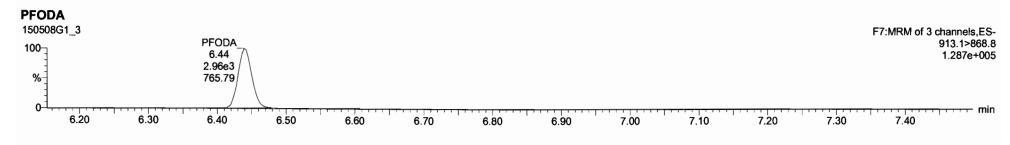
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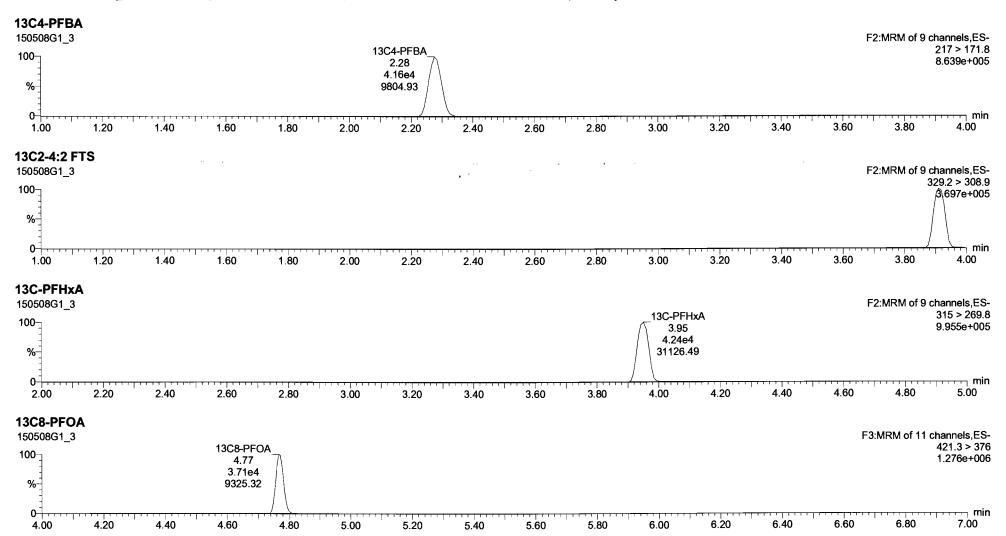


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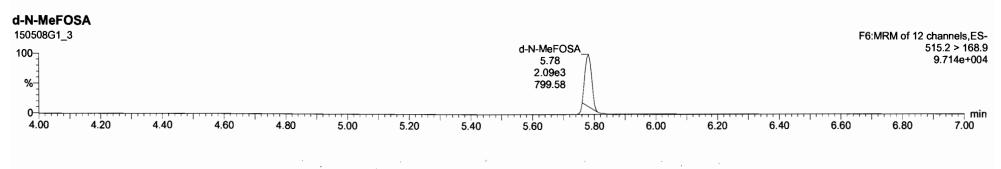
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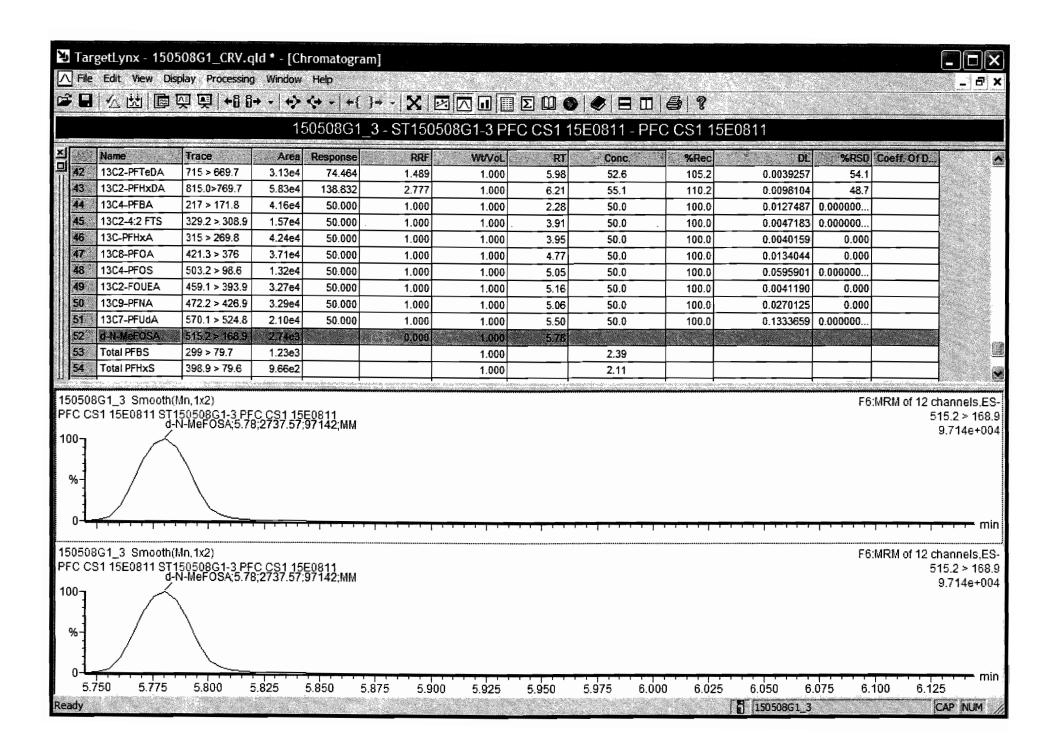
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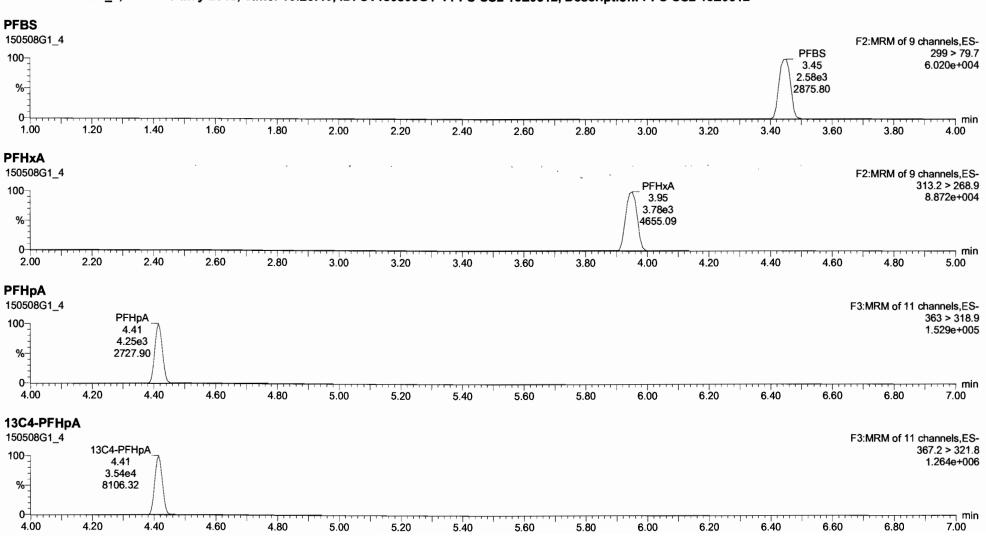
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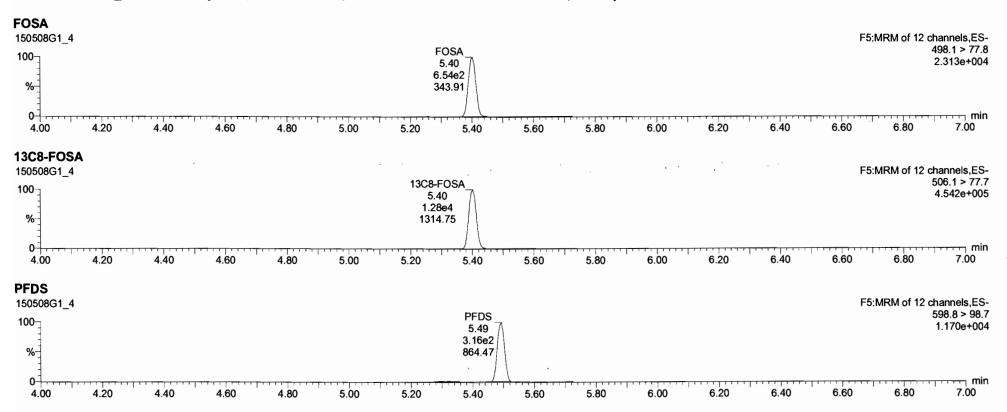
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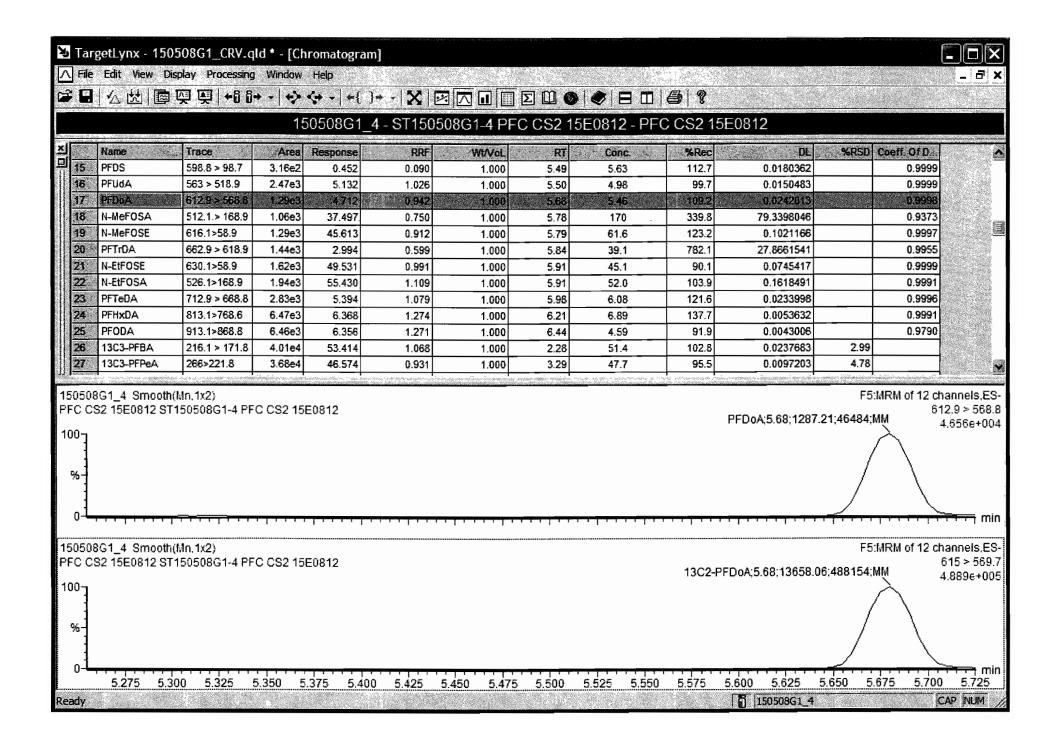


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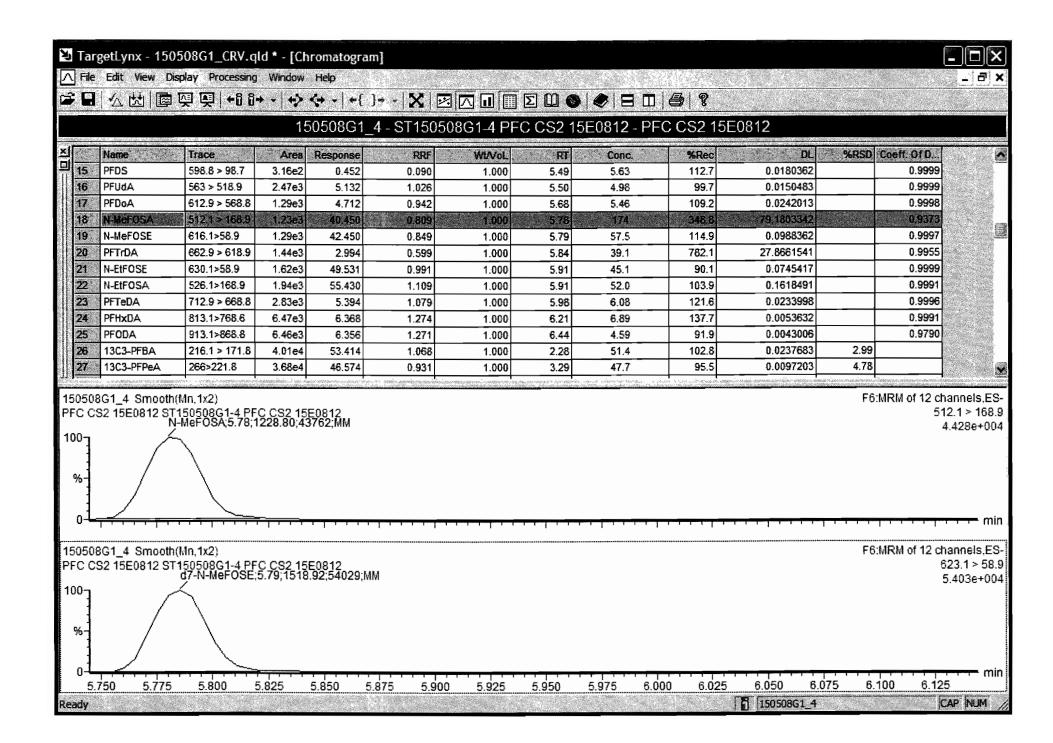


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Quantify Sample ReportMassLynx 4.1Vista Analytical Laboratory Q1Page 57 of 120

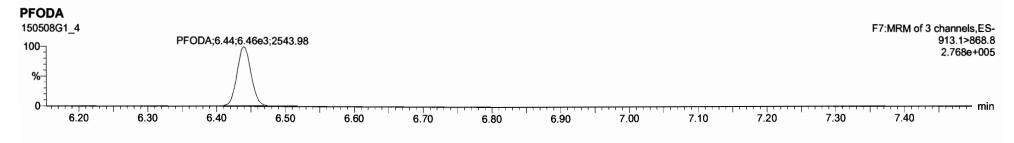
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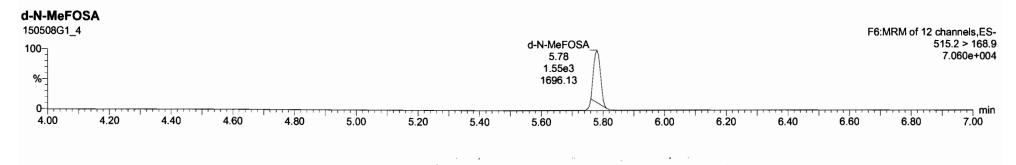
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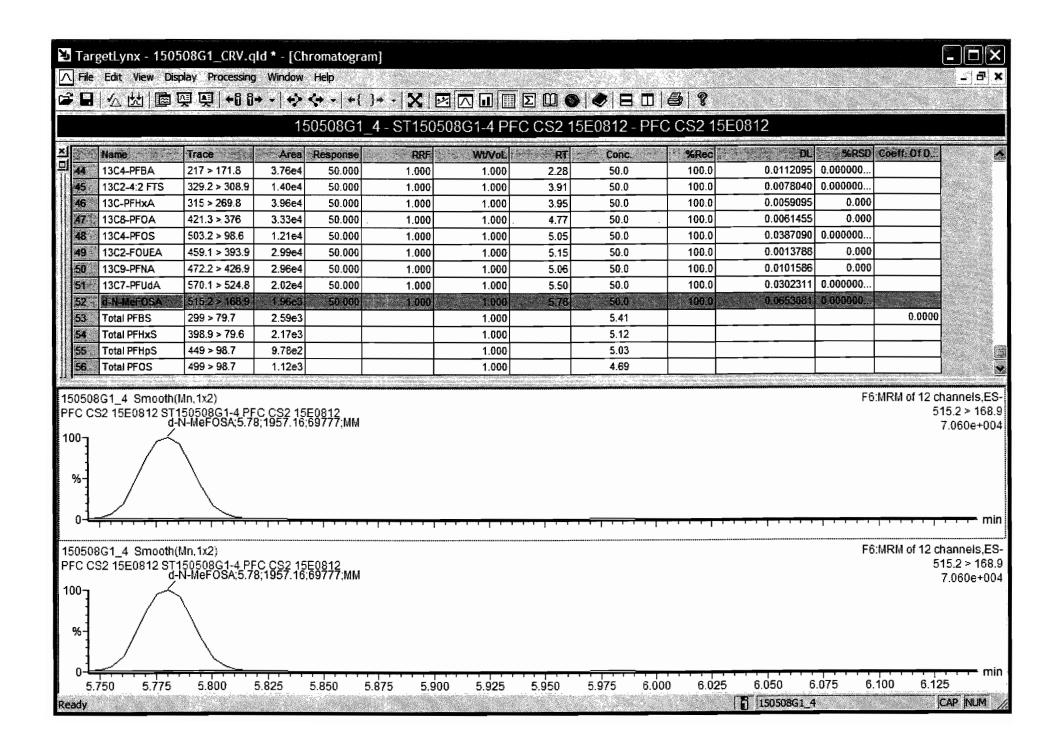


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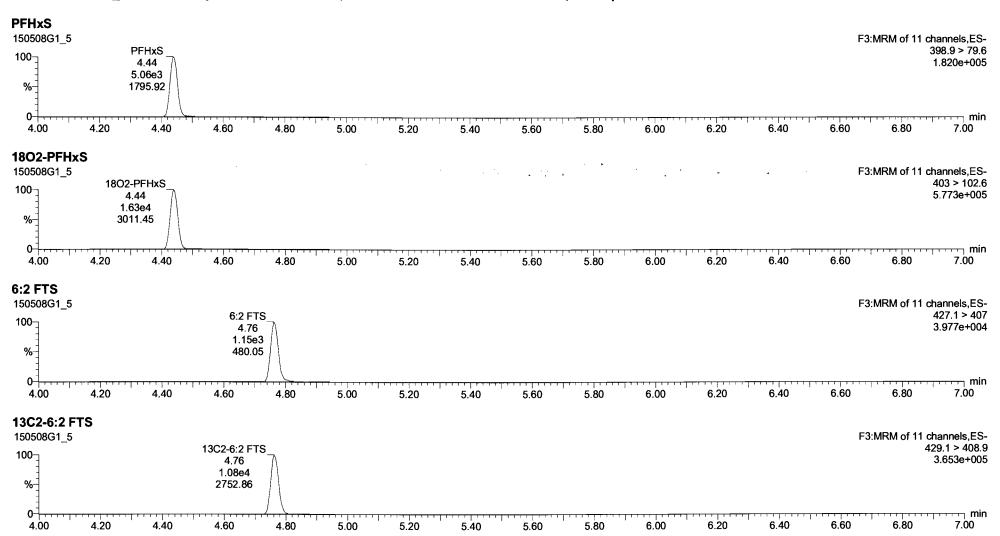
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Vista Analytical Laboratory Q1

