ANALYTICAL REPORT

Job Number: 480-178459-1

Job Description: Easton PFAS Spill #1900266 PIN H7140

Contract Number: C100700

For:
New York State D.E.C.
625 Broadway
12th Floor
Albany, NY 12233-7017

Attention: Mr. Dave Chiusano



Approved for release.
Judy L Stone
Senior Project Manager
11/30/2020 4:40 PM

Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
Judy.Stone@Eurofinset.com
11/30/2020

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Job Number: 480-178459-1

Job Description: Easton PFAS Spill #1900266 PIN H7140

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Judy L Stone
Senior Project Manager
11/30/2020 4:40 PM

Judy L Stone

Table of Contents

Cover Title Page 1

Data Summaries 6

- Report Narrative 6
- Sample Summary 7
- Detection Summary 8
- Method Summary 10
- Client Sample Results 11
- Surrogate Summary 20
- Isotope Dilution Summary 21
- QC Sample Results 22
- Definitions 32
- QC Association 33
- Chronicle 35
- Certification Summary 37

Organic Sample Data 39

- GC/MS VOA 39
  - Method 8260C 39
    - Method 8260C QC Summary 40
    - Method 8260C Sample Data 52
    - Standards Data 77
      - Method 8260C ICAL Data 77
      - Method 8260C CCAL Data 147
    - Raw QC Data 162
      - Method 8260C Tune Data 162
      - Method 8260C Blank Data 170
      - Method 8260C LCS/LCSD Data 179

Table of Contents

Method 8260C MS/MSD Data 185

Method 8260C Run Logs 195

Method 8260C Prep Data 197

LCMS 201

Method PFAS DW 201

Method PFAS DW QC Summary 202

Method PFAS DW Sample Data 207

Standards Data 232

Method PFAS DW ICAL Data 232

Method PFAS DW CCAL Data 380

Raw QC Data 441

Method PFAS DW Blank Data 441

Method PFAS DW LCS/LCSD Data 462

Method PFAS DW MS/MSD Data 473

Method PFAS DW Run Logs 493

Method PFAS DW Prep Data 495

Inorganic Sample Data 496

Metals Data 496

Met Cover Page 497

Met Sample Data 498

Met QC Data 502

Met ICV/CCV 502

Met Blanks 508

Met ICSA/ICSAB 512

Met MS/MSD/PDS 514

Met LCS/LCSD 517

Table of Contents

Met Serial Dilution 519

Met MDL 521

Met IECF 525

Met Linear Ranges 528

Met Preparation Log 530

Met Analysis Run Log 532

Met ICP/MS Int Stds 540

Met Raw Data 541

Met Prep Data 1150

Subcontracted Data 1154

Shipping and Receiving Documents 1155

Client Chain of Custody 1156

Sample Receipt Checklist 1158

Job Narrative
480-178459-1

Receipt
The samples were received on 11/20/2020 8:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-560291 recovered outside acceptance criteria, low biased, for 2-Butanone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The associated samples are impacted: Influent (480-178459-1), Mid (480-178459-2), Effluent (480-178459-3) and DUP (480-178459-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010C: The interference check standard solution (ICSA) associated with the following samples showed results for Barium at a level greater than 2 times the limit of detection (LOD). It is believed that the solution contains trace impurities of this element and the results are not due to matrix interference. These results are consistent with those found by the manufacturer of the ICSA solution. Influent (480-178459-1), Mid (480-178459-2), Effluent (480-178459-3), Effluent (480-178459-3[MS]), Effluent (480-178459-3[MSD]), DUP (480-178459-4), (LCS 480-560468/2-A), (MB 480-560468/1-A), (480-178459-C-3-A PDS) and (480-178459-C-3-A SD ^5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
Method WS-LC-0025 Att1: The “I” qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte.
Influent (480-178459-1)

Method WS-LC-0025 Att1: The matrix spike and matrix spike duplicate (MS/MSD) precision for Perfluorooctanesulfonic acid (PFOS) of preparation batch 320-434591 and analytical batch 320-434683 were outside control limits. The MS and MSD percent recovery for PFOS is within control limits. Sample matrix interference is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: New York State D.E.C.
Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-178459-1	Influent	Water	11/19/20 09:45	11/20/20 08:00	
480-178459-2	Mid	Water	11/19/20 09:35	11/20/20 08:00	
480-178459-3	Effluent	Water	11/19/20 09:10	11/20/20 08:00	
480-178459-4	DUP	Water	11/19/20 00:00	11/20/20 08:00	

Detection Summary

Client: New York State D.E.C.
Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

Client Sample ID: Influent
Lab Sample ID: 480-178459-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	3.2		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	20		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluoroheptanoic acid (PFHpA)	18		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorooctanoic acid (PFOA)	79		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	24	I	2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorononanoic acid (PFNA)	3.3		2.0		ng/L	1		WS-LC-0025 Att1	Total/NA
Barium	0.14	^	0.0020		mg/L	1		6010C	Total/NA
Calcium	127		0.50		mg/L	1		6010C	Total/NA
Copper	0.058		0.010		mg/L	1		6010C	Total/NA
Lead	0.013		0.010		mg/L	1		6010C	Total/NA
Magnesium	15.6		0.20		mg/L	1		6010C	Total/NA
Manganese	0.54		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.9		0.50		mg/L	1		6010C	Total/NA
Sodium	13.3		1.0		mg/L	1		6010C	Total/NA
Zinc	0.40		0.010		mg/L	1		6010C	Total/NA

Client Sample ID: Mid
Lab Sample ID: 480-178459-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.14	^	0.0020		mg/L	1		6010C	Total/NA
Calcium	130		0.50		mg/L	1		6010C	Total/NA
Copper	0.036		0.010		mg/L	1		6010C	Total/NA
Magnesium	16.1		0.20		mg/L	1		6010C	Total/NA
Manganese	0.62		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.8		0.50		mg/L	1		6010C	Total/NA
Sodium	13.6		1.0		mg/L	1		6010C	Total/NA
Zinc	0.15		0.010		mg/L	1		6010C	Total/NA

Client Sample ID: Effluent
Lab Sample ID: 480-178459-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.14	^	0.0020		mg/L	1		6010C	Total/NA
Calcium	131		0.50		mg/L	1		6010C	Total/NA
Copper	0.015		0.010		mg/L	1		6010C	Total/NA
Magnesium	16.2		0.20		mg/L	1		6010C	Total/NA
Manganese	0.65		0.0030		mg/L	1		6010C	Total/NA
Potassium	3.0		0.50		mg/L	1		6010C	Total/NA
Sodium	13.7		1.0		mg/L	1		6010C	Total/NA
Zinc	0.30	F1 F2	0.010		mg/L	1		6010C	Total/NA

Client Sample ID: DUP
Lab Sample ID: 480-178459-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.14	^	0.0020		mg/L	1		6010C	Total/NA
Calcium	130		0.50		mg/L	1		6010C	Total/NA
Copper	0.024		0.010		mg/L	1		6010C	Total/NA
Magnesium	16.1		0.20		mg/L	1		6010C	Total/NA
Manganese	0.65		0.0030		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP (Continued) Lab Sample ID: 480-178459-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3.0		0.50		mg/L	1		6010C	Total/NA
Sodium	13.6		1.0		mg/L	1		6010C	Total/NA
Zinc	0.34		0.010		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: New York State D.E.C. Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
WS-LC-0025 Att1	Fluorinated Alkyl Substances	TAL-SAC	TAL SAC
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
7470A	Preparation, Mercury	SW846	TAL BUF
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Client Sample ID: Influent
Date Collected: 11/19/20 09:45
Date Received: 11/20/20 08:00

Lab Sample ID: 480-178459-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/21/20 14:35	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/21/20 14:35	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/21/20 14:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/21/20 14:35	1
1,1-Dichloroethane	ND		1.0		ug/L			11/21/20 14:35	1
1,1-Dichloroethene	ND		1.0		ug/L			11/21/20 14:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/21/20 14:35	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/21/20 14:35	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/21/20 14:35	1
1,2-Dichloroethane	ND		1.0		ug/L			11/21/20 14:35	1
1,2-Dichloropropane	ND		1.0		ug/L			11/21/20 14:35	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/21/20 14:35	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/21/20 14:35	1
2-Butanone (MEK)	ND		10		ug/L			11/21/20 14:35	1
2-Hexanone	ND		5.0		ug/L			11/21/20 14:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			11/21/20 14:35	1
Acetone	ND		10		ug/L			11/21/20 14:35	1
Benzene	ND		1.0		ug/L			11/21/20 14:35	1
Bromodichloromethane	ND		1.0		ug/L			11/21/20 14:35	1
Bromoform	ND		1.0		ug/L			11/21/20 14:35	1
Bromomethane	ND		1.0		ug/L			11/21/20 14:35	1
Carbon disulfide	ND		1.0		ug/L			11/21/20 14:35	1
Carbon tetrachloride	ND		1.0		ug/L			11/21/20 14:35	1
Chlorobenzene	ND		1.0		ug/L			11/21/20 14:35	1
Dibromochloromethane	ND		1.0		ug/L			11/21/20 14:35	1
Chloroethane	ND		1.0		ug/L			11/21/20 14:35	1
Chloroform	ND		1.0		ug/L			11/21/20 14:35	1
Chloromethane	ND		1.0		ug/L			11/21/20 14:35	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 14:35	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 14:35	1
Cyclohexane	ND		1.0		ug/L			11/21/20 14:35	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/21/20 14:35	1
Ethylbenzene	ND		1.0		ug/L			11/21/20 14:35	1
1,2-Dibromoethane	ND		1.0		ug/L			11/21/20 14:35	1
Isopropylbenzene	ND		1.0		ug/L			11/21/20 14:35	1
Methyl acetate	ND		2.5		ug/L			11/21/20 14:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/21/20 14:35	1
Methylcyclohexane	ND		1.0		ug/L			11/21/20 14:35	1
Methylene Chloride	ND		1.0		ug/L			11/21/20 14:35	1
Styrene	ND		1.0		ug/L			11/21/20 14:35	1
Tetrachloroethene	ND		1.0		ug/L			11/21/20 14:35	1
Toluene	ND		1.0		ug/L			11/21/20 14:35	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 14:35	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 14:35	1
Trichloroethene	ND		1.0		ug/L			11/21/20 14:35	1
Trichlorofluoromethane	ND		1.0		ug/L			11/21/20 14:35	1
Vinyl chloride	ND		1.0		ug/L			11/21/20 14:35	1
Xylenes, Total	ND		2.0		ug/L			11/21/20 14:35	1

Client Sample ID: Influent
Date Collected: 11/19/20 09:45
Date Received: 11/20/20 08:00

Lab Sample ID: 480-178459-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*92*		*80 - 120*		*11/21/20 14:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*11/21/20 14:35*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*11/21/20 14:35*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*11/21/20 14:35*	*1*

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**3.2**		2.0		ng/L		11/23/20 05:50	11/23/20 12:12	1
Perfluorohexanesulfonic acid (PFHxS)	**20**		2.0		ng/L		11/23/20 05:50	11/23/20 12:12	1
Perfluoroheptanoic acid (PFHpA)	**18**		2.0		ng/L		11/23/20 05:50	11/23/20 12:12	1
Perfluorooctanoic acid (PFOA)	**79**		2.0		ng/L		11/23/20 05:50	11/23/20 12:12	1
Perfluorooctanesulfonic acid (PFOS)	**24**	I	2.0		ng/L		11/23/20 05:50	11/23/20 12:12	1
Perfluorononanoic acid (PFNA)	**3.3**		2.0		ng/L		11/23/20 05:50	11/23/20 12:12	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	*109*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:12*	*1*
13C4 PFHpA	*104*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:12*	*1*
13C4 PFOA	*110*		*70 - 130*	*11/23/20 05:50*	*11/23/20 12:12*	*1*
13C4 PFOS	*106*		*70 - 130*	*11/23/20 05:50*	*11/23/20 12:12*	*1*
13C5 PFNA	*108*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:12*	*1*
13C3 PFBS	*87*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:12*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		11/23/20 11:05	11/24/20 13:31	1
Antimony	ND		0.020		mg/L		11/23/20 11:05	11/24/20 13:31	1
Arsenic	ND		0.015		mg/L		11/23/20 11:05	11/24/20 13:31	1
Barium	**0.14**	^	0.0020		mg/L		11/23/20 11:05	11/24/20 13:31	1
Beryllium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 13:31	1
Cadmium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 13:31	1
Calcium	**127**		0.50		mg/L		11/23/20 11:05	11/24/20 13:31	1
Chromium	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 13:31	1
Cobalt	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 13:31	1
Copper	**0.058**		0.010		mg/L		11/23/20 11:05	11/24/20 13:31	1
Iron	ND		0.050		mg/L		11/23/20 11:05	11/24/20 13:31	1
Lead	**0.013**		0.010		mg/L		11/23/20 11:05	11/24/20 13:31	1
Magnesium	**15.6**		0.20		mg/L		11/23/20 11:05	11/24/20 13:31	1
Manganese	**0.54**		0.0030		mg/L		11/23/20 11:05	11/24/20 13:31	1
Nickel	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:31	1
Potassium	**2.9**		0.50		mg/L		11/23/20 11:05	11/24/20 13:31	1
Selenium	ND		0.025		mg/L		11/23/20 11:05	11/24/20 13:31	1
Silver	ND		0.0060		mg/L		11/23/20 11:05	11/24/20 13:31	1
Sodium	**13.3**		1.0		mg/L		11/23/20 11:05	11/24/20 13:31	1
Thallium	ND		0.020		mg/L		11/23/20 11:05	11/24/20 13:31	1
Vanadium	ND		0.0050		mg/L		11/23/20 11:05	11/24/20 13:31	1
Zinc	**0.40**		0.010		mg/L		11/23/20 11:05	11/24/20 13:31	1

Client Sample ID: Influent
Lab Sample ID: 480-178459-1

Date Collected: 11/19/20 09:45
Matrix: Water
Date Received: 11/20/20 08:00

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/20 13:25	11/23/20 16:32	1

Client Sample ID: Mid
Lab Sample ID: 480-178459-2

Date Collected: 11/19/20 09:35
Matrix: Water
Date Received: 11/20/20 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/21/20 15:00	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/21/20 15:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/21/20 15:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/21/20 15:00	1
1,1-Dichloroethane	ND		1.0		ug/L			11/21/20 15:00	1
1,1-Dichloroethene	ND		1.0		ug/L			11/21/20 15:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/21/20 15:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/21/20 15:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:00	1
1,2-Dichloroethane	ND		1.0		ug/L			11/21/20 15:00	1
1,2-Dichloropropane	ND		1.0		ug/L			11/21/20 15:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:00	1
2-Butanone (MEK)	ND		10		ug/L			11/21/20 15:00	1
2-Hexanone	ND		5.0		ug/L			11/21/20 15:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			11/21/20 15:00	1
Acetone	ND		10		ug/L			11/21/20 15:00	1
Benzene	ND		1.0		ug/L			11/21/20 15:00	1
Bromodichloromethane	ND		1.0		ug/L			11/21/20 15:00	1
Bromoform	ND		1.0		ug/L			11/21/20 15:00	1
Bromomethane	ND		1.0		ug/L			11/21/20 15:00	1
Carbon disulfide	ND		1.0		ug/L			11/21/20 15:00	1
Carbon tetrachloride	ND		1.0		ug/L			11/21/20 15:00	1
Chlorobenzene	ND		1.0		ug/L			11/21/20 15:00	1
Dibromochloromethane	ND		1.0		ug/L			11/21/20 15:00	1
Chloroethane	ND		1.0		ug/L			11/21/20 15:00	1
Chloroform	ND		1.0		ug/L			11/21/20 15:00	1
Chloromethane	ND		1.0		ug/L			11/21/20 15:00	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 15:00	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 15:00	1
Cyclohexane	ND		1.0		ug/L			11/21/20 15:00	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/21/20 15:00	1
Ethylbenzene	ND		1.0		ug/L			11/21/20 15:00	1
1,2-Dibromoethane	ND		1.0		ug/L			11/21/20 15:00	1
Isopropylbenzene	ND		1.0		ug/L			11/21/20 15:00	1
Methyl acetate	ND		2.5		ug/L			11/21/20 15:00	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/21/20 15:00	1
Methylcyclohexane	ND		1.0		ug/L			11/21/20 15:00	1
Methylene Chloride	ND		1.0		ug/L			11/21/20 15:00	1
Styrene	ND		1.0		ug/L			11/21/20 15:00	1
Tetrachloroethene	ND		1.0		ug/L			11/21/20 15:00	1
Toluene	ND		1.0		ug/L			11/21/20 15:00	1

Client Sample ID: Mid
Date Collected: 11/19/20 09:35
Date Received: 11/20/20 08:00

Lab Sample ID: 480-178459-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 15:00	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 15:00	1
Trichloroethene	ND		1.0		ug/L			11/21/20 15:00	1
Trichlorofluoromethane	ND		1.0		ug/L			11/21/20 15:00	1
Vinyl chloride	ND		1.0		ug/L			11/21/20 15:00	1
Xylenes, Total	ND		2.0		ug/L			11/21/20 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*11/21/20 15:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*11/21/20 15:00*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*11/21/20 15:00*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*11/21/20 15:00*	*1*

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:31	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:31	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:31	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:31	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*110*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:31*	*1*
13C4 PFHpA	*111*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:31*	*1*
13C4 PFOA	*106*		*70 - 130*	*11/23/20 05:50*	*11/23/20 12:31*	*1*
13C4 PFOS	*104*		*70 - 130*	*11/23/20 05:50*	*11/23/20 12:31*	*1*
13C5 PFNA	*106*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:31*	*1*
13C3 PFBS	*90*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:31*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		11/23/20 11:05	11/24/20 13:35	1
Antimony	ND		0.020		mg/L		11/23/20 11:05	11/24/20 13:35	1
Arsenic	ND		0.015		mg/L		11/23/20 11:05	11/24/20 13:35	1
Barium	**0.14**	^	0.0020		mg/L		11/23/20 11:05	11/24/20 13:35	1
Beryllium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 13:35	1
Cadmium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 13:35	1
Calcium	**130**		0.50		mg/L		11/23/20 11:05	11/24/20 13:35	1
Chromium	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 13:35	1
Cobalt	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 13:35	1
Copper	**0.036**		0.010		mg/L		11/23/20 11:05	11/24/20 13:35	1
Iron	ND		0.050		mg/L		11/23/20 11:05	11/24/20 13:35	1
Lead	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:35	1
Magnesium	**16.1**		0.20		mg/L		11/23/20 11:05	11/24/20 13:35	1
Manganese	**0.62**		0.0030		mg/L		11/23/20 11:05	11/24/20 13:35	1
Nickel	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:35	1
Potassium	**2.8**		0.50		mg/L		11/23/20 11:05	11/24/20 13:35	1
Selenium	ND		0.025		mg/L		11/23/20 11:05	11/24/20 13:35	1
Silver	ND		0.0060		mg/L		11/23/20 11:05	11/24/20 13:35	1
Sodium	**13.6**		1.0		mg/L		11/23/20 11:05	11/24/20 13:35	1

Client Sample ID: Mid
Lab Sample ID: 480-178459-2
Date Collected: 11/19/20 09:35
Matrix: Water
Date Received: 11/20/20 08:00

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.020		mg/L		11/23/20 11:05	11/24/20 13:35	1
Vanadium	ND		0.0050		mg/L		11/23/20 11:05	11/24/20 13:35	1
Zinc	**0.15**		0.010		mg/L		11/23/20 11:05	11/24/20 13:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/20 13:25	11/23/20 16:33	1

Client Sample ID: Effluent
Lab Sample ID: 480-178459-3
Date Collected: 11/19/20 09:10
Matrix: Water
Date Received: 11/20/20 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/21/20 15:24	1
1,1,2,2-Tetrachloroethane	ND	F2	1.0		ug/L			11/21/20 15:24	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/21/20 15:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/21/20 15:24	1
1,1-Dichloroethane	ND		1.0		ug/L			11/21/20 15:24	1
1,1-Dichloroethene	ND		1.0		ug/L			11/21/20 15:24	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/21/20 15:24	1
1,2-Dibromo-3-Chloropropane	ND	F2	1.0		ug/L			11/21/20 15:24	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:24	1
1,2-Dichloroethane	ND		1.0		ug/L			11/21/20 15:24	1
1,2-Dichloropropane	ND		1.0		ug/L			11/21/20 15:24	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:24	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:24	1
2-Butanone (MEK)	ND	F2	10		ug/L			11/21/20 15:24	1
2-Hexanone	ND		5.0		ug/L			11/21/20 15:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			11/21/20 15:24	1
Acetone	ND	F2	10		ug/L			11/21/20 15:24	1
Benzene	ND		1.0		ug/L			11/21/20 15:24	1
Bromodichloromethane	ND		1.0		ug/L			11/21/20 15:24	1
Bromoform	ND		1.0		ug/L			11/21/20 15:24	1
Bromomethane	ND		1.0		ug/L			11/21/20 15:24	1
Carbon disulfide	ND		1.0		ug/L			11/21/20 15:24	1
Carbon tetrachloride	ND		1.0		ug/L			11/21/20 15:24	1
Chlorobenzene	ND		1.0		ug/L			11/21/20 15:24	1
Dibromochloromethane	ND		1.0		ug/L			11/21/20 15:24	1
Chloroethane	ND		1.0		ug/L			11/21/20 15:24	1
Chloroform	ND		1.0		ug/L			11/21/20 15:24	1
Chloromethane	ND		1.0		ug/L			11/21/20 15:24	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 15:24	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 15:24	1
Cyclohexane	ND		1.0		ug/L			11/21/20 15:24	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/21/20 15:24	1
Ethylbenzene	ND		1.0		ug/L			11/21/20 15:24	1
1,2-Dibromoethane	ND		1.0		ug/L			11/21/20 15:24	1
Isopropylbenzene	ND		1.0		ug/L			11/21/20 15:24	1
Methyl acetate	ND		2.5		ug/L			11/21/20 15:24	1

Client Sample ID: Effluent
Lab Sample ID: 480-178459-3

Date Collected: 11/19/20 09:10
Matrix: Water
Date Received: 11/20/20 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			11/21/20 15:24	1
Methylcyclohexane	ND		1.0		ug/L			11/21/20 15:24	1
Methylene Chloride	ND		1.0		ug/L			11/21/20 15:24	1
Styrene	ND		1.0		ug/L			11/21/20 15:24	1
Tetrachloroethene	ND		1.0		ug/L			11/21/20 15:24	1
Toluene	ND		1.0		ug/L			11/21/20 15:24	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 15:24	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 15:24	1
Trichloroethene	ND		1.0		ug/L			11/21/20 15:24	1
Trichlorofluoromethane	ND		1.0		ug/L			11/21/20 15:24	1
Vinyl chloride	ND		1.0		ug/L			11/21/20 15:24	1
Xylenes, Total	ND		2.0		ug/L			11/21/20 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/21/20 15:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*11/21/20 15:24*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*11/21/20 15:24*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*11/21/20 15:24*	*1*

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:49	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:49	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:49	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:49	1
Perfluorooctanesulfonic acid (PFOS)	ND	F2	2.0		ng/L		11/23/20 05:50	11/23/20 12:49	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 12:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*107*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:49*	*1*
13C4 PFHpA	*106*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:49*	*1*
13C4 PFOA	*104*		*70 - 130*	*11/23/20 05:50*	*11/23/20 12:49*	*1*
13C4 PFOS	*105*		*70 - 130*	*11/23/20 05:50*	*11/23/20 12:49*	*1*
13C5 PFNA	*109*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:49*	*1*
13C3 PFBS	*90*		*25 - 150*	*11/23/20 05:50*	*11/23/20 12:49*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		11/23/20 11:05	11/24/20 13:38	1
Antimony	ND		0.020		mg/L		11/23/20 11:05	11/24/20 13:38	1
Arsenic	ND		0.015		mg/L		11/23/20 11:05	11/24/20 13:38	1
Barium	**0.14**	^	0.0020		mg/L		11/23/20 11:05	11/24/20 13:38	1
Beryllium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 13:38	1
Cadmium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 13:38	1
Calcium	**131**		0.50		mg/L		11/23/20 11:05	11/24/20 13:38	1
Chromium	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 13:38	1
Cobalt	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 13:38	1
Copper	**0.015**		0.010		mg/L		11/23/20 11:05	11/24/20 13:38	1
Iron	ND		0.050		mg/L		11/23/20 11:05	11/24/20 13:38	1
Lead	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:38	1
Magnesium	**16.2**		0.20		mg/L		11/23/20 11:05	11/24/20 13:38	1

Client Sample ID: Effluent
Lab Sample ID: 480-178459-3
Date Collected: 11/19/20 09:10
Matrix: Water
Date Received: 11/20/20 08:00

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.65**		0.0030		mg/L		11/23/20 11:05	11/24/20 13:38	1
Nickel	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:38	1
Potassium	**3.0**		0.50		mg/L		11/23/20 11:05	11/24/20 13:38	1
Selenium	ND		0.025		mg/L		11/23/20 11:05	11/24/20 13:38	1
Silver	ND		0.0060		mg/L		11/23/20 11:05	11/24/20 13:38	1
Sodium	**13.7**		1.0		mg/L		11/23/20 11:05	11/24/20 13:38	1
Thallium	ND		0.020		mg/L		11/23/20 11:05	11/24/20 13:38	1
Vanadium	ND		0.0050		mg/L		11/23/20 11:05	11/24/20 13:38	1
Zinc	**0.30**	**F1 F2**	0.010		mg/L		11/23/20 11:05	11/24/20 13:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/20 13:25	11/23/20 16:35	1

Client Sample ID: DUP
Lab Sample ID: 480-178459-4
Date Collected: 11/19/20 00:00
Matrix: Water
Date Received: 11/20/20 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/21/20 15:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/21/20 15:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/21/20 15:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/21/20 15:49	1
1,1-Dichloroethane	ND		1.0		ug/L			11/21/20 15:49	1
1,1-Dichloroethene	ND		1.0		ug/L			11/21/20 15:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/21/20 15:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/21/20 15:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:49	1
1,2-Dichloroethane	ND		1.0		ug/L			11/21/20 15:49	1
1,2-Dichloropropane	ND		1.0		ug/L			11/21/20 15:49	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/21/20 15:49	1
2-Butanone (MEK)	ND		10		ug/L			11/21/20 15:49	1
2-Hexanone	ND		5.0		ug/L			11/21/20 15:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			11/21/20 15:49	1
Acetone	ND		10		ug/L			11/21/20 15:49	1
Benzene	ND		1.0		ug/L			11/21/20 15:49	1
Bromodichloromethane	ND		1.0		ug/L			11/21/20 15:49	1
Bromoform	ND		1.0		ug/L			11/21/20 15:49	1
Bromomethane	ND		1.0		ug/L			11/21/20 15:49	1
Carbon disulfide	ND		1.0		ug/L			11/21/20 15:49	1
Carbon tetrachloride	ND		1.0		ug/L			11/21/20 15:49	1
Chlorobenzene	ND		1.0		ug/L			11/21/20 15:49	1
Dibromochloromethane	ND		1.0		ug/L			11/21/20 15:49	1
Chloroethane	ND		1.0		ug/L			11/21/20 15:49	1
Chloroform	ND		1.0		ug/L			11/21/20 15:49	1
Chloromethane	ND		1.0		ug/L			11/21/20 15:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 15:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 15:49	1

Client Sample ID: DUP
Date Collected: 11/19/20 00:00
Date Received: 11/20/20 08:00

Lab Sample ID: 480-178459-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0		ug/L			11/21/20 15:49	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/21/20 15:49	1
Ethylbenzene	ND		1.0		ug/L			11/21/20 15:49	1
1,2-Dibromoethane	ND		1.0		ug/L			11/21/20 15:49	1
Isopropylbenzene	ND		1.0		ug/L			11/21/20 15:49	1
Methyl acetate	ND		2.5		ug/L			11/21/20 15:49	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/21/20 15:49	1
Methylcyclohexane	ND		1.0		ug/L			11/21/20 15:49	1
Methylene Chloride	ND		1.0		ug/L			11/21/20 15:49	1
Styrene	ND		1.0		ug/L			11/21/20 15:49	1
Tetrachloroethene	ND		1.0		ug/L			11/21/20 15:49	1
Toluene	ND		1.0		ug/L			11/21/20 15:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 15:49	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 15:49	1
Trichloroethene	ND		1.0		ug/L			11/21/20 15:49	1
Trichlorofluoromethane	ND		1.0		ug/L			11/21/20 15:49	1
Vinyl chloride	ND		1.0		ug/L			11/21/20 15:49	1
Xylenes, Total	ND		2.0		ug/L			11/21/20 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*11/21/20 15:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*11/21/20 15:49*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*11/21/20 15:49*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*11/21/20 15:49*	*1*

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 13:44	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 13:44	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 13:44	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 13:44	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 13:44	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 13:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*112*		*25 - 150*	*11/23/20 05:50*	*11/23/20 13:44*	*1*
13C4 PFHpA	*113*		*25 - 150*	*11/23/20 05:50*	*11/23/20 13:44*	*1*
13C4 PFOA	*109*		*70 - 130*	*11/23/20 05:50*	*11/23/20 13:44*	*1*
13C4 PFOS	*105*		*70 - 130*	*11/23/20 05:50*	*11/23/20 13:44*	*1*
13C5 PFNA	*113*		*25 - 150*	*11/23/20 05:50*	*11/23/20 13:44*	*1*
13C3 PFBS	*92*		*25 - 150*	*11/23/20 05:50*	*11/23/20 13:44*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		11/23/20 11:05	11/24/20 14:08	1
Antimony	ND		0.020		mg/L		11/23/20 11:05	11/24/20 14:08	1
Arsenic	ND		0.015		mg/L		11/23/20 11:05	11/24/20 14:08	1
Barium	**0.14**	**^**	0.0020		mg/L		11/23/20 11:05	11/24/20 14:08	1
Beryllium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 14:08	1
Cadmium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 14:08	1
Calcium	**130**		0.50		mg/L		11/23/20 11:05	11/24/20 14:08	1

Client Sample ID: DUP
Date Collected: 11/19/20 00:00
Date Received: 11/20/20 08:00

Lab Sample ID: 480-178459-4
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 14:08	1
Cobalt	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 14:08	1
Copper	**0.024**		0.010		mg/L		11/23/20 11:05	11/24/20 14:08	1
Iron	ND		0.050		mg/L		11/23/20 11:05	11/24/20 14:08	1
Lead	ND		0.010		mg/L		11/23/20 11:05	11/24/20 14:08	1
Magnesium	**16.1**		0.20		mg/L		11/23/20 11:05	11/24/20 14:08	1
Manganese	**0.65**		0.0030		mg/L		11/23/20 11:05	11/24/20 14:08	1
Nickel	ND		0.010		mg/L		11/23/20 11:05	11/24/20 14:08	1
Potassium	**3.0**		0.50		mg/L		11/23/20 11:05	11/24/20 14:08	1
Selenium	ND		0.025		mg/L		11/23/20 11:05	11/24/20 14:08	1
Silver	ND		0.0060		mg/L		11/23/20 11:05	11/24/20 14:08	1
Sodium	**13.6**		1.0		mg/L		11/23/20 11:05	11/24/20 14:08	1
Thallium	ND		0.020		mg/L		11/23/20 11:05	11/24/20 14:08	1
Vanadium	ND		0.0050		mg/L		11/23/20 11:05	11/24/20 14:08	1
Zinc	**0.34**		0.010		mg/L		11/23/20 11:05	11/24/20 14:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/20 13:25	11/23/20 16:44	1

Surrogate Summary

Client: New York State D.E.C.
Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-178459-1	Influent	92	99	91	95
480-178459-2	Mid	88	96	86	92
480-178459-3	Effluent	94	94	95	94
480-178459-3 MS	Effluent	92	90	89	93
480-178459-3 MSD	Effluent	91	96	89	95
480-178459-4	DUP	92	96	87	94
LCS 480-560291/5	Lab Control Sample	91	97	92	94
MB 480-560291/7	Method Blank	93	92	90	88

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Matrix: Water
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (25-150)	C4PFHA (25-150)	PFOA (70-130)	PFOS (70-130)	PFNA (25-150)	C3PFBS (25-150)		
480-178459-1	Influent	109	104	110	106	108	87		
480-178459-2	Mid	110	111	106	104	106	90		
480-178459-3	Effluent	107	106	104	105	109	90		
480-178459-3 MS	Effluent	114	113	107	106	116	94		
480-178459-3 MSD	Effluent	105	111	110	105	111	91		
480-178459-4	DUP	112	113	109	105	113	92		
LCS 320-434591/2-A	Lab Control Sample	112	106	107	107	108	97		
MB 320-434591/1-A	Method Blank	101	101	95	99	99	89		

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-560291/7
Matrix: Water
Analysis Batch: 560291

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/21/20 10:21	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/21/20 10:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/21/20 10:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/21/20 10:21	1
1,1-Dichloroethane	ND		1.0		ug/L			11/21/20 10:21	1
1,1-Dichloroethene	ND		1.0		ug/L			11/21/20 10:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/21/20 10:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/21/20 10:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/21/20 10:21	1
1,2-Dichloroethane	ND		1.0		ug/L			11/21/20 10:21	1
1,2-Dichloropropane	ND		1.0		ug/L			11/21/20 10:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/21/20 10:21	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/21/20 10:21	1
2-Butanone (MEK)	ND		10		ug/L			11/21/20 10:21	1
2-Hexanone	ND		5.0		ug/L			11/21/20 10:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			11/21/20 10:21	1
Acetone	ND		10		ug/L			11/21/20 10:21	1
Benzene	ND		1.0		ug/L			11/21/20 10:21	1
Bromodichloromethane	ND		1.0		ug/L			11/21/20 10:21	1
Bromoform	ND		1.0		ug/L			11/21/20 10:21	1
Bromomethane	ND		1.0		ug/L			11/21/20 10:21	1
Carbon disulfide	ND		1.0		ug/L			11/21/20 10:21	1
Carbon tetrachloride	ND		1.0		ug/L			11/21/20 10:21	1
Chlorobenzene	ND		1.0		ug/L			11/21/20 10:21	1
Dibromochloromethane	ND		1.0		ug/L			11/21/20 10:21	1
Chloroethane	ND		1.0		ug/L			11/21/20 10:21	1
Chloroform	ND		1.0		ug/L			11/21/20 10:21	1
Chloromethane	ND		1.0		ug/L			11/21/20 10:21	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 10:21	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 10:21	1
Cyclohexane	ND		1.0		ug/L			11/21/20 10:21	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/21/20 10:21	1
Ethylbenzene	ND		1.0		ug/L			11/21/20 10:21	1
1,2-Dibromoethane	ND		1.0		ug/L			11/21/20 10:21	1
Isopropylbenzene	ND		1.0		ug/L			11/21/20 10:21	1
Methyl acetate	ND		2.5		ug/L			11/21/20 10:21	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/21/20 10:21	1
Methylcyclohexane	ND		1.0		ug/L			11/21/20 10:21	1
Methylene Chloride	ND		1.0		ug/L			11/21/20 10:21	1
Styrene	ND		1.0		ug/L			11/21/20 10:21	1
Tetrachloroethene	ND		1.0		ug/L			11/21/20 10:21	1
Toluene	ND		1.0		ug/L			11/21/20 10:21	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/21/20 10:21	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/21/20 10:21	1
Trichloroethene	ND		1.0		ug/L			11/21/20 10:21	1
Trichlorofluoromethane	ND		1.0		ug/L			11/21/20 10:21	1
Vinyl chloride	ND		1.0		ug/L			11/21/20 10:21	1
Xylenes, Total	ND		2.0		ug/L			11/21/20 10:21	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-560291/7
Matrix: Water
Analysis Batch: 560291