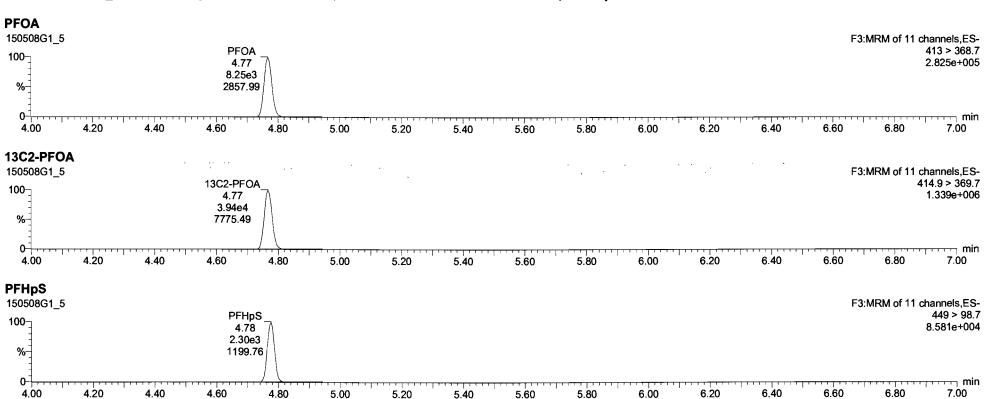
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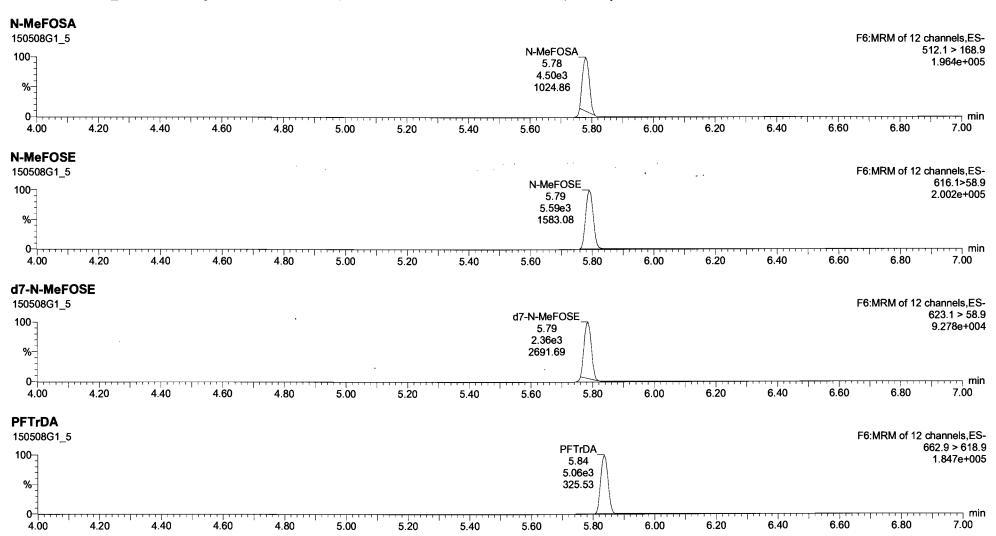
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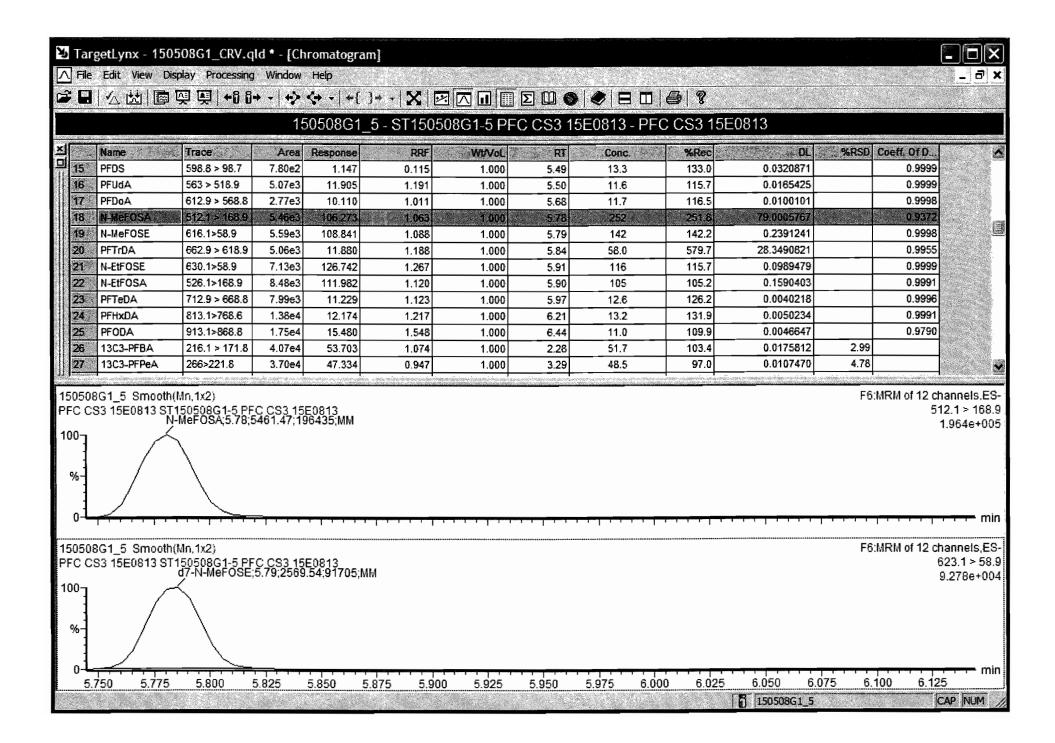
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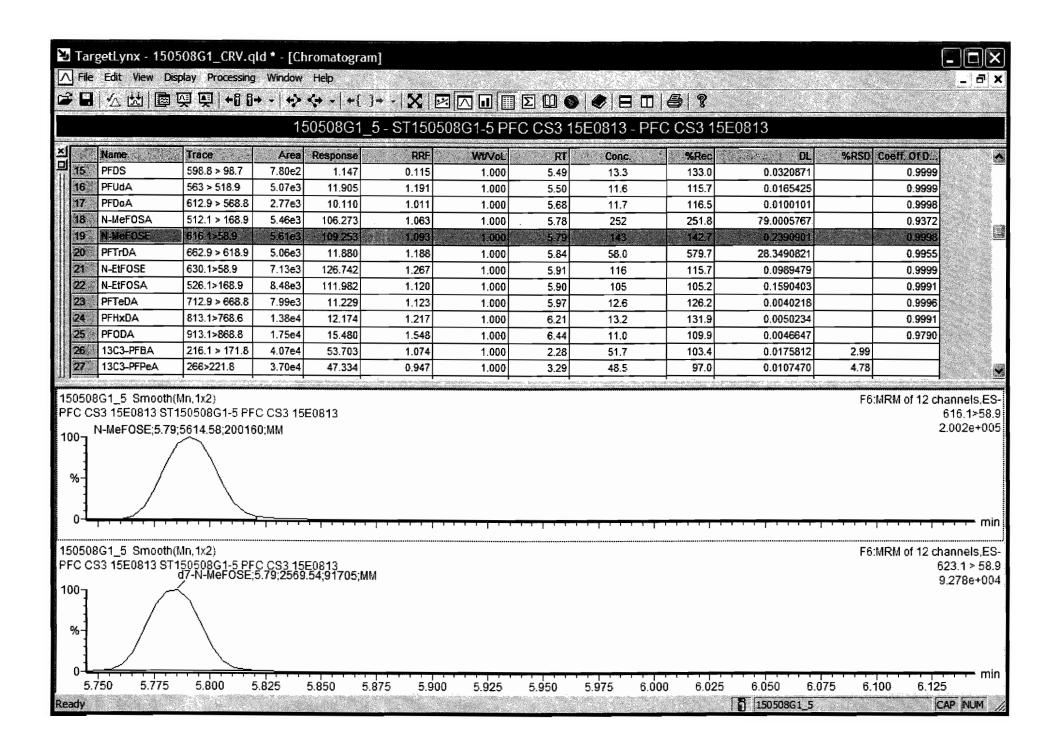
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 Quantify Sample Report
 MassLynx 4.1

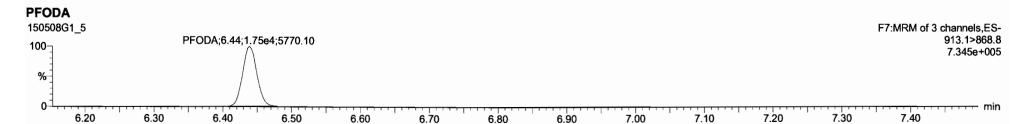
 Vista Analytical Laboratory Q1
 Page 72 of 120

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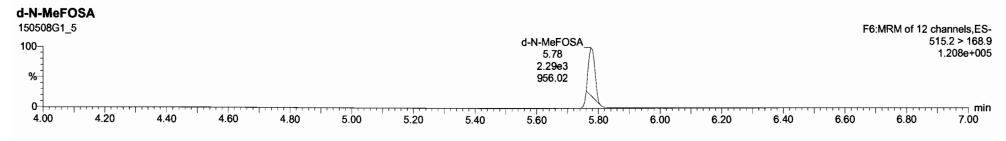
Project 1500410 Page 259 of 333

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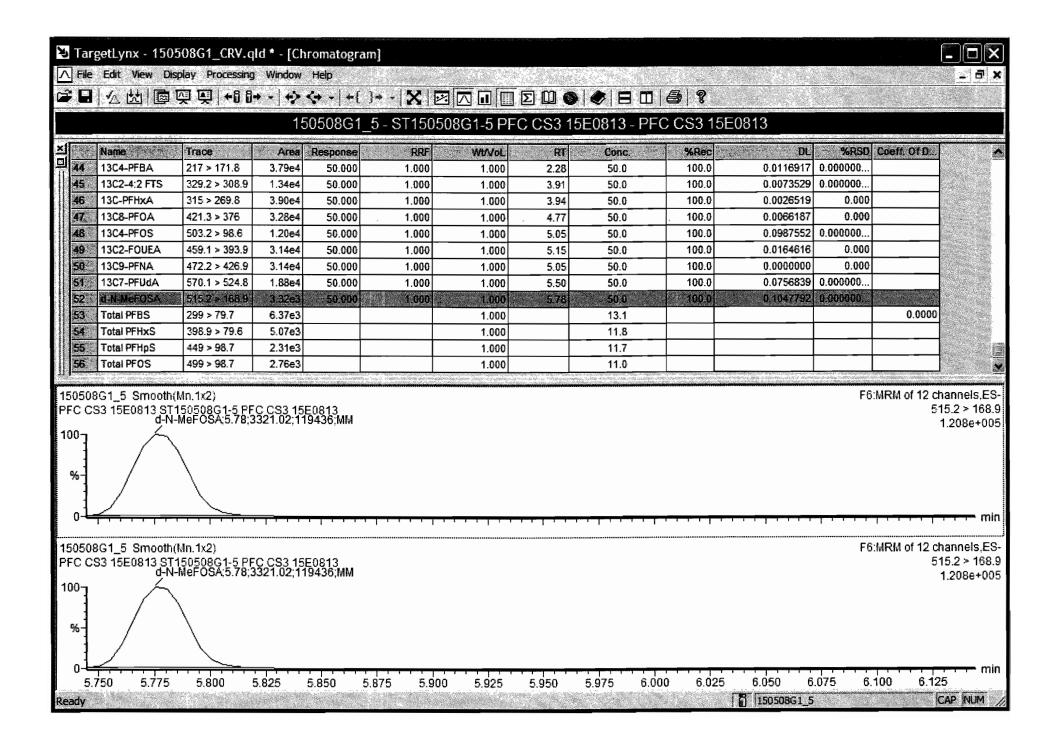
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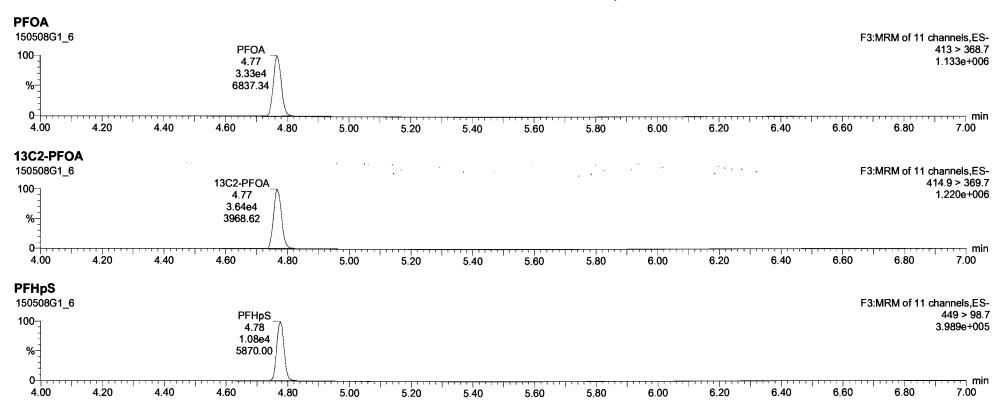
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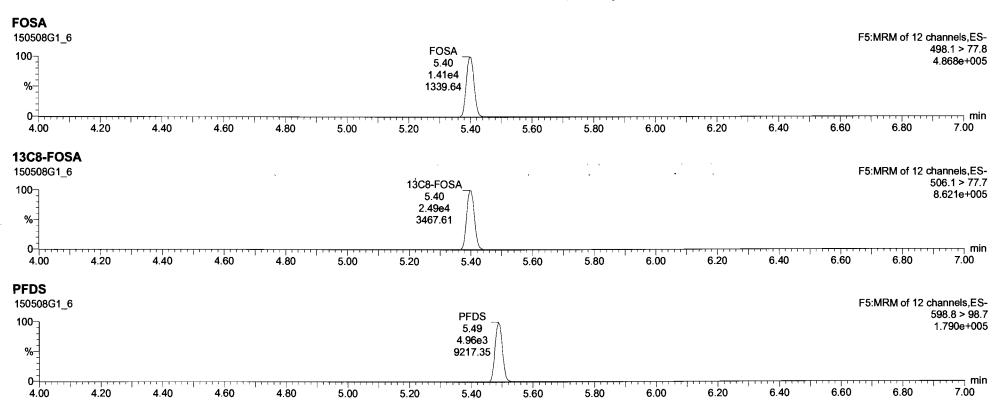
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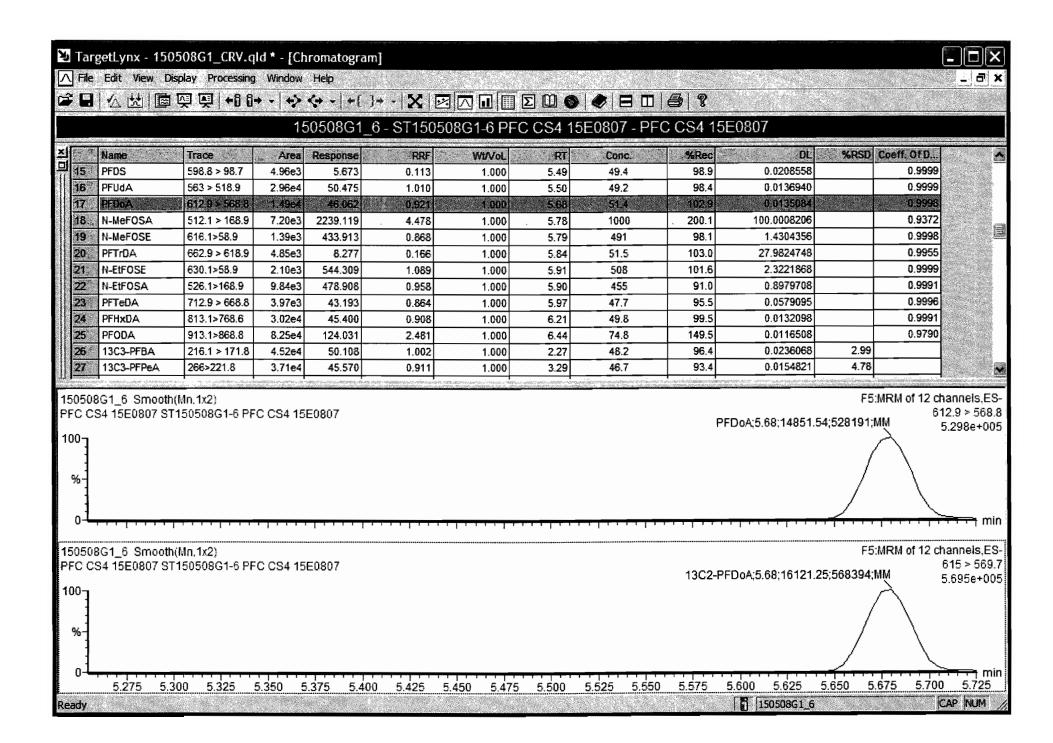
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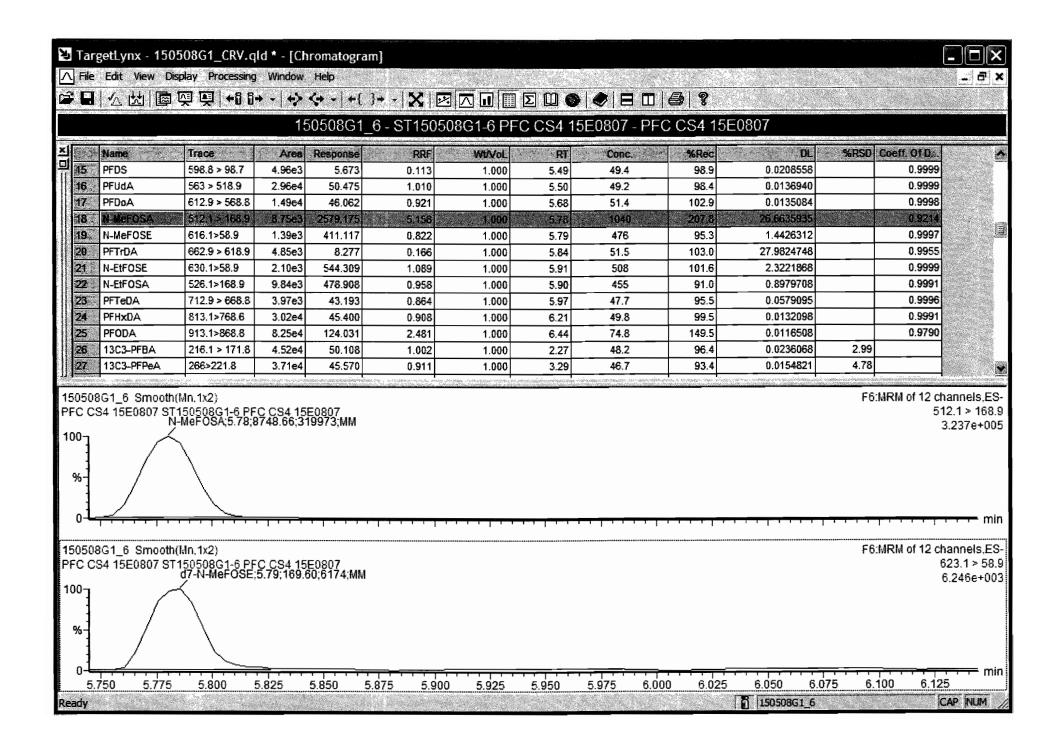


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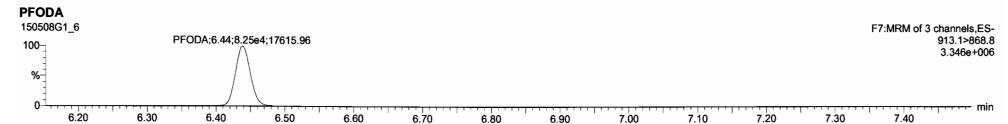
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Project 1500410 Page 275 of 333

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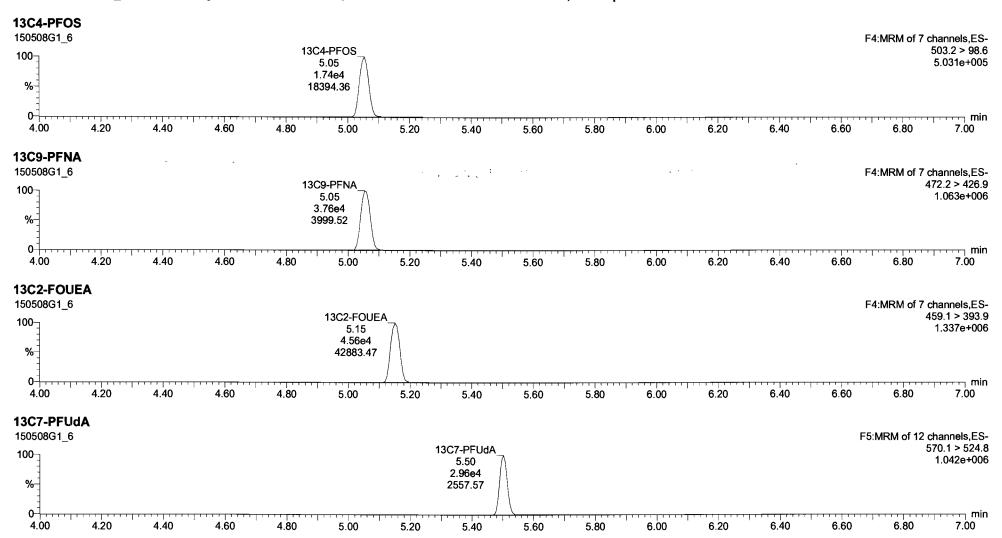
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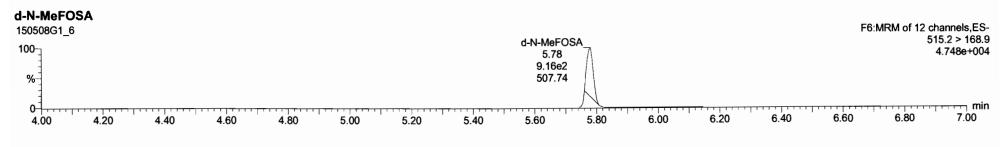
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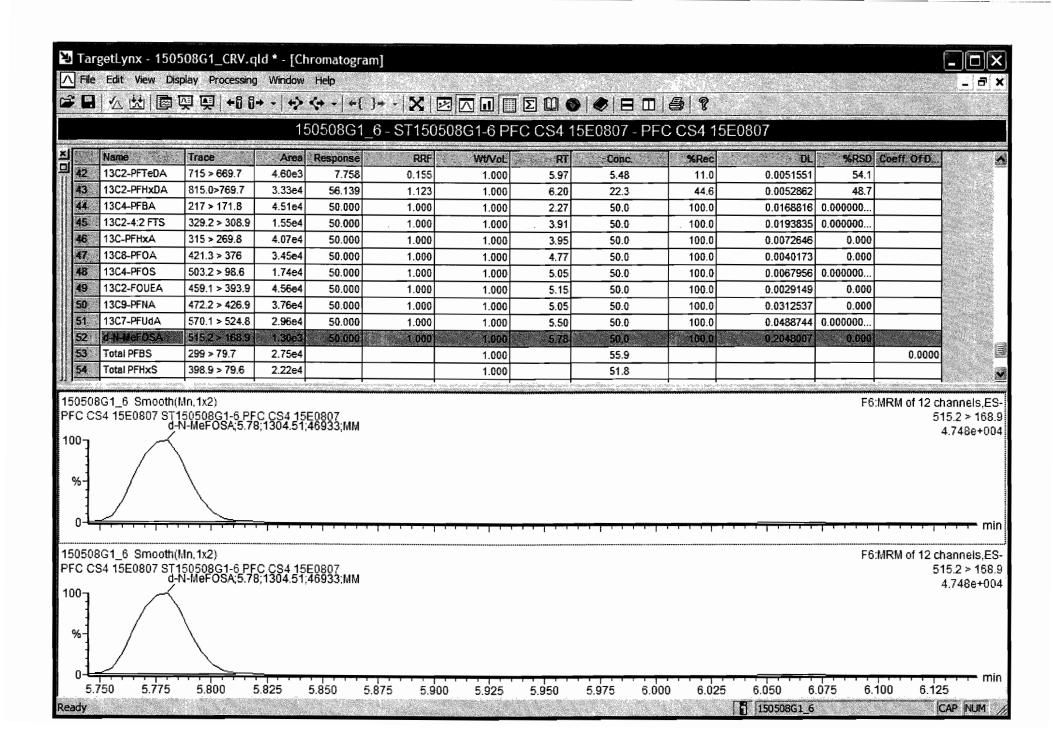
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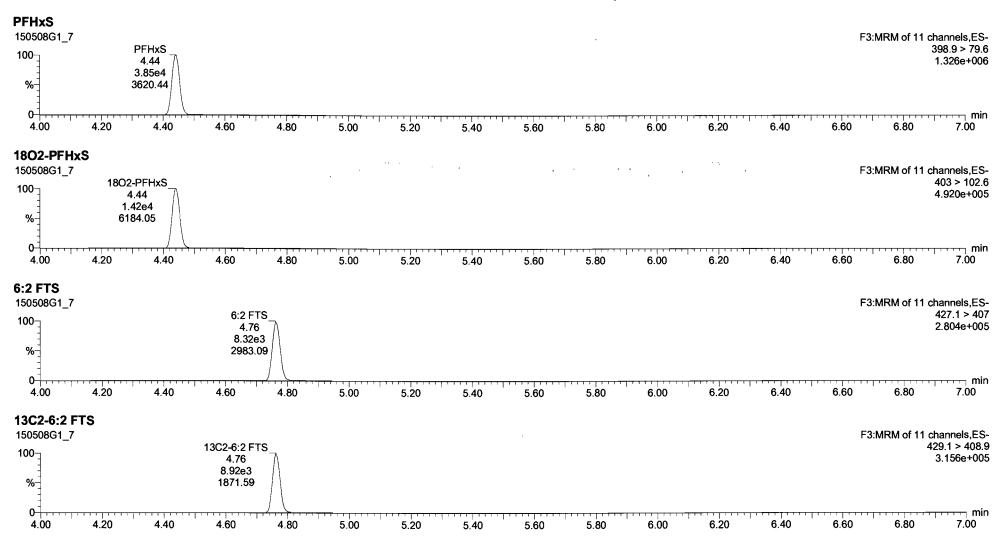
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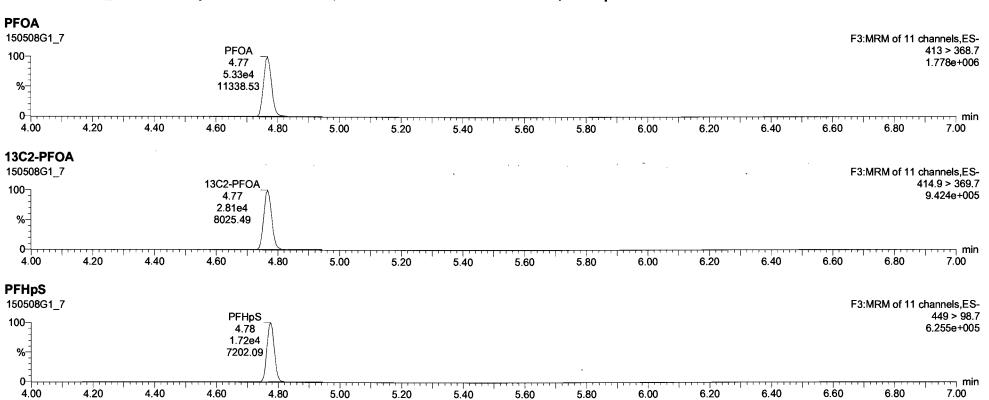


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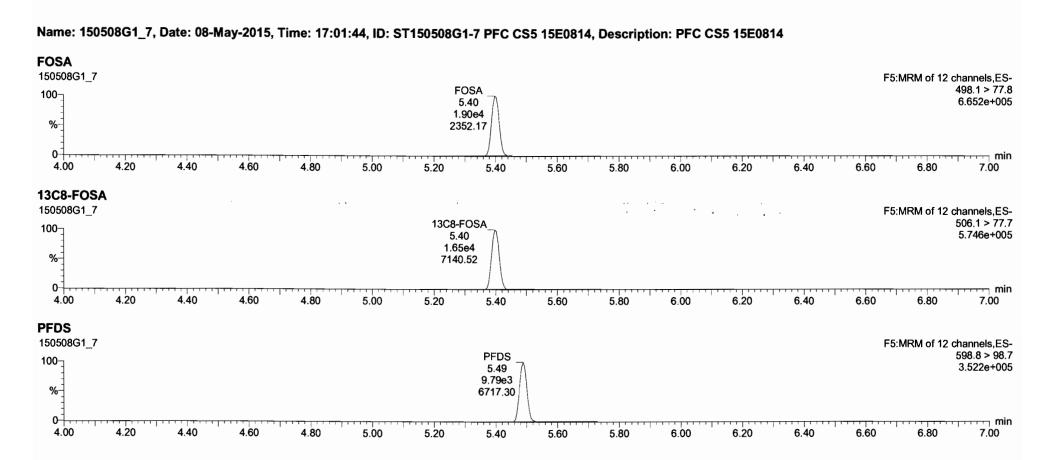
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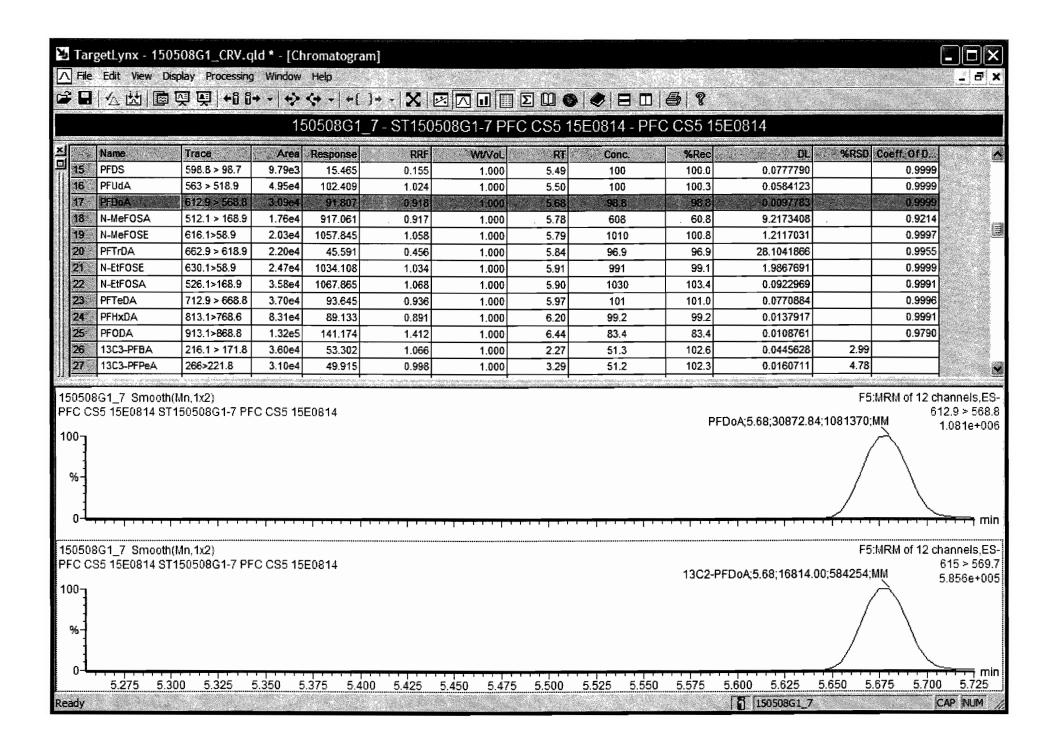


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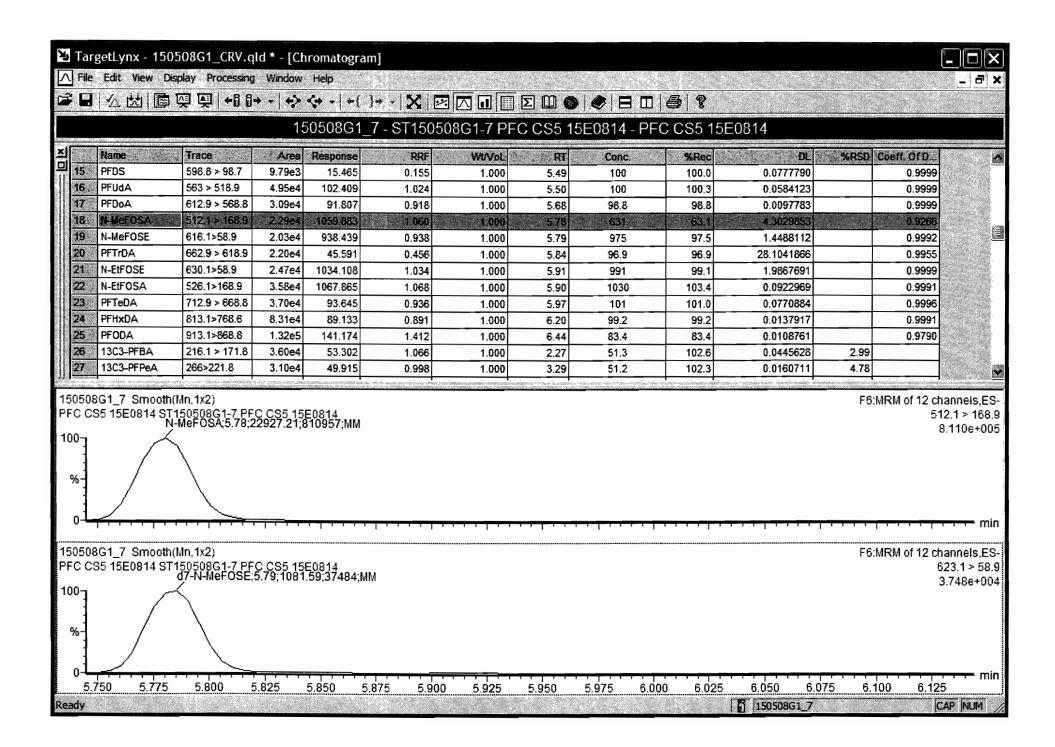
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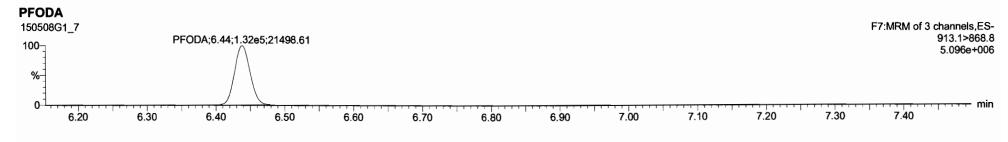
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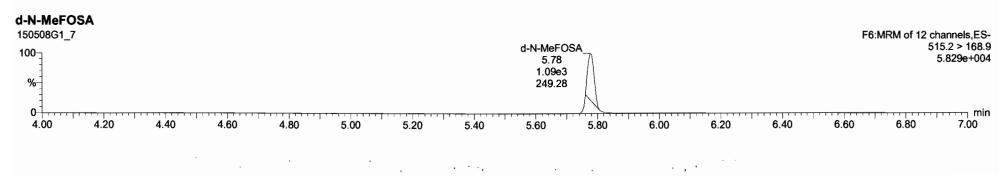
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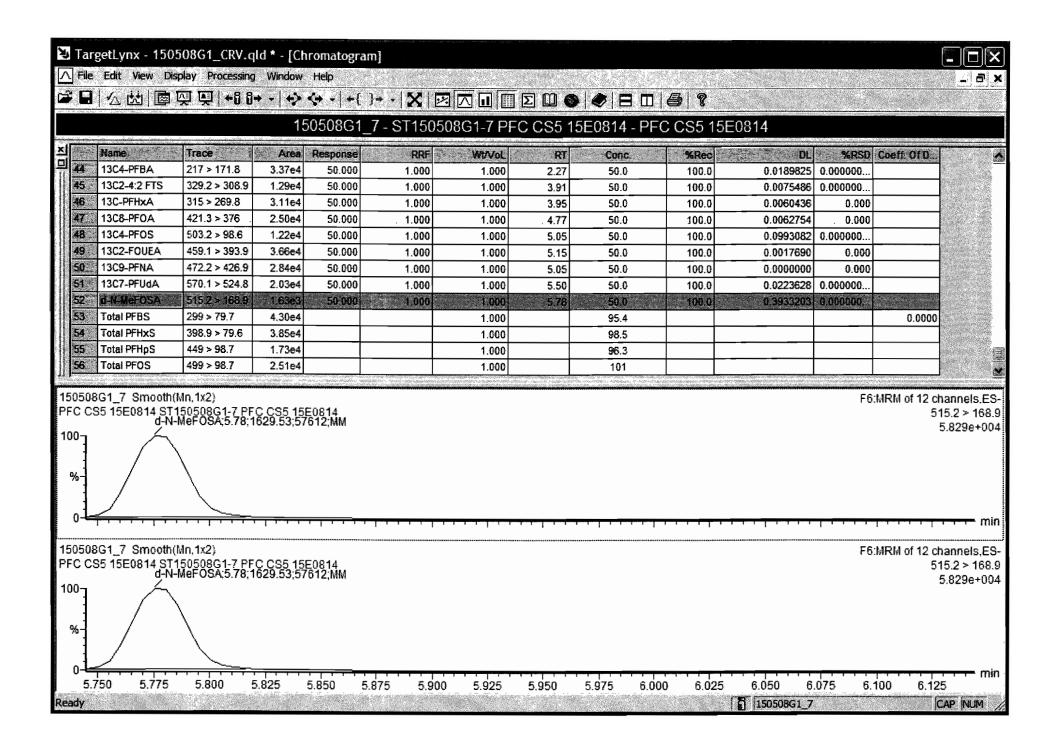


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## Project 1500410 Page 303 of 333

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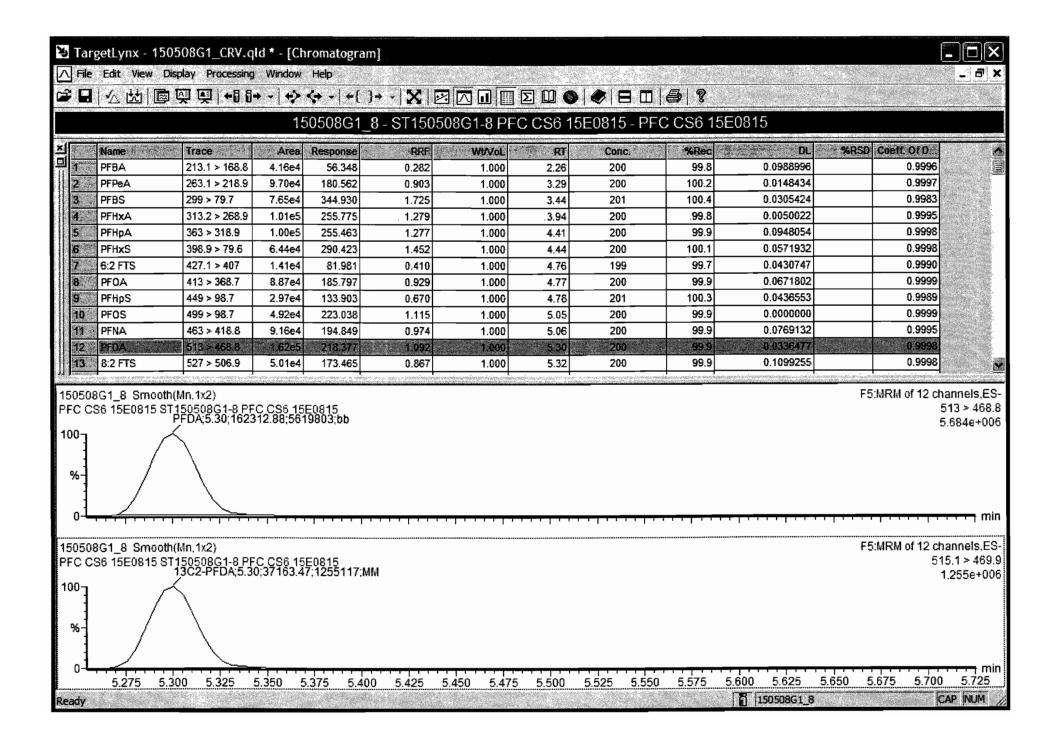
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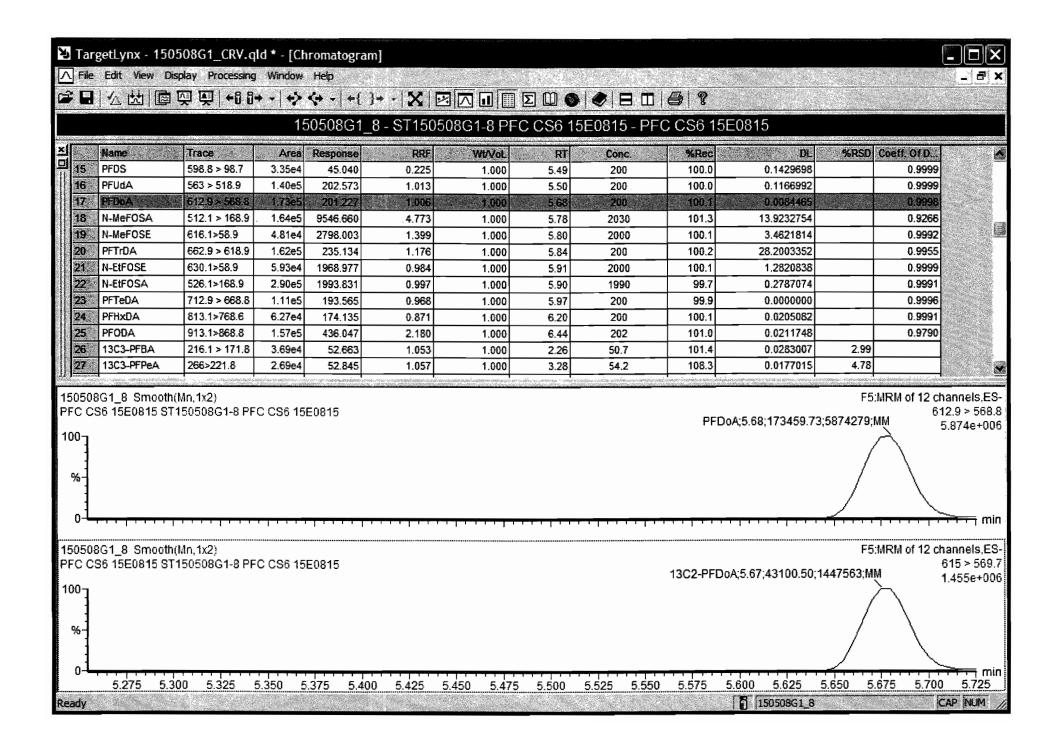
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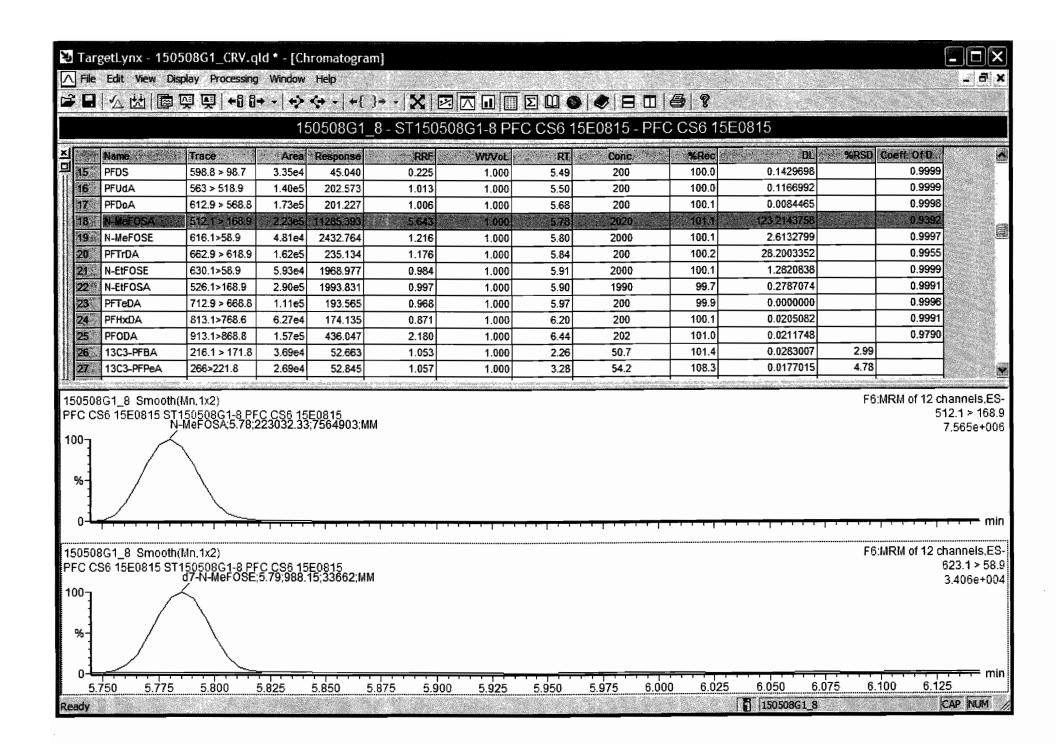
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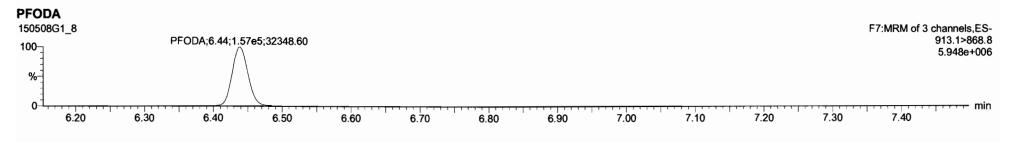