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*93*		*80 - 120*		*11/21/20 10:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*11/21/20 10:21*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*11/21/20 10:21*	*1*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*11/21/20 10:21*	*1*

Lab Sample ID: LCS 480-560291/5
Matrix: Water
Analysis Batch: 560291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	76 - 120
1,1,2-Trichloroethane	25.0	24.4		ug/L		98	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.6		ug/L		102	61 - 148
1,1-Dichloroethane	25.0	24.6		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	24.7		ug/L		99	66 - 127
1,2,4-Trichlorobenzene	25.0	25.9		ug/L		103	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	56 - 134
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	24.9		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 120
2-Butanone (MEK)	125	125		ug/L		100	57 - 140
2-Hexanone	125	122		ug/L		97	65 - 127
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		98	71 - 125
Acetone	125	133		ug/L		106	56 - 142
Benzene	25.0	24.7		ug/L		99	71 - 124
Bromodichloromethane	25.0	24.2		ug/L		97	80 - 122
Bromoform	25.0	22.7		ug/L		91	61 - 132
Bromomethane	25.0	21.4		ug/L		86	55 - 144
Carbon disulfide	25.0	24.3		ug/L		97	59 - 134
Carbon tetrachloride	25.0	25.7		ug/L		103	72 - 134
Chlorobenzene	25.0	24.0		ug/L		96	80 - 120
Dibromochloromethane	25.0	23.8		ug/L		95	75 - 125
Chloroethane	25.0	21.9		ug/L		88	69 - 136
Chloroform	25.0	23.3		ug/L		93	73 - 127
Chloromethane	25.0	22.4		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	74 - 124
Cyclohexane	25.0	26.1		ug/L		105	59 - 135
Dichlorodifluoromethane	25.0	24.0		ug/L		96	59 - 135
Ethylbenzene	25.0	25.1		ug/L		100	77 - 123
1,2-Dibromoethane	25.0	25.0		ug/L		100	77 - 120
Isopropylbenzene	25.0	26.9		ug/L		108	77 - 122
Methyl acetate	50.0	49.3		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	25.0		ug/L		100	77 - 120
Methylcyclohexane	25.0	26.1		ug/L		104	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-560291/5
Matrix: Water
Analysis Batch: 560291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	25.4		ug/L		102	75 - 124
Styrene	25.0	25.8		ug/L		103	80 - 120
Tetrachloroethene	25.0	24.9		ug/L		100	74 - 122
Toluene	25.0	23.5		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	24.9		ug/L		100	73 - 127
trans-1,3-Dichloropropene	25.0	24.7		ug/L		99	80 - 120
Trichloroethene	25.0	24.5		ug/L		98	74 - 123
Trichlorofluoromethane	25.0	25.1		ug/L		101	62 - 150
Vinyl chloride	25.0	24.1		ug/L		96	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*91*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*94*		*75 - 123*

Lab Sample ID: 480-178459-3 MS
Matrix: Water
Analysis Batch: 560291

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		25.0	23.7		ug/L		95	73 - 126
1,1,2,2-Tetrachloroethane	ND	F2	25.0	21.9		ug/L		87	76 - 120
1,1,2-Trichloroethane	ND		25.0	22.1		ug/L		88	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	23.1		ug/L		92	61 - 148
1,1-Dichloroethane	ND		25.0	22.6		ug/L		90	77 - 120
1,1-Dichloroethene	ND		25.0	22.7		ug/L		91	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	20.7		ug/L		83	79 - 122
1,2-Dibromo-3-Chloropropane	ND	F2	25.0	19.5		ug/L		78	56 - 134
1,2-Dichlorobenzene	ND		25.0	21.3		ug/L		85	80 - 124
1,2-Dichloroethane	ND		25.0	21.1		ug/L		84	75 - 120
1,2-Dichloropropane	ND		25.0	22.3		ug/L		89	76 - 120
1,3-Dichlorobenzene	ND		25.0	21.1		ug/L		84	77 - 120
1,4-Dichlorobenzene	ND		25.0	21.1		ug/L		84	78 - 124
2-Butanone (MEK)	ND	F2	125	88.6		ug/L		71	57 - 140
2-Hexanone	ND		125	106		ug/L		85	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	102		ug/L		82	71 - 125
Acetone	ND	F2	125	75.3		ug/L		60	56 - 142
Benzene	ND		25.0	22.4		ug/L		89	71 - 124
Bromodichloromethane	ND		25.0	22.1		ug/L		89	80 - 122
Bromoform	ND		25.0	20.5		ug/L		82	61 - 132
Bromomethane	ND		25.0	20.1		ug/L		80	55 - 144
Carbon disulfide	ND		25.0	20.7		ug/L		83	59 - 134
Carbon tetrachloride	ND		25.0	23.4		ug/L		93	72 - 134
Chlorobenzene	ND		25.0	21.8		ug/L		87	80 - 120
Dibromochloromethane	ND		25.0	21.4		ug/L		86	75 - 125
Chloroethane	ND		25.0	20.4		ug/L		81	69 - 136
Chloroform	ND		25.0	21.3		ug/L		85	73 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-178459-3 MS **Client Sample ID: Effluent**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 560291

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND		25.0	21.1		ug/L		84	68 - 124
cis-1,2-Dichloroethene	ND		25.0	21.8		ug/L		87	74 - 124
cis-1,3-Dichloropropene	ND		25.0	21.2		ug/L		85	74 - 124
Cyclohexane	ND		25.0	23.5		ug/L		94	59 - 135
Dichlorodifluoromethane	ND		25.0	22.0		ug/L		88	59 - 135
Ethylbenzene	ND		25.0	22.2		ug/L		89	77 - 123
1,2-Dibromoethane	ND		25.0	22.4		ug/L		90	77 - 120
Isopropylbenzene	ND		25.0	22.8		ug/L		91	77 - 122
Methyl acetate	ND		50.0	41.4		ug/L		83	74 - 133
Methyl tert-butyl ether	ND		25.0	20.8		ug/L		83	77 - 120
Methylcyclohexane	ND		25.0	23.1		ug/L		92	68 - 134
Methylene Chloride	ND		25.0	22.8		ug/L		91	75 - 124
Styrene	ND		25.0	23.3		ug/L		93	80 - 120
Tetrachloroethene	ND		25.0	21.7		ug/L		87	74 - 122
Toluene	ND		25.0	21.5		ug/L		86	80 - 122
trans-1,2-Dichloroethene	ND		25.0	23.0		ug/L		92	73 - 127
trans-1,3-Dichloropropene	ND		25.0	21.5		ug/L		86	80 - 120
Trichloroethene	ND		25.0	21.8		ug/L		87	74 - 123
Trichlorofluoromethane	ND		25.0	22.5		ug/L		90	62 - 150
Vinyl chloride	ND		25.0	22.6		ug/L		90	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*
Dibromofluoromethane (Surr)	*93*		*75 - 123*

Lab Sample ID: 480-178459-3 MSD **Client Sample ID: Effluent**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 560291

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		25.0	26.3		ug/L		105	73 - 126	10	15
1,1,2,2-Tetrachloroethane	ND	F2	25.0	25.6	F2	ug/L		103	76 - 120	16	15
1,1,2-Trichloroethane	ND		25.0	24.7		ug/L		99	76 - 122	11	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	24.4		ug/L		98	61 - 148	6	20
1,1-Dichloroethane	ND		25.0	25.7		ug/L		103	77 - 120	13	20
1,1-Dichloroethene	ND		25.0	25.6		ug/L		103	66 - 127	12	16
1,2,4-Trichlorobenzene	ND		25.0	25.0		ug/L		100	79 - 122	19	20
1,2-Dibromo-3-Chloropropane	ND	F2	25.0	23.2	F2	ug/L		93	56 - 134	18	15
1,2-Dichlorobenzene	ND		25.0	24.3		ug/L		97	80 - 124	13	20
1,2-Dichloroethane	ND		25.0	25.5		ug/L		102	75 - 120	19	20
1,2-Dichloropropane	ND		25.0	24.8		ug/L		99	76 - 120	11	20
1,3-Dichlorobenzene	ND		25.0	24.0		ug/L		96	77 - 120	13	20
1,4-Dichlorobenzene	ND		25.0	23.2		ug/L		93	78 - 124	10	20
2-Butanone (MEK)	ND	F2	125	119	F2	ug/L		95	57 - 140	29	20
2-Hexanone	ND		125	117		ug/L		94	65 - 127	10	15
4-Methyl-2-pentanone (MIBK)	ND		125	123		ug/L		99	71 - 125	19	35

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-178459-3 MSD
Matrix: Water
Analysis Batch: 560291

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	F2	125	125	F2	ug/L		100	56 - 142	49	15
Benzene	ND		25.0	25.1		ug/L		101	71 - 124	12	13
Bromodichloromethane	ND		25.0	25.1		ug/L		100	80 - 122	12	15
Bromoform	ND		25.0	23.3		ug/L		93	61 - 132	13	15
Bromomethane	ND		25.0	22.2		ug/L		89	55 - 144	10	15
Carbon disulfide	ND		25.0	22.8		ug/L		91	59 - 134	10	15
Carbon tetrachloride	ND		25.0	26.0		ug/L		104	72 - 134	11	15
Chlorobenzene	ND		25.0	23.9		ug/L		96	80 - 120	9	25
Dibromochloromethane	ND		25.0	24.7		ug/L		99	75 - 125	14	15
Chloroethane	ND		25.0	23.0		ug/L		92	69 - 136	12	15
Chloroform	ND		25.0	24.5		ug/L		98	73 - 127	14	20
Chloromethane	ND		25.0	23.6		ug/L		94	68 - 124	11	15
cis-1,2-Dichloroethene	ND		25.0	25.1		ug/L		100	74 - 124	14	15
cis-1,3-Dichloropropene	ND		25.0	23.5		ug/L		94	74 - 124	10	15
Cyclohexane	ND		25.0	25.3		ug/L		101	59 - 135	7	20
Dichlorodifluoromethane	ND		25.0	22.8		ug/L		91	59 - 135	3	20
Ethylbenzene	ND		25.0	24.4		ug/L		98	77 - 123	10	15
1,2-Dibromoethane	ND		25.0	24.4		ug/L		97	77 - 120	8	15
Isopropylbenzene	ND		25.0	25.9		ug/L		103	77 - 122	13	20
Methyl acetate	ND		50.0	47.6		ug/L		95	74 - 133	14	20
Methyl tert-butyl ether	ND		25.0	25.6		ug/L		102	77 - 120	21	37
Methylcyclohexane	ND		25.0	25.4		ug/L		102	68 - 134	10	20
Methylene Chloride	ND		25.0	26.1		ug/L		104	75 - 124	13	15
Styrene	ND		25.0	25.6		ug/L		102	80 - 120	9	20
Tetrachloroethene	ND		25.0	23.7		ug/L		95	74 - 122	9	20
Toluene	ND		25.0	23.8		ug/L		95	80 - 122	10	15
trans-1,2-Dichloroethene	ND		25.0	25.9		ug/L		103	73 - 127	12	20
trans-1,3-Dichloropropene	ND		25.0	24.0		ug/L		96	80 - 120	11	15
Trichloroethene	ND		25.0	24.1		ug/L		96	74 - 123	10	16
Trichlorofluoromethane	ND		25.0	24.2		ug/L		97	62 - 150	7	20
Vinyl chloride	ND		25.0	24.6		ug/L		98	65 - 133	8	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*91*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-434591/1-A
Matrix: Water
Analysis Batch: 434683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 434591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 11:35	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 11:35	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 11:35	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 11:35	1

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-434591/1-A
Matrix: Water
Analysis Batch: 434683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 434591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 11:35	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		11/23/20 05:50	11/23/20 11:35	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*101*		*25 - 150*	*11/23/20 05:50*	*11/23/20 11:35*	*1*
13C4 PFHpA	*101*		*25 - 150*	*11/23/20 05:50*	*11/23/20 11:35*	*1*
13C4 PFOA	*95*		*70 - 130*	*11/23/20 05:50*	*11/23/20 11:35*	*1*
13C4 PFOS	*99*		*70 - 130*	*11/23/20 05:50*	*11/23/20 11:35*	*1*
13C5 PFNA	*99*		*25 - 150*	*11/23/20 05:50*	*11/23/20 11:35*	*1*
13C3 PFBS	*89*		*25 - 150*	*11/23/20 05:50*	*11/23/20 11:35*	*1*

Lab Sample ID: LCS 320-434591/2-A
Matrix: Water
Analysis Batch: 434683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 434591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	16.8		ng/L		95	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	16.7		ng/L		92	73 - 157
Perfluoroheptanoic acid (PFHpA)	20.0	17.0		ng/L		85	71 - 138
Perfluorooctanoic acid (PFOA)	20.0	16.6		ng/L		83	70 - 130
Perfluorooctanesulfonic acid (PFOS)	18.6	16.5		ng/L		89	70 - 130
Perfluorononanoic acid (PFNA)	20.0	18.0		ng/L		90	73 - 147

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*112*		*25 - 150*
13C4 PFHpA	*106*		*25 - 150*
13C4 PFOA	*107*		*70 - 130*
13C4 PFOS	*107*		*70 - 130*
13C5 PFNA	*108*		*25 - 150*
13C3 PFBS	*97*		*25 - 150*

Lab Sample ID: 480-178459-3 MS
Matrix: Water
Analysis Batch: 434683

Client Sample ID: Effluent
Prep Type: Total/NA
Prep Batch: 434591

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	ND		15.4	14.7		ng/L		96	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	ND		15.8	13.8		ng/L		87	73 - 157
Perfluoroheptanoic acid (PFHpA)	ND		17.4	14.3		ng/L		82	71 - 138
Perfluorooctanoic acid (PFOA)	ND		17.4	15.9		ng/L		91	70 - 130
Perfluorooctanesulfonic acid (PFOS)	ND	F2	16.1	14.4		ng/L		89	70 - 130
Perfluorononanoic acid (PFNA)	ND		17.4	15.2		ng/L		88	73 - 147

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
18O2 PFHxS	*114*		*25 - 150*

Method: WS-LC-0025 Att1 - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 480-178459-3 MS
Matrix: Water
Analysis Batch: 434683

Client Sample ID: Effluent
Prep Type: Total/NA
Prep Batch: 434591

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFHpA	113		25 - 150
13C4 PFOA	107		70 - 130
13C4 PFOS	106		70 - 130
13C5 PFNA	116		25 - 150
13C3 PFBS	94		25 - 150

Lab Sample ID: 480-178459-3 MSD
Matrix: Water
Analysis Batch: 434683

Client Sample ID: Effluent
Prep Type: Total/NA
Prep Batch: 434591

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)	ND		15.7	15.4		ng/L		98	72 - 151	5	30
Perfluorohexanesulfonic acid (PFHxS)	ND		16.2	15.8		ng/L		97	73 - 157	13	30
Perfluoroheptanoic acid (PFHpA)	ND		17.8	15.5		ng/L		87	71 - 138	8	30
Perfluorooctanoic acid (PFOA)	ND		17.8	16.7		ng/L		94	70 - 130	5	20
Perfluorooctanesulfonic acid (PFOS)	ND	F2	16.5	18.4	F2	ng/L		111	70 - 130	24	20
Perfluorononanoic acid (PFNA)	ND		17.8	19.0		ng/L		107	73 - 147	22	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
18O2 PFHxS	105		25 - 150
13C4 PFHpA	111		25 - 150
13C4 PFOA	110		70 - 130
13C4 PFOS	105		70 - 130
13C5 PFNA	111		25 - 150
13C3 PFBS	91		25 - 150

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-560468/1-A
Matrix: Water
Analysis Batch: 560898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 560468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		11/23/20 11:05	11/24/20 13:24	1
Antimony	ND		0.020		mg/L		11/23/20 11:05	11/24/20 13:24	1
Arsenic	ND		0.015		mg/L		11/23/20 11:05	11/24/20 13:24	1
Barium	ND	^	0.0020		mg/L		11/23/20 11:05	11/24/20 13:24	1
Beryllium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 13:24	1
Cadmium	ND		0.0020		mg/L		11/23/20 11:05	11/24/20 13:24	1
Calcium	ND		0.50		mg/L		11/23/20 11:05	11/24/20 13:24	1
Chromium	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 13:24	1
Cobalt	ND		0.0040		mg/L		11/23/20 11:05	11/24/20 13:24	1
Copper	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:24	1
Iron	ND		0.050		mg/L		11/23/20 11:05	11/24/20 13:24	1
Lead	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:24	1
Magnesium	ND		0.20		mg/L		11/23/20 11:05	11/24/20 13:24	1
Manganese	ND		0.0030		mg/L		11/23/20 11:05	11/24/20 13:24	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-560468/1-A
Matrix: Water
Analysis Batch: 560898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 560468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:24	1
Potassium	ND		0.50		mg/L		11/23/20 11:05	11/24/20 13:24	1
Selenium	ND		0.025		mg/L		11/23/20 11:05	11/24/20 13:24	1
Silver	ND		0.0060		mg/L		11/23/20 11:05	11/24/20 13:24	1
Sodium	ND		1.0		mg/L		11/23/20 11:05	11/24/20 13:24	1
Thallium	ND		0.020		mg/L		11/23/20 11:05	11/24/20 13:24	1
Vanadium	ND		0.0050		mg/L		11/23/20 11:05	11/24/20 13:24	1
Zinc	ND		0.010		mg/L		11/23/20 11:05	11/24/20 13:24	1

Lab Sample ID: LCS 480-560468/2-A
Matrix: Water
Analysis Batch: 560898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 560468

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.29		mg/L		103	80 - 120
Antimony	0.200	0.202		mg/L		101	80 - 120
Arsenic	0.200	0.203		mg/L		101	80 - 120
Barium	0.200	0.211	^	mg/L		105	80 - 120
Beryllium	0.200	0.211		mg/L		105	80 - 120
Cadmium	0.200	0.200		mg/L		100	80 - 120
Calcium	10.0	10.18		mg/L		102	80 - 120
Chromium	0.200	0.197		mg/L		99	80 - 120
Cobalt	0.200	0.188		mg/L		94	80 - 120
Copper	0.200	0.200		mg/L		100	80 - 120
Iron	10.0	9.82		mg/L		98	80 - 120
Lead	0.200	0.194		mg/L		97	80 - 120
Magnesium	10.0	9.76		mg/L		98	80 - 120
Manganese	0.200	0.200		mg/L		100	80 - 120
Nickel	0.200	0.188		mg/L		94	80 - 120
Potassium	10.0	9.95		mg/L		99	80 - 120
Selenium	0.200	0.199		mg/L		100	80 - 120
Silver	0.0500	0.0491		mg/L		98	80 - 120
Sodium	10.0	10.04		mg/L		100	80 - 120
Thallium	0.200	0.198		mg/L		99	80 - 120
Vanadium	0.200	0.196		mg/L		98	80 - 120
Zinc	0.200	0.202		mg/L		101	80 - 120

Lab Sample ID: 480-178459-3 MS
Matrix: Water
Analysis Batch: 560898

Client Sample ID: Effluent
Prep Type: Total/NA
Prep Batch: 560468

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	ND		10.0	9.87		mg/L		99	75 - 125
Antimony	ND		0.200	0.202		mg/L		101	75 - 125
Arsenic	ND		0.200	0.206		mg/L		103	75 - 125
Barium	0.14	^	0.200	0.352	^	mg/L		104	75 - 125
Beryllium	ND		0.200	0.209		mg/L		105	75 - 125
Cadmium	ND		0.200	0.201		mg/L		100	75 - 125
Calcium	131		10.0	135.1	4	mg/L		44	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-178459-3 MS
Matrix: Water
Analysis Batch: 560898

Client Sample ID: Effluent
Prep Type: Total/NA
Prep Batch: 560468

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	ND		0.200	0.197		mg/L		98	75 - 125
Cobalt	ND		0.200	0.191		mg/L		95	75 - 125
Copper	0.015		0.200	0.223		mg/L		104	75 - 125
Iron	ND		10.0	9.58		mg/L		96	75 - 125
Lead	ND		0.200	0.196		mg/L		98	75 - 125
Magnesium	16.2		10.0	25.49		mg/L		93	75 - 125
Manganese	0.65		0.200	0.838		mg/L		93	75 - 125
Nickel	ND		0.200	0.192		mg/L		96	75 - 125
Potassium	3.0		10.0	13.05		mg/L		101	75 - 125
Selenium	ND		0.200	0.203		mg/L		102	75 - 125
Silver	ND		0.0500	0.0496		mg/L		99	75 - 125
Sodium	13.7		10.0	23.25		mg/L		96	75 - 125
Thallium	ND		0.200	0.201		mg/L		100	75 - 125
Vanadium	ND		0.200	0.200		mg/L		100	75 - 125
Zinc	0.30	F1 F2	0.200	0.372	F1	mg/L		35	75 - 125

Lab Sample ID: 480-178459-3 MSD
Matrix: Water
Analysis Batch: 560898

Client Sample ID: Effluent
Prep Type: Total/NA
Prep Batch: 560468

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	ND		10.0	10.15		mg/L		102	75 - 125	3	20
Antimony	ND		0.200	0.203		mg/L		102	75 - 125	0	20
Arsenic	ND		0.200	0.206		mg/L		103	75 - 125	0	20
Barium	0.14	^	0.200	0.351	^	mg/L		103	75 - 125	0	20
Beryllium	ND		0.200	0.212		mg/L		106	75 - 125	1	20
Cadmium	ND		0.200	0.202		mg/L		101	75 - 125	0	20
Calcium	131		10.0	140.4	4	mg/L		97	75 - 125	4	20
Chromium	ND		0.200	0.198		mg/L		99	75 - 125	1	20
Cobalt	ND		0.200	0.191		mg/L		96	75 - 125	0	20
Copper	0.015		0.200	0.222		mg/L		104	75 - 125	1	20
Iron	ND		10.0	9.65		mg/L		96	75 - 125	1	20
Lead	ND		0.200	0.199		mg/L		100	75 - 125	2	20
Magnesium	16.2		10.0	25.71		mg/L		95	75 - 125	1	20
Manganese	0.65		0.200	0.843		mg/L		95	75 - 125	1	20
Nickel	ND		0.200	0.191		mg/L		96	75 - 125	0	20
Potassium	3.0		10.0	12.98		mg/L		100	75 - 125	1	20
Selenium	ND		0.200	0.204		mg/L		102	75 - 125	0	20
Silver	ND		0.0500	0.0498		mg/L		100	75 - 125	0	20
Sodium	13.7		10.0	23.66		mg/L		100	75 - 125	2	20
Thallium	ND		0.200	0.197		mg/L		99	75 - 125	2	20
Vanadium	ND		0.200	0.199		mg/L		100	75 - 125	0	20
Zinc	0.30	F1 F2	0.200	0.767	F1 F2	mg/L		232	75 - 125	69	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-560510/1-A
Matrix: Water
Analysis Batch: 560597

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 560510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/20 13:25	11/23/20 16:21	1

Lab Sample ID: LCS 480-560510/2-A
Matrix: Water
Analysis Batch: 560597

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 560510

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00667	0.00692		mg/L		104	80 - 120		

Lab Sample ID: 480-178459-3 MS
Matrix: Water
Analysis Batch: 560597

Client Sample ID: Effluent
Prep Type: Total/NA
Prep Batch: 560510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.00667	0.00717		mg/L		107	80 - 120		

Lab Sample ID: 480-178459-3 MSD
Matrix: Water
Analysis Batch: 560597

Client Sample ID: Effluent
Prep Type: Total/NA
Prep Batch: 560510

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00718		mg/L		108	80 - 120	0	20

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

LCMS

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
I	Value is EMPC (estimated maximum possible concentration).

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: New York State D.E.C.
Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

GC/MS VOA

Analysis Batch: 560291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-178459-1	Influent	Total/NA	Water	8260C	
480-178459-2	Mid	Total/NA	Water	8260C	
480-178459-3	Effluent	Total/NA	Water	8260C	
480-178459-4	DUP	Total/NA	Water	8260C	
MB 480-560291/7	Method Blank	Total/NA	Water	8260C	
LCS 480-560291/5	Lab Control Sample	Total/NA	Water	8260C	
480-178459-3 MS	Effluent	Total/NA	Water	8260C	
480-178459-3 MSD	Effluent	Total/NA	Water	8260C	

LCMS

Prep Batch: 434591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-178459-1	Influent	Total/NA	Water	PFAS Prep	
480-178459-2	Mid	Total/NA	Water	PFAS Prep	
480-178459-3	Effluent	Total/NA	Water	PFAS Prep	
480-178459-4	DUP	Total/NA	Water	PFAS Prep	
MB 320-434591/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-434591/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
480-178459-3 MS	Effluent	Total/NA	Water	PFAS Prep	
480-178459-3 MSD	Effluent	Total/NA	Water	PFAS Prep	

Analysis Batch: 434683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-178459-1	Influent	Total/NA	Water	WS-LC-0025 Att1	434591
480-178459-2	Mid	Total/NA	Water	WS-LC-0025 Att1	434591
480-178459-3	Effluent	Total/NA	Water	WS-LC-0025 Att1	434591
480-178459-4	DUP	Total/NA	Water	WS-LC-0025 Att1	434591
MB 320-434591/1-A	Method Blank	Total/NA	Water	WS-LC-0025 Att1	434591
LCS 320-434591/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 Att1	434591
480-178459-3 MS	Effluent	Total/NA	Water	WS-LC-0025 Att1	434591
480-178459-3 MSD	Effluent	Total/NA	Water	WS-LC-0025 Att1	434591

Metals

Prep Batch: 560468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-178459-1	Influent	Total/NA	Water	3005A	
480-178459-2	Mid	Total/NA	Water	3005A	
480-178459-3	Effluent	Total/NA	Water	3005A	
480-178459-4	DUP	Total/NA	Water	3005A	
MB 480-560468/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-560468/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-178459-3 MS	Effluent	Total/NA	Water	3005A	
480-178459-3 MSD	Effluent	Total/NA	Water	3005A	

Metals

Prep Batch: 560510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-178459-1	Influent	Total/NA	Water	7470A	
480-178459-2	Mid	Total/NA	Water	7470A	
480-178459-3	Effluent	Total/NA	Water	7470A	
480-178459-4	DUP	Total/NA	Water	7470A	
MB 480-560510/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-560510/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-178459-3 MS	Effluent	Total/NA	Water	7470A	
480-178459-3 MSD	Effluent	Total/NA	Water	7470A	

Analysis Batch: 560597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-178459-1	Influent	Total/NA	Water	7470A	560510
480-178459-2	Mid	Total/NA	Water	7470A	560510
480-178459-3	Effluent	Total/NA	Water	7470A	560510
480-178459-4	DUP	Total/NA	Water	7470A	560510
MB 480-560510/1-A	Method Blank	Total/NA	Water	7470A	560510
LCS 480-560510/2-A	Lab Control Sample	Total/NA	Water	7470A	560510
480-178459-3 MS	Effluent	Total/NA	Water	7470A	560510
480-178459-3 MSD	Effluent	Total/NA	Water	7470A	560510

Analysis Batch: 560898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-178459-1	Influent	Total/NA	Water	6010C	560468
480-178459-2	Mid	Total/NA	Water	6010C	560468
480-178459-3	Effluent	Total/NA	Water	6010C	560468
480-178459-4	DUP	Total/NA	Water	6010C	560468
MB 480-560468/1-A	Method Blank	Total/NA	Water	6010C	560468
LCS 480-560468/2-A	Lab Control Sample	Total/NA	Water	6010C	560468
480-178459-3 MS	Effluent	Total/NA	Water	6010C	560468
480-178459-3 MSD	Effluent	Total/NA	Water	6010C	560468

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

Client Sample ID: Influent
Lab Sample ID: 480-178459-1
Date Collected: 11/19/20 09:45
Matrix: Water
Date Received: 11/20/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	560291	11/21/20 14:35	RJF	TAL BUF
Total/NA	Prep	PFAS Prep			434591	11/23/20 05:50	MM	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	434683	11/23/20 12:12	K1S	TAL SAC
Total/NA	Prep	3005A			560468	11/23/20 11:05	ADM	TAL BUF
Total/NA	Analysis	6010C		1	560898	11/24/20 13:31	LMH	TAL BUF
Total/NA	Prep	7470A			560510	11/23/20 13:25	BMB	TAL BUF
Total/NA	Analysis	7470A		1	560597	11/23/20 16:32	BMB	TAL BUF

Client Sample ID: Mid
Lab Sample ID: 480-178459-2
Date Collected: 11/19/20 09:35
Matrix: Water
Date Received: 11/20/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	560291	11/21/20 15:00	RJF	TAL BUF
Total/NA	Prep	PFAS Prep			434591	11/23/20 05:50	MM	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	434683	11/23/20 12:31	K1S	TAL SAC
Total/NA	Prep	3005A			560468	11/23/20 11:05	ADM	TAL BUF
Total/NA	Analysis	6010C		1	560898	11/24/20 13:35	LMH	TAL BUF
Total/NA	Prep	7470A			560510	11/23/20 13:25	BMB	TAL BUF
Total/NA	Analysis	7470A		1	560597	11/23/20 16:33	BMB	TAL BUF

Client Sample ID: Effluent
Lab Sample ID: 480-178459-3
Date Collected: 11/19/20 09:10
Matrix: Water
Date Received: 11/20/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	560291	11/21/20 15:24	RJF	TAL BUF
Total/NA	Prep	PFAS Prep			434591	11/23/20 05:50	MM	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	434683	11/23/20 12:49	K1S	TAL SAC
Total/NA	Prep	3005A			560468	11/23/20 11:05	ADM	TAL BUF
Total/NA	Analysis	6010C		1	560898	11/24/20 13:38	LMH	TAL BUF
Total/NA	Prep	7470A			560510	11/23/20 13:25	BMB	TAL BUF
Total/NA	Analysis	7470A		1	560597	11/23/20 16:35	BMB	TAL BUF

Client Sample ID: DUP
Lab Sample ID: 480-178459-4
Date Collected: 11/19/20 00:00
Matrix: Water
Date Received: 11/20/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	560291	11/21/20 15:49	RJF	TAL BUF
Total/NA	Prep	PFAS Prep			434591	11/23/20 05:50	MM	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	434683	11/23/20 13:44	K1S	TAL SAC
Total/NA	Prep	3005A			560468	11/23/20 11:05	ADM	TAL BUF
Total/NA	Analysis	6010C		1	560898	11/24/20 14:08	LMH	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

Client Sample ID: DUP
Date Collected: 11/19/20 00:00
Date Received: 11/20/20 08:00

Lab Sample ID: 480-178459-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			560510	11/23/20 13:25	BMB	TAL BUF
Total/NA	Analysis	7470A		1	560597	11/23/20 16:44	BMB	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 480-178459-1
Project/Site: Easton PFAS Spill #1900266 PIN H7140

Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-01-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010C	3005A	Water	Aluminum
6010C	3005A	Water	Antimony
6010C	3005A	Water	Arsenic
6010C	3005A	Water	Barium
6010C	3005A	Water	Beryllium
6010C	3005A	Water	Cadmium
6010C	3005A	Water	Calcium
6010C	3005A	Water	Chromium
6010C	3005A	Water	Cobalt
6010C	3005A	Water	Copper
6010C	3005A	Water	Iron
6010C	3005A	Water	Lead
6010C	3005A	Water	Magnesium
6010C	3005A	Water	Manganese
6010C	3005A	Water	Nickel
6010C	3005A	Water	Potassium
6010C	3005A	Water	Selenium
6010C	3005A	Water	Silver
6010C	3005A	Water	Sodium
6010C	3005A	Water	Thallium
6010C	3005A	Water	Vanadium
6010C	3005A	Water	Zinc
7470A	7470A	Water	Mercury
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dibromoethane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,4-Dichlorobenzene
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Hexanone
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromodichloromethane
8260C		Water	Bromoform
8260C		Water	Bromomethane

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-01-21

8260C	Water	Carbon disulfide
8260C	Water	Carbon tetrachloride
8260C	Water	Chlorobenzene
8260C	Water	Chloroethane
8260C	Water	Chloroform
8260C	Water	Chloromethane
8260C	Water	cis-1,2-Dichloroethene
8260C	Water	cis-1,3-Dichloropropene
8260C	Water	Cyclohexane
8260C	Water	Dibromochloromethane
8260C	Water	Dichlorodifluoromethane
8260C	Water	Ethylbenzene
8260C	Water	Isopropylbenzene
8260C	Water	Methyl acetate
8260C	Water	Methyl tert-butyl ether
8260C	Water	Methylcyclohexane
8260C	Water	Methylene Chloride
8260C	Water	Styrene
8260C	Water	Tetrachloroethene
8260C	Water	Toluene
8260C	Water	trans-1,2-Dichloroethene
8260C	Water	trans-1,3-Dichloropropene
8260C	Water	Trichloroethene
8260C	Water	Trichlorofluoromethane
8260C	Water	Vinyl chloride
8260C	Water	Xylenes, Total

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11666	04-01-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
WS-LC-0025 Att1	PFAS Prep	Water	Perfluorobutanesulfonic acid (PFBS)
WS-LC-0025 Att1	PFAS Prep	Water	Perfluoroheptanoic acid (PFHpA)
WS-LC-0025 Att1	PFAS Prep	Water	Perfluorohexanesulfonic acid (PFHxS)
WS-LC-0025 Att1	PFAS Prep	Water	Perfluorononanoic acid (PFNA)

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 (20) ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
Influent	480-178459-1	95	99	92	91
Mid	480-178459-2	92	96	88	86
Effluent	480-178459-3	94	94	94	95
DUP	480-178459-4	94	96	92	87
	MB 480-560291/7	88	92	93	90
	LCS 480-560291/5	94	97	91	92
Effluent MS	480-178459-3 MS	93	90	92	89
Effluent MSD	480-178459-3 MSD	95	96	91	89

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-123
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C2382.D