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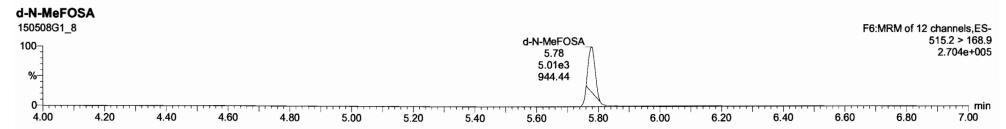


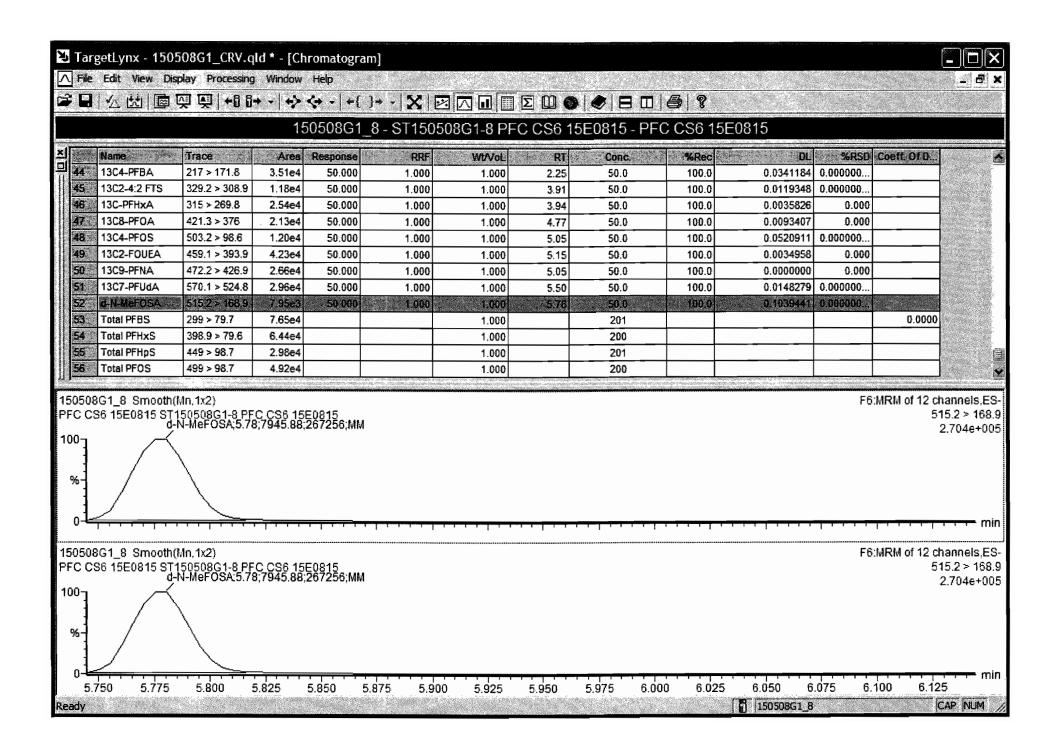
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Page 1 of 1

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	# Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec	17.3
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2	3 PFBS	299 > 79.7	2.89e4	1.78e4		1.000	3.45	52.7	105.4	
3	5 PFHpA	363 > 318.9	4.06e4	3.37e4		1.000	4.41	47.1	94.2	
4	6 PFHxS	398.9 > 79.6	2.26e4	1.78e4		1.000	4.44	47.3	94.6	
5	8 PFOA	413 > 368.7	2.73e4	3.91e4		1.000	4.77	36.9	73.8	
6	9 PFHpS	449 > 98.7	9.40e3	1.78e4		1.000	4.78	42.9	85.6	,
7	10 PFOS	499 > 98.7	9.17e3	1.09e4		1.000	5.05	39.6	19.2	
8	11 PFNA	463 > 418.8	2.69e4	2.80e4		1.000	5.06	51.8	103.4	<i>y</i> <b>V</b>
8 9 10	26 13C3-PFBA	216.1 > 171.8	4.30e4	4.09e4	1.039	1.000	2.28	50.7	101.3	
10	27 13C3-PFPeA	266>221.8	4.78e4	5.00e4	0.976	1.000	3.29	49.0	98.1	. ^
11 (2000)	28 13C4-PFHpA	367.2 > 321.8	3.37e4	5.00e4	0.850	1.000	4.41	39.7	79.4	5/11/15
12	29 18O2-PFHxS	403 > 102.6	1.78e4	5.00e4	0.420	1.000	4.44	42.4	84.8	2111119
13	30 13C2-6:2 FTS	429.1 > 408.9	1.12e4	1.74e4	0.739	1.000	4.76	43.7	87.5	2/11/5
14	31 13C2-PFOA	414.9 > 369.7	3.91e4	3.35e4	1.160	1.000	4.77	50.3	100.5	
15	32 13C8-PFOS	507.1 > 98.6	1.09e4	1.10e4	0.939	1.000	5.05	53.0	106.0	
16	33 13C5-PFNA	468.2 > 422.9	2.80e4	3.00e4	0.915	1.000	5.06	51.2	102.3	
17	44 13C4-PFBA	217 > 171.8	4.09e4	4.09e4	1.000	1.000	2.28	50.0	100.0	
18	45 13C2-4:2 FTS	329.2 > 308.9	1.74e4	1.74e4	1.000	1.000	3.91	50.0	100.0	
19	46 13C-PFHxA	315 > 269.8	5.00e4	5.00e4	1.000	1.000	3.95	50.0	100.0	
20	47 13C8-PFOA	421.3 > 376	3.35e4	3.35e4	1.000	1.000	4.77	50.0	100.0	
21	48 13C4-PFOS	503.2 > 98.6	1.10e4	1.10e4	1.000	1.000	5.05	50.0	100.0	
22	49 13C2-FOUEA	459.1 > 393.9	3.29e4	3.29e4	1.000	1.000	5.15	50.0	100.0	
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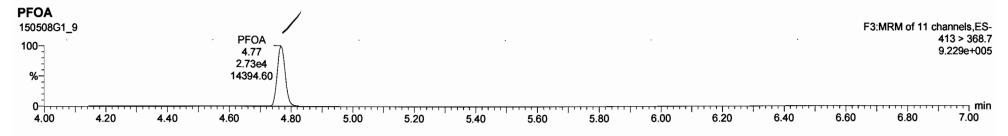
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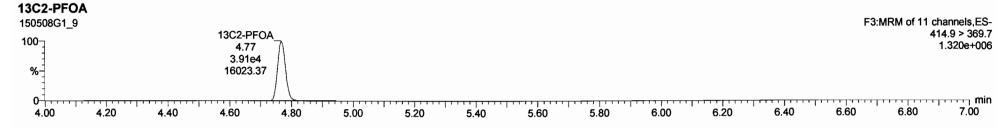
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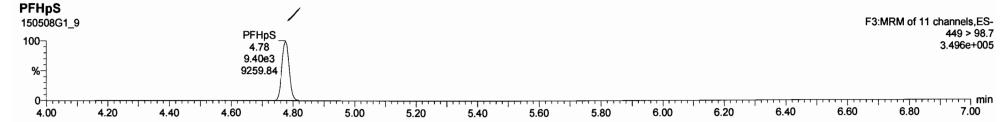
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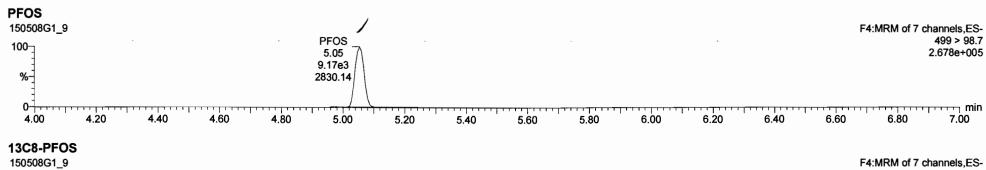


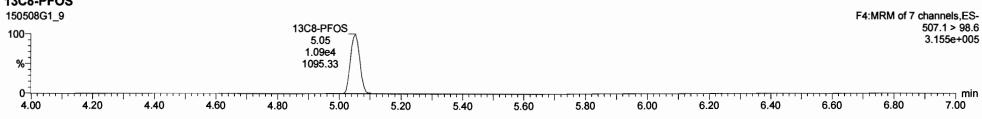
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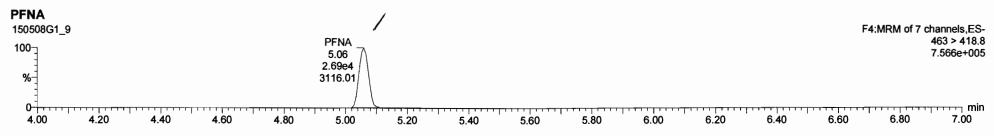
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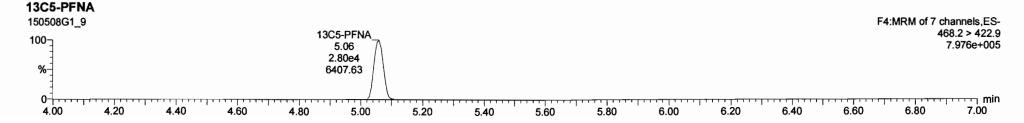
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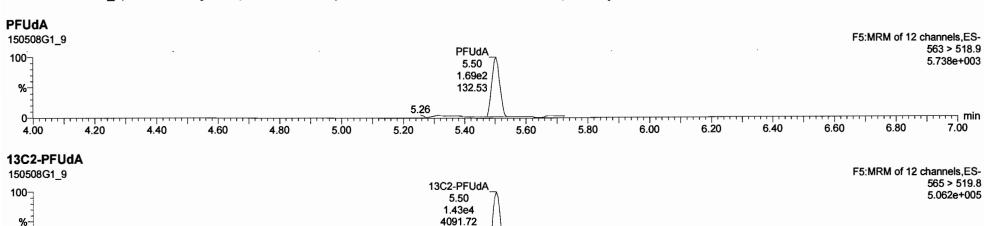
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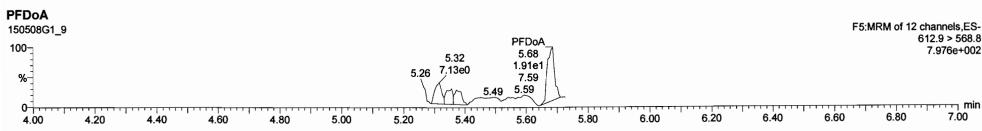
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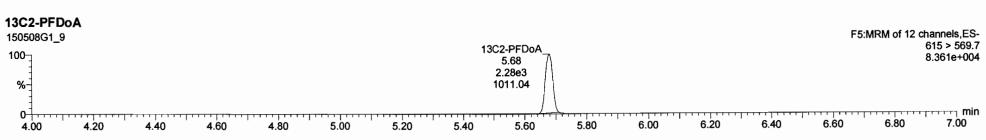
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Quantify Sample Report MassLynx 4.1

Vista Analytical Laboratory Q1

Page 12 of 15

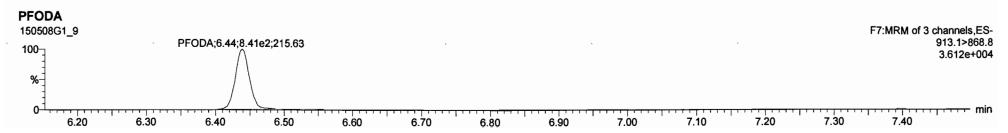
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MassLynx 4.1

Page 15 of 15

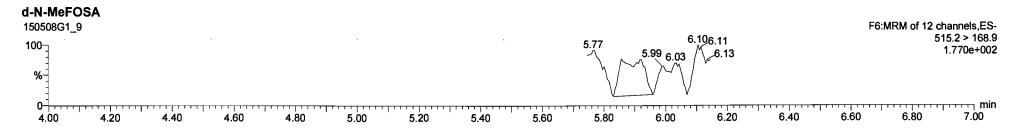
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### INTERNAL CORRESPONDENCE

TO: L. KLINK DATE: JUNE 8, 2015

FROM: EDWARD SEDLMYER COPIES: DV FILE

SUBJECT: ORGANIC DATA VALIDATION – PFOA / PFOS

MCRD PARRIS ISLAND

**SAMPLE DELIVERY GROUP (SDG) 1500410** 

**SAMPLES:** 2/Soil/PFOA/PFOS

PA104-SB28-0608 PA113C-SB11-0103

### **OVERVIEW**

The sample set for MCRD Parris Island, SDG 1500410 consisted of two (2) soil samples. The samples were analyzed for perfluorooctanoic acid (PFOA), and perfluorooctane sulfonate (PFOS).

The samples were collected on May 3 and 4, 2015 and analyzed by Vista Analytical Laboratory. All analyses were conducted in accordance with a modified EPA Method 537 Rev 1.1 analytical method and reporting protocols. The data was evaluated based on the following parameters:

- Data Completeness
- Holding Times
- Laboratory Method Blank Results
  - Initial and Continuing Calibrations
- Detection Limits

The asterisk (\*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains the documentation to support the findings as discussed in this data validation report.

#### PFOA/PFOS

No laboratory issues were noted.

### **NOTES**

Detected results reported below the limit of quantitation (LOQ) but greater than the Method Detection Limit (MDL) were qualified as estimated, (J). Non-detected results were reported to the limit of detection (LOD).

### **EXECUTIVE SUMMARY**

Laboratory Performance Issues: None.

Other Factors Affecting Data Quality: None.

TO: L. KLINK PAGE 2

SDG: 1500410

The data for these analyses were reviewed with reference to the USEPA National Functional Guidelines for Organic Data Validation (June 2008) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (July 2013). The text of this report has been formulated to address only those areas affecting data quality.

Tetra Tech, Inc. Edward SedImyer

Chemist/Data Validator

Edward Sodlinger

Tetra Tech Inc.

Joseph A. Samchuck
Data Validation Manager

### Attachments:

Appendix A - Qualified Analytical Results

Appendix B – Results as Reported by the Laboratory

Appendix C – Support Documentation

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

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# APPENDIX A QUALIFIED ANALYTICAL RESULTS

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### **Qualifier Codes:**

A = Lab Blank Contamination

B = Field Blank Contamination

C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)

C01 = GC/MS Tuning Noncompliance

D = MS/MSD Recovery Noncompliance

E = LCS/LCSD Recovery Noncompliance

F = Lab Duplicate Imprecision

G = Field Duplicate Imprecision

H = Holding Time Exceedance

I = ICP Serial Dilution Noncompliance

J = ICP PDS Recovery Noncompliance; MSA's r < 0.995

K = ICP Interference - includes ICS % R Noncompliance

L = Instrument Calibration Range Exceedance

M = Sample Preservation Noncompliance

N = Internal Standard Noncompliance

N01 = Internal Standard Recovery Noncompliance Dioxins

N02 = Recovery Standard Noncompliance Dioxins

N03 = Clean-up Standard Noncompliance Dioxins

O = Poor Instrument Performance (i.e., base-time drifting)

P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)

Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)

R = Surrogates Recovery Noncompliance

S = Pesticide/PCB Resolution

T = % Breakdown Noncompliance for DDT and Endrin

U = RPD between columns/detectors >40% for positive results determined via GC/HPLC

V = Non-linear calibrations; correlation coefficient r < 0.995

W = EMPC result

X = Signal to noise response drop

Y = Percent solids <30%

Z = Uncertainty at 2 standard deviations is greater than sample activity

Z1 = Tentatively Identified Compound considered presumptively present

Z2 = Tentatively Identified Compound column bleed

Z3 = Tentatively Identified Compound aldol condensate

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PROJ_NO: 01509	NSAMPLE	PA104-SB28-0	608		PA113C-SB11-0103				
SDG: 1500410	LAB_ID	1500410-01			1500410-02				
FRACTION: OS	SAMP_DATE	5/3/2015	5/3/2015			5/4/2015			
MEDIA: SOIL	QC_TYPE	NM	NM						
	UNITS	UG/KG			UG/KG				
	PCT_SOLIDS	77.6			56.9				
	DUP_OF								
PARAMETER	PARAMETER		VQL	QLCD	RESULT	VQL	QLCD		
PENTADECAFLUOROOCT	2.04			0.575	U				
PERFLUOROOCTANE SUL	0.541	J	Р	4.31					

1 of 1 6/9/2015

### APPENDIX B RESULTS AS REPORTED BY THE LABORATORY

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Sample ID:	PA104-SB28-0608							VA	L - PFAS
Client Data		Sample Data			Laborato	ory Data			
Name:	Tetra Tech Inc.	Matrix:	Soil		Lab Saı	mple: 1500410-01	Date Received:	06-May-201	15 8:56
Project:	112G01509	Sample Size:	1.46 g		QC Bat	ch: B5E0032	Date Extracted:	07-May-201	15 15:31
Date Collected:	03-May-2015 12:30	% Solids:	77.6		Date A	nalyzed: 08-May-15 23:35 Co	olumn: BEH C18 Ana	lyst: AC	
Location:	SB28					12-May-15 18:46 Co	olumn: BEH C18 Ana	lyst: AC	
Analyte	Conc. (ng/g)	LOD	LOQ	Qualifi	iers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFOS	0.541	0.441	0.883	J	IS	13C2-PFOA	95.3	60 - 150	
PFOA	2.04	0.441	0.883		IS	13C8-PFOS	62.1	60 - 150	

DL - Sample specifc estimated detection limit

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to the LOD.

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EMPC - Estimated maximum possible concentration

Sample ID:	PA113C-SB11-0103								VA	L - PFAS
Client Data		Sample Data			Labor	ratory	Data			
Name:	Tetra Tech Inc.	Matrix:	Soil		Lab	Samp	le: 1500410-02	Date Received:	06-May-20	15 8:56
Project:	112G01509	Sample Size:	1.53 g		QC	Batch:	B5E0032	Date Extracted:	07-May-20	15 15:31
Date Collected:	04-May-2015 11:15	% Solids:	56.9		Date	Analy	yzed: 08-May-15 23:47 C	olumn: BEH C18 Ana	lyst: AC	
Location:	SB11						12-May-15 18:59 C	olumn: BEH C18 Ana	lyst: AC	
Analyte	Conc. (ng/g)	LOD	LOQ	Qual	ifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
PFOS	4.31	0.575	1.15			IS	13C2-PFOA	90.9	60 - 150	
PFOA	ND	0.575	1.15			IS	13C8-PFOS	67.1	60 - 150	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to the LOD.

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## APPENDIX C SUPPORT DOCUMENTATION

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May 22, 2015

Vista Project I.D.: 1500410

Ms. Peggy Churchill Tetra Tech Inc. 11 Riverside Drive, Suite 206 Cocoa, FL 32922

Dear Ms. Churchill,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on May 06, 2015. This sample set was analyzed on a standard turn-around time, under your Project Name '112G01509'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier Laboratory Director



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 95762 ph: 916-673-1520 fx: 916-673-0106 www.vista-analytical.com

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### Vista Work Order No. 1500410 Case Narrative

### **Sample Condition on Receipt:**

Two soil samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

### **Analytical Notes:**

### VAL-PFAS

The solid samples were extracted and analyzed for PFOA and PFOS using VAL Method PFAS.

### **Holding Times**

The samples were extracted and analyzed within the hold times.

### **Quality Control**

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above the LOD. The OPR recoveries were within the method acceptance criteria.

The recoveries of all internal standards for the QC and field samples were within the acceptance criteria.