Lab ID: LCS 480-560291/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	25.4	102	73-126	
1,1,2,2-Tetrachloroethane	25.0	25.3	101	76-120	
1,1,2-Trichloroethane	25.0	24.4	98	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.6	102	61-148	
1,1-Dichloroethane	25.0	24.6	98	77-120	
1,1-Dichloroethene	25.0	24.7	99	66-127	
1,2,4-Trichlorobenzene	25.0	25.9	103	79-122	
1,2-Dibromo-3-Chloropropane	25.0	23.6	94	56-134	
1,2-Dichlorobenzene	25.0	25.7	103	80-124	
1,2-Dichloroethane	25.0	24.9	100	75-120	
1,2-Dichloropropane	25.0	24.3	97	76-120	
1,3-Dichlorobenzene	25.0	25.3	101	77-120	
1,4-Dichlorobenzene	25.0	24.5	98	80-120	
2-Butanone (MEK)	125	125	100	57-140	
2-Hexanone	125	122	97	65-127	
4-Methyl-2-pentanone (MIBK)	125	123	98	71-125	
Acetone	125	133	106	56-142	
Benzene	25.0	24.7	99	71-124	
Bromodichloromethane	25.0	24.2	97	80-122	
Bromoform	25.0	22.7	91	61-132	
Bromomethane	25.0	21.4	86	55-144	
Carbon disulfide	25.0	24.3	97	59-134	
Carbon tetrachloride	25.0	25.7	103	72-134	
Chlorobenzene	25.0	24.0	96	80-120	
Dibromochloromethane	25.0	23.8	95	75-125	
Chloroethane	25.0	21.9	88	69-136	
Chloroform	25.0	23.3	93	73-127	
Chloromethane	25.0	22.4	90	68-124	
cis-1,2-Dichloroethene	25.0	24.0	96	74-124	
cis-1,3-Dichloropropene	25.0	24.5	98	74-124	
Cyclohexane	25.0	26.1	105	59-135	
Dichlorodifluoromethane	25.0	24.0	96	59-135	
Ethylbenzene	25.0	25.1	100	77-123	
1,2-Dibromoethane	25.0	25.0	100	77-120	
Isopropylbenzene	25.0	26.9	108	77-122	
Methyl acetate	50.0	49.3	99	74-133	
Methyl tert-butyl ether	25.0	25.0	100	77-120	
Methylcyclohexane	25.0	26.1	104	68-134	
Methylene Chloride	25.0	25.4	102	75-124	
Styrene	25.0	25.8	103	80-120	
Tetrachloroethene	25.0	24.9	100	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C2382.D

Lab ID: LCS 480-560291/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	23.5	94	80-122	
trans-1,2-Dichloroethene	25.0	24.9	100	73-127	
trans-1,3-Dichloropropene	25.0	24.7	99	80-120	
Trichloroethene	25.0	24.5	98	74-123	
Trichlorofluoromethane	25.0	25.1	101	62-150	
Vinyl chloride	25.0	24.1	96	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C2403.D

Lab ID: 480-178459-3 MS Client ID: Effluent MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	ND	23.7	95	73-126	
1,1,2,2-Tetrachloroethane	25.0	ND	21.9	87	76-120	
1,1,2-Trichloroethane	25.0	ND	22.1	88	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	ND	23.1	92	61-148	
1,1-Dichloroethane	25.0	ND	22.6	90	77-120	
1,1-Dichloroethene	25.0	ND	22.7	91	66-127	
1,2,4-Trichlorobenzene	25.0	ND	20.7	83	79-122	
1,2-Dibromo-3-Chloropropane	25.0	ND	19.5	78	56-134	
1,2-Dichlorobenzene	25.0	ND	21.3	85	80-124	
1,2-Dichloroethane	25.0	ND	21.1	84	75-120	
1,2-Dichloropropane	25.0	ND	22.3	89	76-120	
1,3-Dichlorobenzene	25.0	ND	21.1	84	77-120	
1,4-Dichlorobenzene	25.0	ND	21.1	84	78-124	
2-Butanone (MEK)	125	ND	88.6	71	57-140	
2-Hexanone	125	ND	106	85	65-127	
4-Methyl-2-pentanone (MIBK)	125	ND	102	82	71-125	
Acetone	125	ND	75.3	60	56-142	
Benzene	25.0	ND	22.4	89	71-124	
Bromodichloromethane	25.0	ND	22.1	89	80-122	
Bromoform	25.0	ND	20.5	82	61-132	
Bromomethane	25.0	ND	20.1	80	55-144	
Carbon disulfide	25.0	ND	20.7	83	59-134	
Carbon tetrachloride	25.0	ND	23.4	93	72-134	
Chlorobenzene	25.0	ND	21.8	87	80-120	
Dibromochloromethane	25.0	ND	21.4	86	75-125	
Chloroethane	25.0	ND	20.4	81	69-136	
Chloroform	25.0	ND	21.3	85	73-127	
Chloromethane	25.0	ND	21.1	84	68-124	
cis-1,2-Dichloroethene	25.0	ND	21.8	87	74-124	
cis-1,3-Dichloropropene	25.0	ND	21.2	85	74-124	
Cyclohexane	25.0	ND	23.5	94	59-135	
Dichlorodifluoromethane	25.0	ND	22.0	88	59-135	
Ethylbenzene	25.0	ND	22.2	89	77-123	
1,2-Dibromoethane	25.0	ND	22.4	90	77-120	
Isopropylbenzene	25.0	ND	22.8	91	77-122	
Methyl acetate	50.0	ND	41.4	83	74-133	
Methyl tert-butyl ether	25.0	ND	20.8	83	77-120	
Methylcyclohexane	25.0	ND	23.1	92	68-134	
Methylene Chloride	25.0	ND	22.8	91	75-124	
Styrene	25.0	ND	23.3	93	80-120	
Tetrachloroethene	25.0	ND	21.7	87	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C2403.D

Lab ID: 480-178459-3 MS Client ID: Effluent MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	25.0	ND	21.5	86	80-122	
trans-1,2-Dichloroethene	25.0	ND	23.0	92	73-127	
trans-1,3-Dichloropropene	25.0	ND	21.5	86	80-120	
Trichloroethene	25.0	ND	21.8	87	74-123	
Trichlorofluoromethane	25.0	ND	22.5	90	62-150	
Vinyl chloride	25.0	ND	22.6	90	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C2404.D

Lab ID: 480-178459-3 MSD Client ID: Effluent MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	26.3	105	10	15	73-126	
1,1,2,2-Tetrachloroethane	25.0	25.6	103	16	15	76-120	F2
1,1,2-Trichloroethane	25.0	24.7	99	11	15	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.4	98	6	20	61-148	
1,1-Dichloroethane	25.0	25.7	103	13	20	77-120	
1,1-Dichloroethene	25.0	25.6	103	12	16	66-127	
1,2,4-Trichlorobenzene	25.0	25.0	100	19	20	79-122	
1,2-Dibromo-3-Chloropropane	25.0	23.2	93	18	15	56-134	F2
1,2-Dichlorobenzene	25.0	24.3	97	13	20	80-124	
1,2-Dichloroethane	25.0	25.5	102	19	20	75-120	
1,2-Dichloropropane	25.0	24.8	99	11	20	76-120	
1,3-Dichlorobenzene	25.0	24.0	96	13	20	77-120	
1,4-Dichlorobenzene	25.0	23.2	93	10	20	78-124	
2-Butanone (MEK)	125	119	95	29	20	57-140	F2
2-Hexanone	125	117	94	10	15	65-127	
4-Methyl-2-pentanone (MIBK)	125	123	99	19	35	71-125	
Acetone	125	125	100	49	15	56-142	F2
Benzene	25.0	25.1	101	12	13	71-124	
Bromodichloromethane	25.0	25.1	100	12	15	80-122	
Bromoform	25.0	23.3	93	13	15	61-132	
Bromomethane	25.0	22.2	89	10	15	55-144	
Carbon disulfide	25.0	22.8	91	10	15	59-134	
Carbon tetrachloride	25.0	26.0	104	11	15	72-134	
Chlorobenzene	25.0	23.9	96	9	25	80-120	
Dibromochloromethane	25.0	24.7	99	14	15	75-125	
Chloroethane	25.0	23.0	92	12	15	69-136	
Chloroform	25.0	24.5	98	14	20	73-127	
Chloromethane	25.0	23.6	94	11	15	68-124	
cis-1,2-Dichloroethene	25.0	25.1	100	14	15	74-124	
cis-1,3-Dichloropropene	25.0	23.5	94	10	15	74-124	
Cyclohexane	25.0	25.3	101	7	20	59-135	
Dichlorodifluoromethane	25.0	22.8	91	3	20	59-135	
Ethylbenzene	25.0	24.4	98	10	15	77-123	
1,2-Dibromoethane	25.0	24.4	97	8	15	77-120	
Isopropylbenzene	25.0	25.9	103	13	20	77-122	
Methyl acetate	50.0	47.6	95	14	20	74-133	
Methyl tert-butyl ether	25.0	25.6	102	21	37	77-120	
Methylcyclohexane	25.0	25.4	102	10	20	68-134	
Methylene Chloride	25.0	26.1	104	13	15	75-124	
Styrene	25.0	25.6	102	9	20	80-120	
Tetrachloroethene	25.0	23.7	95	9	20	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C2404.D

Lab ID: 480-178459-3 MSD Client ID: Effluent MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	25.0	23.8	95	10	15	80-122	
trans-1,2-Dichloroethene	25.0	25.9	103	12	20	73-127	
trans-1,3-Dichloropropene	25.0	24.0	96	11	15	80-120	
Trichloroethene	25.0	24.1	96	10	16	74-123	
Trichlorofluoromethane	25.0	24.2	97	7	20	62-150	
Vinyl chloride	25.0	24.6	98	8	15	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab File ID: C2384.D Lab Sample ID: MB 480-560291/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5973C Date Analyzed: 11/21/2020 10:21

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-560291/5	C2382.D	11/21/2020 09:31
Influent	480-178459-1	C2394.D	11/21/2020 14:35
Mid	480-178459-2	C2395.D	11/21/2020 15:00
Effluent	480-178459-3	C2396.D	11/21/2020 15:24
DUP	480-178459-4	C2397.D	11/21/2020 15:49
Effluent MS	480-178459-3 MS	C2403.D	11/21/2020 18:18
Effluent MSD	480-178459-3 MSD	C2404.D	11/21/2020 18:43

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab File ID: C2263.D BFB Injection Date: 11/18/2020

Instrument ID: HP5973C BFB Injection Time: 14:24

Analysis Batch No.: 559712

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.3	
75	30.0 - 60.0 % of mass 95	51.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	Greater than 50% of mass 95	87.2	
175	5.0 - 9.0 % of mass 174	6.3	(7.2) 1
176	95.0 - 101.0 % of mass 174	87.4	(100.2) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-559712/13	C2265.D	11/18/2020	15:16
	IC 480-559712/14	C2266.D	11/18/2020	15:42
	IC 480-559712/15	C2267.D	11/18/2020	16:07
	IC 480-559712/16	C2268.D	11/18/2020	16:32
	IC 480-559712/17	C2269.D	11/18/2020	16:57
	ICIS 480-559712/18	C2270.D	11/18/2020	17:22
	IC 480-559712/19	C2271.D	11/18/2020	17:47
	IC 480-559712/20	C2272.D	11/18/2020	18:12
	ICV 480-559712/34	C2286.D	11/18/2020	23:57

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab File ID: C2379.D BFB Injection Date: 11/21/2020

Instrument ID: HP5973C BFB Injection Time: 08:06

Analysis Batch No.: 560291

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	51.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.8	(0.9) 1
174	Greater than 50% of mass 95	87.8	
175	5.0 - 9.0 % of mass 174	5.7	(6.5) 1
176	95.0 - 101.0 % of mass 174	87.2	(99.3) 1
177	5.0 - 9.0 % of mass 176	5.1	(5.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-560291/3	C2380.D	11/21/2020	8:41
	LCS 480-560291/5	C2382.D	11/21/2020	9:31
	MB 480-560291/7	C2384.D	11/21/2020	10:21
Influent	480-178459-1	C2394.D	11/21/2020	14:35
Mid	480-178459-2	C2395.D	11/21/2020	15:00
Effluent	480-178459-3	C2396.D	11/21/2020	15:24
DUP	480-178459-4	C2397.D	11/21/2020	15:49
Effluent MS	480-178459-3 MS	C2403.D	11/21/2020	18:18
Effluent MSD	480-178459-3 MSD	C2404.D	11/21/2020	18:43

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Sample No.: ICIS 480-559712/18 Date Analyzed: 11/18/2020 17:22

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): C2270.D Heated Purge: (Y/N) N

Calibration ID: 40674

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		200563	4.93	389943	7.24	434458	9.11
UPPER LIMIT		401126	5.43	779886	7.74	868916	9.61
LOWER LIMIT		100282	4.43	194972	6.74	217229	8.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 480-559712/34		195362	4.93	385597	7.24	428468	9.11
CCVIS 480-560291/3		190432	4.93	357556	7.24	384074	9.11

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Sample No.: CCVIS 480-560291/3 Date Analyzed: 11/21/2020 08:41

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): C2380.D Heated Purge: (Y/N) N

Calibration ID: 40677

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		190432	4.93	357556	7.24	384074	9.11
UPPER LIMIT		380864	5.43	715112	7.74	768148	9.61
LOWER LIMIT		95216	4.43	178778	6.74	192037	8.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-560291/5		199193	4.93	381700	7.24	404049	9.11
MB 480-560291/7		196160	4.93	348435	7.24	384582	9.11
480-178459-1	Influent	176833	4.93	336498	7.24	373532	9.11
480-178459-2	Mid	179301	4.93	353467	7.24	392478	9.11
480-178459-3	Effluent	181756	4.93	344118	7.24	374692	9.11
480-178459-4	DUP	185312	4.93	345624	7.24	388727	9.11
480-178459-3 MS	Effluent MS	190261	4.93	366874	7.24	400577	9.11
480-178459-3 MSD	Effluent MSD	189625	4.93	359709	7.24	383788	9.11

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Influent Lab Sample ID: 480-178459-1

Matrix: Water Lab File ID: C2394.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:45

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 14:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Influent Lab Sample ID: 480-178459-1

Matrix: Water Lab File ID: C2394.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:45

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 14:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-20-9	Methyl acetate	ND		2.5	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		77-120
460-00-4	4-Bromofluorobenzene (Surr)	91		73-120
1868-53-7	Dibromofluoromethane (Surr)	95		75-123

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2394.D
Lims ID: 480-178459-D-1
Client ID: Influent
Sample Type: Client
Inject. Date: 21-Nov-2020 14:35:30 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-178459-D-1
Misc. Info.: 480-0095148-016
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 20:24:35 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1677

First Level Reviewer: farrellr Date: 21-Nov-2020 20:24:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	176833	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	85	336498	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.111	9.112	-0.001	95	373532	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.459	-0.010	93	292898	23.8	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	99	163844	24.6	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	94	868339	23.0	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	278369	22.7	
10 Dichlorodifluoromethane	85		1.132				ND	
12 Chloromethane	50		1.298				ND	
13 Vinyl chloride	62		1.401				ND	
14 Bromomethane	94		1.692				ND	
15 Chloroethane	64		1.785				ND	
17 Trichlorofluoromethane	101		2.003				ND	
21 112TCTFE	101		2.500				ND	
22 1,1-Dichloroethene	96		2.500				ND	
23 Acetone	43		2.624				ND	
26 Carbon disulfide	76		2.686				ND	
27 Methyl acetate	43		2.904				ND	
30 Methylene Chloride	84		2.997				ND	7
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	15	1520	0.0504	7
34 trans-1,2-Dichloroethene	96		3.205				ND	
39 1,1-Dichloroethane	63		3.578				ND	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	77	5879	0.4983	
43 2-Butanone (MEK)	43		4.086				ND	
50 Chloroform	83		4.324				ND	
51 1,1,1-Trichloroethane	97		4.417				ND	
52 Cyclohexane	56		4.427				ND	
55 Carbon tetrachloride	117		4.531				ND	
57 Benzene	78		4.707				ND	
58 1,2-Dichloroethane	62		4.769				ND	
62 Trichloroethene	95		5.194				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		5.298				ND	
65 1,2-Dichloropropane	63		5.391				ND	
68 Dichlorobromomethane	83		5.619				ND	
72 cis-1,3-Dichloropropene	75		5.940				ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.044				ND	U
74 Toluene	92		6.158				ND	
77 trans-1,3-Dichloropropene	75		6.365				ND	
79 1,1,2-Trichloroethane	83		6.521				ND	
81 Tetrachloroethene	166		6.573				ND	
80 2-Hexanone	43		6.676				ND	
83 Chlorodibromomethane	129		6.821				ND	
84 Ethylene Dibromide	107		6.904				ND	
87 Chlorobenzene	112		7.267				ND	
88 Ethylbenzene	91		7.319				ND	
90 m-Xylene & p-Xylene	106		7.412				ND	
91 o-Xylene	106		7.733				ND	
92 Styrene	104		7.754				ND	
95 Bromoform	173		7.951				ND	
94 Isopropylbenzene	105		8.013				ND	
97 1,1,2,2-Tetrachloroethane	83		8.324				ND	
111 1,3-Dichlorobenzene	146		9.060				ND	
113 1,4-Dichlorobenzene	146		9.132				ND	
116 1,2-Dichlorobenzene	146		9.443				ND	
117 1,2-Dibromo-3-Chloropropane	75		10.117				ND	
119 1,2,4-Trichlorobenzene	180		10.770				ND	
S 124 Xylenes, Total	1		30.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent

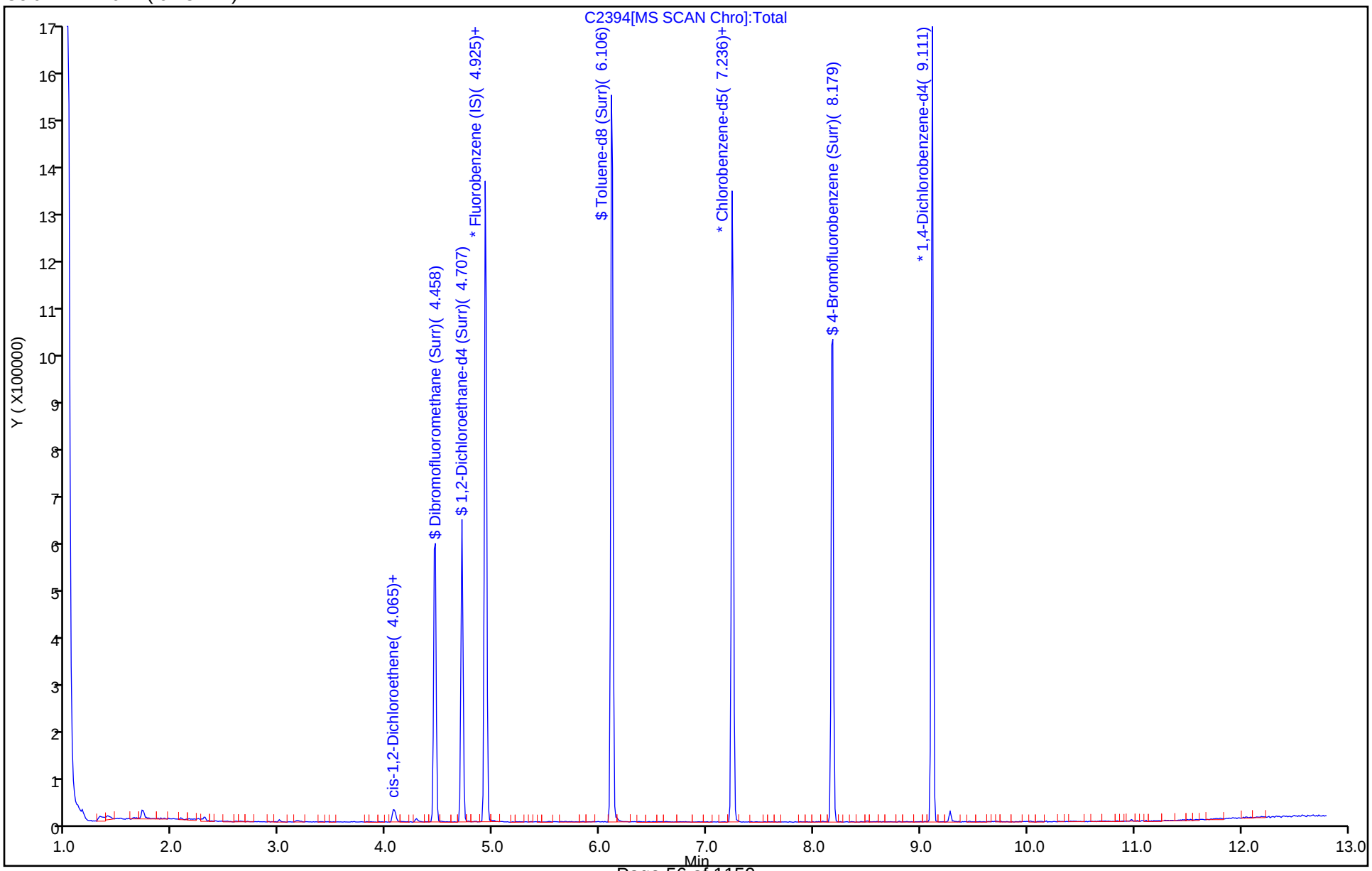
Report Date: 21-Nov-2020 20:24:35 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2394.D

Injection Date:	21-Nov-2020 14:35:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	480-178459-D-1	Lab Sample ID:	480-178459-1	Worklist Smp#:	16
Client ID:	Influent				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



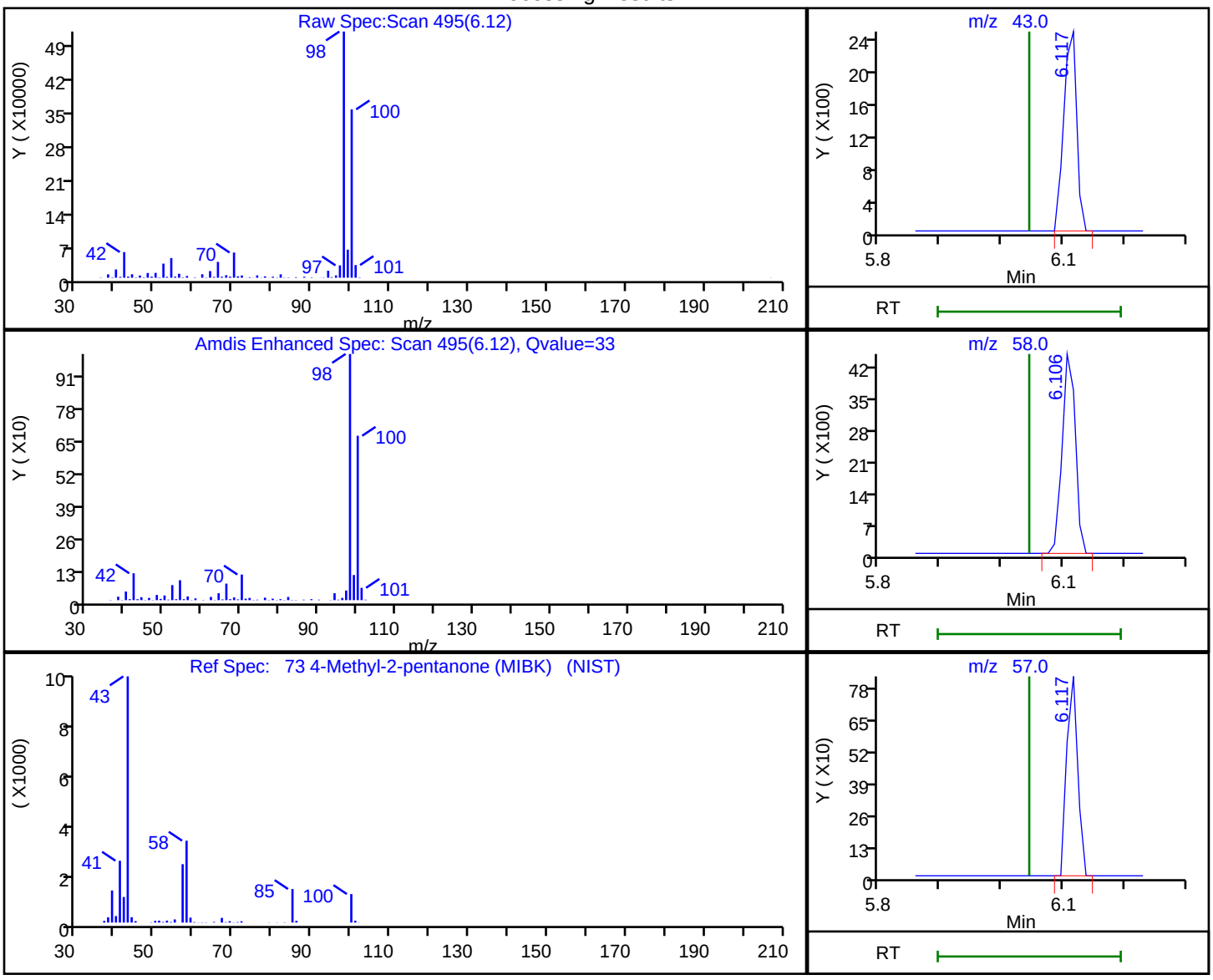
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2394.D				
Injection Date:	21-Nov-2020 14:35:30	Instrument ID:	HP5973C		
Lims ID:	480-178459-D-1	Lab Sample ID:	480-178459-1		
Client ID:	Influent				
Operator ID:	AM	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	C-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

73 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
6.12	43.00	3557	0.294159
6.11	58.00	6695	
6.12	57.00	1029	

Reviewer: farrellr, 21-Nov-2020 20:24:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Mid Lab Sample ID: 480-178459-2

Matrix: Water Lab File ID: C2395.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:35

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 15:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Mid Lab Sample ID: 480-178459-2

Matrix: Water Lab File ID: C2395.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:35

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 15:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-20-9	Methyl acetate	ND		2.5	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	88		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		77-120
460-00-4	4-Bromofluorobenzene (Surr)	86		73-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-123

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2395.D
Lims ID: 480-178459-D-2
Client ID: Mid
Sample Type: Client
Inject. Date: 21-Nov-2020 15:00:30 ALS Bottle#: 11 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-178459-D-2
Misc. Info.: 480-0095148-017
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 20:25:05 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1677

First Level Reviewer: farrellr Date: 21-Nov-2020 20:25:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	100	179301	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	85	353467	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.111	9.112	-0.001	94	392478	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.459	-0.010	93	287882	23.1	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	99	161450	23.9	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	94	876792	22.1	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	276886	21.5	
10 Dichlorodifluoromethane	85		1.132				ND	U
12 Chloromethane	50		1.298				ND	
13 Vinyl chloride	62		1.401				ND	
14 Bromomethane	94		1.692				ND	
15 Chloroethane	64		1.785				ND	
17 Trichlorofluoromethane	101		2.003				ND	
21 112TCTFE	101		2.500				ND	
22 1,1-Dichloroethene	96		2.500				ND	
23 Acetone	43		2.624				ND	
26 Carbon disulfide	76		2.686				ND	
27 Methyl acetate	43		2.904				ND	
30 Methylene Chloride	84		2.997				ND	
32 Methyl tert-butyl ether	73		3.194				ND	
34 trans-1,2-Dichloroethene	96		3.205				ND	
39 1,1-Dichloroethane	63		3.578				ND	
45 cis-1,2-Dichloroethene	96		4.065				ND	
43 2-Butanone (MEK)	43		4.086				ND	
50 Chloroform	83		4.324				ND	
51 1,1,1-Trichloroethane	97		4.417				ND	
52 Cyclohexane	56		4.427				ND	
55 Carbon tetrachloride	117		4.531				ND	
57 Benzene	78		4.707				ND	
58 1,2-Dichloroethane	62		4.769				ND	
62 Trichloroethene	95		5.194				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		5.298				ND	
65 1,2-Dichloropropane	63		5.391				ND	
68 Dichlorobromomethane	83		5.619				ND	
72 cis-1,3-Dichloropropene	75		5.940				ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.044				ND	U
74 Toluene	92		6.158				ND	
77 trans-1,3-Dichloropropene	75		6.365				ND	
79 1,1,2-Trichloroethane	83		6.521				ND	
81 Tetrachloroethene	166		6.573				ND	
80 2-Hexanone	43		6.676				ND	
83 Chlorodibromomethane	129		6.821				ND	
84 Ethylene Dibromide	107		6.904				ND	
87 Chlorobenzene	112		7.267				ND	
88 Ethylbenzene	91		7.319				ND	
90 m-Xylene & p-Xylene	106		7.412				ND	
91 o-Xylene	106		7.733				ND	
92 Styrene	104		7.754				ND	
95 Bromoform	173		7.951				ND	
94 Isopropylbenzene	105		8.013				ND	
97 1,1,2,2-Tetrachloroethane	83		8.324				ND	
111 1,3-Dichlorobenzene	146		9.060				ND	
113 1,4-Dichlorobenzene	146		9.132				ND	
116 1,2-Dichlorobenzene	146		9.443				ND	
117 1,2-Dibromo-3-Chloropropane	75		10.117				ND	
119 1,2,4-Trichlorobenzene	180		10.770				ND	
S 124 Xylenes, Total	1		30.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent

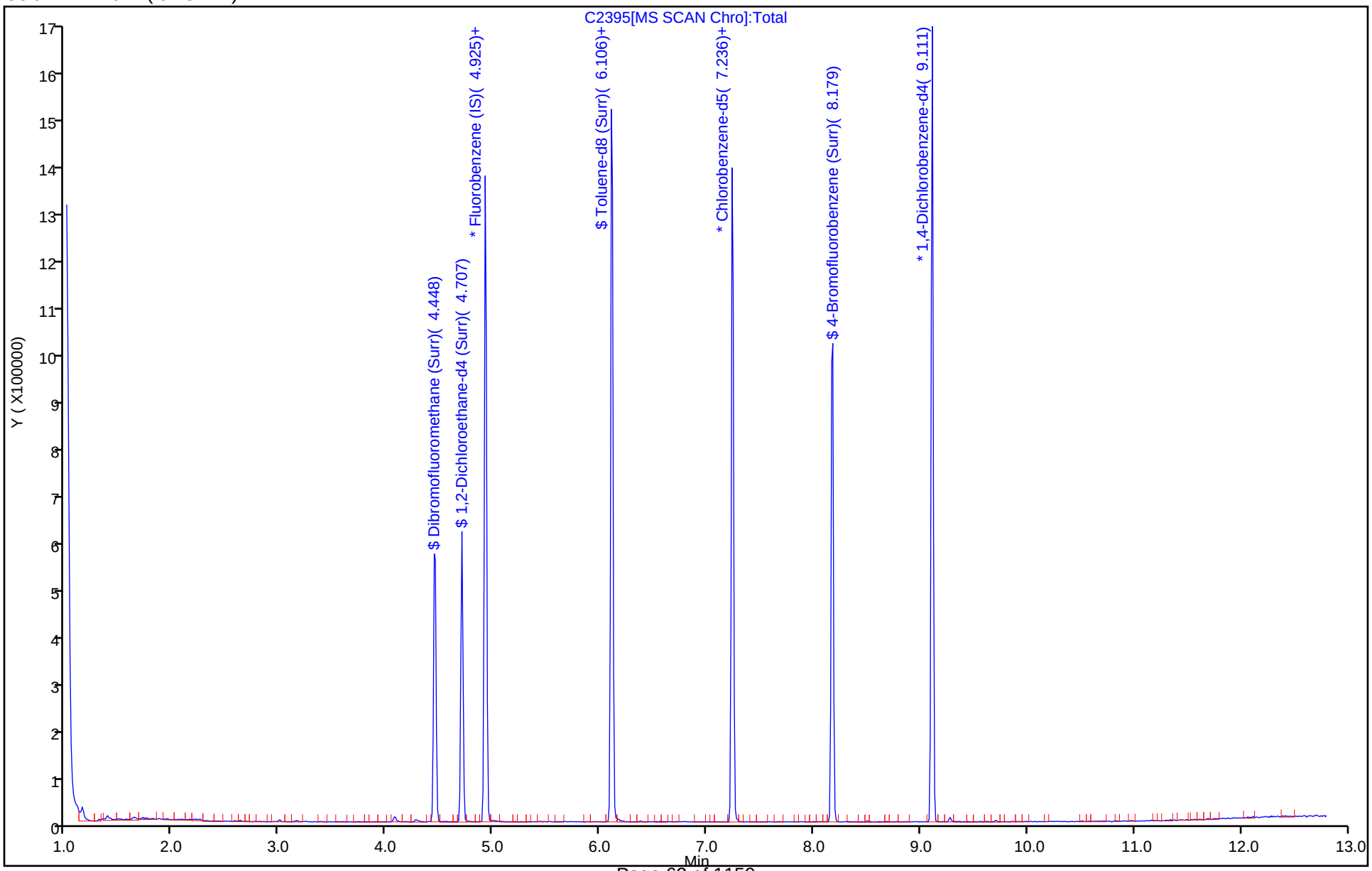
Report Date: 21-Nov-2020 20:25:06 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2395.D

Injection Date:	21-Nov-2020 15:00:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	480-178459-D-2	Lab Sample ID:	480-178459-2	Worklist Smp#:	17
Client ID:	Mid				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



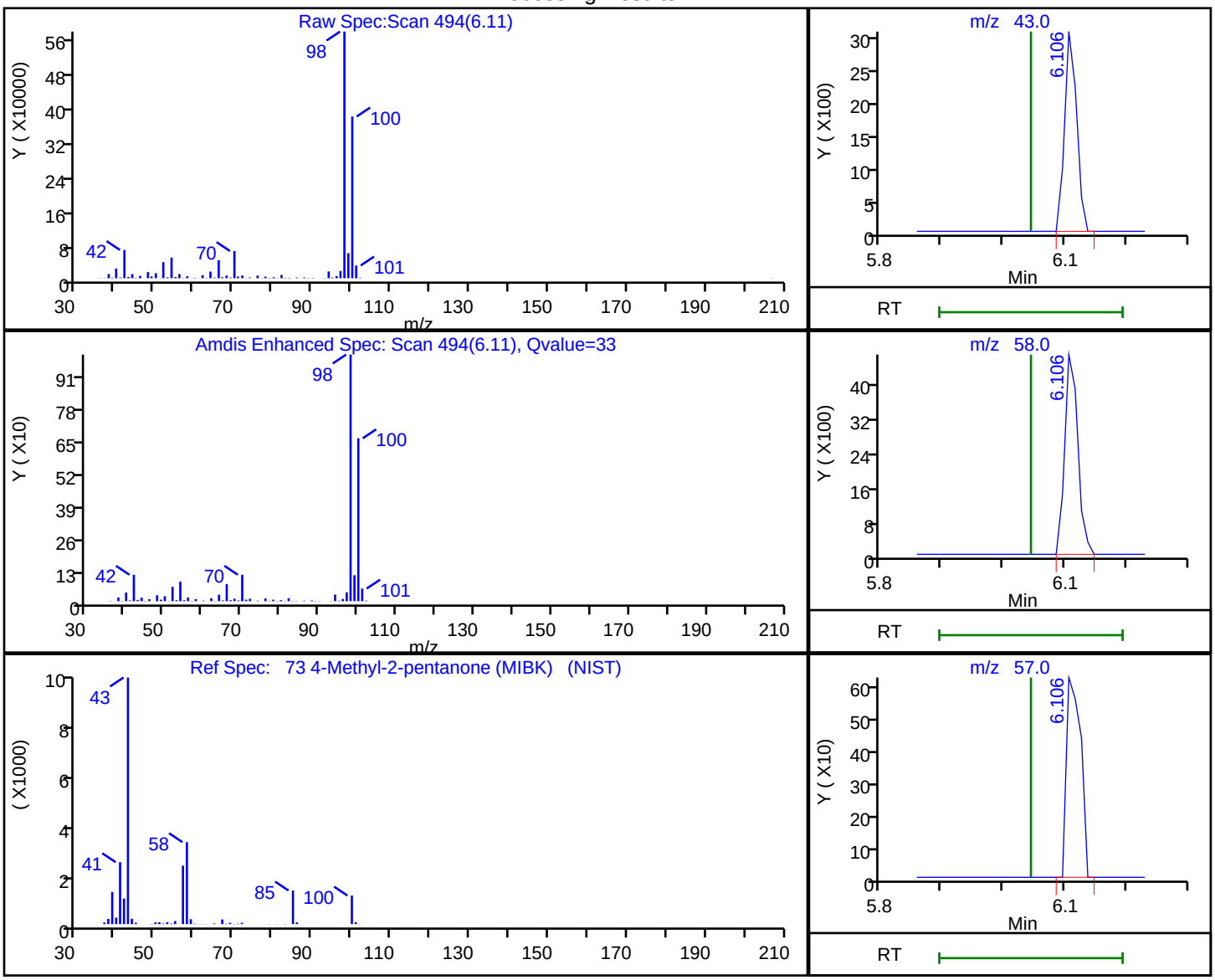
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2395.D				
Injection Date:	21-Nov-2020 15:00:30	Instrument ID:	HP5973C		
Lims ID:	480-178459-D-2	Lab Sample ID:	480-178459-2		
Client ID:	Mid				
Operator ID:	AM	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	C-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