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### **Sample Inventory Report**

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1500410-01	PA104-SB28-0608	03-May-15 12:30	06-May-15 08:56	HDPE Bottle
1500410-02	PA113C-SB11-0103	04-May-15 11:15	06-May-15 08:56	HDPE Bottle

Vista Project: 1500410 Client Project: 112G01509

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### **DATA QUALIFIERS & ABBREVIATIONS**

В This compound was also detected in the method blank. D **Dilution**  $\mathbf{E}$ The associated compound concentration exceeded the calibration range of the instrument. H Recovery and/or RPD was outside laboratory acceptance limits. **Chemical Interference** I J The amount detected is below the Lower Calibration Limit of the instrument. See Cover Letter Conc. Concentration  $\mathbf{DL}$ Sample-specific estimated detection limit MDL The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested. **EMPC Estimated Maximum Possible Concentration** NA Not applicable RL Reporting Limit – concentrations that correspond to low calibration point ND **Not Detected** 

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

**TEQ** 

**Toxic Equivalency** 

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**CHAIN OF CUSTODY** 

| NUMBER Nº 927853 1.00 PAGE / OF /

PRO	JECT NO:	FACILITY PARTY GNATURE)	: is \$s/and	7	PROJE P. C	ALL C	NAGER	LEADER	PH 3	ONE NI	JMBER 36- JMBER	647	0	ADDRES	TORY I	NAME A	ND COL	STA A	nalytical	Lo
JAIVI		L A			5-4	Hò		IUMBER	9	73	- (cO·	1-7	188/	104 CITY ST	ATE	di	eld Hills	Man	9576	
STAI	NDARD TA	T) Z	day 444	4			SD, QC,			PLAS	AINER TIC (P) ERVAT	or GLA	SS (G)		5/	/	/	<del>//</del>	///	
DATE NEAR		48 hr.		LOCATION ID RP	тор бертн (FT)	ВОТТОМ DEPTH (FT)	MATRIX (GW, SO, SW, SI ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TIPE	OF AMALY	15 C						/ c	DAIMENTS	
58	51230	PA104-SB28-0	Xe08 5	BUS	6	8	So	G	(	1										
54	15 1115	PA113C-SBII-	6103 5	SBU	l	3	SO	61	)	1										_
	LINQUISE				DATE 5/5	15	7	IME 700	1. RE	CEIVE	DBY			L			DAT	F-/15	THE00	
2. RE	LINQUISH	HED BY Fedex			DATE	,,,,	<del></del>	IME	2	CEIVE	D BY D BY D BY	luor	slie	t			DAT	5/06/15	TIME 0858	
3. RE	LINQUISH	HED BY			DATE		Т	IME	3. RE	CEIVE	D'BY						DAT	E /	TIME	
	MENTS							- 10 0a							100-4					
DIST	RIBUTION	: WHITE (ACCOME	PANIES SAMP	LE)			YELLO	W (FIELD	COPY)				PIN	IK (FILE	COPY)				4/02	R

Project 1500410

FORM NO. TtNUS-001 Page 12 of 47

### SAMPLE LOG-IN CHECKLIST



Vista Project #: 1500 410 TAT Std

Vista Project #:		300	71	0		T	AT_	019		_
	Date/Time			Initials:	4	Loc	ation	: t	UR	- 2
Samples Arrival:	05/06/15	- CE	35k	B	OB	She	elf/Rac	ck:	NA	
	Date/Time			Initials:	Initials:			: W)	R-2	
Logged In:	05/06/15	13	43	Bo	Shelf/Ra				45	
Delivered By:	relivered By: FedEx UPS On Trac DHL H								Oth	ner
Preservation: Ice Blue Ice Dry Ice									None	
Temp °C: 0.9	Temp °C: 0.9 (uncorrected)								) ID	1
Temp °C: 1.0 (corrected) Time: 757									J. 11\\-	ı
	mmmmm			mmmm			anni d	VEC	NO	NIA
								YES	NO	NA
Adequate Sample `	Volume Rece	ived?					-			
Holding Time Acce	ptable?									
Shipping Container	r(s) Intact?							1/)		
Shipping Custody S	Seals Intact?							V		
Shipping Documen	tation Presen	t?								
Airbill	Trk# 8	1070	1 5	480 0	376	5		V		
Sample Container	Intact?		r.	,				V		
Sample Custody S	eals Intact?							-		V
Chain of Custody /	Sample Docu	ımenta	tion P	resent?				/	/	-
COC Anomaly/San	nple Acceptar	ice For	m cor	npleted?					<b>V</b>	
If Chlorinated or Dr	inking Water	Sample	es, Ac	ceptable Pre	eservatio	n?				V
If Chlorinated or Drinking Water Samples, Acceptable Preservation?  Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Preservation Documented?  COC  Sample Container										
Shipping Container	-	Vis	ta	Client	Reta	iin	Re	turn	Disp	ose

Comments:

Sample ID:	Method Blank							VA	L - PFAS
	Solid 1.00 g	QC Batch: B5E0032 Date Extracted: 07-May-201:	5 15:31		Lab Sample: Date Analyzed	B5E0032-BLK1 : 08-May-15 23:2		H C18 Analyst: 1	AC
Analyte	Conc. (ng/g)	LOD	LOQ	Qualifiers	Labeled St	andard	%R	LCL-UCL	Qualifiers
PFOS PFOA	ND ND	0.500 0.500	1.00 1.00		IS 13C2-P1 IS 13C8-P1		114 104	60 - 150 60 - 150	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to the LOD.

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Sample ID: OPR							VAL - PFAS
Matrix: Solid Sample Size: 1.00 g	QC Batch: Date Extracted	B5E0032 l: 07-May-201	5 15:31		Lab Sample: B5E0032-BS1 Date Analyzed: 08-May-15 23:09 Column	n: BEH C18 Analyst: AC	
Analyte Ar	nt Found (ng/g )	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
PFOS PFOA	2.11 2.02	2.00 2.00	106 101	50 - 150 70 - 130	IS 13C2-PFOA IS 13C8-PFOS	109 100	60 - 150 60 - 150

LCL-UCL - Lower control limit - upper control limit

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Vista Analytical Laboratory Q1

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.gld Dataset:

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: 6:2 FTS

Coefficient of Determination: R^2 = 0.999008 Calibration curve: -0.00041331 \* x^2 + 0.493707 \* x

Response type: Internal Std (Ref 30), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1 - 12 -	1 150508G1_1	0.500	4.78	9.16e1	1.52e4	0.612	0.9990
2	2 150508G1_2	1.00	4.77	1.11e2	1.05e4	1.08	0.9990
3	3 150508G1_3	2.00	4.77	2.12e2	1.14e4	1.89	0.9990
4	4 150508G1_4	5.00	4.77	5.39e2	1.10e4	4.96	0.9990
5	5 150508G1_5	10.0	4.76	1.15e3	1.08e4	10.9	0.9990
6	6 150508G1_6	50.0	4.76	4.78e3	1.10e4	45.6	0.9990
7	7 150508G1_7	100	4.76	8.32e3	8.92e3	103	0.9990
8.	8 150508G1_8	200	4.76	1.41e4	8.62e3	199	0.9990

Compound name: PFOA

Coefficient of Determination: R^2 = 0.999872

Calibration curve: -0.000103446 \* x^2 + 0.950371 \* x

Response type: Internal Std (Ref 31), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name : ,	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	4.79	5.74e2	4.02e4	0.752	0.9999
2	2 150508G1_2	1.00	4.77	8.60e2	4.49e4	1.01	0.9999
3	3 150508G1_3	2.00	4.77	1.60e3	4.42e4	1.90	0.9999
4	4 150508G1_4	5.00	4.77	3.56e3	3.93e4	4.76	0.9999
5	5 150508G1_5	10.0	4.77	8.25e3	3.94e4	11.0	0.9999
6/	6 150508G1_6	50.0	4.77	3.33e4	3.64e4	48.5	0.9999
7.600	7 150508G1_7	100	4.77	5.33e4	2.81e4	101	0.9999
8	8 150508G1_8	200	4.77	8.87e4	2.39e4	200	0.9999

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Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFHpS

Coefficient of Determination:  $R^2 = 0.998871$ Calibration curve:  $0.000328508 * x^2 + 0.601622 * x$ 

Response type: Internal Std ( Ref 29 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std, Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
100	1 150508G1_1	0.500	4.79	1.03e2	1.71e4	0.503	0.9989
2	2 150508G1_2	1.00	4.78	1.66e2	1.70e4	0.811	0.9989
3 1	3 150508G1_3	2.00	4.78	4.40e2	1.75e4	2.09	0.9989
4	4 150508G1_4	5.00	4.78	9.78e2	1.61e4	5.03	0.9989
5	5 150508G1_5	10.0	4.78	2.30e3	1.63e4	11.7	0.9989
6	6 150508G1_6	50.0	4.78	1.08e4	1.59e4	54.9	0.9989
7	7 150508G1_7	100	4.78	1.72e4	1.42e4	96.2	0.9989
8	8 150508G1_8	200	4.78	2.97e4	1.11e4	201	0.9989

Compound name: PFOS

Coefficient of Determination:  $R^2 = 0.999903$ Calibration curve:  $0.000368843 * x^2 + 1.04217 * x$ 

Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
13/12	1 150508G1_1	0.500	5.07	9.58e1	1.18e4	0.390	0.9999
2	2 150508G1_2	1.00	5.06	2.11e2	1.13e4	0.901	0.9999
3	3 150508G1_3	2.00	5.05	4.74e2	1.23e4	1.84	0.9999
4	4 150508G1_4	5.00	5.05	1.12e3	1.15e4	4.69	0.9999
5	5 150508G1_5	10.0	5.05	2.76e3	1.21e4	11.0	0.9999
6	6 150508G1_6	50.0	5.05	1.52e4	1.48e4	48.6	0.9999
7	7 150508G1_7	100	5.05	2.51e4	1.15e4	101	0.9999
8	8 150508G1_8	200	5.05	4.92e4	1.10e4	200	0.9999

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Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFNA

Coefficient of Determination: R^2 = 0.999547 Calibration curve: 0.000330257 \* x^2 + 0.909529 \* x

Response type: Internal Std (Ref 33), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff, Of D
135	1 150508G1_1	0.500	5.08	3.64e2	2.82e4	0.708	0.9995
2	2 150508G1_2	1.00	5.06	6.19e2	2.92e4	1.17	0.9995
3	3 150508G1_3	2.00	5.06	1.10e3	2.99e4	2.02	0.9995
4	4 150508G1_4	5.00	5.06	2.64e3	2.79e4	5.20	0.9995
5	5 150508G1_5	10.0	5.06	6.40e3	2.90e4	12.1	0.9995
6	6 150508G1_6	50.0	5.06	2.74e4	3.15e4	46.9	0.9995
7	7 150508G1_7	100	5.06	4.95e4	2.58e4	102	0.9995
8	8 150508G1_8	200	5.06	9.16e4	2.35e4	200	0.9995

Compound name: PFDA

Coefficient of Determination:  $R^2 = 0.999783$ Calibration curve:  $-0.000311293 * x^2 + 1.15525 * x$ 

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.32	6.12e2	3.28e4	0.806	0.9998
2	2 150508G1_2	1.00	5.31	8.23e2	3.18e4	1.12	0.9998
3	3 150508G1_3	2.00	5.30	1.62e3	3.60e4	1.94	0.9998
4	4 150508G1_4	5.00	5.30	3.79e3	3.50e4	4.69	0.9998
5	5 150508G1_5	10.0	5.30	8.80e3	3.40e4	11.2	0.9998
6	6 150508G1_6	50.0	5.30	4.79e4	4.37e4	48.0	0.9998
7	7 150508G1_7	100	5.30	7.20e4	3.16e4	101	0.9998
8	8 150508G1_8	200	5.30	1.62e5	3.72e4	200	0.9998

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C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: 8:2 FTS

Coefficient of Determination:  $R^2 = 0.999830$ Calibration curve:  $-0.000475814 * x^2 + 0.963198 * x$ 

Response type: Internal Std ( Ref 35 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.33	1.36e2	1.47e4	0.481	0.9998
2	2 150508G1_2	1.00	5.32	2.46e2	1.06e4	1.20	0.9998
3	3 150508G1_3	2.00	5.32	4.76e2	1.33e4	1.86	0.9998
4	4 150508G1_4	5.00	5.32	1.24e3	1.23e4	5.28	0.9998
5	5 150508G1_5	10.0	5.32	2.62e3	1.23e4	11.1	0.9998
6',	6 150508G1_6	50.0	5.32	1.49e4	1.64e4	48.3	0.9998
7	7 150508G1_7	100	5.32	2.32e4	1.25e4	101	0.9998
8	8 150508G1_8	200	5.32	5.01e4	1.44e4	200	0.9998

@ Excluded, 15 not linear. AC 5/11/15

Compound name: FOSA

Coefficient of Determination: R^2 = 0.999724

Calibration curve: 7.04969e-005 \* x^2 + 0.568845 \* x

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	* RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.42	1.04e2	1.67e4	0.547	0.9997
2	2 150508G1_2	1.00	5.41	9.53e1	1.09e4	0.767	0.9997
3	3 150508G1_3	2.00	5.40	3.05e2	1.29e4	2.08	0.9997
4	4 150508G1_4	5.00	5.40	6.54e2	1.28e4	4.48	0.9997
5	5 150508G1_5	10.0	5.40	1.46e3	1.13e4	11.4	0.9997
6	6 150508G1_6	50.0	5.40	1.41e4	2.49e4	49.6	0.9997
7	7 150508G1_7	100	5.40	1.90e4	1.65e4	100	0.9997
8	8 150508G1_8(📐 )	200	5.40	1.05e5	4.48e4	200	0.9997

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Quantify Compound Summary Report MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFDS

Coefficient of Determination:  $R^2 = 0.999927$ Calibration curve:  $0.00071702 \times x^2 + 0.0818658 \times x$ 

Response type: Internal Std (Ref 34), Area \* (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D.:.
1	1 150508G1_1	0.500	5.50	4.32e1	3.28e4	0.798	0.9999
2	2 150508G1_2	1.00	5.50	7.90e1	3.18e4	1.50	0.9999
3	3 150508G1_3	2.00	5.49	1.18e2	3.60e4	1.97	0.9999
4	4 150508G1_4	5.00	5.49	3.16e2	3.50e4	5.28	0.9999
5	5 150508G1_5	10.0	5.49	7.80e2	3.40e4	12.6	0.9999
6	6 150508G1_6	50.0	5.49	4.96e3	4.37e4	48.6	0.9999
7 (1984)	7 150508G1_7	100	5.49	9.79e3	3.16e4	100	0.9999
8	8 150508G1_8	200	5.49	3.35e4	3.72e4	200	0.9999

Compound name: PFUdA

Coefficient of Determination:  $R^2 = 0.999874$ Calibration curve:  $-8.50084e-005 * x^2 + 1.02996 * x$ 

Response type: Internal Std (Ref 37), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT .	Resp	IS Resp	Conc.	Coeff, Of D
1-14-20	1 150508G1_1	0.500	5.52	5.29e2	2.14e4	1.20	0.9999
2	2 150508G1_2	1.00	5.51	6.68e2	1.93e4	1.68	0.9999
3.	3 150508G1_3	2.00	5.50	1.22e3	2.40e4	2.46	0.9999
4	4 150508G1_4	5.00	5.50	2.47e3	2.41e4	4.98	0.9999
5.	5 150508G1_5	10.0	5.50	5.07e3	2.13e4	11.6	0.9999
6	6 150508G1_6	50.0	5.50	2.96e4	2.93e4	49.2	0.9999
70 30 30	7 150508G1_7	100	5.50	4.95e4	2.42e4	100	0.9999
8	8 150508G1_8	200	5.50	1.40e5	3.45e4	200	0.9999

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Quantify Compound Summary Report

MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFDoA

Coefficient of Determination:  $R^2 = 0.999831$ Calibration curve:  $0.000736243 * x^2 + 0.857671 * x$ 

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp 2.	IS Resp	Conc.	Coeff, Of D
1	1 150508G1_1	0.500	5.69	2.14e2	1.68e4	0.741	0.9998
2	2 150508G1_2	1.00	5.68	2.03e2	1.14e4	1.04	0.9998
3	3 150508G1_3	2.00	5.68	5.42e2	1.59e4	1.99	0.9998
4	4 150508G1_4	5.00	5.68	1.29e3	1.37e4	5.47	0.9998
5	5 150508G1_5	10.0	5.68	2.77e3	1.37e4	11.7	0.9998
6	6 150508G1_6	50.0	5.68	1.49e4	1.61e4	51.4	0.9998
7	7 150508G1_7	100	5.68	3.09e4	1.68e4	98.7	0.9998
8	8 150508G1_8	200	5.68	1.73e5	4.31e4	200	0.9998

@coD outside method limits. AC5/11/15

Compound name: N-MeFOSA

Coefficient of Determination: R^2 = 0.939196 (x)
Calibration curve: 0.00291862 \* x^2 + -0.323442 \* x

Response type: Internal Std (Ref 39), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	** RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	5.00	5.80	2.68e2	2.17e3	127	0.9392
2	2 150508G1_2	10.0	5.79	1.16e2	1.07e3	126	0.9392
3	3 150508G1_3	20.0	5.78	6.98e2	1.71e3	156	0.9392
4	4 150508G1_4	50.0	5.78	1.23e3	1.52e3	186	0.9392
5	5 150508G1_5	100	5.78	5.46e3	2.57e3	254	0.9392
6	6 150508G1_6	500	5.78	8.75e3	1.70e2	997	0.9392
7.	7 150508G1_7	1000	5.78	2.29e4	1.08e3	661	0.9392
8 10 16 16	8 150508G1_8	2000	5.78	2.23e5	9.88e2	2020	0.9392

## Quantify Compound Summary Report MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: N-MeFOSE

Coefficient of Determination: R^2 = 0.999662 Calibration curve: 0.000266129 \* x^2 + 0.682944 \* x

Response type: Internal Std (Ref 39), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

A TO MAKE THE	# Name	Std. Conc	RT .	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	5.00	5.81	2.18e2	2.17e3	7.35	0.9997
2	2 150508G1_2	10.0	5.80	1.70e2	1.07e3	11.6	0.9997
3	3 150508G1_3	20.0	5.79	6.80e2	1.71e3	28.7	0.9997
4	4 150508G1_4	50.0	5.79	1.29e3	1.52e3	60.7	0.9997
5	5 150508G1_5	100	5.79	5.61e3	2.57e3	151	0.9997
6	6 150508G1_6	500	5.79	1.39e3	1.70e2	503	0.9997
7	7 150508G1_7	1000	5.79	2.03e4	1.08e3	991	0.9997
8.	8 150508G1_8	2000	5.80	4.81e4	9.88e2	2000	0.9997

Compound name: PFTrDA

Coefficient of Determination:  $R^2 = 0.995540$ Calibration curve:  $0.00680653 * x^2 + -0.189616 * x$ 

Response type: Internal Std (Ref 37), Area \* (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

436 - 434	# Name	Std. Conc	RT	Resp	IS Resp.	Conc.	Coeff. Of D
18 48 68	1 150508G1_1	0.500	5.85	3.36e2	2.14e4	31.5	0.9955
2	2 150508G1_2	1.00	5.84	2.87e2	1.93e4	31.3	0.9955
3.	3 150508G1_3	2.00	5.84	7.22e2	2.40e4	34.3	0.9955
4	4 150508G1_4	5.00	5.84	1.44e3	2.41e4	39.1	0.9955
5	5 150508G1_5	10.0	5.84	5.06e3	2.13e4	58.0	0.9955
6	6 150508G1_6	50.0	5.84	4.85e3	2.93e4	51.5	0.9955
7,500,000	7 150508G1_7	100	5.84	2.20e4	2.42e4	96.9	0.9955
8.	8 150508G1_8	200	5.84	1.62e5	3.45e4	200	0.9955

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Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: N-EtFOSE

Coefficient of Determination: R^2 = 0.999864 Calibration curve: -5.91536e-005 \* x^2 + 1.10198 \* x

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	, RT	Resp	IS Resp	Conc.	Coeff; Of D
1	1 150508G1_1	5.00	5.92	2.34e2	2.28e3	4.65	0.9999
2	2 150508G1_2	10.0	5.91	2.62e2	1.09e3	10.9	0.9999
3	3 150508G1_3	20.0	5.91	8.03e2	2.08e3	17.5	0.9999
4	4 150508G1_4	50.0	5.91	1.62e3	1.64e3	45.1	0.9999
5	5 150508G1_5	100	5.91	7.13e3	2.81e3	116	0.9999
6	6 150508G1_6	500	5.91	2.10e3	1.93e2	508	0.9999
7	7 150508G1_7	1000	5.91	2.47e4	1.20e3	991	0.9999
8	8 150508G1_8	2000	5.91	5.93e4	1.51e3	2000	0.9999

Compound name: N-EtFOSA

Coefficient of Determination:  $R^2 = 0.999060$ Calibration curve:  $-3.43571e-005 * x^2 + 1.0684 * x$ 

Response type: Internal Std (Ref 41), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT RT	Resp	IS Resp	Conc.	Coeff. Of D
1,	1 150508G1_1	5.00	5.92	3.07e2	3.01e3	4.77	0.9991
2	2 150508G1_2	10.0	5.91	2.42e2	1.17e3	9.70	0.9991
3	3 150508G1_3	20.0	5.91	1.09e3	2.63e3	19.4	0.9991
4	4 150508G1_4	50.0	5.91	1.94e3	1.75e3	52.0	0.9991
5	5 150508G1_5	100	5.90	8.48e3	3.78e3	105	0.9991
6	6 150508G1_6	500	5.90	9.84e3	1.03e3	455	0.9991
7	7 150508G1_7	1000	5.90	3.58e4	1.68e3	1030	0.9991
8	8 150508G1_8	2000	5.90	2.90e5	7.26e3	1990	0.9991

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C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.qld

Last Altered: Printed:

Dataset:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFTeDA

Coefficient of Determination: R^2 = 0.999613 Calibration curve: 0.000418872 \* x^2 + 0.88467 \* x

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area ) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	5.99	9.65e2	4.87e4	1.12	0.9996
2	2 150508G1_2	1.00	5.98	8.92e2	3.01e4	1.68	0.9996
3	3 150508G1_3	2.00	5.98	1.44e3	3.13e4	2.60	0.9996
4	4 150508G1_4	5.00	5.98	2.83e3	2.62e4	6.08	0.9996
5	5 150508G1_5	10.0	5.97	7.99e3	3.56e4	12.6	0.9996
6	6 150508G1_6	50.0	5.97	3.97e3	4.60e3	47.7	0.9996
7	7 150508G1_7	100	5.97	3.70e4	1.98e4	101	0.9996
8	8 150508G1_8	200	5.97	1.11e5	2.85e4	200	0.9996