73 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
6.11	43.00	4143	0.326173
6.11	58.00	6984	
6.11	57.00	1015	

Reviewer: farrellr, 21-Nov-2020 20:24:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

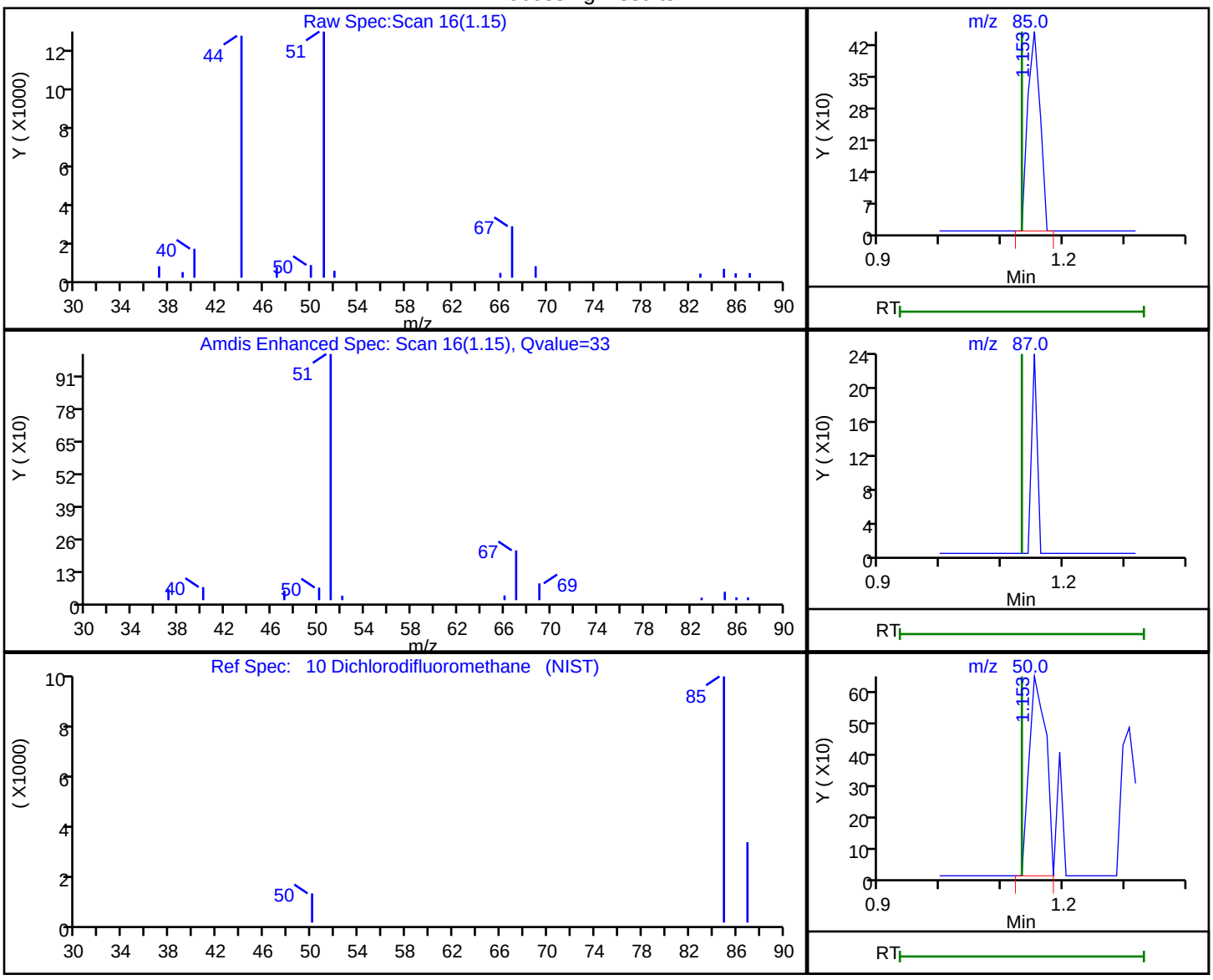
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2395.D				
Injection Date:	21-Nov-2020 15:00:30	Instrument ID:	HP5973C		
Lims ID:	480-178459-D-2	Lab Sample ID:	480-178459-2		
Client ID:	Mid				
Operator ID:	AM	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	C-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

10 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.15	85.00	628	0.058662
1.15	50.00	1219	
1.13	87.00	0	

Reviewer: farrellr, 21-Nov-2020 20:24:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent Lab Sample ID: 480-178459-3

Matrix: Water Lab File ID: C2396.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 15:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	F2	1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	F2	1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND	F2	10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND	F2	10	
71-43-2	Benzene	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent Lab Sample ID: 480-178459-3

Matrix: Water Lab File ID: C2396.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 15:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-20-9	Methyl acetate	ND		2.5	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	94		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-123

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2396.D
Lims ID: 480-178459-D-3
Client ID: Effluent
Sample Type: Client
Inject. Date: 21-Nov-2020 15:24:30 ALS Bottle#: 12 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-178459-D-3
Misc. Info.: 480-0095148-018
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 20:25:34 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1677

First Level Reviewer: farrellr Date: 21-Nov-2020 20:25:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	181756	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	344118	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.111	9.112	-0.001	95	374692	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.459	-0.010	93	295971	23.4	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	99	161480	23.6	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	94	909853	23.5	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	297147	23.7	
10 Dichlorodifluoromethane	85		1.132				ND	U
12 Chloromethane	50		1.298				ND	
13 Vinyl chloride	62		1.401				ND	
14 Bromomethane	94		1.692				ND	
15 Chloroethane	64		1.785				ND	
17 Trichlorofluoromethane	101		2.003				ND	
21 112TCTFE	101		2.500				ND	
22 1,1-Dichloroethene	96		2.500				ND	
23 Acetone	43		2.624				ND	
26 Carbon disulfide	76		2.686				ND	
27 Methyl acetate	43		2.904				ND	
30 Methylene Chloride	84		2.997				ND	7
32 Methyl tert-butyl ether	73		3.194				ND	
34 trans-1,2-Dichloroethene	96		3.205				ND	
39 1,1-Dichloroethane	63		3.578				ND	
45 cis-1,2-Dichloroethene	96		4.065				ND	
43 2-Butanone (MEK)	43		4.086				ND	
50 Chloroform	83		4.324				ND	
51 1,1,1-Trichloroethane	97		4.417				ND	
52 Cyclohexane	56		4.427				ND	
55 Carbon tetrachloride	117		4.531				ND	
57 Benzene	78		4.707				ND	
58 1,2-Dichloroethane	62		4.769				ND	U
62 Trichloroethene	95		5.194				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		5.298				ND	
65 1,2-Dichloropropane	63		5.391				ND	
68 Dichlorobromomethane	83		5.619				ND	
72 cis-1,3-Dichloropropene	75		5.940				ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.044				ND	
74 Toluene	92		6.158				ND	
77 trans-1,3-Dichloropropene	75		6.365				ND	
79 1,1,2-Trichloroethane	83		6.521				ND	
81 Tetrachloroethene	166		6.573				ND	
80 2-Hexanone	43		6.676				ND	
83 Chlorodibromomethane	129		6.821				ND	
84 Ethylene Dibromide	107		6.904				ND	
87 Chlorobenzene	112		7.267				ND	
88 Ethylbenzene	91		7.319				ND	
90 m-Xylene & p-Xylene	106		7.412				ND	
91 o-Xylene	106		7.733				ND	
92 Styrene	104		7.754				ND	
95 Bromoform	173		7.951				ND	
94 Isopropylbenzene	105		8.013				ND	
97 1,1,2,2-Tetrachloroethane	83		8.324				ND	
111 1,3-Dichlorobenzene	146		9.060				ND	
113 1,4-Dichlorobenzene	146		9.132				ND	
116 1,2-Dichlorobenzene	146		9.443				ND	
117 1,2-Dibromo-3-Chloropropane	75		10.117				ND	
119 1,2,4-Trichlorobenzene	180		10.770				ND	
S 124 Xylenes, Total	1		30.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent

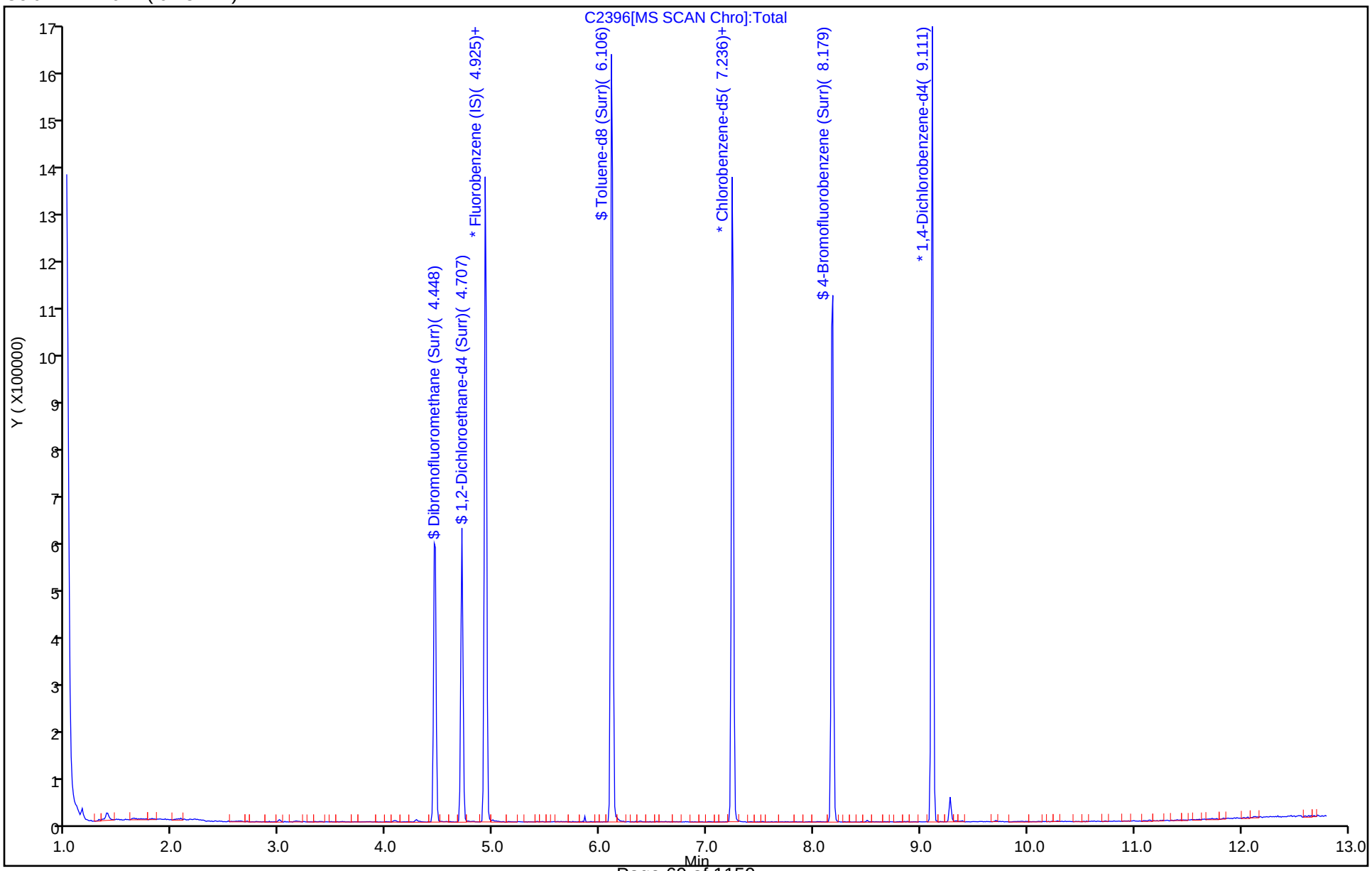
Report Date: 21-Nov-2020 20:25:34 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2396.D

Injection Date:	21-Nov-2020 15:24:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	480-178459-D-3	Lab Sample ID:	480-178459-3	Worklist Smp#:	18
Client ID:	Effluent				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



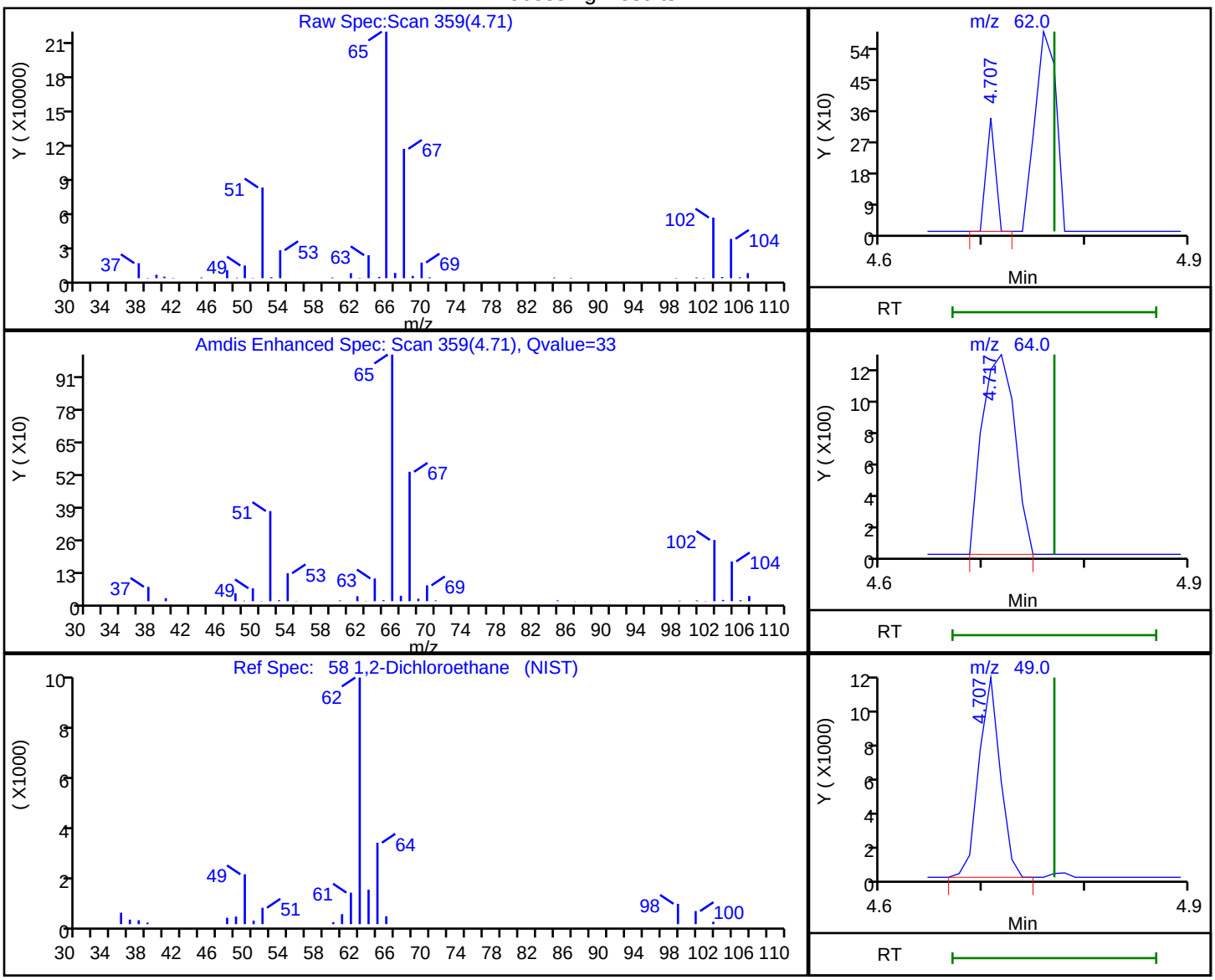
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2396.D				
Injection Date:	21-Nov-2020 15:24:30	Instrument ID:	HP5973C		
Lims ID:	480-178459-D-3	Lab Sample ID:	480-178459-3		
Client ID:	Effluent				
Operator ID:	AM	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	C-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

58 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.71	62.00	206	0.014189
4.72	64.00	2700	
4.71	49.00	15976	

Reviewer: farrellr, 21-Nov-2020 20:25:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

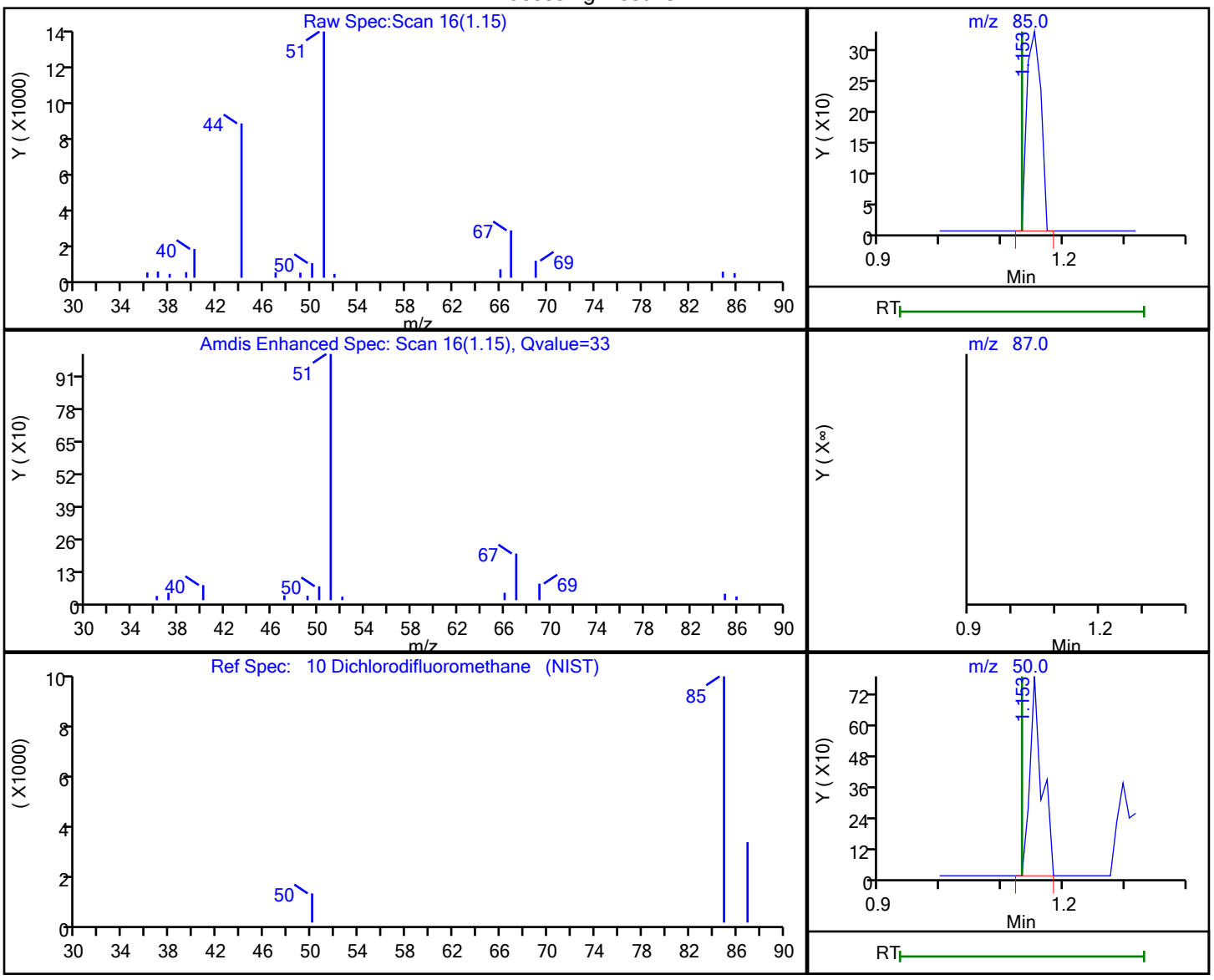
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2396.D				
Injection Date:	21-Nov-2020 15:24:30	Instrument ID:	HP5973C		
Lims ID:	480-178459-D-3	Lab Sample ID:	480-178459-3		
Client ID:	Effluent				
Operator ID:	AM	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	C-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

10 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.15	85.00	517	0.047641
1.15	50.00	1078	
1.13	87.00	0	

Reviewer: farrellr, 21-Nov-2020 20:25:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: DUP Lab Sample ID: 480-178459-4

Matrix: Water Lab File ID: C2397.D

Analysis Method: 8260C Date Collected: 11/19/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 15:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: DUP Lab Sample ID: 480-178459-4

Matrix: Water Lab File ID: C2397.D

Analysis Method: 8260C Date Collected: 11/19/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 15:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-20-9	Methyl acetate	ND		2.5	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		77-120
460-00-4	4-Bromofluorobenzene (Surr)	87		73-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-123

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2397.D
Lims ID: 480-178459-D-4
Client ID: DUP
Sample Type: Client
Inject. Date: 21-Nov-2020 15:49:30 ALS Bottle#: 13 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-178459-D-4
Misc. Info.: 480-0095148-019
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 20:25:34 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1677

First Level Reviewer: farrellr Date: 21-Nov-2020 20:25:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	185312	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	345624	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.112	0.000	94	388727	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.459	-0.010	93	302560	23.5	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	98	168022	24.1	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	94	888046	22.9	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	274536	21.8	
10 Dichlorodifluoromethane	85		1.132				ND	
12 Chloromethane	50		1.298				ND	
13 Vinyl chloride	62		1.401				ND	
14 Bromomethane	94		1.692				ND	
15 Chloroethane	64		1.785				ND	
17 Trichlorofluoromethane	101		2.003				ND	
21 112TCTFE	101		2.500				ND	
22 1,1-Dichloroethene	96		2.500				ND	
23 Acetone	43		2.624				ND	
26 Carbon disulfide	76		2.686				ND	
27 Methyl acetate	43		2.904				ND	
30 Methylene Chloride	84		2.997				ND	
32 Methyl tert-butyl ether	73		3.194				ND	
34 trans-1,2-Dichloroethene	96		3.205				ND	
39 1,1-Dichloroethane	63		3.578				ND	
45 cis-1,2-Dichloroethene	96		4.065				ND	
43 2-Butanone (MEK)	43		4.086				ND	
50 Chloroform	83		4.324				ND	
51 1,1,1-Trichloroethane	97		4.417				ND	
52 Cyclohexane	56		4.427				ND	
55 Carbon tetrachloride	117		4.531				ND	
57 Benzene	78		4.707				ND	
58 1,2-Dichloroethane	62		4.769				ND	
62 Trichloroethene	95		5.194				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		5.298				ND	
65 1,2-Dichloropropane	63		5.391				ND	
68 Dichlorobromomethane	83		5.619				ND	
72 cis-1,3-Dichloropropene	75		5.940				ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.044				ND	
74 Toluene	92		6.158				ND	
77 trans-1,3-Dichloropropene	75		6.365				ND	
79 1,1,2-Trichloroethane	83		6.521				ND	
81 Tetrachloroethene	166		6.573				ND	
80 2-Hexanone	43		6.676				ND	
83 Chlorodibromomethane	129		6.821				ND	
84 Ethylene Dibromide	107		6.904				ND	
87 Chlorobenzene	112		7.267				ND	
88 Ethylbenzene	91		7.319				ND	
90 m-Xylene & p-Xylene	106		7.412				ND	
91 o-Xylene	106		7.733				ND	
92 Styrene	104		7.754				ND	
95 Bromoform	173		7.951				ND	
94 Isopropylbenzene	105		8.013				ND	
97 1,1,2,2-Tetrachloroethane	83		8.324				ND	
111 1,3-Dichlorobenzene	146		9.060				ND	
113 1,4-Dichlorobenzene	146		9.132				ND	
116 1,2-Dichlorobenzene	146		9.443				ND	
117 1,2-Dibromo-3-Chloropropane	75		10.117				ND	
119 1,2,4-Trichlorobenzene	180		10.770				ND	
S 124 Xylenes, Total	1		30.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent

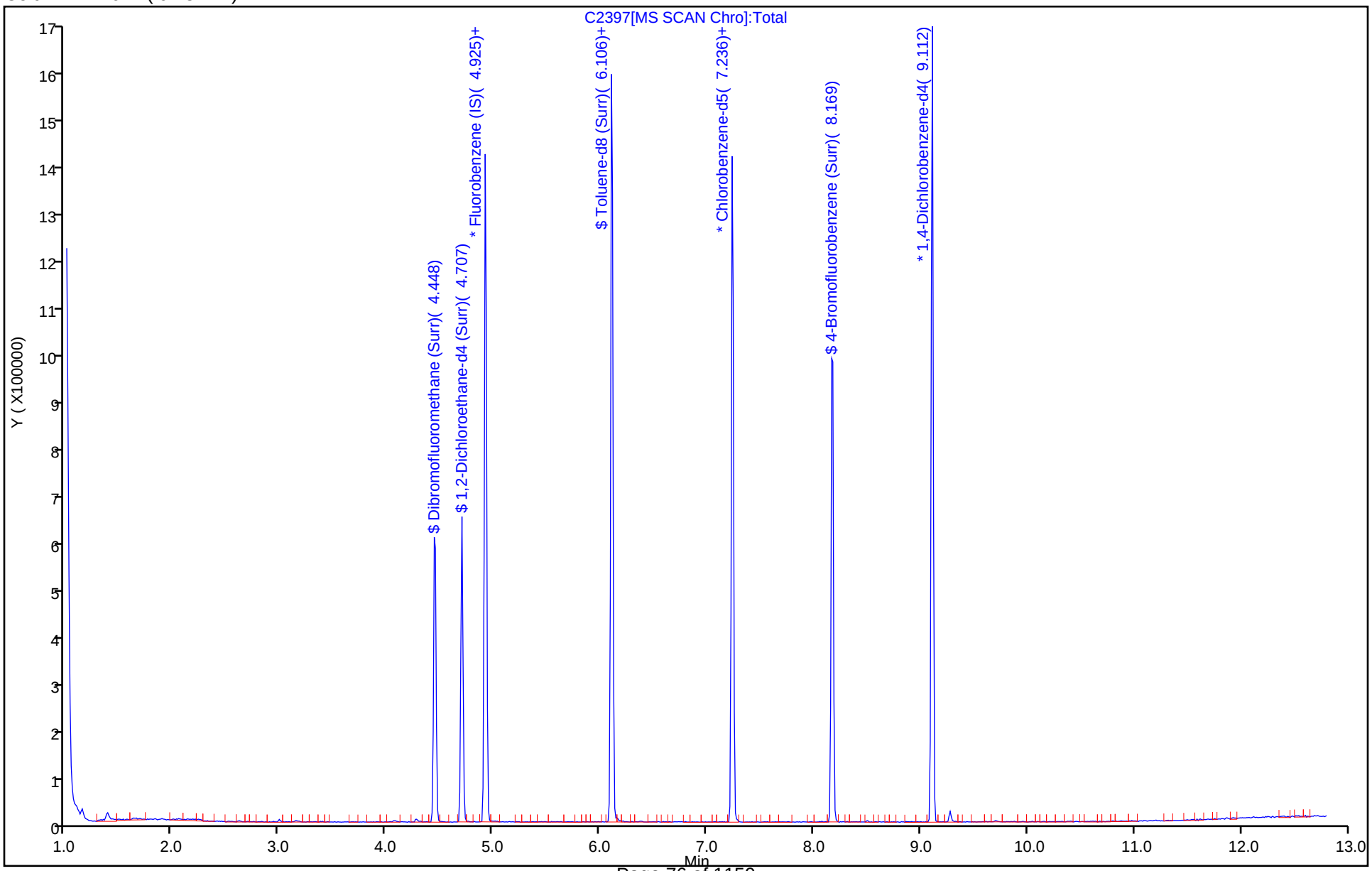
Report Date: 21-Nov-2020 20:25:58 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2397.D