Compound name: PFHxDA

Coefficient of Determination: R^2 = 0.999107

Calibration curve: -0.000284561 \* x^2 + 0.926696 \* x

Response type: Internal Std (Ref 43), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	6.22	4.19e3	8.05e4	2.81	0.9991
2	2 150508G1_2	1.00	6.21	3.05e3	5.48e4	3.01	0.9991
3	3 150508G1_3	2.00	6.21	4.29e3	5.83e4	3.97	0.9991
4	4 150508G1_4	5.00	6.21	6.47e3	5.08e4	6.89	0.9991
5	5 150508G1_5	10.0	6.21	1.38e4	5.65e4	13.2	0.9991
6	6 150508G1_6	50.0	6.21	3.02e4	3.33e4	49.8	0.9991
7	7 150508G1_7	100	6.20	8.31e4	4.66e4	99.2	0.9991
8	8 150508G1_8	200	6.20	6.27e4	1.80e4	200	0.9991

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C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Dataset:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:24:57 Pacific Daylight Time

Compound name: PFODA

Coefficient of Determination:  $R^2 = 0.979018$ Calibration curve:  $0.00392936 * x^2 + 1.36541 * x$ 

Response type: Internal Std (Ref 43), Area \* (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	Coeff. Of D
1	1 150508G1_1	0.500	6.46	1.30e3	8.05e4	0.591	0.9790
2	2 150508G1_2	1.00	6.44	1.40e3	5.48e4	0.930	0.9790
3	3 150508G1_3	2.00	6.44	2.96e3	5.83e4	1.85	0.9790
4	4 150508G1_4	5.00	6.44	6.46e3	5.08e4	4.59	0.9790
5	5 150508G1_5	10.0	6.44	1.75e4	5.65e4	11.0	0.9790
6	6 150508G1_6	50.0	6.44	8.25e4	3.33e4	74.8	0.9790
7	7 150508G1_7	100	6.44	1.32e5	4.66e4	83.4	0.9790
8	8 150508G1_8	200	6.44	1.57e5	1.80e4	202	0.9790

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## Quantify Compound Summary Report MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Method: Untitled 11 May 2015 13:08:22

Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Compound name: 13C3-PFBA

Response Factor: 1.03917

RRF SD: 0.031068, Relative SD: 2.98971

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	2.30	3.90e4	3.93e4	47.8	0.993
2	2 150508G1_2	50.0	2.28	4.03e4	3.92e4	49.5	1.03
3	3 150508G1_3	50.0	2.28	4.28e4	4.16e4	49.5	1.03
4	4 150508G1_4	50.0	2.28	4.01e4	3.76e4	51.4	1.07
5	5 150508G1_5	50.0	2.28	4.07e4	3.79e4	51.7	1.07
6	6 150508G1_6	50.0	2.27	4.52e4	4.51e4	48.2	1.00
7	7 150508G1_7	50.0	2.27	3.60e4	3.37e4	51.3	1.07
8	8 150508G1_8	50.0	2.26	3.69e4	3.51e4	50.7	1.05

Compound name: 13C3-PFPeA

Response Factor: 0.975838

RRF SD: 0.0466711, Relative SD: 4.78267

Response type: Internal Std (Ref 46), Area \* (IS Conc. / IS Area)

Curve type: RF

1.50	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	3.32	4.03e4	4.02e4	51.5	1.00
2	2 150508G1_2	50.0	3.30	3.94e4	4.08e4	49.5	0.965
3	3 150508G1_3	50.0	3.29	4.21e4	4.24e4	50.8	0.992
4	4 150508G1_4	50.0	3.29	3.68e4	3.96e4	47.7	0.931
5	5 150508G1_5	50.0	3.29	3.70e4	3.90e4	48.5	0.947
6	6 150508G1_6	50.0	3.29	3.71e4	4.07e4	46.7	0.911
7	7 150508G1_7	50.0	3.29	3.10e4	3.11e4	51.2	0.998
8	8 150508G1_8	50.0	3.28	2.69e4	2.54e4	54.2	1.06

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Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C4-PFHpA

Response Factor: 0.849971

RRF SD: 0.0785916, Relative SD: 9.24638

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc	RRF
1	1 150508G1_1	50.0	4.43	3.30e4	4.02e4	48.3	0.822
2	2 150508G1_2	50.0	4.42	3.91e4	4.08e4	56.3	0.958
3	3 150508G1_3	50.0	4.41	3.95e4	4.24e4	54.7	0.930
4	4 150508G1_4	50.0	4.41	3.54e4	3.96e4	52.6	0.895
5	5 150508G1_5	50.0	4.41	3.49e4	3.90e4	52.6	0.894
6	6 150508G1_6	50.0	4.41	3.12e4	4.07e4	45.2	0.768
7	7 150508G1_7	50.0	4.41	2.36e4	3.11e4	44.7	0.760
8	8 150508G1_8	50.0	4.41	1.96e4	2.54e4	45.5	0.773

Compound name: 1802-PFHxS

Response Factor: 0.42031

RRF SD: 0.0193569, Relative SD: 4.6054

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

all servers.	# Name	Std, Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	4.46	1.71e4	4.02e4	50.7	0.426
2	2 150508G1_2	50.0	4.45	1.70e4	4.08e4	49.6	0.417
3	3 150508G1_3	50.0	4.44	1.75e4	4.24e4	48.9	0.411
4	4 150508G1_4	50.0	4.44	1.61e4	3.96e4	48.5	0.408
5	5 150508G1_5	50.0	4.44	1.63e4	3.90e4	49.6	0.417
6	6 150508G1_6	50.0	4.44	1.59e4	4.07e4	46.6	0.392
7.	7 150508G1_7	50.0	4.44	1.42e4	3.11e4	54.2	0.456
8	8 150508G1_8	50.0	4.44	1.11e4	2.54e4	51.9	0.437

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Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C2-6:2 FTS

Response Factor: 0.738727

RRF SD: 0.0408691, Relative SD: 5.53237

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	4.78	1.52e4	2.16e4	47.5	0.702
2	2 150508G1_2	50.0	4.77	1.05e4	1.39e4	50.9	0.753
3	3 150508G1_3	50.0	4.77	1.14e4	1.57e4	49.0	0.725
4	4 150508G1_4	50.0	4.77	1.10e4	1.40e4	53.5	0.791
5	5 150508G1_5	50.0	4.76	1.08e4	1.34e4	54.4	0.804
6	6 150508G1_6	50.0	4.76	1.10e4	1.55e4	48.1	0.711
7	7 150508G1_7	50.0	4.76	8.92e3	1.29e4	46.9	0.693
8	8 150508G1_8	50.0	4.76	8.62e3	1.18e4	49.5	0.731

Compound name: 13C2-PFOA

Response Factor: 1.15963

RRF SD: 0.058011, Relative SD: 5.00254

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	4.79	4.02e4	3.45e4	50.2	1.16
2	2 150508G1_2	50.0	4.77	4.49e4	3.62e4	53.4	1.24
3	3 150508G1_3	50.0	4.77	4.42e4	3.71e4	51.4	1.19
4	4 150508G1_4	50.0	4.77	3.93e4	3.33e4	51.0	1.18
5	5 150508G1_5	50.0	4.77	3.94e4	3.28e4	51.8	1.20
6	6 150508G1_6	50.0	4.77	3.64e4	3.45e4	45.4	1.05
7	7 150508G1_7	50.0	4.77	2.81e4	2.50e4	48.4	1.12
8	8 150508G1_8	50.0	4.77	2.39e4	2.13e4	48.4	1.12

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Me

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C8-PFOS

Response Factor: 0.939383

RRF SD: 0.0454519, Relative SD: 4.83849

Response type: Internal Std ( Ref 48 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.07	1.18e4	1.21e4	51.9	0.975
2	2 150508G1_2	50.0	5.05	1.13e4	1.20e4	49.8	0.935
3	3 150508G1_3	50.0	5.05	1.23e4	1.32e4	49.6	0.931
4	4 150508G1_4	50.0	5.05	1.15e4	1.21e4	50.7	0.953
5	5 150508G1_5	50.0	5.05	1.21e4	1.20e4	53.4	1.00
6	6 150508G1_6	50.0	5.05	1.48e4	1.74e4	45.1	0.847
7	7 150508G1_7	50.0	5.05	1.15e4	1.22e4	50.4	0.947
8	8 150508G1_8	50.0	5.05	1.10e4	1.20e4	49.1	0.923

Compound name: 13C5-PFNA

Response Factor: 0.914519

RRF SD: 0.0398454, Relative SD: 4.35698

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.07	2.82e4	2.96e4	52.1	0.953
2	2 150508G1_2	50.0	5.06	2.92e4	3.04e4	52.5	0.960
3	3 150508G1_3	50.0	5.06	2.99e4	3.29e4	49.7	0.910
4	4 150508G1_4	50.0	5.06	2.79e4	2.96e4	51.5	0.941
5	5 150508G1_5	50.0	5.06	2.90e4	3.14e4	50.4	0.922
6	6 150508G1_6	50.0	5.06	3.15e4	3.76e4	45.8	0.838
7 7 5	7 150508G1_7	50.0	5.06	2.58e4	2.84e4	49.6	0.907
8	8 150508G1_8	50.0	5.06	2.35e4	2.66e4	48.4	0.885

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C2-PFDA

Response Factor: 1.14857

RRF SD: 0.110012, Relative SD: 9.57822

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.32	3.28e4	2.96e4	48.3	1.11
2	2 150508G1_2	50.0	5.31	3.18e4	3.04e4	45.6	1.05
3	3 150508G1_3	50.0	5.31	3.60e4	3.29e4	47.6	1.09
4	4 150508G1_4	50.0	5.30	3.50e4	2.96e4	51.4	1.18
5	5 150508G1_5	50.0	5.30	3.40e4	3.14e4	47.1	1.08
6	6 150508G1_6	50.0	5.30	4.37e4	3.76e4	50.7	1.16
7	7 150508G1_7	50.0	5.30	3.16e4	2.84e4	48.4	1.11
8	8 150508G1_8	50.0	5.30	3.72e4	2.66e4	60.9	1.40

Compound name: 13C2-8:2 FTS

Response Factor: 0.917614

RRF SD: 0.170212, Relative SD: 18.5494

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.33	1.47e4	2.16e4	37.1	0.681
2	2 150508G1_2	50.0	5.32	1.06e4	1.39e4	41.6	0.764
3	3 150508G1_3	50.0	5.32	1.33e4	1.57e4	46.2	0.847
4	4 150508G1_4	50.0	5.32	1.23e4	1.40e4	47.8	0.878
5	5 150508G1_5	50.0	5.32	1.23e4	1.34e4	50.0	0.917
6	6 150508G1_6	50.0	5.32	1.64e4	1.55e4	57.6	1.06
7	7 150508G1_7	50.0	5.32	1.25e4	1.29e4	53.0	0.972
8	8 150508G1_8	50.0	5.32	1.44e4	1.18e4	66.7	1.22

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C8-FOSA

Response Factor: 0.728043

RRF SD: 0.131802, Relative SD: 18.1037

Response type: Internal Std (Ref 51), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp 4.	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.42	1.67e4	1.79e4	64.1	0.933
2	2 150508G1_2	50.0	5.41	1.09e4	1.64e4	45.6	0.664
3	3 150508G1_3	50.0	5.40	1.29e4	2.10e4	42.0	0.612
4	4 150508G1_4	50.0	5.40	1.28e4	2.02e4	43.7	0.636
5	5 150508G1_5	50.0	5.40	1.13e4	1.88e4	41.2	0.600
6	6 150508G1_6	50.0	5.40	2.49e4	2.96e4	57.7	0.841
7	7 150508G1_7	50.0	5.40	1.65e4	2.03e4	55.7	0.811
8	8 150508G1_8	50.0	5.40	4.48e4	2.96e4	104	1.51

Compound name: 13C2-PFUdA

Response Factor: 1.14796

RRF SD: 0.0682511, Relative SD: 5.94544

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.52	2.14e4	1.79e4	52.1	1.20
2	2 150508G1_2	50.0	5.51	1.93e4	1.64e4	51.1	1.17
3	3 150508G1_3	50.0	5.50	2.40e4	2.10e4	49.8	1.14
4	4 150508G1_4	50.0	5.50	2.41e4	2.02e4	52.0	1.19
5	5 150508G1_5	50.0	5.50	2.13e4	1.88 <del>e4</del>	49.4	1.13
6	6 150508G1_6	50.0	5.50	2.93e4	2.96e4	43.1	0.989
7	7 150508G1_7	50.0	5.50	2.42e4	2.03e4	51.8	1.19
8	8 150508G1_8	50.0	5.50	3.45e4	2.96e4	50.8	1.17

Excluded, not linear. AC 5/11/15

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Quantify Compound Summary Report MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C2-PFDoA

Response Factor: 0.827404

RRF SD: 0.2789, Relative SD: 33.7078

Response type: Internal Std (Ref 51), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.70	1.68e4	1.79e4	56.8	0.941
2	2 150508G1_2	50.0	5.68	1.14e4	1.64e4	41.8	0.691
3	3 150508G1_3	50.0	5.68	1.59e4	2.10e4	45.6	0.755
4	4 150508G1_4	50.0	5.68	1.37e4	2.02e4	40.9	0.677
5	5 150508G1_5	50.0	5.68	1.37e4	1.88e4	44.0	0.728
6	6 150508G1_6	50.0	5.68	1.61e4	2.96e4	32.9	0.544
7	7 150508G1_7	50.0	5.68	1.68e4	2.03e4	50.0	0.827
8	8 150508G1_8	50.0	5.67	4.31e4	2.96e4	88.0	1.46

DRSD outside method limits. AC5/11/15

Compound name: d7-N-MeFOSE

Response Factor: 0.597018

RRF SD: 0.309698, Relative SD: 51.8742

Response type: Internal Std (Ref 52), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	- RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.80	2.17e3	3.12e3	58.2	0.695
2	2 150508G1_2	50.0	5.79	1.07e3	1.09e3	82.6	0.986
3	3 150508G1_3	50.0	5.79	1.71e3	2.74e3	52.5	0.626
4	4 150508G1_4	50.0	5.79	1.52e3	1.96e3	65.0	0.776
5	5 150508G1_5	50.0	5.79	2.57e3	3.32e3	64.8	0.774
6	6 150508G1_6	50.0	5.79	1.70e2	1.30e3	10.9	0.130
7	7 150508G1_7	50.0	5.79	1.08e3	1.63e3	55.6	0.664
8	8 150508G1_8	50.0	5.79	9.88e2	7.95e3	10.4	0.124

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: d9-N-EtFOSE

Response Factor: 0.656249

RRF SD: 0.313488, Relative SD: 47.7697 (Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std: Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.91	2.28e3	3.12e3	55.7	0.732
2	2 150508G1_2	50.0	5.90	1.09e3	1.09e3	76.4	1.00
3	3 150508G1_3	50.0	5.90	2.08e3	2.74e3	57.9	0.760
4	4 150508G1_4	50.0	5.90	1.64e3	1.96e3	63.8	0.838
5	5 150508G1_5	50.0	5.90	2.81e3	3.32e3	64.5	0.847
6	6 150508G1_6	50.0	5.90	1.93e2	1.30e3	11.3	0.148
7	7 150508G1_7	50.0	5.90	1.20e3	1.63e3	55.9	0.734
8	8 150508G1_8	50.0	5.90	1.51e3	7.95e3	14.4	0.190

@ RSD outside method 11mits. AC 5/11/15

Compound name: d5-N-EtFOSA

Response Factor: 0.970495

RRF SD: 0.110608, Relative SD: 11.3971

Response type: Internal Std (Ref 52), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1950	1 150508G1_1	50.0	5.91	3.01e3	3.12e3	49.8	0.966
2	2 150508G1_2	50.0	5.90	1.17e3	1.09e3	55.4	1.07
3	3 150508G1_3	50.0	5.90	2.63e3	2.74e3	49.5	0.961
4	4 150508G1_4	50.0	5.90	1.75e3	1.96e3	46.0	0.893
5	5 150508G1_5	50.0	5.90	3.78e3	3.32e3	58.7	1.14
6	6 150508G1_6	50.0	5.90	1.03e3	1.30e3	40.6	0.787
7	7 150508G1_7	50.0	5.90	1.68e3	1.63e3	53.0	1.03
8	8 150508G1_8	50.0	5.90	7.26e3	7.95e3	47.1	0.914

Project 1500410 Page 33 of 47 Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.gld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C2-PFTeDA

Response Factor: 1.41518

RRF SD: 0.766009, Relative SD: 54.128

Response type: Internal Std (Ref 51), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.99	4.87e4	1.79e4	96.1	2.72
2	2 150508G1_2	50.0	5.98	3.01e4	1.64e4	64.6	1.83
3	3 150508G1_3	50.0	5.98	3.13e4	2.10e4	52.6	1.49
4	4 150508G1_4	50.0	5.97	2.62e4	2.02e4	45.9	1.30
5	5 150508G1_5	50.0	5.97	3.56e4	1.88e4	66.9	1.89
6	6 150508G1_6	50.0	5.97	4.60e3	2.96e4	5.48	0.155
7	7 150508G1_7	50.0	5.97	1.98e4	2.03e4	34.4	0.973
8	8 150508G1_8	50.0	5.97	2.85e4	2.96e4	34.1	0.964

Compound name: 13C2-PFHxDA

Response Factor: 2.51962

RRF SD: 1.2268, Relative SD: 48.6901

Response type: Internal Std (Ref 51), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc	RRF
101	1 150508G1_1	50.0	6.22	8.05e4	1.79e4	89.3	4.50
2	2 150508G1_2	50.0	6.21	5.48e4	1.64e4	66.2	3.33
3	3 150508G1_3	50.0	6.21	5.83e4	2.10e4	55.1	2.78
4	4 150508G1_4	50.0	6.21	5.08e4	2.02e4	50.0	2.52
5	5 150508G1_5	50.0	6.20	5.65e4	1.88e4	59.7	3.01
6	6 150508G1_6	50.0	6.20	3.33e4	2.96e4	22.3	1.12
7 - : : :	7 150508G1_7	50.0	6.20	4.66e4	2.03e4	45.5	2.29
8 4 2	8 150508G1_8	50.0	6.20	1.80e4	2.96e4	12.1	0.608

ARSD ontside method limits. ACS/11/15

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Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C4-PFBA

Response Factor: 1

RRF SD: 9.3831e-017, Relative SD: 9.3831e-015

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

10	# Name 41	Std. Conc	RT.	Resp	IS Resp	Conc.	RRF
<b>1</b> 303	1 150508G1_1	50.0	2.30	3.93e4	3.93e4	50.0	1.00
2	2 150508G1_2	50.0	2.28	3.92e4	3.92e4	50.0	1.00
3	3 150508G1_3	50.0	2.28	4.16e4	4.16e4	50.0	1.00
4	4 150508G1_4	50.0	2.28	3.76e4	3.76e4	50.0	1.00
5	5 150508G1_5	50.0	2.28	3.79e4	3.79e4	50.0	1.00
6	6 150508G1_6	50.0	2.27	4.51e4	4.51e4	50.0	1.00
7.	7 150508G1_7	50.0	2.27	3.37e4	3.37e4	50.0	1.00
8	8 150508G1_8	50.0	2.25	3.51e4	3.51e4	50.0	1.00

Compound name: 13C2-4:2 FTS

Response Factor: 1

RRF SD: 1.32697e-016, Relative SD: 1.32697e-014

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	3.93	2.16e4	2.16e4	50.0	1.00
2	2 150508G1_2	50.0	3.92	1.39e4	1.39e4	50.0	1.00
3	3 150508G1_3	50.0	3.91	1.57e4	1.57e4	50.0	1.00
4	4 150508G1_4	50.0	3.91	1.40e4	1.40e4	50.0	1.00
5	5 150508G1_5	50.0	3.91	1.34e4	1.34e4	50.0	1.00
6	6 150508G1_6	50.0	3.91	1.55e4	1.55e4	50.0	1.00
7	7 150508G1_7	50.0	3.91	1.29e4	1.29e4	50.0	1.00
8	8 150508G1_8	50.0	3.91	1.18e4	1.18e4	50.0	1.00

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## Quantify Compound Summary Report MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C-PFHxA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc	RRF
1	1 150508G1_1	50.0	3.97	4.02e4	4.02e4	50.0	1.00
2	2 150508G1_2	50.0	3.95	4.08e4	4.08e4	50.0	1.00
3	3 150508G1_3	50.0	3.95	4.24e4	4.24e4	50.0	1.00
4 (35)	4 150508G1_4	50.0	3.95	3.96e4	3.96e4	50.0	1.00
5	5 150508G1_5	50.0	3.94	3.90e4	3.90e4	50.0	1.00
6	6 150508G1_6	50.0	3.95	4.07e4	4.07e4	50.0	1.00
7	7 150508G1_7	50.0	3.95	3.11e4	3.11e4	50.0	1.00
8	8 150508G1_8	50.0	3.94	2.54e4	2.54e4	50.0	1.00