Injection Date:	21-Nov-2020 15:49:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	480-178459-D-4	Lab Sample ID:	480-178459-4	Worklist Smp#:	19
Client ID:	DUP				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-559712/13	C2265.D
Level 2	IC 480-559712/14	C2266.D
Level 3	IC 480-559712/15	C2267.D
Level 4	IC 480-559712/16	C2268.D
Level 5	IC 480-559712/17	C2269.D
Level 6	ICIS 480-559712/18	C2270.D
Level 7	IC 480-559712/19	C2271.D
Level 8	IC 480-559712/20	C2272.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	1.2408 1.5022	1.5864 1.5528	1.3556 1.6588	1.4042	1.6404	Ave		1.4927			0.1000	9.9		20.0			
Chloromethane	1.3851 1.4598	1.6993 1.3811	1.4767 1.4218	1.3742	1.4802	Ave		1.4598			0.1000	7.3		20.0			
Vinyl chloride	1.1907 1.4968	1.6498 1.4916	1.4124 1.5328	1.4199	1.4847	Ave		1.4598			0.1000	9.0		20.0			
Butadiene	1.2478 1.3449	1.6112 1.3050	1.2808 1.3519	1.2305	1.3928	Ave		1.3456				8.9		20.0			
Bromomethane	+++++ 1.2392	1.5773 1.2238	1.4903 1.2530	1.3026	1.2789	Ave		1.3379			0.1000	10.4		20.0			
Chloroethane	1.1219 0.9909	1.2022 0.9453	0.9494 0.9486	0.9497	1.0181	Ave		1.0158			0.1000	9.5		20.0			
Trichlorofluoromethane	1.9627 2.5437	2.5556 2.5113	2.2244 2.5893	2.3821	2.5856	Ave		2.4193			0.1000	9.2		20.0			
Dichlorofluoromethane	2.1346 2.4260	2.5785 2.3660	2.3332 2.4052	2.3099	2.4411	Ave		2.3743				5.4		20.0			
Ethyl ether	1.2402 1.1430	1.2469 1.1299	1.2046 1.0617	1.1460	1.1566	Ave		1.1661				5.3		20.0			
Acrolein	0.0839 0.0739	0.0744 0.0800	0.0834 0.0594	0.0804	0.0759	Ave		0.0764				10.3		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	1.3093 1.4230	1.7032 1.4534	1.3472 1.4882	1.5065	1.4940	Ave		1.4656			0.1000	8.1		20.0			
1,1-Dichloroethene	1.3068 1.2943	1.3621 1.2987	1.2999 1.2849	1.3595	1.3043	Ave		1.3138			0.1000	2.3		20.0			
Acetone	0.7298 0.6459	0.7582 0.6642	0.6848 0.3486	0.6743	0.6734	Ave		0.6474			0.1000	19.5		20.0			
Iodomethane	2.4512 2.5875	2.6138 2.5876	2.6328 2.5642	2.6775	2.5779	Ave		2.5866				2.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	4.1347 4.2396	4.4128 4.3183	4.1911 4.3848	4.3722	4.3968	Ave		4.3063			0.1000	2.4		20.0			
Allyl chloride	1.7185 1.7225	1.7695 1.7304	1.6714 1.7214	1.6767	1.7683	Ave		1.7223				2.1		20.0			
Methyl acetate	1.2733 1.4093	1.5470 1.4323	1.4124 0.9724	1.4470	1.4212	Ave		1.3644			0.1000	12.8		20.0			
Methylene Chloride	2.6231 1.4729	1.8861 1.4601	1.7658 1.4068	1.6422	1.5654	Lin1	0.5460	1.4296			0.1000				0.9990		0.9900
2-Methyl-2-propanol	0.2996 0.3163	0.3299 0.3358	0.3160 +++++	0.3157	0.3374	Ave		0.3215				4.2		20.0			
Methyl tert-butyl ether	3.8230 4.2725	4.4353 4.3871	4.3434 4.1098	4.3840	4.3533	Ave		4.2636			0.1000	4.8		20.0			
trans-1,2-Dichloroethene	1.4336 1.4987	1.5127 1.5035	1.3494 1.4905	1.5604	1.5330	Ave		1.4852			0.1000	4.4		20.0			
Acrylonitrile	0.6986 0.7695	0.7911 0.7809	0.7614 0.5061	0.7789	0.7995	Ave		0.7357				13.3		20.0			
Hexane	1.6525 1.7329	1.9795 1.8196	1.6817 1.9044	1.7841	1.8108	Ave		1.7957				6.1		20.0			
1,1-Dichloroethane	2.1581 2.3454	2.5165 2.3306	2.2667 2.3105	2.4192	2.4489	Ave		2.3495			0.2000	4.8		20.0			
Vinyl acetate	2.6353 2.9554	2.8446 3.1599	2.7473 2.9350	2.7588	2.9247	Ave		2.8701				5.6		20.0			
2,2-Dichloropropane	1.2386 1.5485	1.4727 1.5596	1.3618 1.6540	1.5383	1.5233	Ave		1.4871				8.7		20.0			
cis-1,2-Dichloroethene	1.6845 1.6573	1.8217 1.6344	1.5878 1.5853	1.6954	1.6778	Ave		1.6680			0.1000	4.5		20.0			
2-Butanone (MEK)	0.9394 0.9441	1.0140 1.0006	0.9000 0.7011	0.9472	0.9915	Ave		0.9297			0.1000	10.7		20.0			
Chlorobromomethane	0.9817 0.9212	1.0198 0.9256	0.9653 0.8598	0.9513	0.9500	Ave		0.9468				5.0		20.0			
Tetrahydrofuran	+++++ 0.6362	0.9363 0.6463	0.7403 +++++	0.6754	0.6905	Ave		0.7208				15.5		20.0			
Chloroform	2.8204 2.5401	2.8929 2.5399	2.6676 2.4736	2.7455	2.5981	Ave		2.6598			0.2000	5.6		20.0			
1,1,1-Trichloroethane	1.6420 2.0538	2.1295 2.1153	1.8906 2.1401	2.0538	2.1236	Ave		2.0186			0.1000	8.5		20.0			
Cyclohexane	1.5738 2.1091	2.1822 2.1248	1.9946 2.1525	2.1607	2.1302	Ave		2.0535			0.1000	9.8		20.0			
Carbon tetrachloride	1.4755 1.8067	1.7290 1.8705	1.5507 1.9375	1.7672	1.8185	Ave		1.7444			0.1000	9.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	1.4406 1.8465	1.9669 1.8991	1.6964 1.9078	1.9247	1.9195	Ave		1.8252				9.6		20.0			
Benzene	4.5705 5.2570	5.4166 5.3077	5.1032 5.2712	5.3914	5.3230	Ave		5.2051			0.5000	5.3		20.0			
Isobutyl alcohol	0.0945 0.1099	0.0970 0.1149	0.1022 0.0589	0.1045	0.1151	Ave		0.0996				18.2		20.0			
1,2-Dichloroethane	1.8714 1.9573	2.2913 1.9874	2.0128 1.8598	2.0397	1.9555	Ave		1.9969			0.1000	6.7		20.0			
n-Heptane	1.6332 1.6151	1.7978 1.7229	1.5097 2.0677	1.5771	1.6878	Ave		1.7014				10.1		20.0			
Trichloroethene	1.3819 1.5044	1.5279 1.5281	1.4482 1.5151	1.5320	1.5302	Ave		1.4960			0.2000	3.6		20.0			
Methylcyclohexane	1.7822 2.4399	2.4613 2.5157	2.1510 2.4906	2.4776	2.4962	Ave		2.3518			0.1000	11.0		20.0			
1,2-Dichloropropane	1.1904 1.1998	1.2312 1.2211	1.0812 1.2059	1.1853	1.2148	Ave		1.1912			0.1000	3.9		20.0			
1,4-Dioxane	0.0129 0.0139	0.0136 0.0137	0.0139 0.0103	0.0155	0.0148	Ave		0.0136				11.5		20.0			
Dibromomethane	0.9074 1.0127	1.0355 1.0306	1.0125 0.9663	0.9901	1.0109	Ave		0.9958			0.1000	4.2		20.0			
Bromodichloromethane	1.4971 1.7176	1.8220 1.7903	1.5335 1.7997	1.6244	1.6953	Ave		1.6850			0.2000	7.3		20.0			
2-Chloroethyl vinyl ether	0.6781 0.8378	0.7935 0.9158	0.7328 0.9068	0.7735	0.8950	Ave		0.8167				10.7		20.0			
cis-1,3-Dichloropropene	1.4467 1.9148	1.8452 2.0287	1.6438 2.1360	1.7804	1.9147	Ave		1.8388			0.2000	11.8		20.0			
4-Methyl-2-pentanone (MIBK)	0.8313 0.9275	0.9163 0.9766	0.8663 0.8036	0.8956	0.9698	Ave		0.8984			0.1000	6.9		20.0			
Toluene	1.5963 1.6149	1.7754 1.6937	1.6233 1.7238	1.6632	1.7455	Ave		1.6795			0.4000	3.9		20.0			
trans-1,3-Dichloropropene	0.7060 0.8812	0.8329 0.9435	0.7592 1.0393	0.8235	0.9138	Ave		0.8624			0.1000	12.3		20.0			
Ethyl methacrylate	0.7424 0.8386	0.7642 0.9115	0.7751 0.9697	0.7614	0.8958	Ave		0.8323				10.2		20.0			
1,1,2-Trichloroethane	0.4719 0.5363	0.5501 0.5401	0.4889 0.5551	0.5176	0.5464	Ave		0.5258			0.1000	5.8		20.0			
Tetrachloroethene	0.7576 0.7739	0.8544 0.8120	0.7475 0.8358	0.7905	0.8045	Ave		0.7970			0.2000	4.7		20.0			
1,3-Dichloropropane	0.8726 1.0262	1.1053 1.0554	1.0009 1.0923	1.0502	1.1009	Ave		1.0380				7.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.5560 0.6081	0.6004 0.6511	0.5588 0.6517	0.5874	0.6613	Ave		0.6094			0.1000	6.9		20.0			
Dibromochloromethane	0.5846 0.6896	0.6569 0.7414	0.6361 0.8056	0.6495	0.7082	Ave		0.6840			0.1000	10.0		20.0			
1,2-Dibromoethane	0.6164 0.7119	0.6793 0.7305	0.5974 0.7738	0.6927	0.7439	Ave		0.6932				8.8		20.0			
Chlorobenzene	1.9084 1.9195	1.9888 1.9685	1.8829 2.0882	1.9419	2.0261	Ave		1.9655			0.5000	3.4		20.0			
Ethylbenzene	2.6266 3.0878	3.0886 3.2268	3.0181 3.3419	3.0999	3.2678	Ave		3.0947			0.1000	7.1		20.0			
1,1,1,2-Tetrachloroethane	0.5784 0.6932	0.6586 0.7338	0.6663 0.7606	0.6649	0.6739	Ave		0.6787				8.0		20.0			
m,p-Xylene	1.1077 1.2078	1.1579 1.2358	1.1578 1.2862	1.2128	1.2676	Ave		1.2042			0.1000	5.0		20.0			
o-Xylene	1.0924 1.2194	1.1554 1.2631	1.1973 1.2998	1.2553	1.2490	Ave		1.2165			0.3000	5.5		20.0			
Styrene	1.5205 1.8744	1.6388 2.0198	1.5796 2.1502	1.8475	1.9093	Ave		1.8175			0.3000	12.1		20.0			
Bromoform	0.4665 0.4738	0.4379 0.5192	0.4004 0.5870	0.4391	0.4496	Ave		0.4717			0.1000	12.2		20.0			
Isopropylbenzene	2.3829 2.9185	2.6493 3.1004	2.6408 3.3694	3.0498	3.1784	Ave		2.9112			0.1000	11.3		20.0			
Bromobenzene	0.7349 0.7529	0.7131 0.7988	0.7125 0.8853	0.7949	0.8287	Ave		0.7777				7.8		20.0			
1,1,2,2-Tetrachloroethane	0.8777 0.9061	0.8582 0.9458	0.8978 1.0316	0.9620	0.9702	Ave		0.9312			0.3000	6.1		20.0			
N-Propylbenzene	3.0772 3.4111	3.2589 3.6363	3.0632 3.9822	3.6044	3.7155	Ave		3.4686				9.3		20.0			
1,2,3-Trichloropropane	0.3356 0.3137	0.2889 0.3249	0.3118 0.3446	0.3572	0.3565	Ave		0.3291				7.3		20.0			
trans-1,4-Dichloro-2-butene	0.2564 0.2310	0.1800 0.2508	0.2114 0.2772	0.2264	0.2453	Ave		0.2348				12.7		20.0			
2-Chlorotoluene	0.5508 0.7223	0.7514 0.7641	0.7156 0.8247	0.8044	0.8065	Ave		0.7425				11.7		20.0			
1,3,5-Trimethylbenzene	2.0535 2.4877	2.2421 2.5966	2.1321 2.8353	2.5527	2.6244	Ave		2.4405				11.1		20.0			
4-Chlorotoluene	0.7422 0.7229	0.6609 0.7641	0.6994 0.8295	0.7932	0.7886	Ave		0.7501				7.3		20.0			
tert-Butylbenzene	0.4193 0.5627	0.4515 0.5938	0.5019 0.6619	0.5542	0.6082	Ave		0.5442				15.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.1142 2.5136	2.2268 2.6507	2.2694 2.8746	2.5606	2.6729	Ave		2.4854				10.4		20.0			
sec-Butylbenzene	2.2996 3.2136	2.8004 3.4170	2.7103 3.7642	3.2472	3.4021	Ave		3.1068				15.1		20.0			
4-Isopropyltoluene	2.2379 2.7363	2.4192 2.9684	2.3366 3.2950	2.7887	2.9059	Ave		2.7110				13.2		20.0			
1,3-Dichlorobenzene	1.4894 1.4513	1.3709 1.5180	1.4488 1.6647	1.6067	1.5823	Ave		1.5165			0.6000	6.4		20.0			
1,4-Dichlorobenzene	1.4894 1.4626	1.5032 1.5283	1.4937 1.6767	1.6105	1.6689	Ave		1.5542			0.5000	5.5		20.0			
n-Butylbenzene	2.0558 2.4605	2.4074 2.6347	2.1820 2.9104	2.6185	2.6999	Ave		2.4961				11.2		20.0			
1,2-Dichlorobenzene	1.3937 1.5022	1.5598 1.5686	1.5272 1.7209	1.6320	1.6350	Ave		1.5674			0.4000	6.3		20.0			
1,2-Dibromo-3-Chloropropane	0.1963 0.1957	0.1997 0.2167	0.1995 0.2394	0.2173	0.2132	Ave		0.2097			0.0500	7.2		20.0			
1,2,4-Trichlorobenzene	0.9589 1.1967	1.1832 1.2479	1.2185 1.3544	1.2429	1.2585	Ave		1.2076			0.2000	9.4		20.0			
Hexachlorobutadiene	0.4688 0.5110	0.5115 0.5613	0.4747 0.6244	0.5724	0.5459	Ave		0.5337				9.8		20.0			
Naphthalene	3.2801 3.7537	3.2391 4.0037	3.3210 4.3112	3.7691	3.9150	Ave		3.6991				10.5		20.0			
1,2,3-Trichlorobenzene	1.0889 1.1782	1.0402 1.2339	1.0849 1.3516	1.3139	1.2628	Ave		1.1943				9.6		20.0			
Dibromofluoromethane (Surr)	1.7601 1.7638	1.7935 1.6958	1.7993 1.6146	1.7837	1.6975	Ave		1.7385				3.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.9662 0.9474	0.9647 0.9190	0.9711 0.8516	0.9594	0.9421	Ave		0.9402				4.2		20.0			
Toluene-d8 (Surr)	2.9330 2.7094	2.8321 2.7282	2.7951 2.8086	2.7739	2.8790	Ave		2.8074				2.6		20.0			
4-Bromofluorobenzene (Surr)	0.9568 0.8838	0.9189 0.8652	0.9011 0.9734	0.8813	0.9037	Ave		0.9105				4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-559712/13	C2265.D
Level 2	IC 480-559712/14	C2266.D
Level 3	IC 480-559712/15	C2267.D
Level 4	IC 480-559712/16	C2268.D
Level 5	IC 480-559712/17	C2269.D
Level 6	ICIS 480-559712/18	C2270.D
Level 7	IC 480-559712/19	C2271.D
Level 8	IC 480-559712/20	C2272.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	3912 301280	12177 628911	20623 1347540	54276	129213	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	4367 292774	13043 559369	22466 1155002	53115	116596	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	3754 300200	12663 604108	21487 1245185	54881	116950	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	3934 269743	12367 528544	19485 1098185	47561	109705	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	+++++ 248539	12107 495678	22673 1017851	50348	100737	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	3537 198747	9228 382871	14444 770595	36709	80196	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	6188 510171	19616 1017112	33840 2103464	92074	203663	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	6730 486563	19792 958288	35496 1953918	89284	192285	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	3910 229246	9571 457628	18326 862501	44296	91101	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	1322 74100	2856 161955	6341 241345	15547	29876	2.00 125	5.00 250	10.0 500	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	4128 285405	13073 588662	20496 1208962	58229	117677	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	4120 259597	10455 525990	19775 1043809	52548	102737	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	11505 647713	29099 1345132	52091 1416096	130315	265219	2.00 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	7728 518960	20063 1048048	40054 2083024	103490	203059	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	13036 850297	33871 1749013	63760 3561979	168994	346328	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	5418 345470	13582 700834	25427 1398365	64809	139289	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	8029 565322	23748 1160235	42973 1579810	111856	223892	0.800 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	8270 295405	14477 591387	26864 1142845	63473	123302	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	9446 634318	25319 1359864	48073 +++++	122023	265751	4.00 250	10.0 500	20.0 +++++	50.0	100
Methyl tert-butyl ether	FB	Ave	12053 856915	34044 1776873	66078 3338648	169449	342901	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	4520 300589	11611 608929	20529 1210847	60313	120752	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	22026 1543333	60722 3162608	115835 4111531	301069	629718	4.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	5210 347562	15194 736983	25584 1547025	68959	142632	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	6804 470404	19316 943938	34484 1876974	93505	192898	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	16617 1185473	43668 2559656	83590 4768594	213266	460746	0.800 50.0	2.00 100	4.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	3905 310575	11304 631677	20717 1343630	59457	119986	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	5311 332397	13983 661977	24156 1287821	65529	132158	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	14809 946754	38917 2026410	68456 2847875	183059	390479	2.00 125	5.00 250	10.0 500	25.0	50.0
Chlorobromomethane	FB	Ave	3095 184765	7828 374898	14685 698462	36770	74831	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	+++++ 255181	14373 523557	22524 +++++	52211	108774	+++++ 50.0	2.00 100	4.00 +++++	10.0	20.0
Chloroform	FB	Ave	8892 509443	22205 1028692	40583 2009452	106119	204650	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	5177 411914	16345 856759	28762 1738544	79384	167273	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	4962 422999	16750 860590	30344 1748623	83514	167792	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	4652 362355	13271 757571	23591 1573909	68306	143243	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	4542 370337	15097 769187	25808 1549796	74392	151199	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	FB	Ave	14410 1054357	41576 2149706	77637 4282126	208389	419282	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	7445 551223	18620 1163430	38857 1196455	100945	226753	10.0 625	25.0 1250	50.0 2500	125	250
1,2-Dichloroethane	FB	Ave	5900 392557	17587 804922	30622 1510780	78839	154030	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	5149 323931	13799 697819	22968 1679743	60957	132942	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	4357 301722	11728 618897	22032 1230783	59215	120532	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	5619 489348	18892 1018913	32724 2023246	95766	196623	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	3753 240628	9450 494574	16448 979626	45813	95689	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	1499 108212	3966 215038	8016 322919	22858	45279	8.00 500	20.0 1000	40.0 2000	100	200
Dibromomethane	FB	Ave	2861 203118	7948 417433	15404 784984	38270	79630	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromodichloromethane	FB	Ave	4720 344486	13985 725095	23330 1461972	62787	133533	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	2138 168039	6091 370934	11149 736627	29898	70500	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	4561 384044	14163 821681	25007 1735168	68817	150817	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	24180 1808438	66566 3827918	124969 6321038	329467	740835	2.00 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	9286 629710	25796 1327782	46831 2711951	122366	266688	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	4107 343605	12102 739668	21902 1635025	60584	139611	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	4319 326993	11104 714576	22362 1525501	56018	136869	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	2745 209141	7992 423409	14105 873290	38081	83475	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	4407 301769	12414 636574	21565 1314971	58160	122909	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	5076 400172	16059 827361	28876 1718421	77267	168206	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	16172 1185705	43614 2552047	80602 5126700	216085	505213	2.00 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	3401 268898	9544 581236	18351 1267458	47785	108197	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	3586 277586	9870 572652	17236 1217435	50961	113656	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	11102 748514	28896 1543235	54321 3285207	142872	309553	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	15280 1204062	44876 2529668	87071 5257654	228070	499264	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3365 270324	9569 575272	19223 1196589	48922	102968	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	6444 470976	16824 968845	33403 2023434	89232	193664	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	6355 475495	16787 990228	34542 2044862	92357	190828	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	8845 730911	23811 1583476	45570 3382734	135923	291709	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	2714 184764	6363 407055	11551 923462	32304	68685	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	14691 1267947	44264 2652070	85285 5493116	237333	511052	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	4531 327088	11915 683326	23010 1443347	61862	133250	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	5411 393654	14339 809007	28994 1681894	74862	155994	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	18971 1481958	54449 3110458	98925 6492227	280487	597405	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	2069 136268	4827 277937	10069 561736	27800	57323	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1581 100367	3008 214566	6826 451869	17619	39444	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	3396 313797	12554 653655	23109 1344508	62600	129682	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	12660 1080791	37461 2221138	68856 4622402	198650	421966	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	4576 314084	11042 653602	22588 1352277	61724	126803	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	2585 244450	7544 507899	16209 1079170	43127	97786	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	13034 1092061	37205 2267429	73291 4686412	199264	429774	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	14177 1396157	46789 2922923	87529 6136774	252696	547016	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	13797 1188821	40420 2539169	75461 5371774	217013	467233	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	9182 630521	22905 1298489	46788 2713961	125032	254409	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1 Analy Batch No.: 559712

SDG No.:

Instrument ID: HP5973C GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2020 15:16 Calibration End Date: 11/18/2020 18:12 Calibration ID: 40674

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	9182 635438	25116 1307306	48240 2733581	125330	268345	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	12674 1068975	40223 2253715	70467 4744770	203770	434118	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	8592 652657	26061 1341804	49320 2805654	126999	262885	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1210 85022	3337 185365	6443 390373	16910	34273	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	5912 519922	19769 1067473	39351 2208002	96720	202345	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	2890 221990	8546 480124	15329 1017907	44546	87775	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	20222 1630835	54118 3424777	107252 7028598	293303	629480	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	6713 511889	17379 1055457	35036 2203484	102250	203041	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	346827 353751	344161 343408	342175 327907	344723	334270	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	190384 190005	185125 186099	184668 172948	185408	185526	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	1066394 1056493	1028707 1069390	1007987 1104636	1020415	1099665	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	347875 344630	333774 339137	324956 382857	324208	345189	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Lims ID: IC 0.4
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Nov-2020 15:16:30 ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 0.4
Misc. Info.: 480-0095057-013
Operator ID: RF Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 12:02:54 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: farrellr Date: 18-Nov-2020 19:59:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	197050	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	363583	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.111	0.001	95	385318	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	93	346827	25.0	25.3	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	99	190384	25.0	25.7	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	94	1066394	25.0	26.1	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	347875	25.0	26.3	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	91	3912	0.4000	0.3325	
12 Chloromethane	50	1.298	1.308	-0.010	76	4367	0.4000	0.3795	
13 Vinyl chloride	62	1.401	1.401	0.000	89	3754	0.4000	0.3263	
151 Butadiene	54	1.412	1.412	0.000	96	3934	0.4000	0.3709	
14 Bromomethane	94	1.692	1.692	0.000	86	9387	0.4000	0.8902	M
15 Chloroethane	64	1.775	1.774	0.001	91	3537	0.4000	0.4418	Ma
16 Dichlorofluoromethane	67	2.003	2.002	0.001	92	6730	0.4000	0.3596	
17 Trichlorofluoromethane	101	1.992	2.002	-0.010	82	6188	0.4000	0.3245	
18 Ethyl ether	59	2.293	2.293	0.000	63	3910	0.4000	0.4254	
20 Acrolein	56	2.479	2.469	0.010	0	1322	2.00	2.20	M
22 1,1-Dichloroethene	96	2.510	2.500	0.010	95	4120	0.4000	0.3979	
21 112TCTFE	101	2.490	2.500	-0.010	71	4128	0.4000	0.3573	
23 Acetone	43	2.624	2.624	0.000	20	11505	2.00	2.25	a
25 Iodomethane	142	2.655	2.655	0.000	98	7728	0.4000	0.3791	
26 Carbon disulfide	76	2.697	2.697	0.000	85	13036	0.4000	0.3841	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	85	5418	0.4000	0.3991	
27 Methyl acetate	43	2.914	2.904	0.010	95	8029	0.8000	0.7466	
30 Methylene Chloride	84	2.997	2.997	0.000	89	8270	0.4000	0.3520	
31 2-Methyl-2-propanol	59	3.163	3.163	0.000	74	9446	4.00	3.73	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	95	12053	0.4000	0.3587	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	93	4520	0.4000	0.3861	
33 Acrylonitrile	53	3.256	3.256	0.000	94	22026	4.00	3.80	a
35 Hexane	57	3.381	3.381	0.000	95	5210	0.4000	0.3681	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.588	3.578	0.010	93	6804	0.4000	0.3674	a
37 Vinyl acetate	43	3.630	3.629	0.001	97	16617	0.8000	0.7345	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	87	3905	0.4000	0.3332	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	75	5311	0.4000	0.4040	
43 2-Butanone (MEK)	43	4.096	4.085	0.011	100	14809	2.00	2.02	a
48 Chlorobromomethane	128	4.262	4.262	0.000	67	3095	0.4000	0.4147	
49 Tetrahydrofuran	42	4.282	4.272	0.010	85	6765	0.8000	1.19	
50 Chloroform	83	4.324	4.324	0.000	90	8892	0.4000	0.4242	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	93	5177	0.4000	0.3254	
52 Cyclohexane	56	4.417	4.427	-0.010	82	4962	0.4000	0.3066	a
55 Carbon tetrachloride	117	4.531	4.531	0.000	77	4652	0.4000	0.3383	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	84	4542	0.4000	0.3157	
57 Benzene	78	4.707	4.707	0.000	56	14410	0.4000	0.3512	
53 Isobutyl alcohol	43	4.718	4.718	0.000	44	7445	10.0	9.48	
58 1,2-Dichloroethane	62	4.759	4.769	-0.010	95	5900	0.4000	0.3749	
59 n-Heptane	43	4.842	4.842	0.000	77	5149	0.4000	0.3840	
62 Trichloroethene	95	5.194	5.194	0.000	89	4357	0.4000	0.3695	
64 Methylcyclohexane	83	5.288	5.298	-0.010	87	5619	0.4000	0.3031	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	91	3753	0.4000	0.3997	a
66 1,4-Dioxane	88	5.505	5.505	0.000	0	1499	8.00	7.59	M
67 Dibromomethane	93	5.505	5.505	0.000	96	2861	0.4000	0.3645	a
68 Dichlorobromomethane	83	5.619	5.619	0.000	97	4720	0.4000	0.3554	
69 2-Chloroethyl vinyl ether	63	5.816	5.826	-0.010	80	2138	0.4000	0.3321	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	93	4561	0.4000	0.3147	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	96	24180	2.00	1.85	
74 Toluene	92	6.158	6.158	0.000	97	9286	0.4000	0.3802	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	90	4107	0.4000	0.3275	
75 Ethyl methacrylate	69	6.396	6.386	0.010	82	4319	0.4000	0.3568	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	89	2745	0.4000	0.3590	
81 Tetrachloroethene	166	6.573	6.573	0.000	86	4407	0.4000	0.3802	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	89	5076	0.4000	0.3363	
80 2-Hexanone	43	6.676	6.676	0.000	95	16172	2.00	1.82	
83 Chlorodibromomethane	129	6.821	6.821	0.000	90	3401	0.4000	0.3419	
84 Ethylene Dibromide	107	6.904	6.904	0.000	94	3586	0.4000	0.3557	
87 Chlorobenzene	112	7.267	7.256	0.011	88	11102	0.4000	0.3884	
88 Ethylbenzene	91	7.319	7.319	0.000	97	15280	0.4000	0.3395	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	0	3365	0.4000	0.3409	M
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	96	6444	0.4000	0.3680	
91 o-Xylene	106	7.733	7.733	0.000	95	6355	0.4000	0.3592	
92 Styrene	104	7.754	7.754	0.000	95	8845	0.4000	0.3346	
95 Bromoform	173	7.951	7.951	0.000	90	2714	0.4000	0.3956	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	14691	0.4000	0.3274	
101 Bromobenzene	156	8.303	8.303	0.000	85	4531	0.4000	0.3780	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	94	5411	0.4000	0.3770	
99 N-Propylbenzene	91	8.345	8.345	0.000	98	18971	0.4000	0.3549	a
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	85	2069	0.4000	0.4078	a
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	73	1581	0.4000	0.4368	
103 2-Chlorotoluene	126	8.438	8.438	0.000	96	3396	0.4000	0.2968	
102 1,3,5-Trimethylbenzene	105	8.479	8.490	-0.011	91	12660	0.4000	0.3366	
105 4-Chlorotoluene	126	8.531	8.531	0.000	95	4576	0.4000	0.3958	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	2585	0.4000	0.3082	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	96	13034	0.4000	0.3403	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	93	14177	0.4000	0.2961	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	96	13797	0.4000	0.3302	
111 1,3-Dichlorobenzene	146	9.049	9.060	-0.011	95	9182	0.4000	0.3928	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	88	9182	0.4000	0.3833	
115 n-Butylbenzene	91	9.381	9.381	0.000	96	12674	0.4000	0.3294	a
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	94	8592	0.4000	0.3557	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	0	1210	0.4000	0.3743	M
119 1,2,4-Trichlorobenzene	180	10.759	10.770	-0.011	94	5912	0.4000	0.3176	
120 Hexachlorobutadiene	225	10.873	10.863	0.010	90	2890	0.4000	0.3513	
121 Naphthalene	128	10.977	10.977	0.000	96	20222	0.4000	0.3547	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	93	6713	0.4000	0.3647	
S 126 1,3-Dichloropropene, Total	1				0			0.6421	
S 125 1,2-Dichloroethene, Total	1				0			0.7901	
S 123 Total BTEX	1				0			1.80	
S 124 Xylenes, Total	1				0			0.7272	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00198	Amount Added:	0.40	Units: uL	
GAS CORP mix_00427	Amount Added:	0.40	Units: uL	
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent

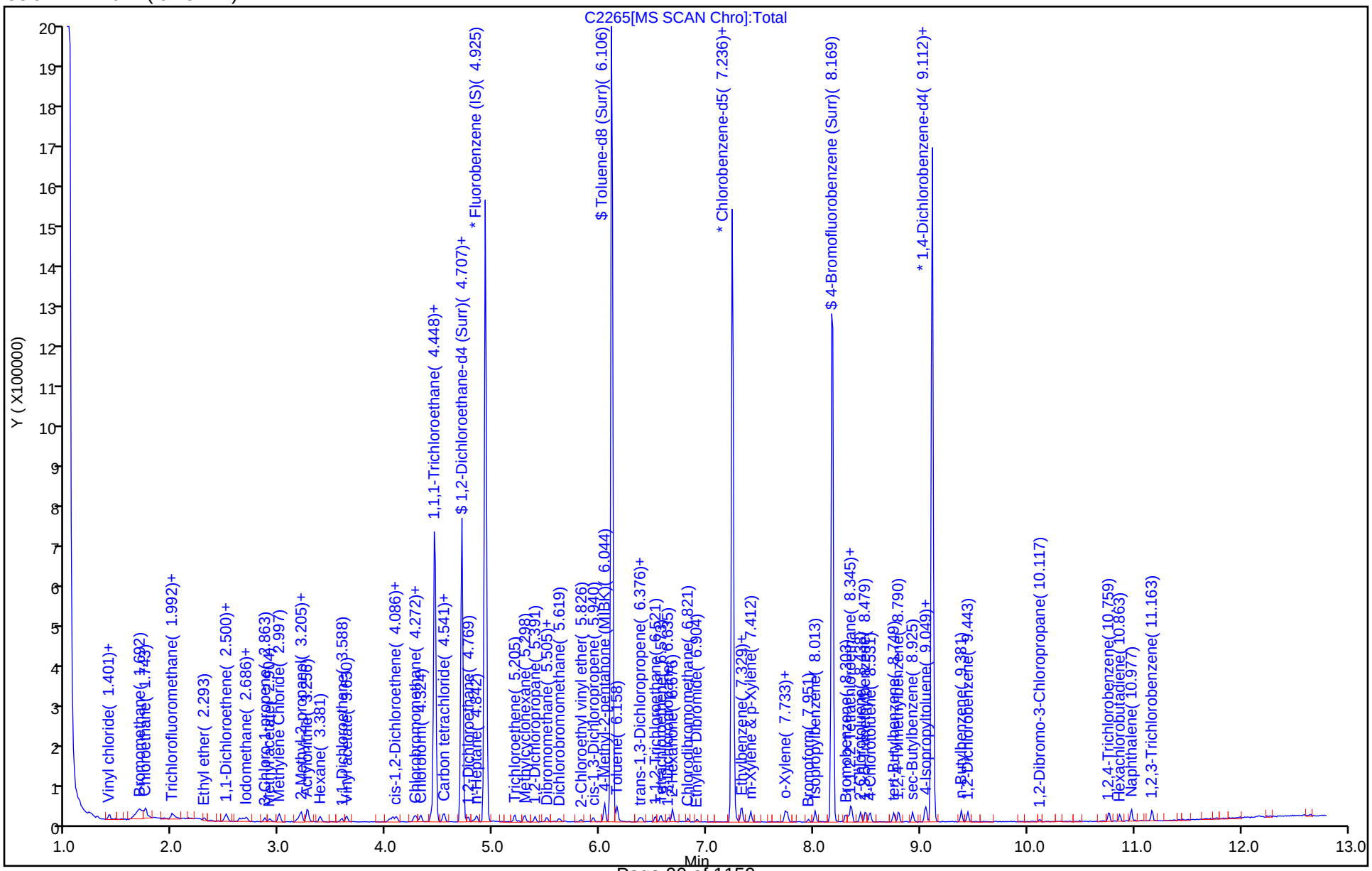
Report Date: 19-Nov-2020 12:02:57 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D

Injection Date:	18-Nov-2020 15:16:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	IC 0.4			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

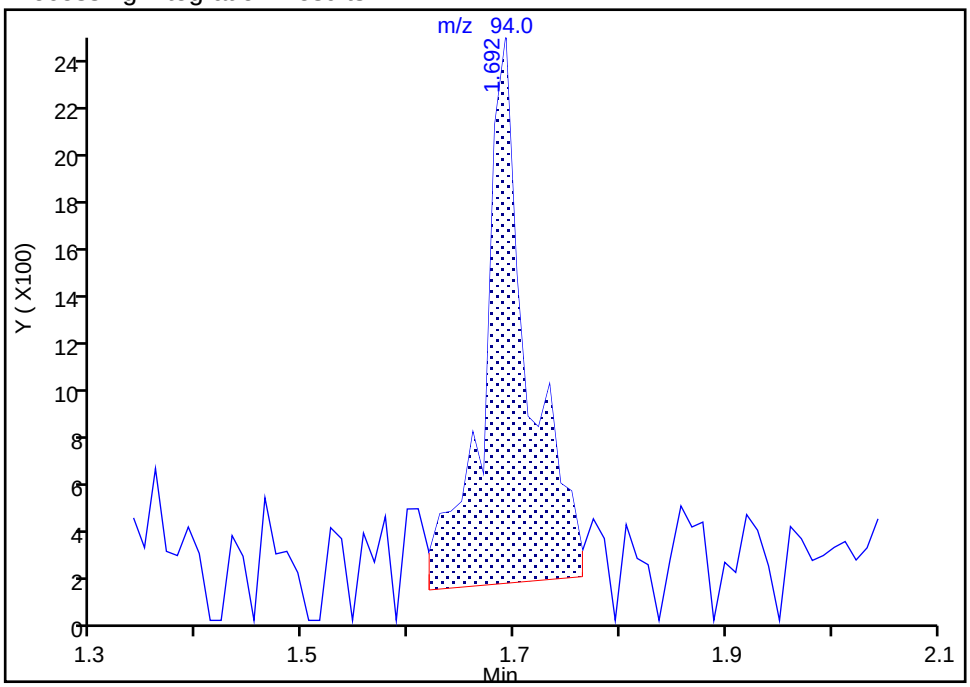
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 1

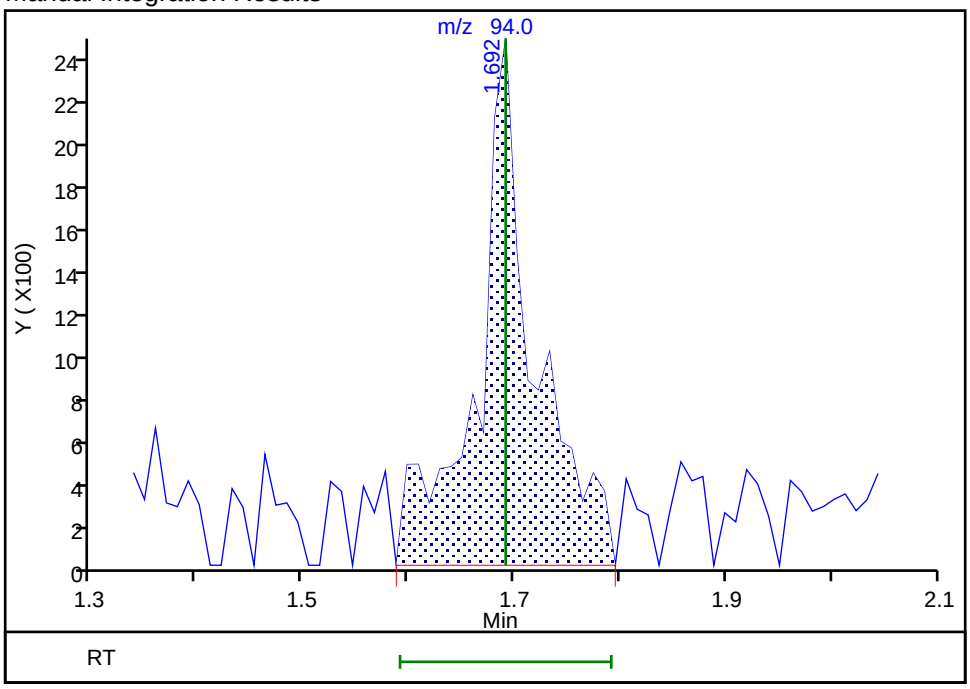
Processing Integration Results

RT: 1.69
Area: 6828
Amount: 0.397650
Amount Units: ug/L



Manual Integration Results

RT: 1.69
Area: 9387
Amount: 0.890170
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:01:19
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

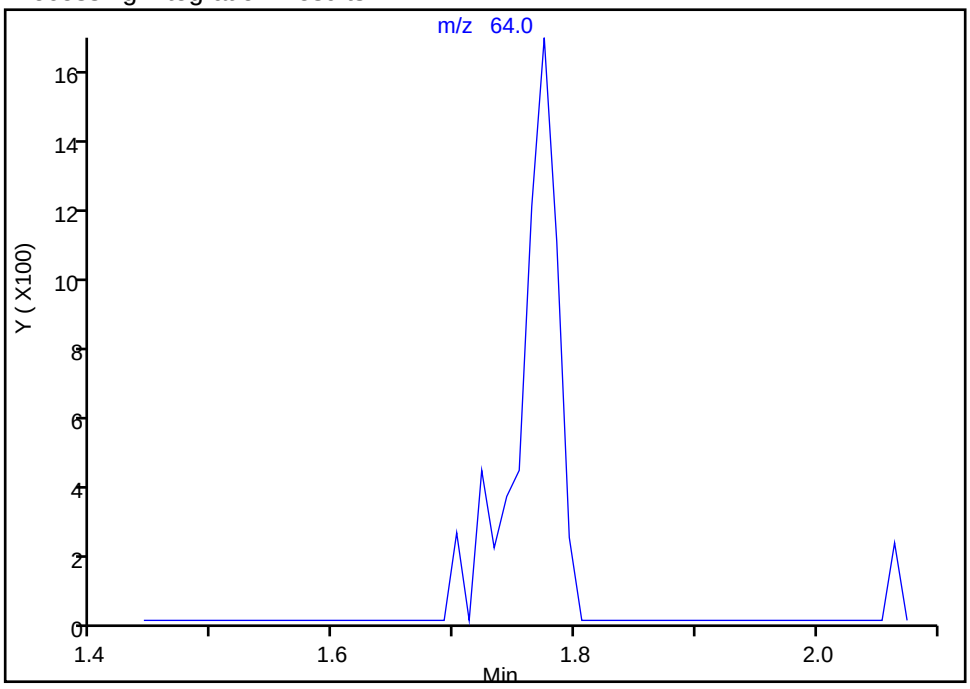
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3

Signal: 1

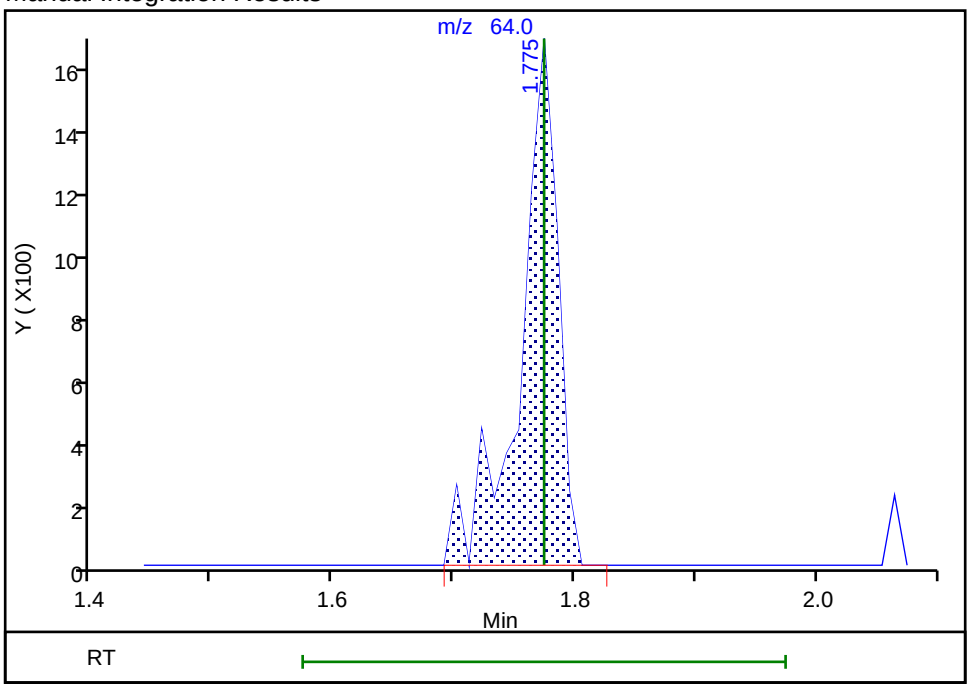
Not Detected
Expected RT: 1.77

Processing Integration Results



Manual Integration Results

RT: 1.77
Area: 3537
Amount: 0.441773
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:55:37
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

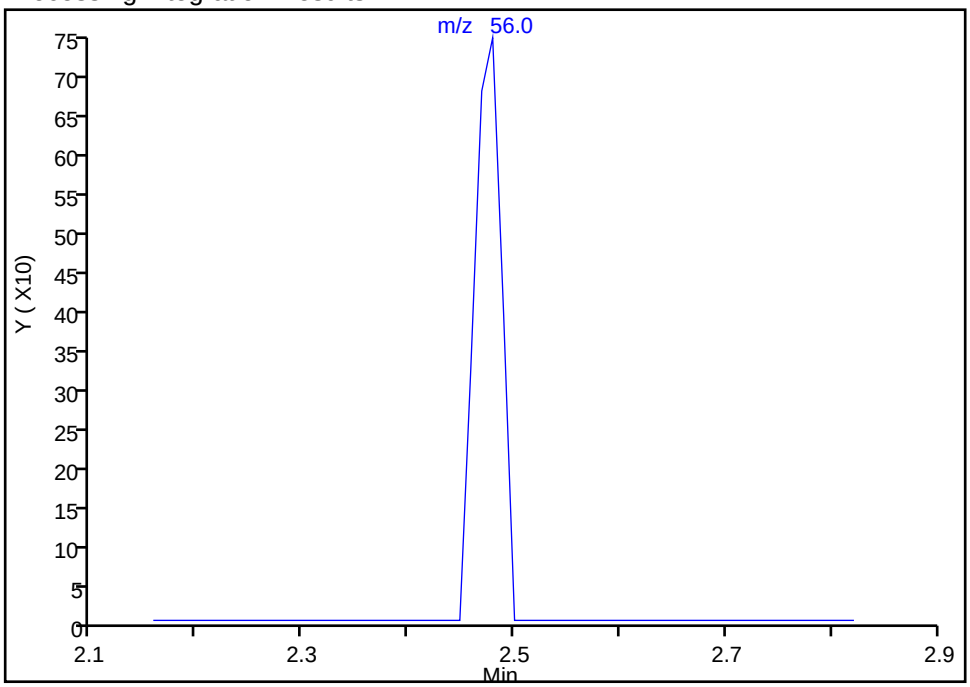
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

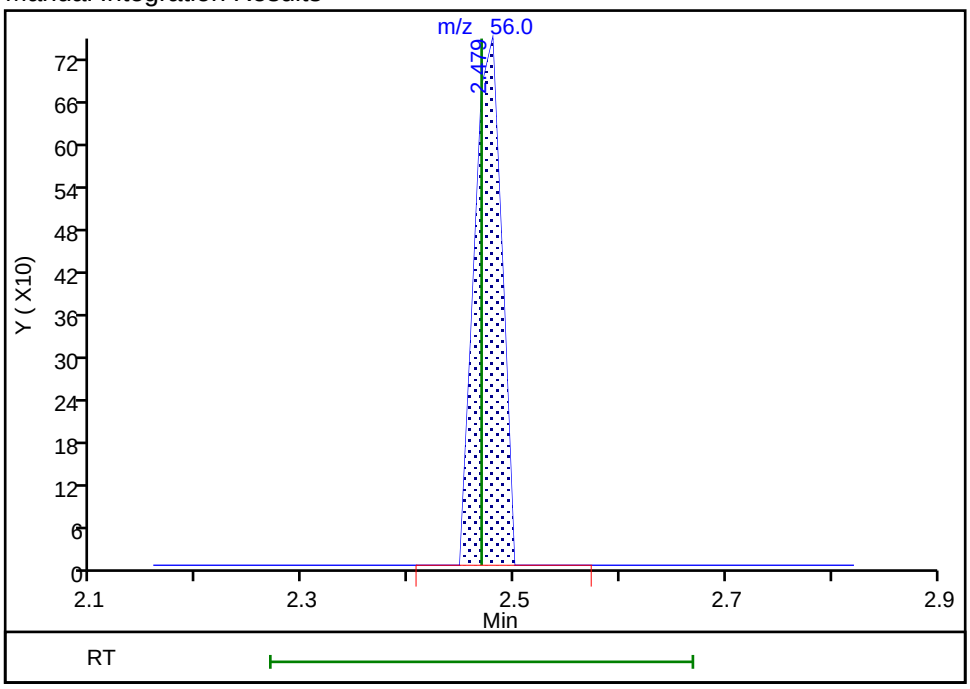
Not Detected
Expected RT: 2.47

Processing Integration Results



Manual Integration Results

RT: 2.48
Area: 1322
Amount: 2.195237
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:55:49
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

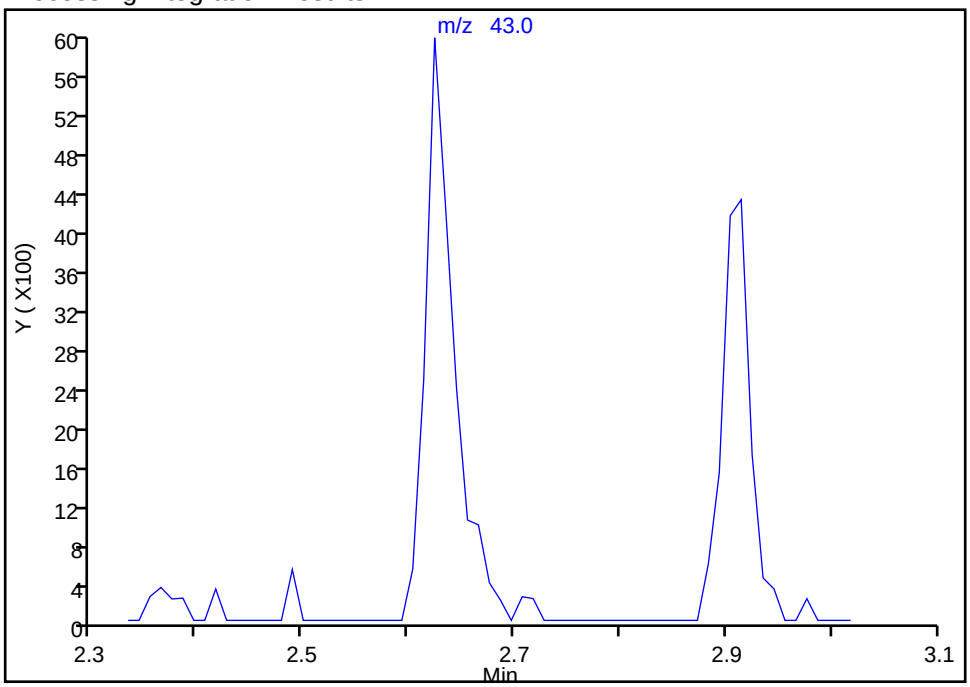
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

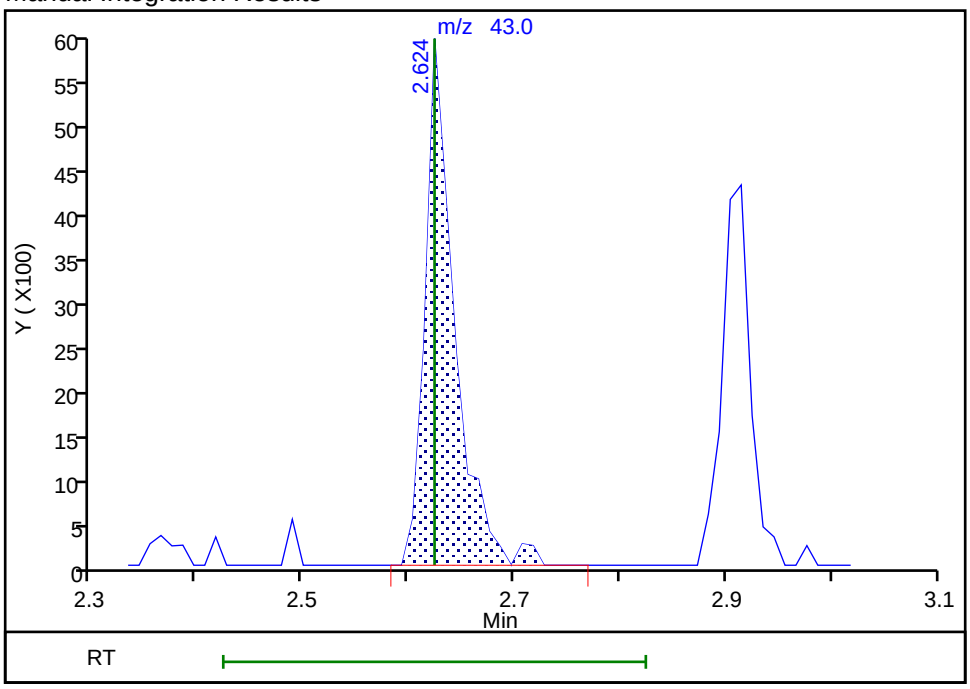
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.62
Area: 11505
Amount: 2.254586
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:55:57
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

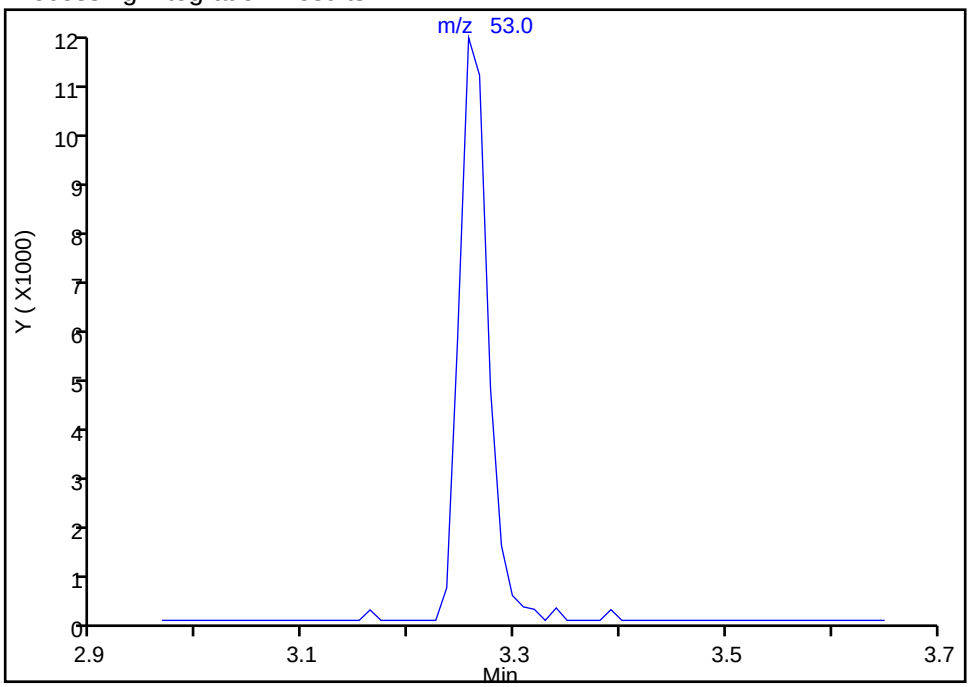
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

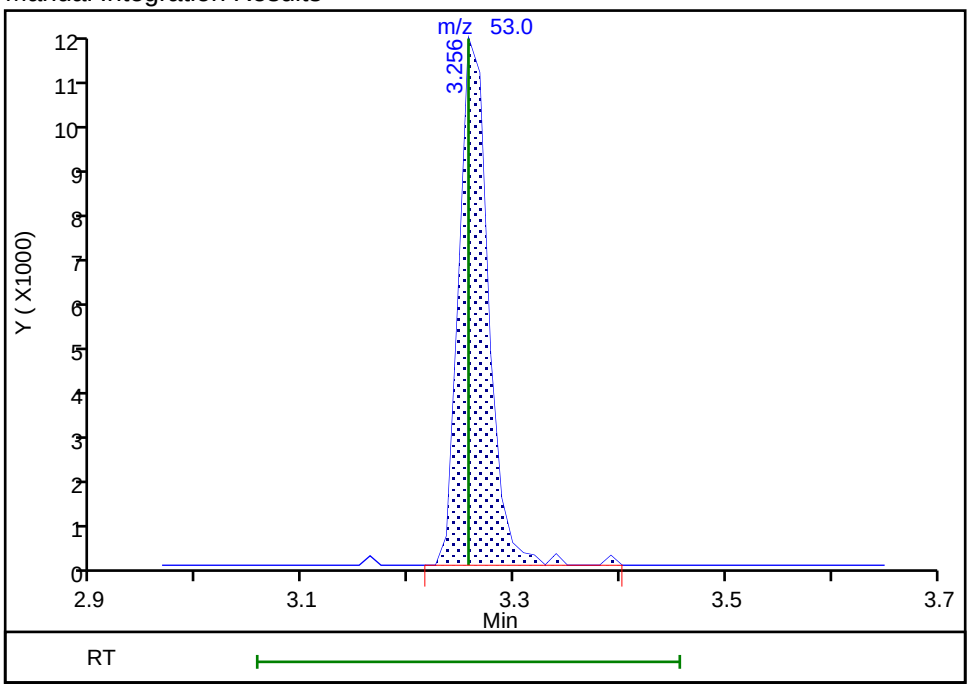
Not Detected
Expected RT: 3.26

Processing Integration Results



Manual Integration Results

RT: 3.26
Area: 22026
Amount: 3.798139
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:56:16
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

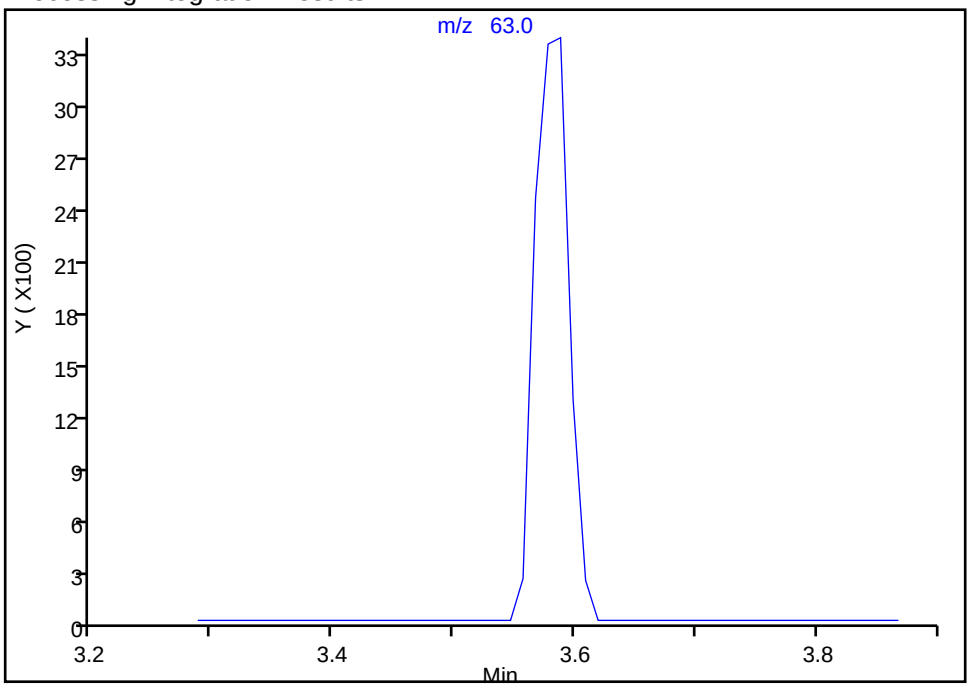
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

39 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

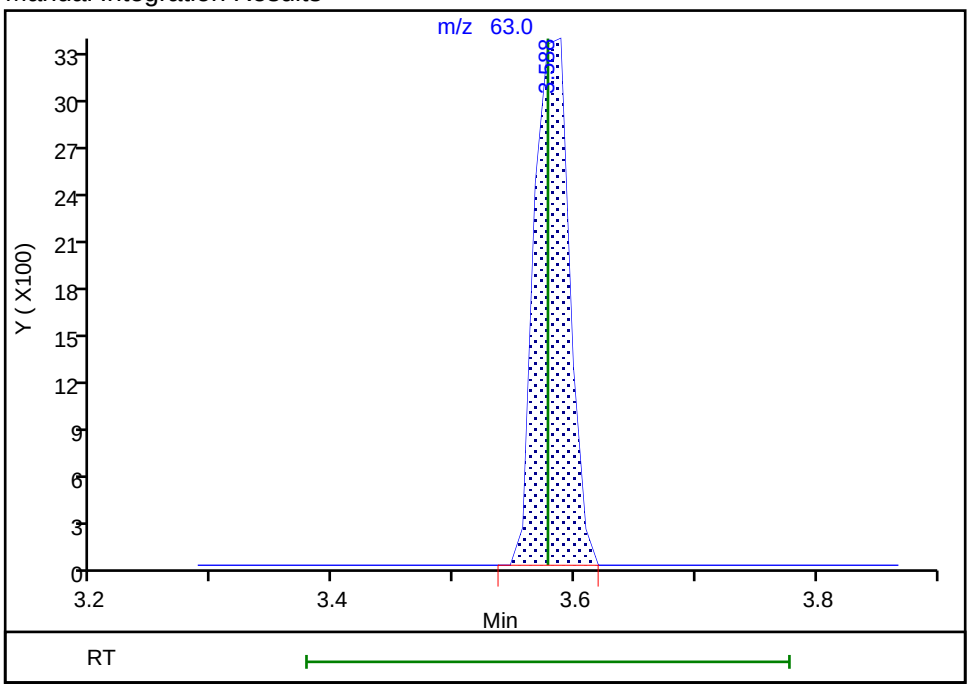
Not Detected
Expected RT: 3.58

Processing Integration Results



Manual Integration Results

RT: 3.59
Area: 6804
Amount: 0.367413
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:56:23
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

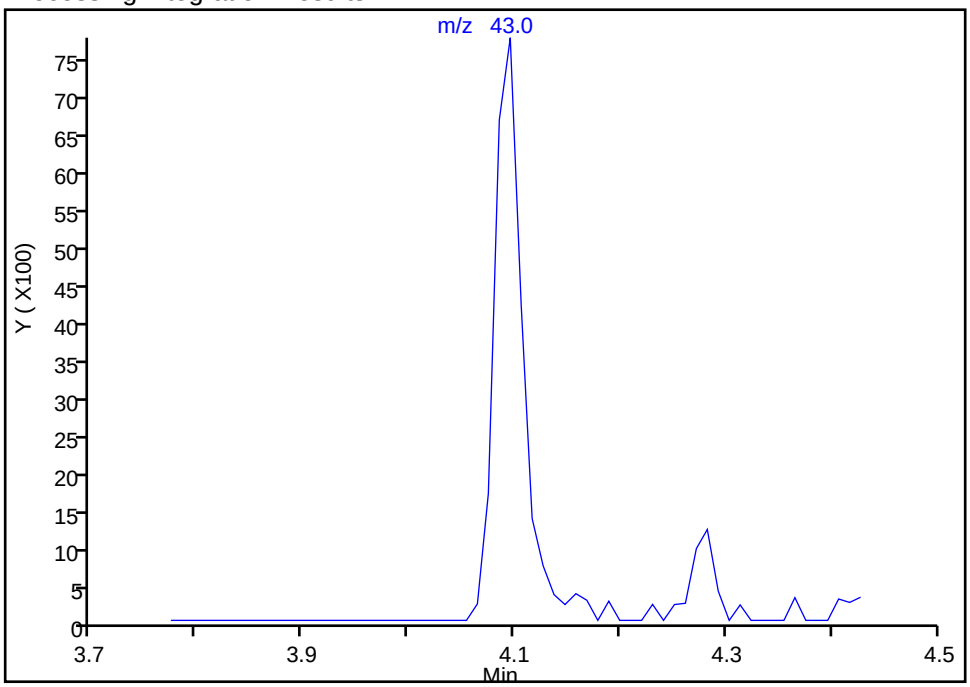
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

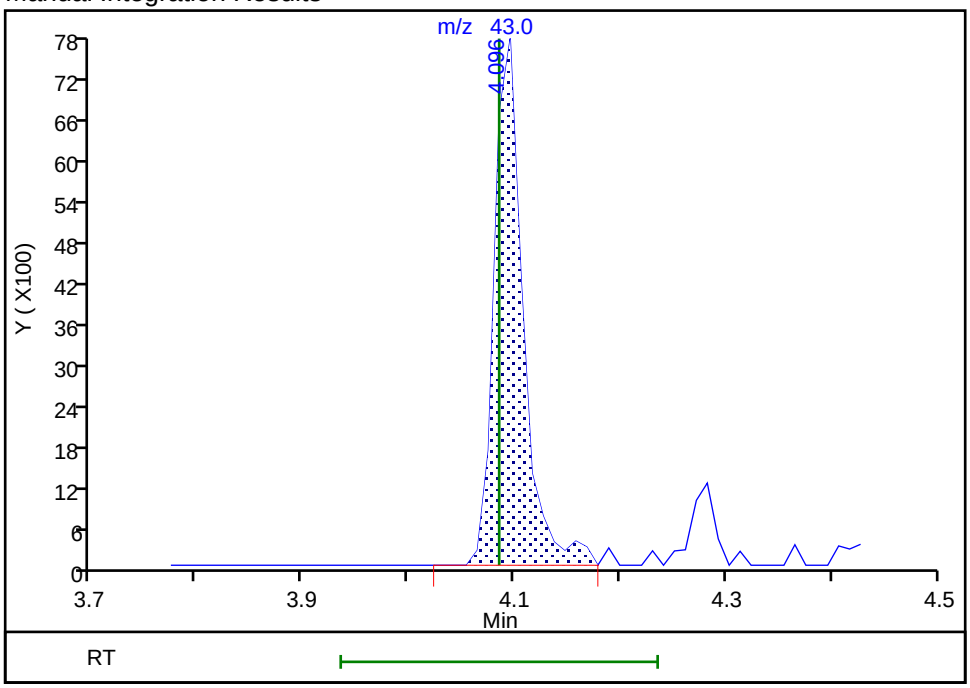
Not Detected
Expected RT: 4.09

Processing Integration Results



Manual Integration Results

RT: 4.10
Area: 14809
Amount: 2.020809
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:56:35
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

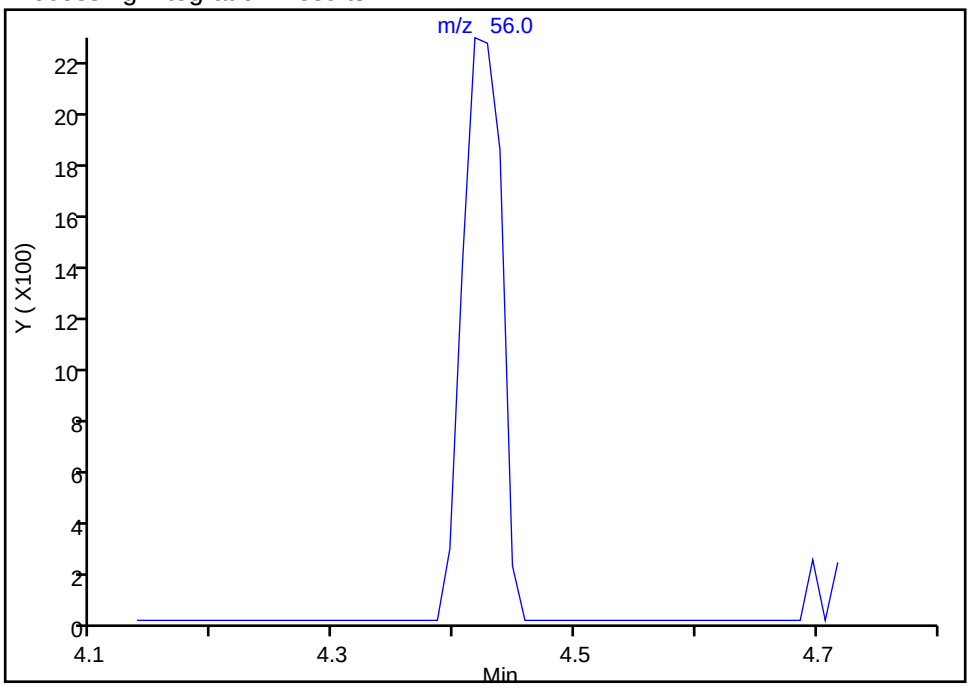
Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D				
Injection Date:	18-Nov-2020 15:16:30	Instrument ID:	HP5973C		
Lims ID:	IC 0.4				
Client ID:					
Operator ID:	RF	ALS Bottle#:	4	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	C-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

52 Cyclohexane, CAS: 110-82-7

Signal: 1

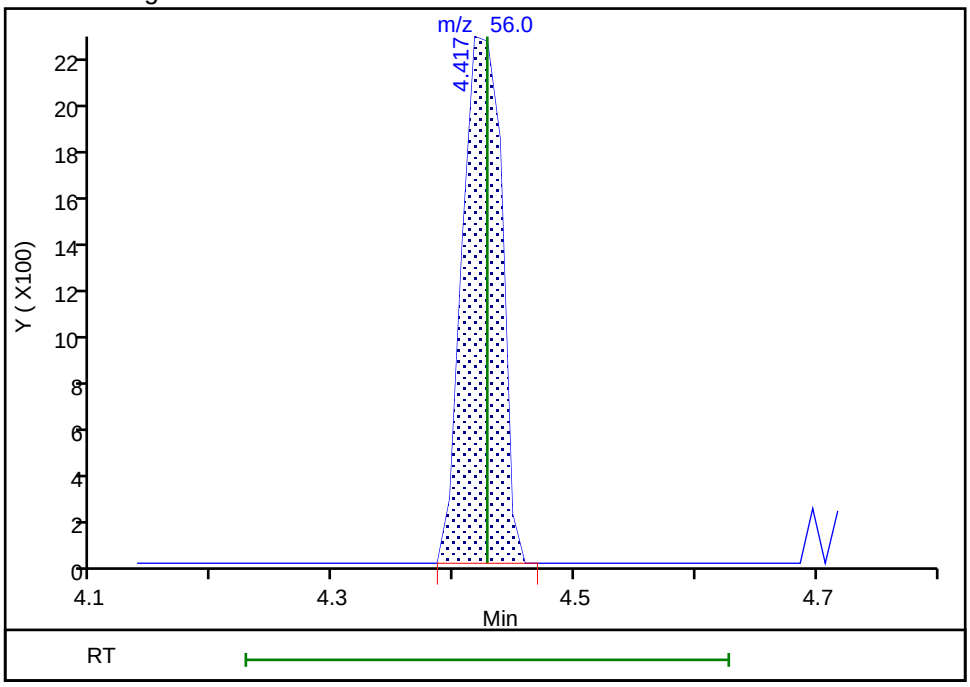
Not Detected
Expected RT: 4.43

Processing Integration Results



Manual Integration Results

RT: 4.42
Area: 4962
Amount: 0.306569
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:56:44
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

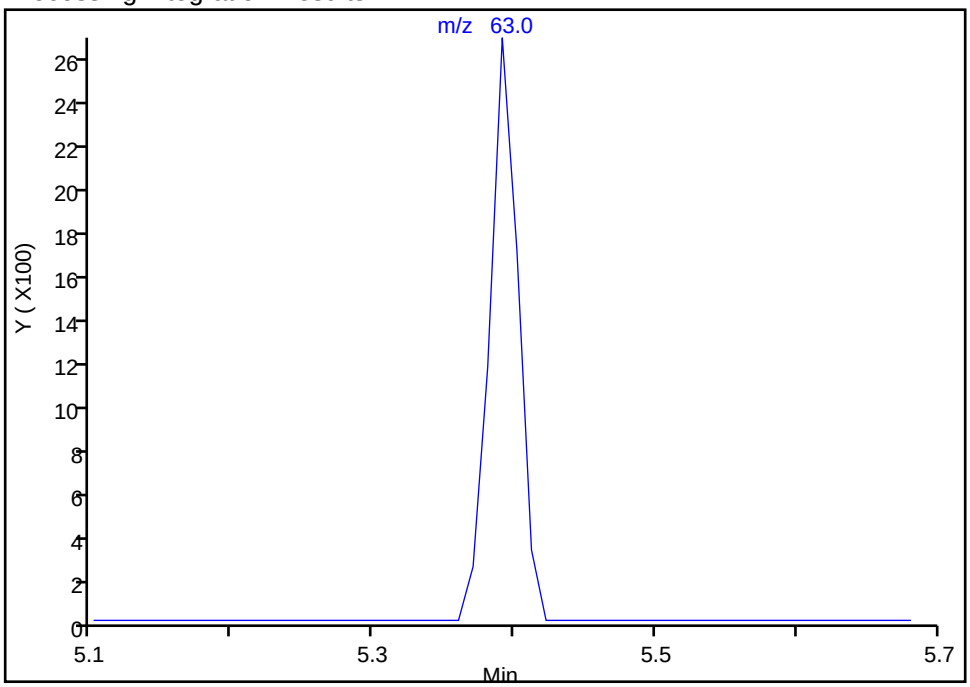
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

65 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

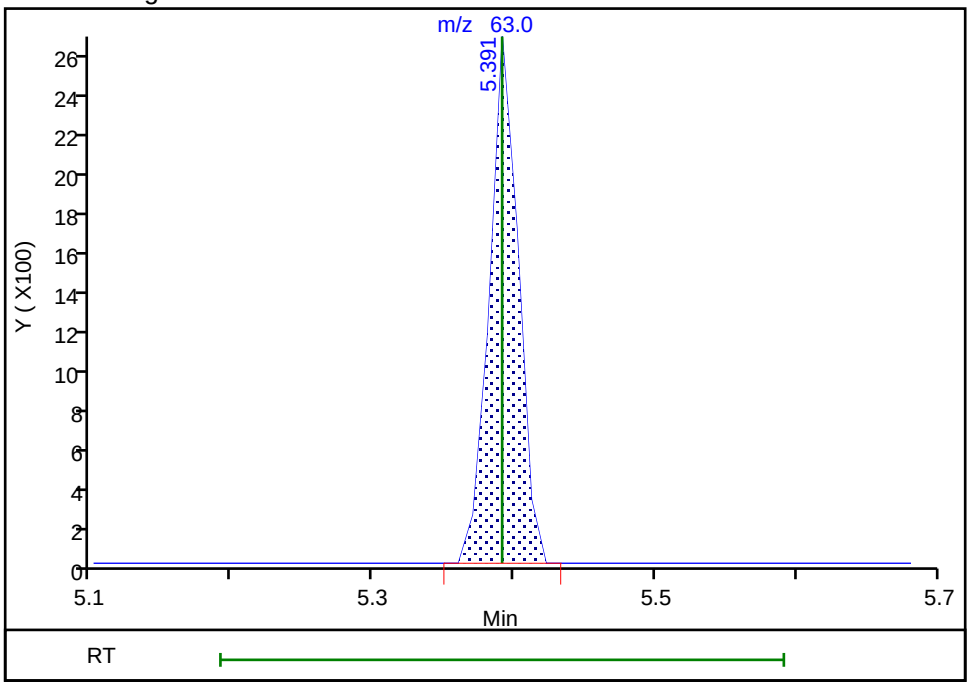
Not Detected
Expected RT: 5.39

Processing Integration Results



Manual Integration Results

RT: 5.39
Area: 3753
Amount: 0.399723
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:57:00
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

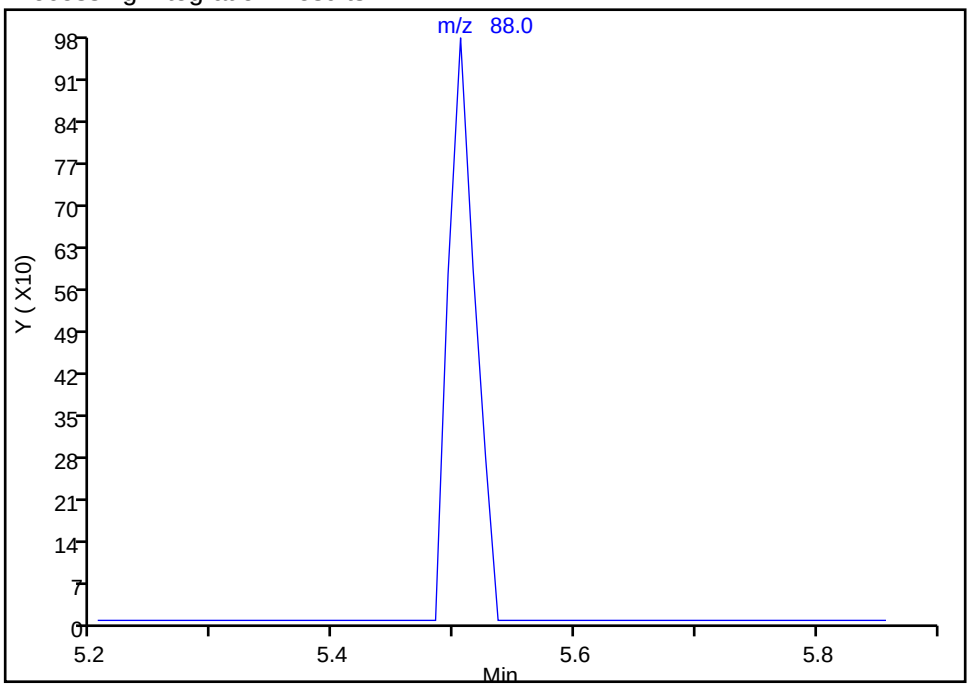
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