Compound name: 13C8-PFOA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

Property (	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1.00	1 150508G1_1	50.0	4.79	3.45e4	3.45e4	50.0	1.00
2	2 150508G1_2	50.0	4.77	3.62e4	3.62e4	50.0	1.00
3	3 150508G1_3	50.0	4.77	3.71e4	3.71e4	50.0	1.00
4	4 150508G1_4	50.0	4.77	3.33e4	3.33e4	50.0	1.00
5	5 150508G1_5	50.0	4.77	3.28e4	3.28e4	50.0	1.00
6	6 150508G1_6	50.0	4.77	3.45e4	3.45e4	50.0	1.00
7	7 150508G1_7	50.0	4.77	2.50e4	2.50e4	50.0	1.00
8	8 150508G1_8	50.0	4.77	2.13e4	2.13e4	50.0	1.00

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Quantify Compound Summary Report MassLynx 4.1

Vista Analytical Laboratory Q1

Dataset: C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Printed: Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C4-PFOS

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std (Ref 48), Area \* (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.07	1.21e4	1.21e4	50.0	1.00
2	2 150508G1_2	50.0	5.06	1.20e4	1.20e4	50.0	1.00
3	3 150508G1_3	50.0	5.05	1.32e4	1.32e4	50.0	1.00
4	4 150508G1_4	50.0	5.05	1.21e4	1.21e4	50.0	1.00
5	5 150508G1_5	50.0	5.05	1.20e4	1.20e4	50.0	1.00
6	6 150508G1_6	50.0	5.05	1.74e4	1.7 <del>4e4</del>	50.0	1.00
7	7 150508G1_7	50.0	5.05	1.22e4	1.22e4	50.0	1.00
8	8 150508G1_8	50.0	5.05	1.20e4	1.20e4	50.0	1.00

Compound name: 13C2-FOUEA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 49 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.17	2.45e4	2.45e4	50.0	1.00
2	2 150508G1_2	50.0	5.16	3.18e4	3.18e4	50.0	1.00
3	3 150508G1_3	50.0	5.16	3.27e4	3.27e4	50.0	1.00
4	4 150508G1_4	50.0	5.15	2.99e4	2.99e4	50.0	1.00
5	5 150508G1_5	50.0	5.15	3.14e4	3.14e4	50.0	1.00
6	6 150508G1_6	50.0	5.15	4.56e4	4.56e4	50.0	1.00
7	7 150508G1_7	50.0	5.15	3.66e4	3.66e4	50.0	1.00
8	8 150508G1_8	50.0	5.15	4.23e4	4.23e4	50.0	1.00

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1 CRV.gld

Last Altered: Printed: Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: 13C9-PFNA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.07	2.96e4	2.96e4	50.0	1.00
2	2 150508G1_2	50.0	5.06	3.04e4	3.04e4	50.0	1.00
3	3 150508G1_3	50.0	5.06	3.29e4	3.29e4	50.0	1.00
4	4 150508G1_4	50.0	5.06	2.96e4	2.96e4	50.0	1.00
5	5 150508G1_5	50.0	5.05	3.14e4	3.14e4	50.0	1.00
6	6 150508G1_6	50.0	5.05	3.76e4	3.76e4	50.0	1.00
7	7 150508G1_7	50.0	5.05	2.84e4	2.84e4	50.0	1.00
8	8 150508G1_8	50.0	5.05	2.66e4	2.66e4	50.0	1.00

Compound name: 13C7-PFUdA

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT.	Resp 🤫 💮	IS Resp	Conc.	RRF
1.	1 150508G1_1	50.0	5.52	1.79e4	1.79 <del>e4</del>	50.0	1.00
2	2 150508G1_2	50.0	5.51	1.64e4	1.64e4	50.0	1.00
3	3 150508G1_3	50.0	5.50	2.10e4	2.10e4	50.0	1.00
4	4 150508G1_4	50.0	5.50	2.02e4	2.02e4	50.0	1.00
5	5 150508G1_5	50.0	5.50	1.88e4	1.88 <del>e4</del>	50.0	1.00
6	6 150508G1_6	50.0	5.50	2.96e4	2.96e4	50.0	1.00
7.66	7 150508G1_7	50.0	5.50	2.03e4	2.03e4	50.0	1.00
8	8 150508G1_8	50.0	5.50	2.96e4	2.96e4	50.0	1.00

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_CRV.qld

Last Altered: Printed:

Monday, May 11, 2015 14:05:34 Pacific Daylight Time Monday, May 11, 2015 14:26:30 Pacific Daylight Time

Compound name: d-N-MeFOSA

Response Factor: 1

RRF SD: 1.18688e-016, Relative SD: 1.18688e-014

Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Std. Conc	RT.	Resp	IS Resp	Conc.	RRF
1	1 150508G1_1	50.0	5.79	3.12e3	3.12e3	50.0	1.00
2	2 150508G1_2	50.0	5.78	1.09e3	1.09e3	50.0	1.00
3	3 150508G1_3	50.0	5.78	2.74e3	2.74e3	50.0	1.00
4	4 150508G1_4	50.0	5.78	1.96e3	1.96e3	50.0	1.00
5	5 150508G1_5	50.0	5.78	3.32e3	3.32e3	50.0	1.00
6	6 150508G1_6	50.0	5.78	1.30e3	1.30e3	50.0	1.00
7	7 150508G1_7	50.0	5.78	1.63e3	1.63e3	50.0	1.00
8	8 150508G1_8	50.0	5.78	7.95e3	7.95e3	50.0	1.00

Project 1500410

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Vista Analytical Laboratory Q1

Dataset:

 $C: \label{lem:condition} C: \label{lem:condition} C: \label{lem:condition} C: \label{lem:condition} PRO \label{lem:condition} Results \label{lem:condition} I = 150508G1 \label{lem:condition$ 

Last Altered: Printed:

Tuesday, May 12, 2015 15:29:49 Pacific Daylight Time Tuesday, May 12, 2015 15:30:14 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_33, Date: 08-May-2015, Time: 22:31:45, ID: ST150508G1-10 PFC CS4 15E0807, Description: PFC CS4 15E0807

	# Name *	Trace		S Resp	RRF	Wt/Vol	RT	Conc.	%R	ec	10.5	Doutside method limits. Okper MM.
1	1 PFBA	213.1 > 168.8	6.21e3	3.01e4		1.000	2.28	37.8		5.6 70	-130	DI ON MIM
2	2 PFPeA	263.1 > 218.9	1.78e4	2.22e4		1.000	3.29	46.8	93	3.6	l	limits, oxperim.
3	3 PFBS	299 > 79.7	1.43e4	9.28e3		1.000	3.44	50.1	100	).1		•
4	4 PFHxA	313.2 > 268.9	2.07e4	2.12e4		1.000	3.95	40.0	80	0.0		
5	5 PFHpA	363 > 318.9	2.70e4	2.12e4		1.000	4.41	49.9	99	9.7		
6	6 PFHxS	398.9 > 79.6	1.29e4	9.28e3		1.000	4.44	51.4	102	2.8		
7	7 6:2 FTS	427.1 > 407	2.95e3	6.31e3		1.000	4.76	49.4	98	3.8		
8	8 PFOA	413 > 368.7	2.28e4	2.55e4		1.000	4.77	47.3	94	1.5		<b>A</b>
9	9 PFHpS	449 > 98.7	5.61e3	9.28e3		1.000	4.78	48.9	97	7.8		15
10	10 PFOS	499 > 98.7	6.87e3	7.08e3		1.000	5.05	45.9	9	1.7		5112117
11	11 PFNA	463 > 418.8	1.71e4	1.73e4		1.000	5.06	53.4	10€	3.9		45/12/15 45/19/11
12	12 PFDA	513 > 468.8	2.21e4	2.10e4		1.000	5.30	46.2	92	2.3		1
13	13 8:2 FTS	527 > 506.9	6.00e3	6.68e3		1.000	5.32	47.8	9	5.5		11-11-
13 14	14 FOSA	498.1 > 77.8	3.28e3	6.28e3		1.000	5.40	45.6		1.2	1	1/5//11/1
15	15 PFDS	598.8 > 98.7	7.63e2	2.10e4		1.000	5.49	19.0	38	3.0	1	
16	16 PFUdA	563 > 518.9	1.00e4	9.99e3		1.000	5.50	48.9	97	7.9	1	
17	17 PFDoA	612.9 > 568.8	2.76e3	3.24e3		1.000	5.68	47.6	9	5.2	1	
18	18 N-MeFOSA	512.1 > 168.9	9.74e2	8.67e0		1.000	5.78	1440	288	3.8	1	
	19 N-MeFOSE	616.1>58.9	1.73e2	8.67e0		1.000	5.79	1040	20	7.6 ₩		
19 20	20 PFTrDA	662.9 > 618.9	8.67e2	9.99e3		1.000	5.84	42.8	8	5.5	1	
21	21 N-EtFOSE	630.1>58.9	2.50e2	2.15e1		1.000	5.90	542	108	3.4		
22	22 N-EtFOSA	526.1>168.9	1.01e3	1.46e2		1.000	5.90	326	6	5.2(18)	1	
22 23	23 PFTeDA	712.9 > 668.8	9.06e2	1.06e3		1.000	5.97	47.0		1.1	İ	
24	24 PFHxDA	813.1>768.6	1.19e4	1.21e4		1.000	6.20	53.9	10			
24 25	25 PFODA	913.1>868.8	3.48e4	1.21e4		1.000	6.44	84.6	169	7 (A)1.e	<b>V</b>	
26	26 13C3-PFBA	216.1 > 171.8	3.01e4	2.50e4	1.039	1.000	2.28	57.9	119	5.7 60	-150	
27	27 13C3-PFPeA	266>221.8	2.22e4	2.47e4	0.976	1.000	3.29	46.0		1.9		
28	28 13C4-PFHpA	367.2 > 321.8	2.12e4	2.47e4	0.850	1.000	4.41	50.4	100	0.8		
29	29 18O2-PFHxS	403 > 102.6	9.28e3	2.47e4	0.420	1.000	4.44	44.7	89	9.4	Y	
30	30 13C2-6:2 FTS	429.1 > 408.9	6.31e3	8.34e3	0.739	1.000	4.76	51.2	10	2.5 40-	150	
31	31 13C2-PFOA	414.9 > 369.7	2.55e4	2.05e4	1.160	1.000	4.77	53.7	10	7.5 40	-150	

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Dataset: C:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_33.qld

Last Altered: Printed:

Tuesday, May 12, 2015 15:29:49 Pacific Daylight Time Tuesday, May 12, 2015 15:30:14 Pacific Daylight Time

Name: 150508G1\_33, Date: 08-May-2015, Time: 22:31:45, ID: ST150508G1-10 PFC CS4 15E0807, Description: PFC CS4 15E0807

I popular in the	# Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc. %Rec
32	32 13C8-PFOS	507.1 > 98.6	7.08e3	7.83e3	0.939	1.000	5.05	48.1 96.2 <i>(</i>
13	33 13C5-PFNA	468.2 > 422.9	1.73e4	2.08e4	0.915	1.000	5.05	45.4 90.8
4	34 13C2-PFDA	515.1 > 469.9	2.10e4	2.08e4	1.149	1.000	5.30	44.0 88.0 60
5	35 13C2-8:2 FTS	529.1 > 508.7	6.68e3	8.34e3	0.918	1.000	5.32	43.6 87.3 40
6	36 13C8-FOSA	506.1 > 77.7	6.28e3	8.92e3	0.728	1.000	5.40	48.4 96.8 20
7	37 13C2-PFUdA	565 > 519.8	9.99e3	8.92e3	1.148	1.000	5.50	48.8 97.6
8	38 13C2-PFDoA	615 > 569.7	3.24e3	8.92e3	0.827	1.000	5.67	22.0 44.0 3
9 😬 .	39 d7-N-MeFOSE	623.1 > 58.9	8.67e0	1.32e2	0.597	1.000	5.78	5.50 11.0 S
0	40 d9-N-EtFOSE	639.2 > 58.8	2.15e1	1.32e2	0.656	1.000	5.89	12.5 24.9
1	41 d5-N-EtFOSA	531.1>168.9	1.46e2	1.32e2	0.970	1.000	5.90	57.2 114.4
2	42 13C2-PFTeDA	715 > 669.7	1.06e3	8.92e3	1.415	1.000	5.97	4.22 <b>(</b> ) 8.4 3
3	43 13C2-PFHxDA	815.0>769.7	1.21e4	8.92e3	2.520	1.000	6.20	27.0 (\$2) 53.9
4	44 13C4-PFBA	217 > 171.8	2.50e4	2.50e4	1.000	1.000	2.28	50.0 201,200.0
5	45 13C2-4:2 FTS	329.2 > 308.9	8.34e3	8.34e3	1.000	1.000	3.91	50.0 <sup>6\14\1</sup> 100.0
6	46 13C-PFHxA	315 > 269.8	2.47e4	2.47e4	1.000	1.000	3.94	50.0 100.0
7	47 13C8-PFOA	421.3 > 376	2.05e4	2.05e4	1.000	1.000	4.77	50.0 100.0
8	48 13C4-PFOS	503.2 > 98.6	7.83e3	7.83e3	1.000	1.000	5.05	50.0 100.0
9	49 13C2-FOUEA	459.1 > 393.9	2.15e4	2.15e4	1.000	1.000	5.15	50.0 100.0
Ю	50 13C9-PFNA	472.2 > 426.9	2.08e4	2.08e4	1.000	1.000	5.05	50.0 100.0
1	51 13C7-PFUdA	570.1 > 524.8	8.92e3	8.92e3	1.000	1.000	5.50	50.0 100.0
2	52 d-N-MeFOSA	515.2 > 168.9	1.32e2	1.32e2	1.000	1.000	5.78	50.0 100.0

A)outside method limits. OxperMM.

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MassLynx 4.1

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_48.qld

Last Altered: Printed:

Tuesday, May 12, 2015 15:38:02 Pacific Daylight Time Tuesday, May 12, 2015 15:38:52 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150508G1\_48, Date: 09-May-2015, Time: 07:40:25, ID: ST150508G1-11 PFC CS4 15E0807, Description: PFC CS4 15E0807

		50 may 2010, 1		.20, .2. 0 , 10	,,,,,,,,,,,		004 10	Loovi, Description: 11	0 001 102	Doutside method jimits. Ox per MM
41.07.00 to 27	# Name	Trace	Response	IS Resp	RRF 1	Wt/Vol ⊈	, RT	Conc. %Rec		(A) outside metrica
1	1 PFBA	213.1 > 168.8	6.28e3	3.02e4	a camera mare ann am per ann an ann an	1.000	2.28	38.1 76.2	10-130	Justite of per MM
2	2 PFPeA	263.1 > 218.9	1.76e4	2.14e4		1.000	3.29	47.9 95.9		MMMS OF ITS
3	3 PFBS	299 > 79.7	1.49e4	9.73e3		1.000	3.45	49.8 99.7	4	
4	4 PFHxA	313.2 > 268.9	1.97e4	2.15e4		1.000	3.95	37.4 74.7	<b>\</b>	
5	5 PFHpA	363 > 318.9	2.62e4	2.15e4		1.000	4.41	47.6 95.1	Į	
6	6 PFHxS	398.9 > 79.6	1.26e4	9.73e3		1.000	4.44	48.1 96.1		NS/14/15
7	7 6:2 FTS	427.1 > 407	2.97e3	6.60e3		1.000	4.76	47.5 95.0		
8	8 PFOA	413 > 368.7	2.24e4	2.48e4		1.000	4.77	47.6 95.3		
9	9 PFHpS	449 > 98.7	5.24e3	9.73e3		1.000	4.78	43.7 87.4	1	1.NV -
10	10 PFOS	499 > 98.7	6.87e3	6.87e3		1.000	5.05	47.2 94.4	i	11 (111/1)
1100	11 PFNA	463 > 418.8	1.73e4	1.70e4		1.000	5.06	54.7 109.5		7/(11)
12	12 PFDA	513 > 468.8	2.05e4	1.87e4		1.000	5.30	48.0 96.0		
13	13 8:2 FTS	527 > 506.9	5.59e3	6.22e3		1.000	5.32	47.7 95.5		
14	14 FOSA	498.1 > 77.8	2.29e3	4.61e3		1.000	5.40	43.4 66.8		
15	15 PFDS	598.8 > 98.7	6.12e2	1.87e4		1.000	5.49	17.3 🚯 34.7		
16	16 PFUdA	563 > 518.9	7.55e3	8.08e3		1.000	5.50	45.5 91.1		
17	17 PFDoA	612.9 > 568.8	1.87e3	2.34e3		1.000	5.68	44.9 89.7		
18	18 N-MeFOSA	512.1 > 168.9	5.89e2	1.05e1		1.000	5.78	1040 🕟 207.5	1	
19	19 N-MeFOSE	616.1>58.9	1.35e2	1.05e1		1.000	5.79	731 🗘 146.2		
20	20 PFTrDA	662.9 > 618.9	6.61e2	8.08e3		1.000	5.84	42.1 84.3	1	
21	21 N-EtFOSE	630.1>58.9	2.05e2	3.09e1		1.000	5.90	305 🕟 61.0	1	
22 23	22 N-EtFOSA	526.1>168.9	6.93e2	5.37e1		1.000	5.90	617 123.4	1	
	23 PFTeDA	712.9 > 668.8	6.65e2	7.77e2		1.000	5.97	47.3 94.6	1	
24	24 PFHxDA	813.1>768.6	8.86e3	9.06e3		1.000	6.20	53.7 107.4	1/	
26	25 PFODA	913.1>868.8	3.43e4	9.06e3		1.000	6.44	106 🕟 212.6	V	
26	26 13C3-PFBA	216.1 > 171.8	3.02e4	2.48e4	1.039	1.000	2.28	58.7 117.4	60-150	
27	27 13C3-PFPeA	266>221.8	2.14e4	2.44e4	0.976	1.000	3.29	44.9 89.8	1	
28	28 13C4-PFHpA	367.2 > 321.8	2.15e4	2.44e4	0.850	1.000	4.41	52.0 104.0		
29	29 18O2-PFHxS	403 > 102.6	9.73e3	2.44e4	0.420	1.000	4.44	47.5 95.1	<b>V</b>	
30	30 13C2-6:2 FTS	429.1 > 408.9	6.60e3	7.42e3	0.739	1.000	4.76	60.2 120.5	40-150	
31	31_13C2-PFOA	414.9 > 369.7	2.48e4	2.06e4	1.160	1.000	4.77	51.9 103.8	60-150	

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150508G1\150508G1\_48.gld

Last Altered: Printed:

Tuesday, May 12, 2015 15:38:02 Pacific Daylight Time Tuesday, May 12, 2015 15:38:52 Pacific Daylight Time

Name: 150508G1\_48, Date: 09-May-2015, Time: 07:40:25, ID: ST150508G1-11 PFC CS4 15E0807, Description: PFC CS4 15E0807

a Company	# Name	Trace	Response	IS Resp	RRF	· Wt/Vol	RT .	Conc	%Rec
32.	32 13C8-PFOS	507.1 > 98.6	6.87e3	7.63e3	0.939	1.000	5.05	47.9	95.9 🗀
33	33 13C5-PFNA	468.2 > 422.9	1.70e4	2.00e4	0.915	1.000	5.05	46.5	92.9 50-
34	34 13C2-PFDA	515.1 > 469.9	1.87e4	2.00e4	1.149	1.000	5.30	40.8	81.560-
35	35 13C2-8:2 FTS	529.1 > 508.7	6.22e3	7.42e3	0.918	1.000	5.32	45.7	91.4 40
36	36 13C8-FOSA	506.1 > 77.7	4.61e3	6.73e3	0.728	1.000	5.40	47.0	94.1 20-
37	37 13C2-PFUdA	565 > 519.8	8.08e3	6.73e3	1.148	1.000	5.50	52.3	104.5 60-
38	38 13C2-PFDoA	615 > 569.7	2.34e3	6.73e3	0.827	1.000	5.68	21.0	42.0 30-
39	39 d7-N-MeFOSE	623.1 > 58.9	1.05e1	5.99e1	0.597	1.000	5.79	14.7	29.4 5-1
40	40 d9-N-EtFOSE	639.2 > 58.8	3.09e1	5.99e1	0.656	1.000	5.90	39.4	78.8
41	41 d5-N-EtFOSA	531.1>168.9	5.37e1	5.99e1	0.970	1.000	5.90	46.2	92.4
42	42 13C2-PFTeDA	715 > 669.7	7.77e2	6.73e3	1.415	1.000	5.97	4.08	(1) 8.2 30
43	43 13C2-PFHxDA	815.0>769.7	9.06e3	6.73e3	2.520	1.000	6.20	26.7	53.4
44	44 13C4-PFBA	217 > 171.8	2.48e4	2.48e4	1.000	1.000	2.28	50.0	100.0
45	45 13C2-4:2 FTS	329.2 > 308.9	7.42e3	7.42e3	1.000	1.000	3.91	50.0	100.0
46	46 13C-PFHxA	315 > 269.8	2.44e4	2.44e4	1.000	1.000	3.95	50.0	100.0
47	47 13C8-PFOA	421.3 > 376	2.06e4	2.06e4	1.000	1.000	4.77	50.0	100.0
48	48 13C4-PFOS	503.2 > 98.6	7.63e3	7.63e3	1.000	1.000	5.05	50.0	100.0
49	49 13C2-FOUEA	459.1 > 393.9	2.17e4	2.17e4	1.000	1.000	5.15	50.0	100.0
50	50 13C9-PFNA	472.2 > 426.9	2.00e4	2.00e4	1.000	1.000	5.05	50.0	100.0
51	51 13C7-PFUdA	570.1 > 524.8	6.73e3	6.73e3	1.000	1.000	5.50	50.0	100.0
52	52 d-N-MeFOSA	515.2 > 168.9	5.99e1	5.99e1	1.000	1.000	5.78	50.0	100.0

Doutside method limits oxper MM. MS/12/115

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Page 1 of 2

Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G1\150512G1\_1.qld

Last Altered: Printed:

Wednesday, May 13, 2015 10:40:58 Pacific Daylight Time Wednesday, May 13, 2015 10:42:46 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150512G1\_1, Date: 12-May-2015, Time: 09:11:03, ID: ST150512G1-1 PFC CS4 15E1201, Description: PFC CS4 15E1201

#Name Trace Response IS Resp. RRF WI/Vol RT Conc. %Rec 1 1 PFBA 213.1 > 168.8 1.16e4 3.84e4 1.000 2.30 55.1 110.2 2 PFPeA 263.1 > 218.9 3.03e4 3.42e4 1.000 3.32 51.5 102.9 3 3 PFBS 299 > 79.7 2.77e4 1.56e4 1.000 3.48 57.3 114.7 4 PFHxA 313.2 > 268.9 3.28e4 2.49e4 1.000 3.98 53.7 107.4 5 5 PFHpA 363 > 318.9 3.43e4 2.49e4 1.000 4.44 53.8 107.7 6 6 PFHxS 398.9 > 79.6 2.24e4 1.56e4 1.000 4.47 53.1 106.1 7 7 6:2 FTS 427.1 > 407 4.89e3 1.10e4 1.000 4.79 46.6 93.3 8 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5 9 9 PFHpS 449 > 98.7 1.05e4 1.56e4 1.000 4.79 54.1 108.2 10 10 PFOS 499 > 98.7 1.48e4 1.31e4 1.000 5.07 53.1 106.2 11 11 PFNA 463 > 418.8 2.70e4 2.74e4 1.000 5.08 53.1 106.2 12 12 PFDA 513 > 468.8 4.58e4 4.09e4 1.000 5.32 49.1 98.2 13 13 8:2 FTS 527 > 506.9 1.74e4 1.78e4 1.000 5.33 52.1 104.2 14 14 FOSA 498.1 > 77.8 1.59e4 2.62e4 1.000 5.50 56.5 112.9 16 16 PFUIDA 563 > 518.9 3.18e4 2.91e4 1.000 5.50 56.5 112.9 16 16 PFUIDA 563 > 518.9 3.18e4 2.91e4 1.000 5.50 56.5 112.9	
4 PFHxA 313.2 > 268.9 3.28e4 2.49e4 1.000 3.98 53.7 107.4 5 5 PFHpA 363 > 318.9 3.43e4 2.49e4 1.000 4.44 53.8 107.7 6 PFHxS 398.9 > 79.6 2.24e4 1.56e4 1.000 4.47 53.1 106.1 7 6:2 FTS 427.1 > 407 4.89e3 1.10e4 1.000 4.79 46.6 93.3 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5	man mutside.
4 PFHxA 313.2 > 268.9 3.28e4 2.49e4 1.000 3.98 53.7 107.4 5 5 PFHpA 363 > 318.9 3.43e4 2.49e4 1.000 4.44 53.8 107.7 6 PFHxS 398.9 > 79.6 2.24e4 1.56e4 1.000 4.47 53.1 106.1 7 6:2 FTS 427.1 > 407 4.89e3 1.10e4 1.000 4.79 46.6 93.3 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5	reidondziona
4 PFHxA 313.2 > 268.9 3.28e4 2.49e4 1.000 3.98 53.7 107.4 5 5 PFHpA 363 > 318.9 3.43e4 2.49e4 1.000 4.44 53.8 107.7 6 PFHxS 398.9 > 79.6 2.24e4 1.56e4 1.000 4.47 53.1 106.1 7 6:2 FTS 427.1 > 407 4.89e3 1.10e4 1.000 4.79 46.6 93.3 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5	od timits.
5 PFHpA 363 > 318.9 3.43e4 2.49e4 1.000 4.44 53.8 107.7 6.2 FTS 427.1 > 407 4.89e3 1.10e4 1.000 4.79 46.6 93.3 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5	
6 6 PFHxS 398.9 > 79.6 2.24e4 1.56e4 1.000 4.47 53.1 106.1 7 6:2 FTS 427.1 > 407 4.89e3 1.10e4 1.000 4.79 46.6 93.3 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5	
7 7 6:2 FTS 427.1 > 407 4.89e3 1.10e4 1.000 4.79 46.6 93.3 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5	
8 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5	
8 8 PFOA 413 > 368.7 3.14e4 3.12e4 1.000 4.79 53.3 106.5 9 PFHpS 449 > 98.7 1.05e4 1.56e4 1.000 4.79 54.1 108.2 10 PFOS 499 > 98.7 1.48e4 1.31e4 1.000 5.07 53.1 106.2 14 PFNA 403 > 449.0 2.70e4 1.000 5.07 53.1 106.2	
9 9 PFHpS 449 > 98.7 1.05e4 1.56e4 1.000 4.79 54.1 108.2 10 PFOS 499 > 98.7 1.48e4 1.31e4 1.000 5.07 53.1 106.2 14 PFNA 463 > 449.0 2.70e4 2.70e4 1.000 5.07 53.1 106.2	
10 10 PFOS 499 > 98.7 1.48e4 1.31e4 1.000 5.07 53.1 106.2	
44 DENIA 460 A40 0 0.70-4 0.74-4 1000 FOR	
11 11 PFNA 463 > 418.8 2.70e4 2.74e4 1.000 5.08 53.1 106.2	115
12 12 PFDA 513 > 468.8 4.58e4 4.09e4 1.000 5.32 49.1 98.2	
13 13 8:2 FTS 527 > 506.9 1.74e4 1.78e4 1.000 5.33 52.1 104.2	1
14 FOSA 498.1 > 77.8 1.59e4 2.62e4 1.000 5.42 52.8 105.7	/-1/4/ W
15 15 PFDS 598.8 > 98.7 5.65e3 4.09e4 1.000 5.50 56.5 112.9 16 PFUdA 563 > 518.9 3.18e4 2.91e4 1.000 5.52 53.3 106.6	5/11
16 16 PFUdA 563 > 518.9 3.18e4 2.91e4 1.000 5.52 53.3 106.6	
17 17 PFDoA 612.9 > 568.8 2.01e4 2.09e4 1.000 5.70 53.6 107.1	
18 N-MeFOSA 512.1 > 168.9 1.63e4 5.92e2 1.000 5.80 744 (►)148.8	
19 19 N-MeFOSE 616.1>58.9 5.82e3 5.92e2 1.000 5.81 586 117.3 20 PFTrDA 662.9 > 618.9 1.85e4 2.91e4 1.000 5.85 83.6 \( \) 167.3	
20 20 PFTrDA 662.9 > 618.9 1.85e4 2.91e4 1.000 5.85 83.6 (1)167.3	
21 N-EtFOSE 630.1>58.9 7.84e3 6.69e2 1.000 5.92 548 109.6	
22 N-EtFOSA 526.1>168.9 2.15e4 2.06e3 1.000 5.92 495 99.1	
23 23 PFTeDA 712.9 > 668.8 3.57e4 3.85e4 1.000 5.99 51.2 102.3 24 PFHxDA 813.1>768.6 7.94e4 7.97e4 1.000 6.22 54.7 109.3	
24 PFHxDA 813.1>768.6 7.94e4 7.97e4 1.000 6.22 54.7 109.3	
25 25 PFODA 913.1>868.8 1.13e5 7.97e4 1.000 6.46 45.8 91.5	
26 26 13C3-PFBA 216.1 > 171.8 3.84e4 3.66e4 1.039 1.000 2.29 50.4 100.7 26つ	
27 27 13C3-PFPeA 266>221.8 3.42e4 3.26e4 0.976 1.000 3.32 53.8 107.6	
28 28 13C4-PFHpA 367.2 > 321.8 2.49e4 3.26e4 0.850 1.000 4.44 44.9 89.7	
29 29 18O2-PFHxS 403 > 102.6 1.56e4 3.26e4 0.420 1.000 4.46 57.1 114.2	
30 30 13C2-6:2 FTS 429.1 > 408.9 1.10e4 1.62e4 0.739 1.000 4.79 46.1 92.2 40-150	
31 31 13C2-PFOA 414.9 > 369.7 3.12e4 2.73e4 1.160 1.000 4.79 49.3 98.6 60ーちつ	

Project 1500410

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MassLynx 4.1

Page 2 of 2

Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G1\150512G1\_1.qld

Last Altered: Printed:

Wednesday, May 13, 2015 10:40:58 Pacific Daylight Time Wednesday, May 13, 2015 10:42:46 Pacific Daylight Time

Name: 150512G1\_1, Date: 12-May-2015, Time: 09:11:03, ID: ST150512G1-1 PFC CS4 15E1201, Description: PFC CS4 15E1201

	# Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT.	Conc.	%Rec	
32	32 13C8-PFOS	507.1 > 98.6	1.31e4	1.45e4	0.939	1.000	5.07	48.1	96.2	60-150
33	33 13C5-PFNA	468.2 > 422.9	2.74e4	3.10e4	0.915	1.000	5.08	48.4	96.7	50-150
34	34 13C2-PFDA	515.1 > 469.9	4.09e4	3.10e4	1.149	1.000	5.32	57.5	115.0	60-150
35	35 13C2-8:2 FTS	529.1 > 508.7	1.78e4	1.62e4	0.918	1.000	5.33	59.9		40-150
36	36 13C8-FOSA	506.1 > 77.7	2.62e4	2.47e4	0.728	1.000	5.42	72.9	145.7	120-150
37	37 13C2-PFUdA	565 > 519.8	2.91e4	2.47e4	1.148	1.000	5.52	51.3	102.6	360-150
38	38 13C2-PFDoA	615 > 569.7	2.09e4	2.47e4	0.827	1.000	5.70	51.1	102.2	30-150
39	39 d7-N-MeFOSE	623.1 > 58.9	5.92e2	2.37e3	0.597	1.000	5.80	20.9	41.9	5-150
40	40 d9-N-EtFOSE	639.2 > 58.8	6.69e2	2.37e3	0.656	1.000	5.91	21.5	43.1	
41	41 d5-N-EtFOSA	531.1>168.9	2.06e3	2.37e3	0.970	1.000	5.92	44.9	89.8	$\mathbf{\Psi}$
42	42 13C2-PFTeDA	715 > 669.7	3.85e4	2.47e4	1.415	1.000	5.99	55.0	110.0	30-150
43	43 13C2-PFHxDA	815.0>769.7	7.97e4	2.47e4	2.520	1.000	6.22	64.0	128.1	V
44	44 13C4-PFBA	217 > 171.8	3.66e4	3.66e4	1.000	1.000	2.29	50.0	100.0	
45	45 13C2-4:2 FTS	329.2 > 308.9	1.62e4	1.62e4	1.000	1.000	3.93	50.0	100.0	
46	46 13C-PFHxA	315 > 269.8	3.26e4	3.26e4	1.000	1.000	3.98	50.0	100.0	
47	47 13C8-PFOA	421.3 > 376	2.73e4	2.73e4	1.000	1.000	4.79	50.0	100.0	
48	48 13C4-PFOS	503.2 > 98.6	1.45e4	1.45e4	1.000	1.000	5.07	50.0	100.0	
49	49 13C2-FOUEA	459.1 > 393.9	3.25e4	3.25e4	1.000	1.000	5.17	50.0	100.0	
50	50 13C9-PFNA	472.2 > 426.9	3.10e4	3.10e4	1.000	1.000	5.08	50.0	100.0	
51	51 13C7-PFUdA	570.1 > 524.8	2.47e4	2.47e4	1.000	1.000	5.52	50.0	100.0	
52	52 d-N-MeFOSA	515.2 > 168.9	2.37e3	2.37e3	1.000	1.000	5.80	50.0	100.0	

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Vista Analytical Laboratory Q1

MassLynx 4.1

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Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G1\150512G1\_16.qld

Last Altered: Printed:

Wednesday, May 13, 2015 12:44:38 Pacific Daylight Time Wednesday, May 13, 2015 12:45:26 Pacific Daylight Time

Method: C:\Projects\Method\_1694.PRO\MethDB\PFAS\_Longlist\_QUAD2.mdb 12 May 2015 09:14:14 Calibration: C:\Projects\Method\_1694.PRO\CurveDB\C18\_VAL-PFC\_FULL\_Q1\_5-8-15.cdb 11 May 2015 14:05:34

Name: 150512G1\_16, Date: 12-May-2015, Time: 12:38:02, ID: ST150512G1-2 PFC CS4 15E1201, Description: PFC CS4 15E1201

4 DEDA	entrategram and production entrangement of the complete complete and the filter for	Response	IS Resp	RRF WtVol	RT.	Conc.	%Rec	ا من ما ه
1 PFBA	213.1 > 168.8	1.37e4	3.99e4	1.000	2.27	62.6	125.1 70-130	A Recovery outside method limits.
2 PFPeA	263.1 > 218.9	3.55e4	3.49e4	1.000	3.28	58.9	117.8	the held to
3 PFBS	299 > 79.7	2.83e4	1.59e4	1.000	3.44	57.4	114.8	mothed IImis.
4 PFHxA	313.2 > 268.9	3.85e4	3.24e4	1.000	3.94	48.5	96.9	11 2111 3
5 PFHpA	363 > 318.9	4.11e4	3.24e4	1.000	4.41	49.6	99.2	
6 PFHxS	398.9 > 79.6	2.21e4	1.59e4	1.000	4.44	51.6	103.1	
7 6:2 FTS	427.1 > 407	4.98e3	9.91e3	1.000	4.76	53.3	106.5	
8 PFOA	413 > 368.7	3.52e4	3.59e4	1.000	4.77	51.9	103.7	
9 PFHpS	449 > 98.7	1.06e4	1.59e4	1.000	4.77	54.0	107.9	
10 PFOS	499 > 98.7	1.56e4	1.45e4	1.000	5.05	50.6	101.2	116
11 PFNA	463 > 418.8	2.92e4	3.10e4	1.000	5.06	50.7	101.4	. ~ 6/14/12
12 PFDA	513 > 468.8	5.01e4	4.20e4	1.000	5.30	52.3	104.6	ACS/14/15
13 8:2 FTS	527 > 506.9	1.53e4	1.52e4	1.000	5.31	53.6	107.2	10
14 FOSA	498.1 > 77.8	1.49e4	2.51e4	1.000	5.40	52.0	104.0	1 -
15 PFDS	598.8 > 98.7	4.53e3	4.20e4	1.000	5.49	46.7	93.3	M
16 PFUdA	563 > 518.9	2.88e4	2.75e4	1.000	5.50	51.1	102.2	114/1
17 PFDoA	612.9 > 568.8	1.25e4	1.34e4	1.000	5.68		104.1	571
18 N-MeFOS	A 512.1 > 168.9	1.08e4	1.61e2	1.000	5.78	1130 🕒	226.0	
19 N-MeFOS	E 616.1>58.9	1.82e3	1.61e2	1.000	5.79	659 <b>(k</b> )	131.7	
20 PFTrDA	662.9 > 618.9	4.91e3	2.75e4	1.000	5.84		105.5	
21 N-EtFOSE	630.1>58.9	2.67e3	2.18e2	1.000	5.91	574	114.8	
22 N-EtFOSA	526.1>168.9	1.25e4	1.27e3	1.000	5.91	466	93.3	
23 PFTeDA	712.9 > 668.8	6.56e3	6.80e3	1.000	5.97	53.2	106.4	
24 PFHxDA	813.1>768.6	4.15e4	4.36e4	1.000	6.20	52.1	104.3	
25 PFODA	913.1>868.8	8.76e4	4.36e4	1.000	6.43	62.4	124.8	
26 13C3-PFB	A 216.1 > 171.8	3.99e4	4.34e4	1.039 1.000	2.26	44.3	88.7 60-150	
27 13C3-PFP	eA 266>221.8	3.49e4	3.59e4	0.976 1.000	3.28	49.8	99.7	
28 13C4-PFH	lpA 367.2 > 321.8	3.24e4	3.59e4	0.850 1.000	4.41	53.0	106.0	
29 18O2-PFF	lxS 403 > 102.6	1.59e4	3.59e4	0.420 1.000	4.44	52.8	105.5	
30 13C2-6:2	FTS 429.1 > 408.9	9.91e3	1.36e4	0.739 1.000	4.76	49.3	98.6 40-150	
31 13C2-PFC	OA 414.9 > 369.7	3.59e4	3.31e4	1.160 1.000	4.76	46.8	93.6 60-150	

Project 1500410

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Vista Analytical Laboratory Q1

MassLynx 4.1

Page 2 of 2

Dataset:

C:\Projects\Method\_1694.PRO\Results\150512G1\150512G1\_16.qld

Last Altered: Printed:

Wednesday, May 13, 2015 12:44:38 Pacific Daylight Time Wednesday, May 13, 2015 12:45:26 Pacific Daylight Time

Name: 150512G1\_16, Date: 12-May-2015, Time: 12:38:02, ID: ST150512G1-2 PFC CS4 15E1201, Description: PFC CS4 15E1201

1000	# Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	A 100 (100 (100 (100 (100 (100 (100 (100
2	32 13C8-PFOS	507.1 > 98.6	1.45e4	1.58e4	0.939	1.000	5.05	48.7	97.4
2 3 4	33 13C5-PFNA	468.2 > 422.9	3.10e4	3.44e4	0.915	1.000	5.05	49.3	
4	34 13C2-PFDA	515.1 > 469.9	4.20e4	3.44e4	1.149	1.000	5.30	53.2	
5	35 13C2-8:2 FTS	529.1 > 508.7	1.52e4	1.36e4	0.918	1.000	5.31	60.8	
6	36 13C8-FOSA	506.1 > 77.7	2.51e4	2.46e4	0.728	1.000	5.40	69.9	
7 8 9	37 13C2-PFUdA	565 > 519.8	2.75e4	2.46e4	1.148	1.000	5.50	48.6	97.3
В.	38 13C2-PFDoA	615 > 569.7	1.34e4	2.46e4	0.827	1.000	5.68	32.9	65.7
9	39 d7-N-MeFOSE	623.1 > 58.9	1.61e2	1.71e3	0.597	1.000	5.78	7.88	15.8
0	40 d9-N-EtFOSE	639.2 > 58.8	2.18e2	1.71e3	0.656	1.000	5.90	9.68	19.4
1	41 d5-N-EtFOSA	531.1>168.9	1.27e3	1.71e3	0.970	1.000	5.90	38.2	$\sim$
2	42 13C2-PFTeDA	715 > 669.7	6.80e3	2.46e4	1.415	1.000	5.97	9.75	<b>(</b> A)19.5
3	43 13C2-PFHxDA	815.0>769.7	4.36e4	2.46e4	2.520	1.000	6.20	35.1	70.2
1	44 13C4-PFBA	217 > 171.8	4.34e4	4.34e4	1.000	1.000	2.26	50.0	100.0
;	45 13C2-4:2 FTS	329.2 > 308.9	1.36e4	1. <b>36e4</b>	1.000	1.000	3.91	50.0	100.0
6 7 8	46 13C-PFHxA	315 > 269.8	3.59e4	3.59e4	1.000	1.000	3.94	50.0	100.0
7	47 13C8-PFOA	421.3 > 376	3.31e4	3.31e4	1.000	1.000	4.76	50.0	100.0
3	48 13C4-PFOS	503.2 > 98.6	1.58e4	1.58e4	1.000	1.000	5.05	50.0	100.0
9	49 13C2-FOUEA	459.1 > 393.9	4.73e4	4.73e4	1.000	1.000	5.15	50.0	100.0
0	50 13C9-PFNA	472.2 > 426.9	3.44e4	3.44e4	1.000	1.000	5.05	50.0	100.0
1	51 13C7-PFUdA	570.1 > 524.8	2.46e4	2.46e4	1.000	1.000	5.50	50.0	100.0
2	52 d-N-MeFOSA	515.2 > 168.9	1.71e3	1.71e3	1.000	1.000	5.78	50.0	100.0

Drecovery outside method limits.

ACS/13/15

Project 1500410

DODCMD_ID	INSTALLATION_ID	SDG	SITE_NAME	NORM_SITE_NAME	LOCATION_NAME	LOCATION_TYPE_DESC	COORD_X	COORD_Y	CONTRACT_ID	DO_CTO_NUMBER	CONTR_NAME	SAMPLE_NAME	SAMPLE_MATRIX_DESC	SAMPLE_TYPE_DES	C COLLECT_DAT	E ANALYTICAL_METHOD	ANALYTICAL_METHOD_GRP_DESC
MID_ATLANTIC	PARRIS_ISLAND_MCRD	1500410	SITE 00013	SITE 00013	PAI13CSB11	Borehole/Soil boring	2102227.306	182838.8033	N6246704D0055	110	TETRA TECH NUS, INC.	PAI-13C-SB11-0103	Soil	Normal (Regular)	4-May-15	537	Perfluoroalkyl Compounds
MID ATLANTIC	PARRIS ISLAND MCRD	1500410	SITE 00004	SITE 00004	PAI04SB28	Borehole/Soil boring	2102048.853	183008.2689	N6246704D0055	110	TETRA TECH NUS, INC.	PAI-04-SB28-0608	Soil	Normal (Regular)	3-May-15	537	Perfluoroalkyl Compounds