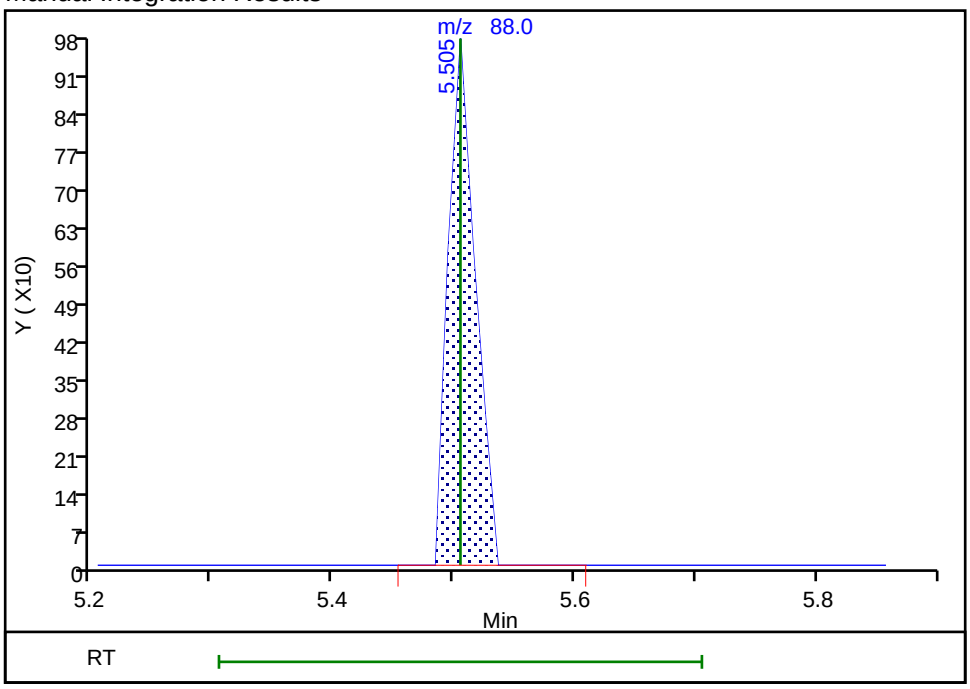
Not Detected
Expected RT: 5.51

Processing Integration Results



Manual Integration Results

RT: 5.51
Area: 1499
Amount: 7.590633
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:57:13
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

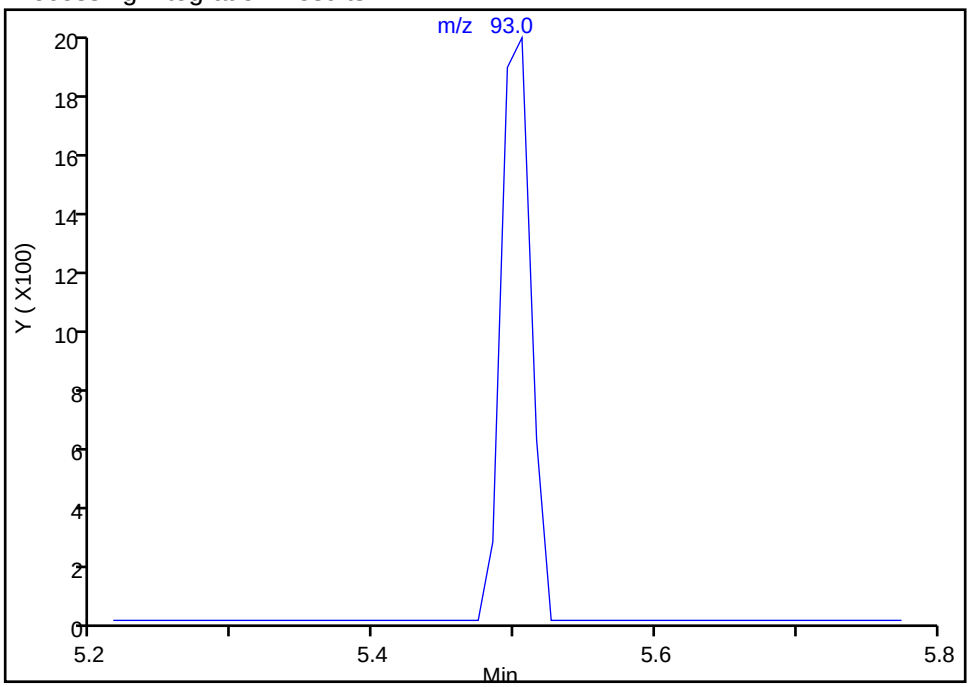
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

67 Dibromomethane, CAS: 74-95-3

Signal: 1

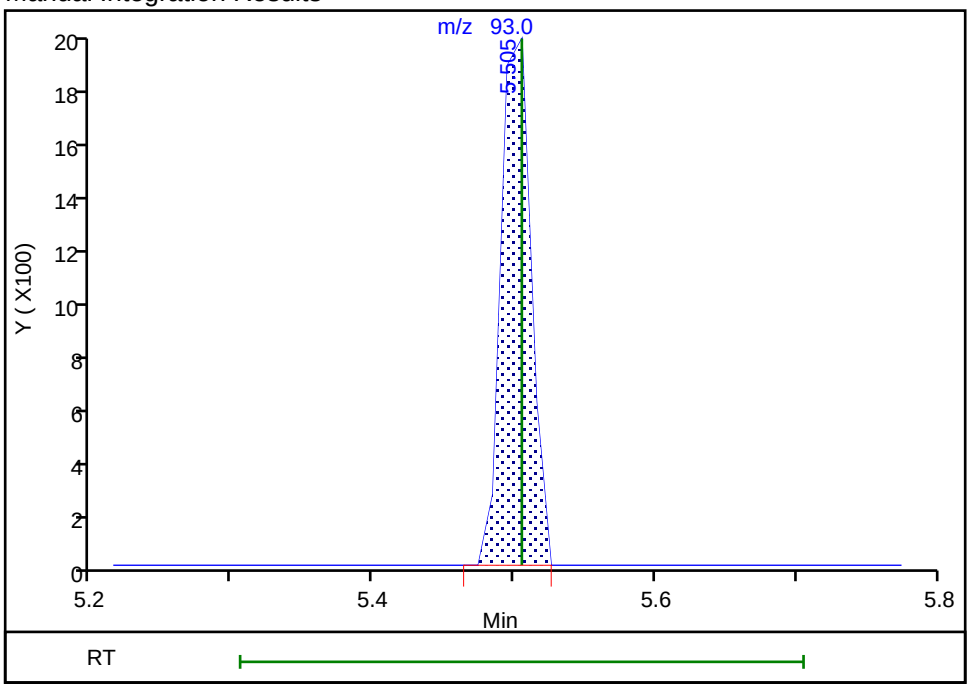
Not Detected
Expected RT: 5.51

Processing Integration Results



Manual Integration Results

RT: 5.51
Area: 2861
Amount: 0.364519
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:57:05
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

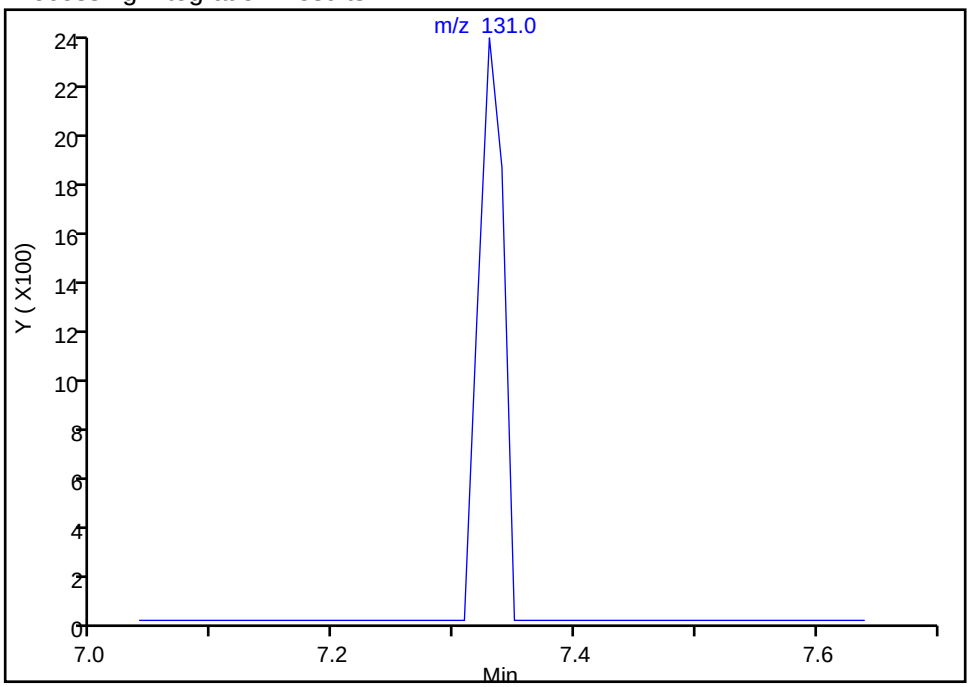
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Signal: 1

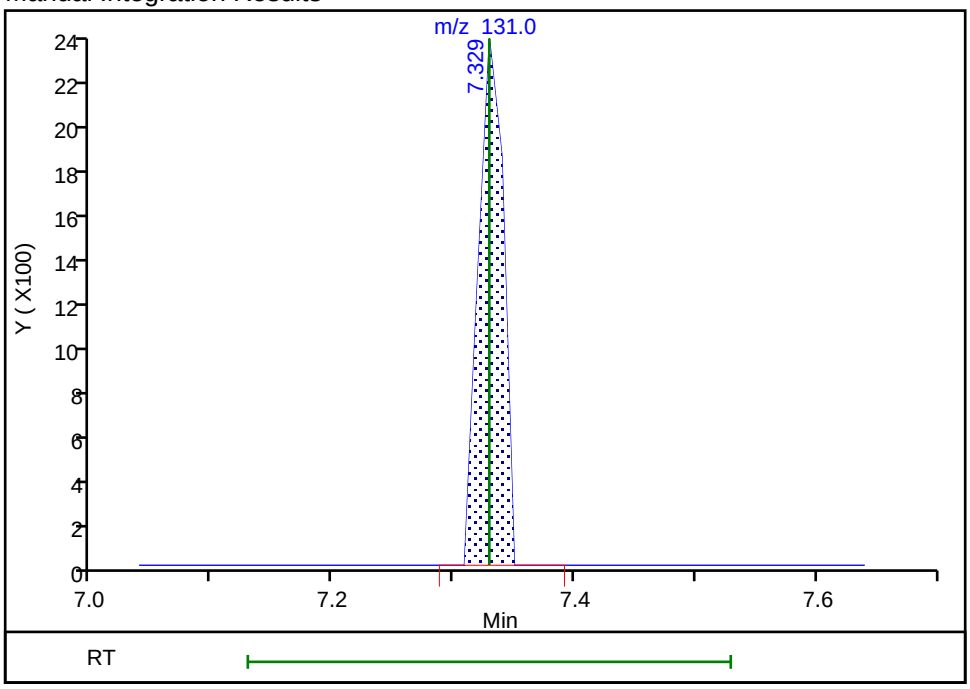
Not Detected
Expected RT: 7.33

Processing Integration Results



Manual Integration Results

RT: 7.33
Area: 3365
Amount: 0.340896
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:57:39
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

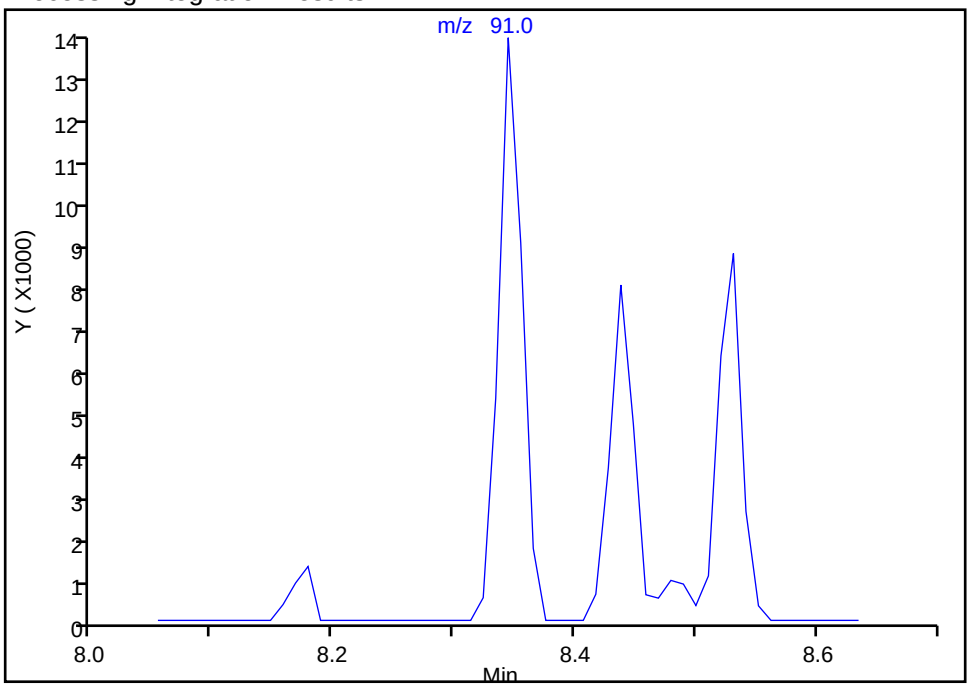
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

99 N-Propylbenzene, CAS: 103-65-1

Signal: 1

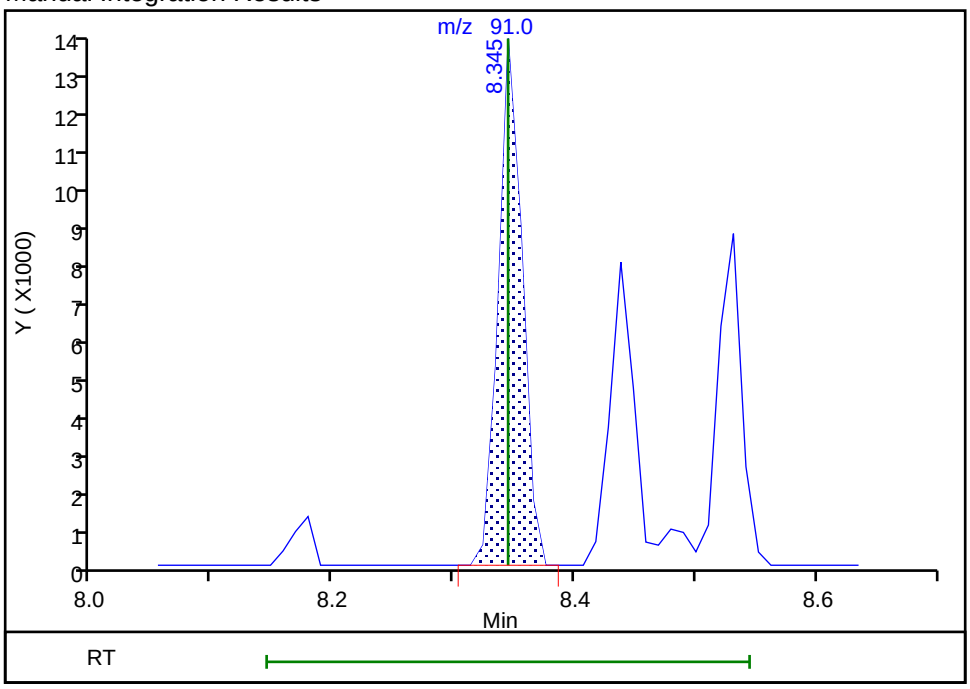
Not Detected
Expected RT: 8.34

Processing Integration Results



Manual Integration Results

RT: 8.34
Area: 18971
Amount: 0.354862
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:57:56
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

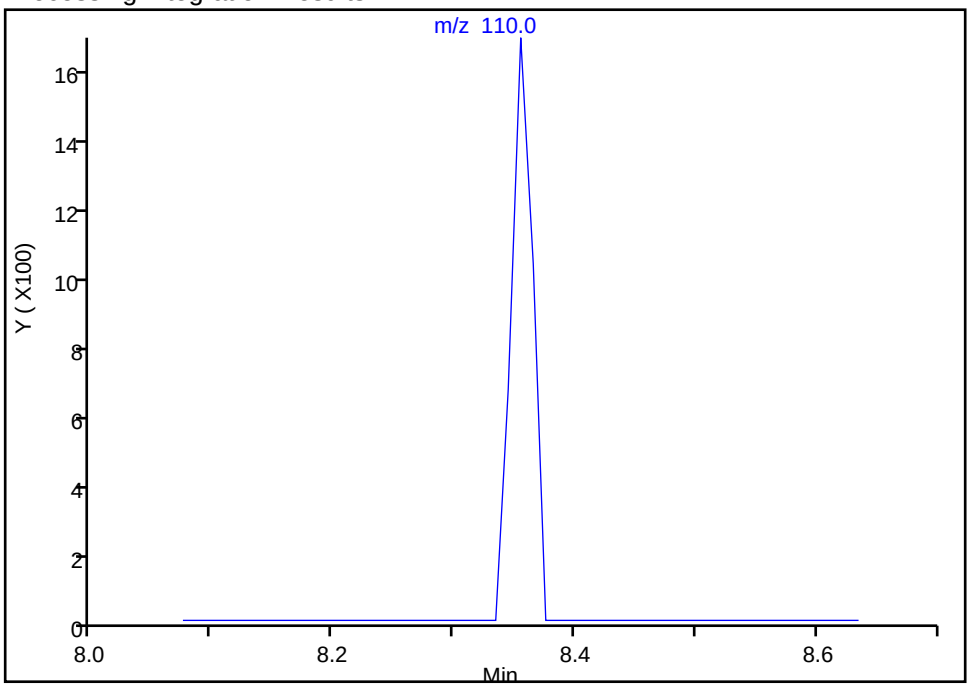
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

100 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

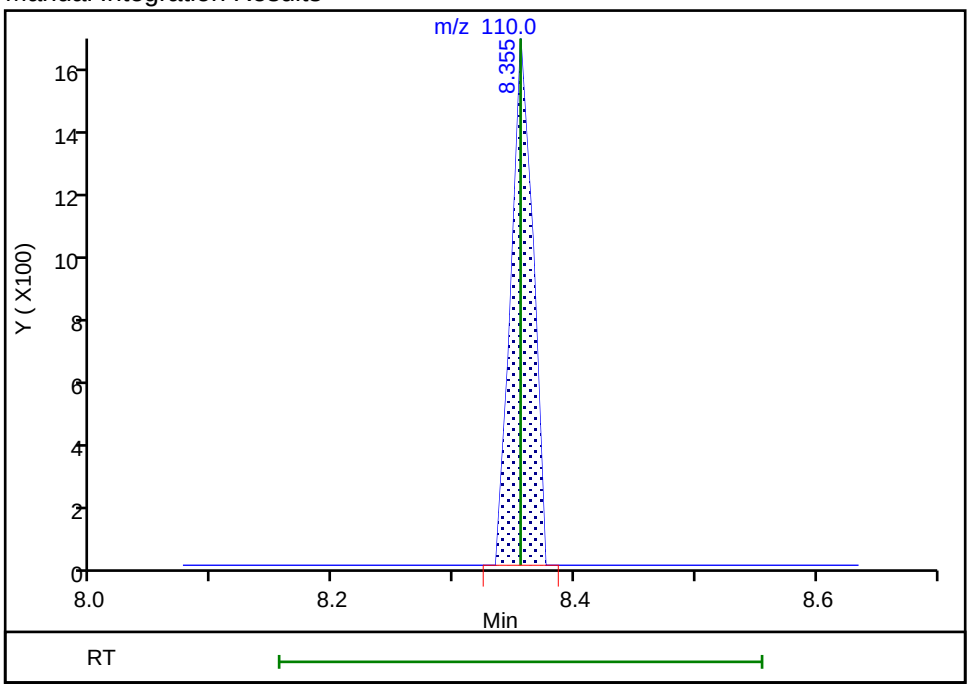
Not Detected
Expected RT: 8.35

Processing Integration Results



Manual Integration Results

RT: 8.36
Area: 2069
Amount: 0.407842
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:58:04
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

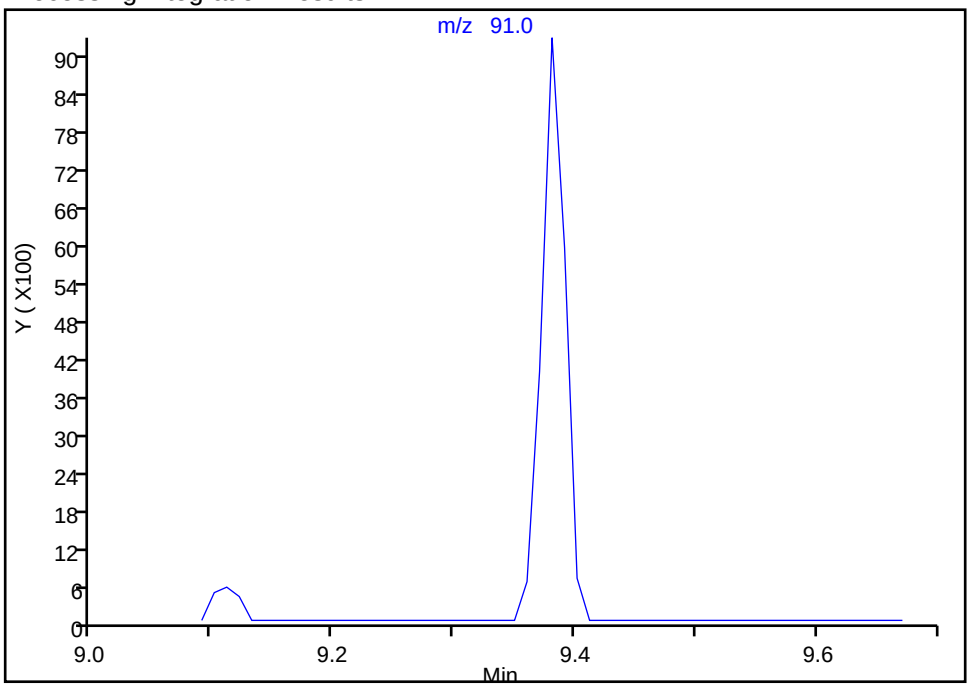
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

115 n-Butylbenzene, CAS: 104-51-8

Signal: 1

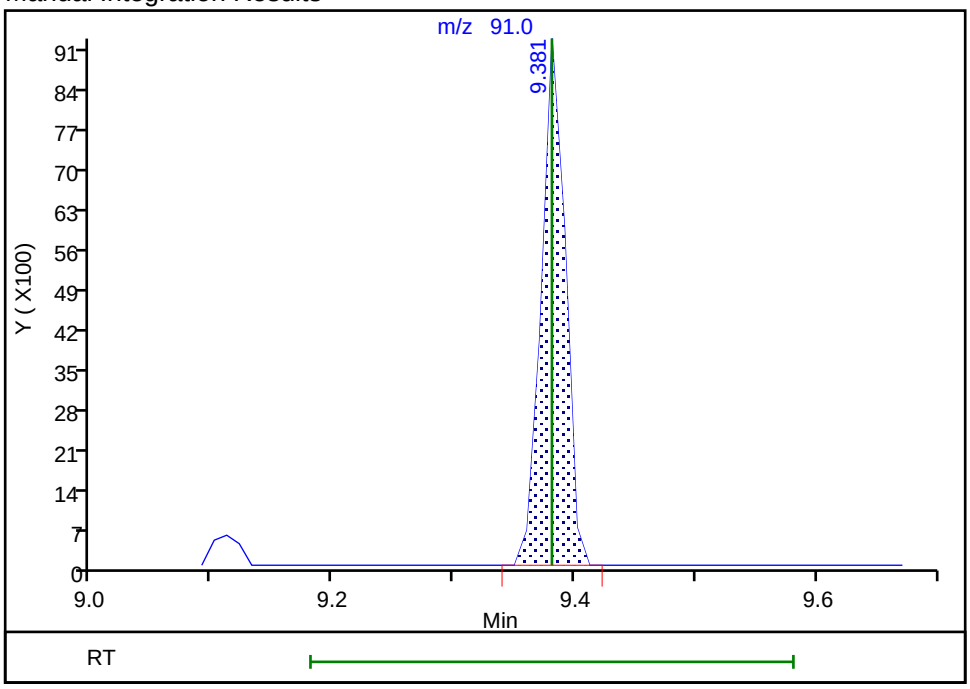
Not Detected
Expected RT: 9.38

Processing Integration Results



Manual Integration Results

RT: 9.38
Area: 12674
Amount: 0.329431
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:58:34
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

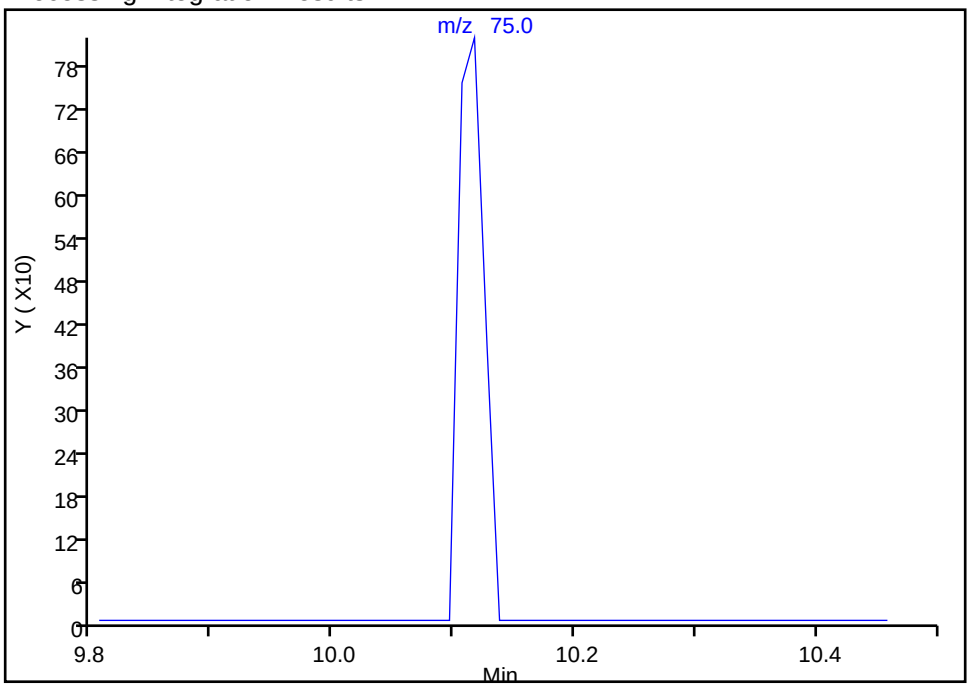
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2265.D
Injection Date: 18-Nov-2020 15:16:30 Instrument ID: HP5973C
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

117 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

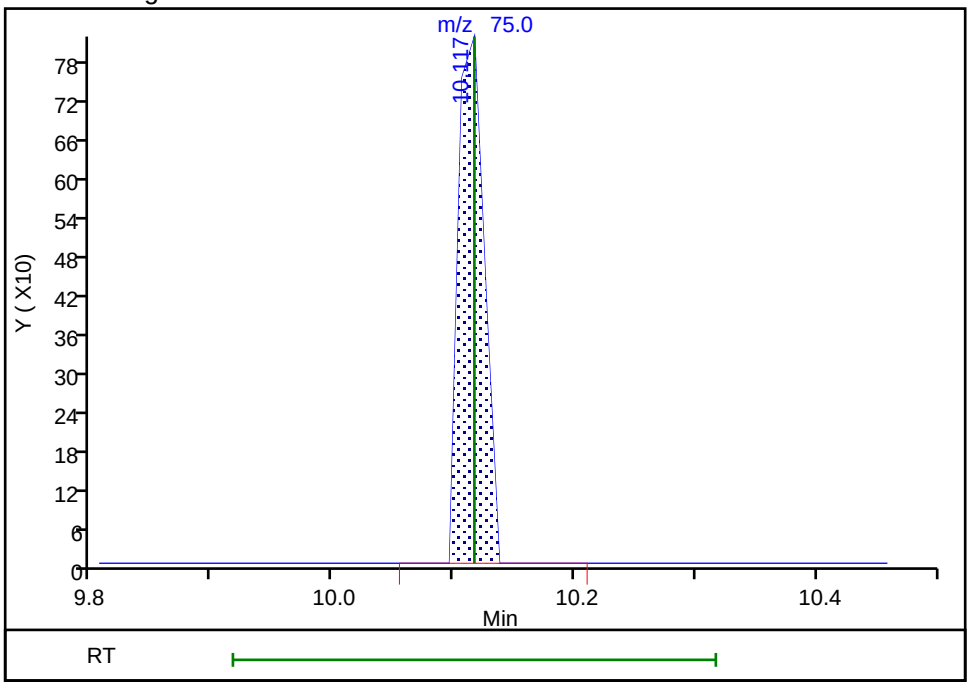
Not Detected
Expected RT: 10.12

Processing Integration Results



Manual Integration Results

RT: 10.12
Area: 1210
Amount: 0.374331
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:58:45
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2266.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Nov-2020 15:42:30 ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic
Misc. Info.: 480-0095057-014
Operator ID: RF Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 12:03:04 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: farrellr Date: 18-Nov-2020 20:00:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	100	191892	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	363234	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.111	9.111	0.000	94	417695	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	93	344161	25.0	25.8	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	99	185125	25.0	25.7	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	1028707	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	333774	25.0	25.2	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	12177	1.00	1.06	
12 Chloromethane	50	1.298	1.308	-0.010	98	13043	1.00	1.16	
13 Vinyl chloride	62	1.401	1.401	0.000	66	12663	1.00	1.13	
151 Butadiene	54	1.412	1.412	0.000	92	12367	1.00	1.20	
14 Bromomethane	94	1.681	1.692	-0.011	94	12107	1.00	1.18	
15 Chloroethane	64	1.774	1.774	0.000	96	9228	1.00	1.18	
16 Dichlorofluoromethane	67	2.002	2.002	0.000	93	19792	1.00	1.09	
17 Trichlorofluoromethane	101	2.002	2.002	0.000	80	19616	1.00	1.06	
18 Ethyl ether	59	2.292	2.293	-0.001	92	9571	1.00	1.07	
20 Acrolein	56	2.469	2.469	0.000	0	2856	5.00	4.87	M
22 1,1-Dichloroethene	96	2.510	2.500	0.010	96	10455	1.00	1.04	
21 112TCTFE	101	2.500	2.500	0.000	79	13073	1.00	1.16	
23 Acetone	43	2.624	2.624	0.000	98	29099	5.00	5.86	a
25 Iodomethane	142	2.655	2.655	0.000	98	20063	1.00	1.01	
26 Carbon disulfide	76	2.697	2.697	0.000	99	33871	1.00	1.02	
28 3-Chloro-1-propene	41	2.862	2.863	-0.001	81	13582	1.00	1.03	
27 Methyl acetate	43	2.904	2.904	0.000	97	23748	2.00	2.27	
30 Methylene Chloride	84	2.997	2.997	0.000	91	14477	1.00	0.9374	
31 2-Methyl-2-propanol	59	3.163	3.163	0.000	84	25319	10.0	10.3	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	99	34044	1.00	1.04	
34 trans-1,2-Dichloroethene	96	3.204	3.205	-0.001	86	11611	1.00	1.02	
33 Acrylonitrile	53	3.256	3.256	0.000	0	60722	10.0	10.8	M
35 Hexane	57	3.381	3.381	0.000	90	15194	1.00	1.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.588	3.578	0.010	95	19316	1.00	1.07	
37 Vinyl acetate	43	3.629	3.629	0.000	97	43668	2.00	1.98	
44 2,2-Dichloropropane	77	4.023	4.034	-0.011	88	11304	1.00	0.99	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	79	13983	1.00	1.09	
43 2-Butanone (MEK)	43	4.096	4.085	0.011	100	38917	5.00	5.45	
48 Chlorobromomethane	128	4.261	4.262	-0.001	84	7828	1.00	1.08	
49 Tetrahydrofuran	42	4.282	4.272	0.010	82	14373	2.00	2.60	
50 Chloroform	83	4.324	4.324	0.000	92	22205	1.00	1.09	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	95	16345	1.00	1.05	
52 Cyclohexane	56	4.427	4.427	0.000	93	16750	1.00	1.06	
55 Carbon tetrachloride	117	4.531	4.531	0.000	95	13271	1.00	0.99	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	93	15097	1.00	1.08	
57 Benzene	78	4.707	4.707	0.000	92	41576	1.00	1.04	
53 Isobutyl alcohol	43	4.717	4.718	-0.001	64	18620	25.0	24.3	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	96	17587	1.00	1.15	
59 n-Heptane	43	4.842	4.842	0.000	81	13799	1.00	1.06	
62 Trichloroethene	95	5.205	5.194	0.010	96	11728	1.00	1.02	
64 Methylcyclohexane	83	5.298	5.298	0.000	86	18892	1.00	1.05	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	93	9450	1.00	1.03	
67 Dibromomethane	93	5.505	5.505	0.000	92	7948	1.00	1.04	
66 1,4-Dioxane	88	5.505	5.505	0.000	41	3966	20.0	20.1	
68 Dichlorobromomethane	83	5.619	5.619	0.000	97	13985	1.00	1.08	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	92	6091	1.00	0.9717	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	93	14163	1.00	1.00	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	97	66566	5.00	5.10	
74 Toluene	92	6.158	6.158	0.000	99	25796	1.00	1.06	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	88	12102	1.00	0.9658	
75 Ethyl methacrylate	69	6.386	6.386	0.000	88	11104	1.00	0.9182	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	91	7992	1.00	1.05	
81 Tetrachloroethene	166	6.572	6.573	-0.001	92	12414	1.00	1.07	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	87	16059	1.00	1.06	
80 2-Hexanone	43	6.676	6.676	0.000	98	43614	5.00	4.93	
83 Chlorodibromomethane	129	6.821	6.821	0.000	88	9544	1.00	0.9604	
84 Ethylene Dibromide	107	6.904	6.904	0.000	96	9870	1.00	0.9799	
87 Chlorobenzene	112	7.267	7.256	0.011	93	28896	1.00	1.01	
88 Ethylbenzene	91	7.319	7.319	0.000	98	44876	1.00	1.00	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	82	9569	1.00	0.9703	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	96	16824	1.00	0.9616	
91 o-Xylene	106	7.733	7.733	0.000	97	16787	1.00	0.9498	
92 Styrene	104	7.754	7.754	0.000	94	23811	1.00	0.9017	
95 Bromoform	173	7.951	7.951	0.000	91	6363	1.00	0.9284	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	44264	1.00	0.9100	
101 Bromobenzene	156	8.303	8.303	0.000	90	11915	1.00	0.9170	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	94	14339	1.00	0.9217	
99 N-Propylbenzene	91	8.345	8.345	-0.001	97	54449	1.00	0.9395	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	89	4827	1.00	0.8777	
98 trans-1,4-Dichloro-2-butene	53	8.365	8.355	0.010	69	3008	1.00	0.7667	
103 2-Chlorotoluene	126	8.438	8.438	0.000	97	12554	1.00	1.01	
102 1,3,5-Trimethylbenzene	105	8.479	8.490	-0.011	95	37461	1.00	0.9187	
105 4-Chlorotoluene	126	8.531	8.531	0.000	97	11042	1.00	0.8811	
106 tert-Butylbenzene	134	8.749	8.749	0.000	93	7544	1.00	0.8297	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	94	37205	1.00	0.8960	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	95	46789	1.00	0.9014	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	96	40420	1.00	0.8924	
111 1,3-Dichlorobenzene	146	9.049	9.060	-0.011	97	22905	1.00	0.9040	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	95	25116	1.00	0.9672	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	40223	1.00	0.9645	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	97	26061	1.00	1.00	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	76	3337	1.00	0.9523	
119 1,2,4-Trichlorobenzene	180	10.769	10.770	-0.001	94	19769	1.00	0.9798	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	95	8546	1.00	0.9583	
121 Naphthalene	128	10.977	10.977	0.000	96	54118	1.00	0.8756	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	94	17379	1.00	0.8710	
S 126 1,3-Dichloropropene, Total	1				0			1.97	
S 125 1,2-Dichloroethene, Total	1				0			2.11	
S 123 Total BTEX	1				0			5.01	
S 124 Xylenes, Total	1				0			1.91	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00198	Amount Added:	1.00	Units: uL	
GAS CORP mix_00427	Amount Added:	1.00	Units: uL	
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent

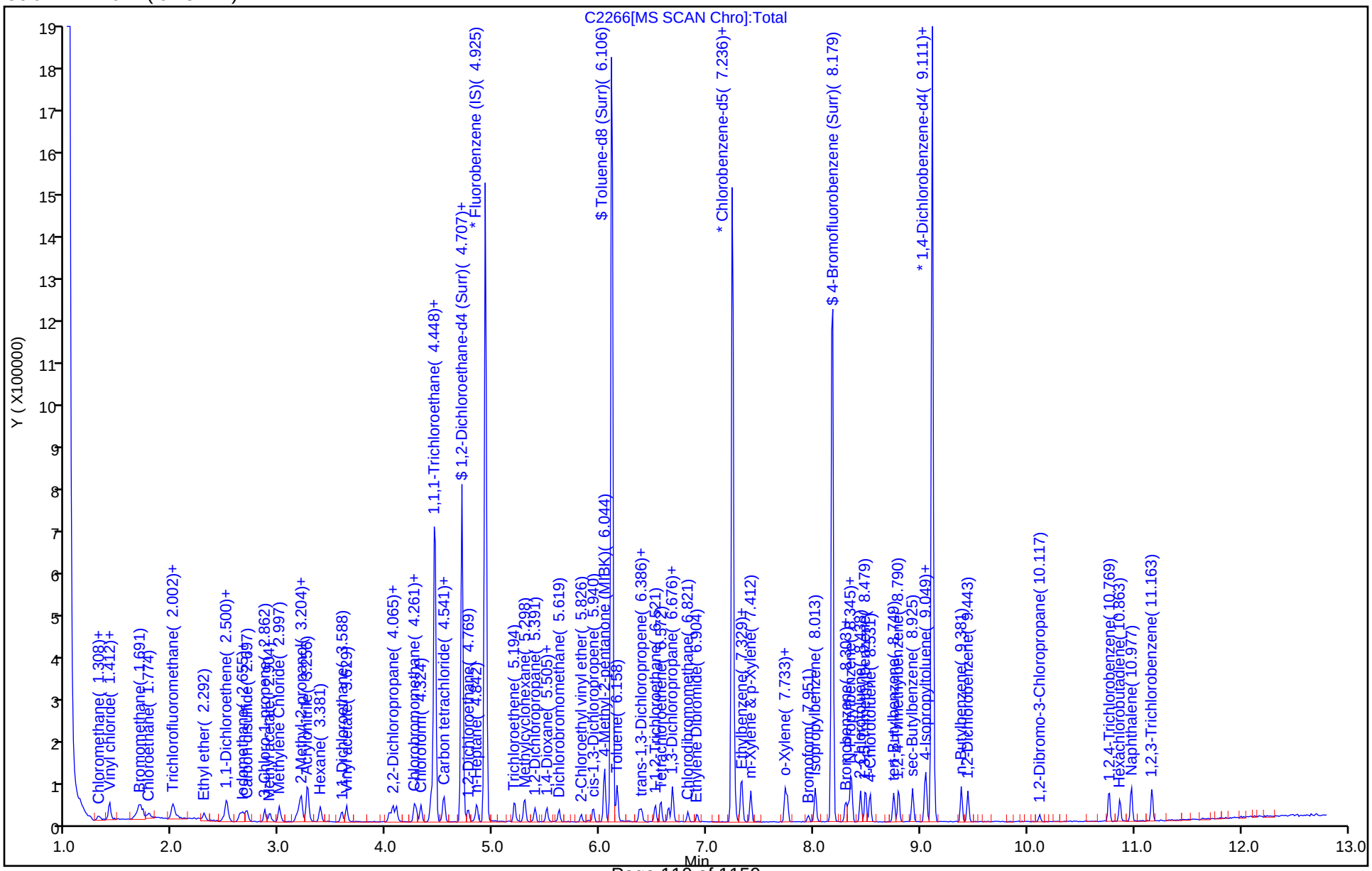
Report Date: 19-Nov-2020 12:03:11 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2266.D

Injection Date:	18-Nov-2020 15:42:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	IC			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

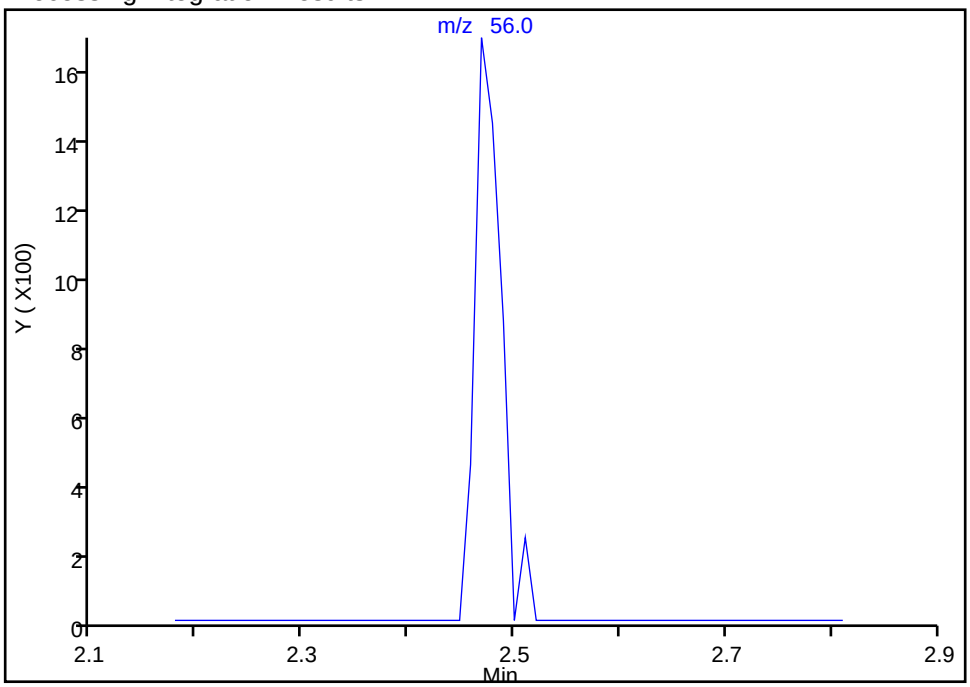
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2266.D
Injection Date: 18-Nov-2020 15:42:30 Instrument ID: HP5973C
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

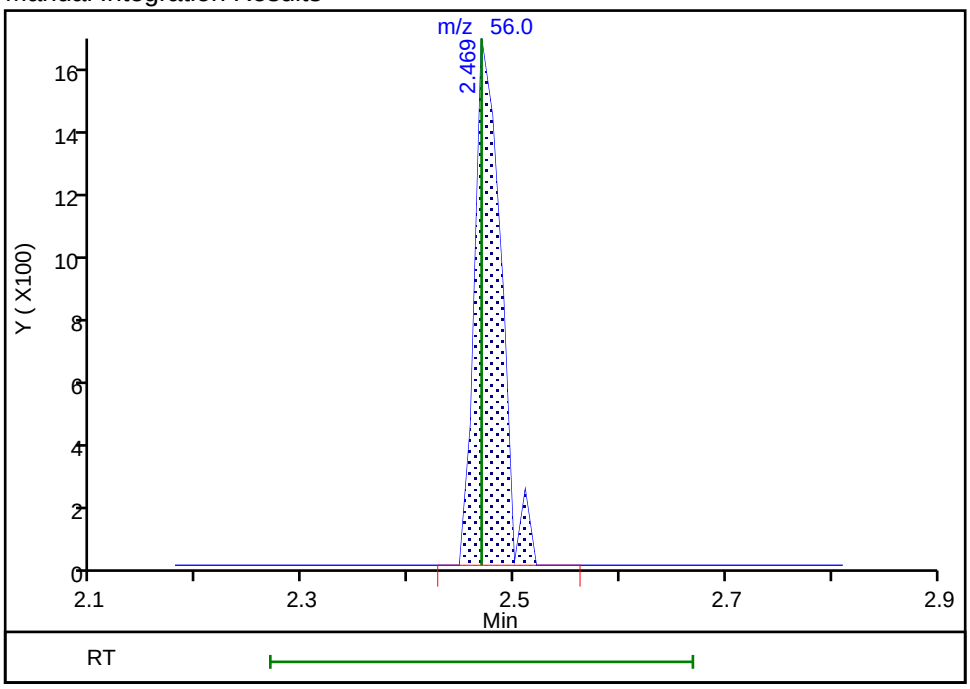
Not Detected
Expected RT: 2.47

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 2856
Amount: 4.869987
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:01:44
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

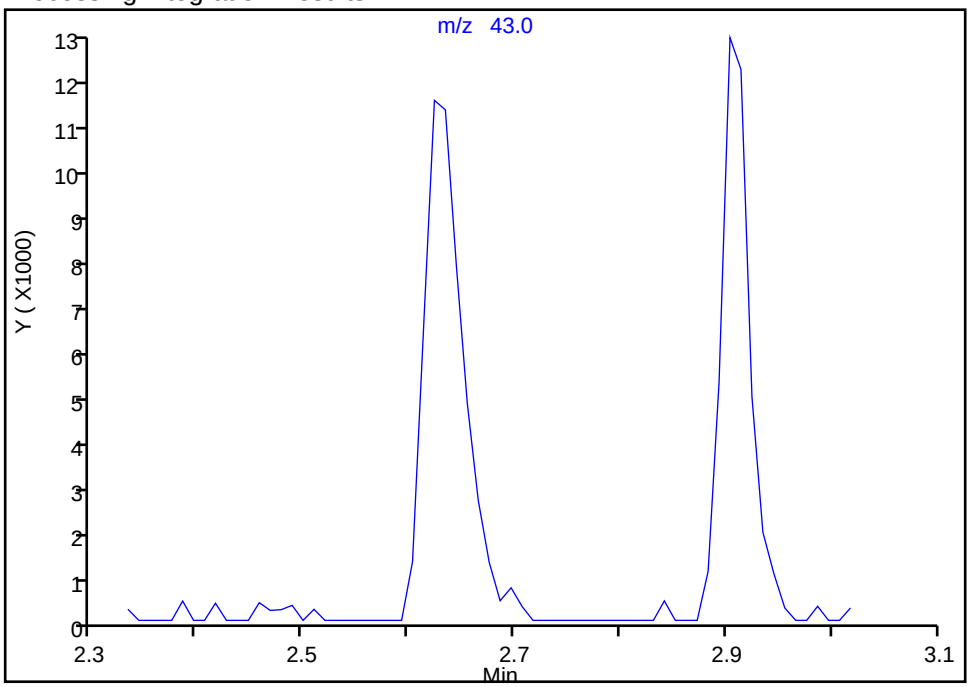
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2266.D
Injection Date: 18-Nov-2020 15:42:30 Instrument ID: HP5973C
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

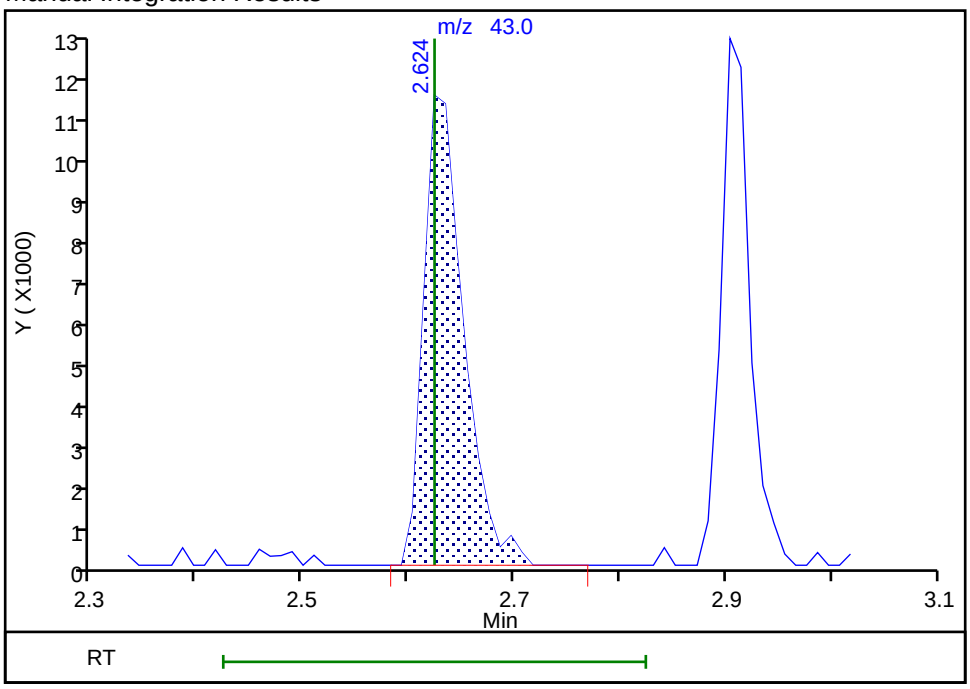
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.62
Area: 29099
Amount: 5.855686
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:01:51
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

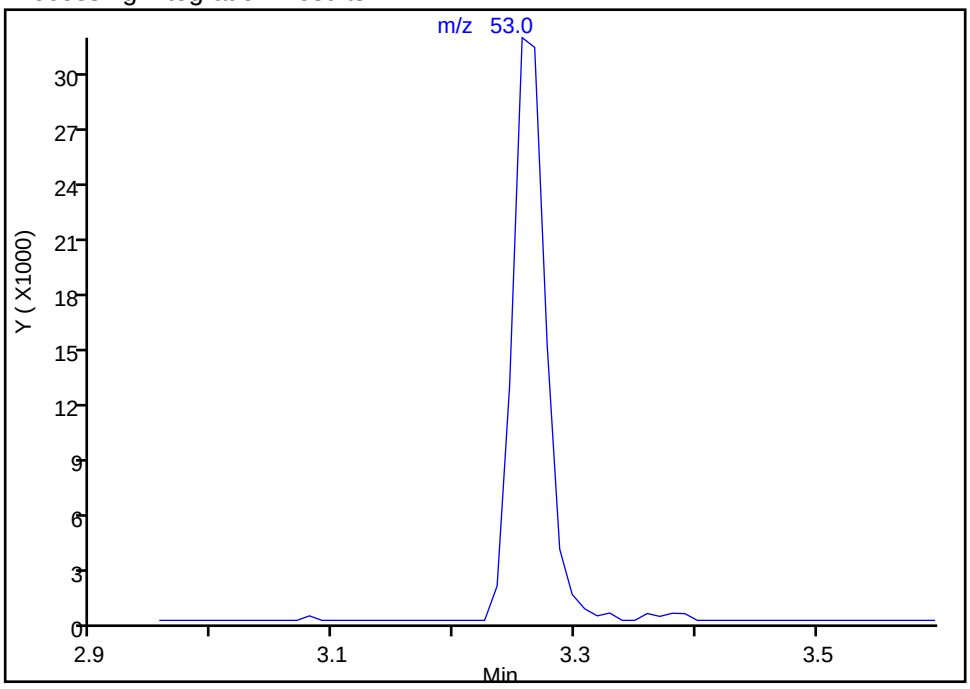
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2266.D
Injection Date: 18-Nov-2020 15:42:30 Instrument ID: HP5973C
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

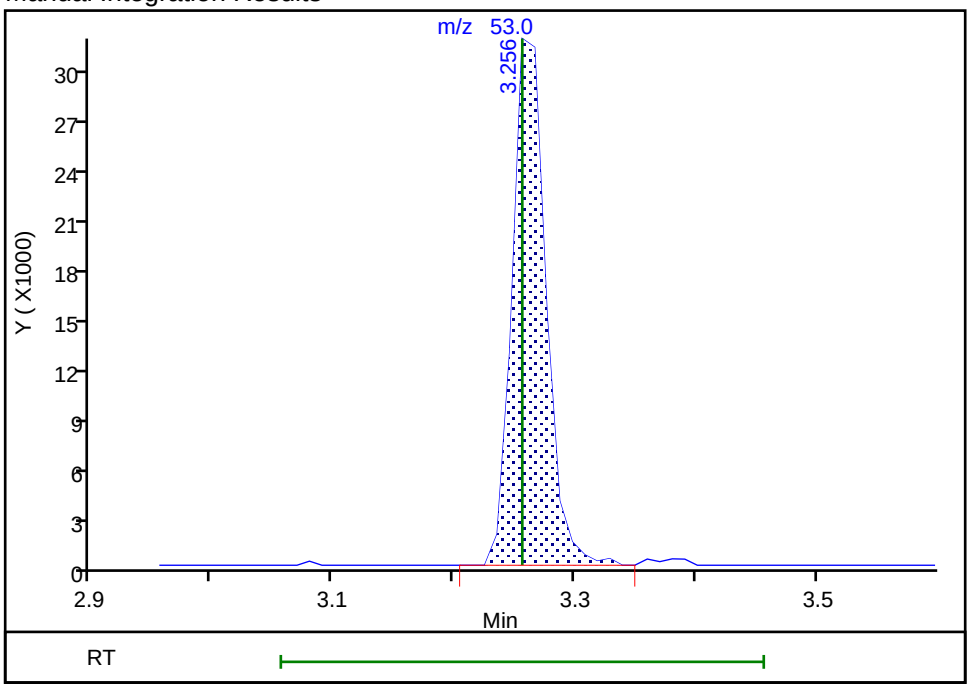
Not Detected
Expected RT: 3.26

Processing Integration Results



Manual Integration Results

RT: 3.26
Area: 60722
Amount: 10.752286
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:02:10
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2267.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Nov-2020 16:07:30 ALS Bottle#: 6 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 2
Misc. Info.: 480-0095057-015
Operator ID: RF Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 12:03:19 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: farrellr Date: 18-Nov-2020 20:09:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	190166	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	360621	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.111	0.001	94	403685	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.459	4.448	0.011	93	342175	25.0	25.9	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	99	184668	25.0	25.8	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	1007987	25.0	24.9	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	97	324956	25.0	24.7	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	94	20623	2.00	1.82	
12 Chloromethane	50	1.308	1.308	0.000	99	22466	2.00	2.02	
13 Vinyl chloride	62	1.401	1.401	0.000	76	21487	2.00	1.94	
151 Butadiene	54	1.412	1.412	0.000	89	19485	2.00	1.90	
14 Bromomethane	94	1.692	1.692	0.000	93	22673	2.00	2.23	
15 Chloroethane	64	1.774	1.774	0.000	99	14444	2.00	1.87	
16 Dichlorofluoromethane	67	2.002	2.002	0.000	94	35496	2.00	1.97	
17 Trichlorofluoromethane	101	2.002	2.002	0.000	79	33840	2.00	1.84	
18 Ethyl ether	59	2.293	2.293	0.000	91	18326	2.00	2.07	
20 Acrolein	56	2.479	2.469	0.010	0	6341	10.0	10.9	M
22 1,1-Dichloroethene	96	2.500	2.500	0.000	97	19775	2.00	1.98	
21 112TCTFE	101	2.500	2.500	0.000	91	20496	2.00	1.84	
23 Acetone	43	2.624	2.624	0.000	98	52091	10.0	10.6	a
25 Iodomethane	142	2.655	2.655	0.000	98	40054	2.00	2.04	
26 Carbon disulfide	76	2.697	2.697	0.000	99	63760	2.00	1.95	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	84	25427	2.00	1.94	
27 Methyl acetate	43	2.914	2.904	0.010	97	42973	4.00	4.14	
30 Methylene Chloride	84	2.997	2.997	0.000	82	26864	2.00	2.09	
31 2-Methyl-2-propanol	59	3.163	3.163	0.000	97	48073	20.0	19.7	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	98	66078	2.00	2.04	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	98	20529	2.00	1.82	
33 Acrylonitrile	53	3.256	3.256	0.000	99	115835	20.0	20.7	a
35 Hexane	57	3.381	3.381	0.000	90	25584	2.00	1.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.588	3.578	0.010	96	34484	2.00	1.93	
37 Vinyl acetate	43	3.629	3.629	0.000	97	83590	4.00	3.83	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	89	20717	2.00	1.83	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	76	24156	2.00	1.90	
43 2-Butanone (MEK)	43	4.096	4.085	0.011	99	68456	10.0	9.68	
48 Chlorobromomethane	128	4.262	4.262	0.000	88	14685	2.00	2.04	
49 Tetrahydrofuran	42	4.282	4.272	0.010	83	22524	4.00	4.11	
50 Chloroform	83	4.324	4.324	0.000	94	40583	2.00	2.01	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	97	28762	2.00	1.87	
52 Cyclohexane	56	4.427	4.427	0.000	89	30344	2.00	1.94	
55 Carbon tetrachloride	117	4.531	4.531	0.000	95	23591	2.00	1.78	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	93	25808	2.00	1.86	
57 Benzene	78	4.707	4.707	0.000	94	77637	2.00	1.96	
53 Isobutyl alcohol	43	4.718	4.718	0.000	93	38857	50.0	51.3	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	98	30622	2.00	2.02	
59 n-Heptane	43	4.842	4.842	0.000	79	22968	2.00	1.77	
62 Trichloroethene	95	5.194	5.194	0.000	97	22032	2.00	1.94	
64 Methylcyclohexane	83	5.298	5.298	0.000	87	32724	2.00	1.83	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	89	16448	2.00	1.82	
66 1,4-Dioxane	88	5.505	5.505	0.000	42	8016	40.0	40.9	
67 Dibromomethane	93	5.505	5.505	0.000	92	15404	2.00	2.03	
68 Dichlorobromomethane	83	5.619	5.619	0.000	94	23330	2.00	1.82	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	93	11149	2.00	1.79	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	93	25007	2.00	1.79	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	95	124969	10.0	9.64	
74 Toluene	92	6.158	6.158	0.000	98	46831	2.00	1.93	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	91	21902	2.00	1.76	
75 Ethyl methacrylate	69	6.386	6.386	0.000	85	22362	2.00	1.86	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	93	14105	2.00	1.86	
81 Tetrachloroethene	166	6.573	6.573	0.000	94	21565	2.00	1.88	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	88	28876	2.00	1.93	
80 2-Hexanone	43	6.676	6.676	0.000	94	80602	10.0	9.17	
83 Chlorodibromomethane	129	6.821	6.821	0.000	88	18351	2.00	1.86	
84 Ethylene Dibromide	107	6.904	6.904	0.000	98	17236	2.00	1.72	
87 Chlorobenzene	112	7.267	7.256	0.011	97	54321	2.00	1.92	
88 Ethylbenzene	91	7.319	7.319	0.000	98	87071	2.00	1.95	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	89	19223	2.00	1.96	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	96	33403	2.00	1.92	
91 o-Xylene	106	7.733	7.733	0.000	95	34542	2.00	1.97	
92 Styrene	104	7.754	7.754	0.000	93	45570	2.00	1.74	
95 Bromoform	173	7.951	7.951	0.000	95	11551	2.00	1.70	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	85285	2.00	1.81	
101 Bromobenzene	156	8.303	8.303	0.000	89	23010	2.00	1.83	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	96	28994	2.00	1.93	
99 N-Propylbenzene	91	8.345	8.345	0.000	99	98925	2.00	1.77	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	89	10069	2.00	1.89	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	71	6826	2.00	1.80	
103 2-Chlorotoluene	126	8.438	8.438	0.000	96	23109	2.00	1.93	
102 1,3,5-Trimethylbenzene	105	8.479	8.490	-0.011	95	68856	2.00	1.75	
105 4-Chlorotoluene	126	8.531	8.531	0.000	96	22588	2.00	1.86	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	16209	2.00	1.84	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	96	73291	2.00	1.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	87529	2.00	1.74	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	97	75461	2.00	1.72	
111 1,3-Dichlorobenzene	146	9.049	9.060	-0.011	97	46788	2.00	1.91	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	95	48240	2.00	1.92	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	70467	2.00	1.75	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	49320	2.00	1.95	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	82	6443	2.00	1.90	
119 1,2,4-Trichlorobenzene	180	10.759	10.770	-0.011	92	39351	2.00	2.02	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	96	15329	2.00	1.78	
121 Naphthalene	128	10.977	10.977	0.000	96	107252	2.00	1.80	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	94	35036	2.00	1.82	
S 126 1,3-Dichloropropene, Total	1				0			3.55	
S 125 1,2-Dichloroethene, Total	1				0			3.72	
S 123 Total BTEX	1				0			9.74	
S 124 Xylenes, Total	1				0			3.89	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00198	Amount Added:	2.00	Units: uL	
GAS CORP mix_00427	Amount Added:	2.00	Units: uL	
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent

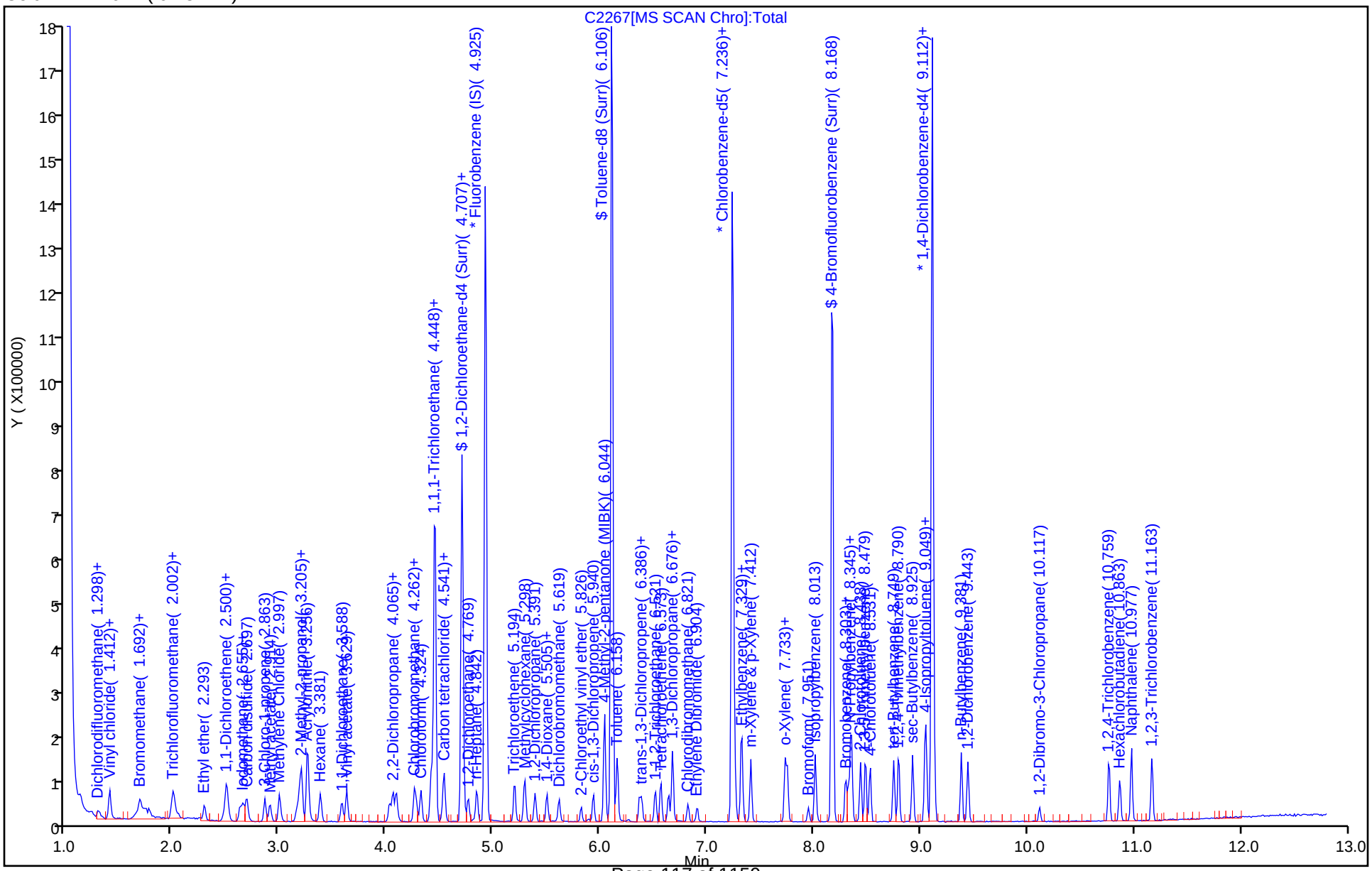
Report Date: 19-Nov-2020 12:03:22 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2267.D

Injection Date:	18-Nov-2020 16:07:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	IC 2			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

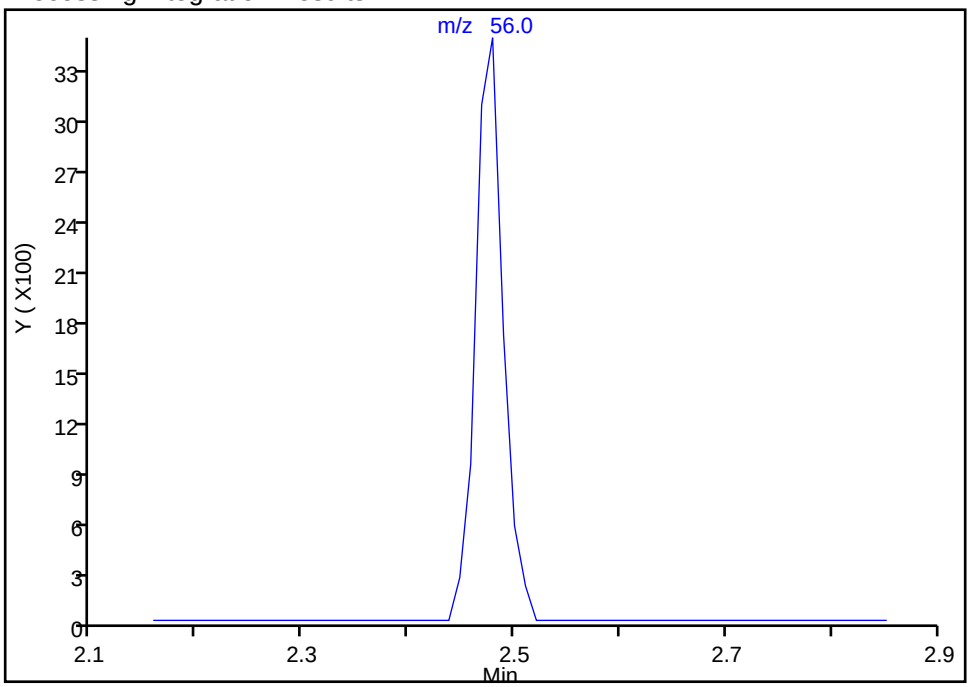
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2267.D
Injection Date: 18-Nov-2020 16:07:30 Instrument ID: HP5973C
Lims ID: IC 2
Client ID:
Operator ID: RF ALS Bottle#: 6 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

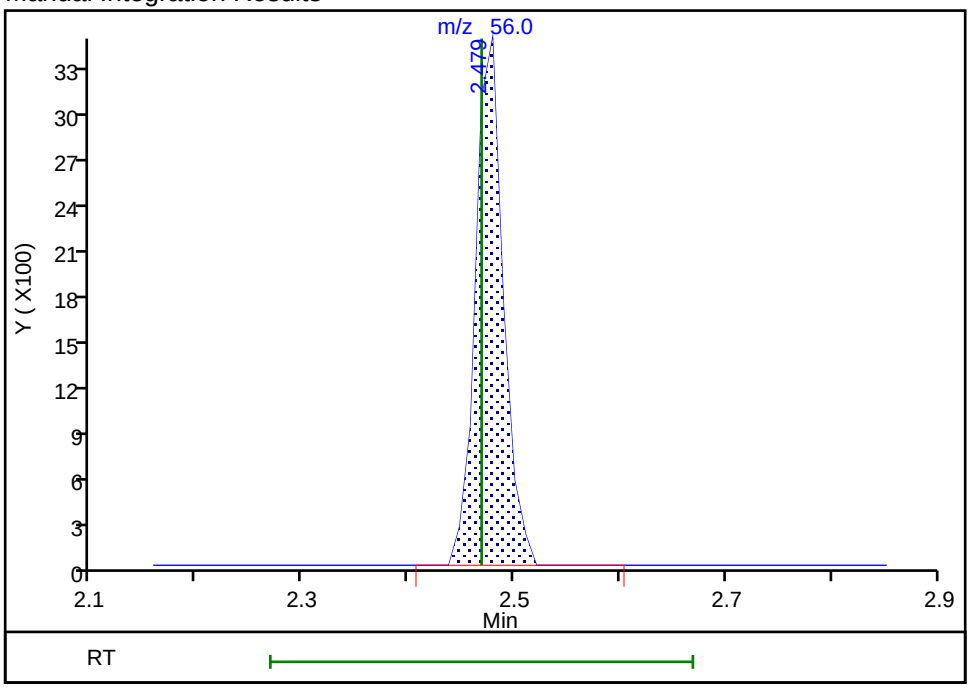
Not Detected
Expected RT: 2.47

Processing Integration Results



Manual Integration Results

RT: 2.48
Area: 6341
Amount: 10.910668
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:05:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

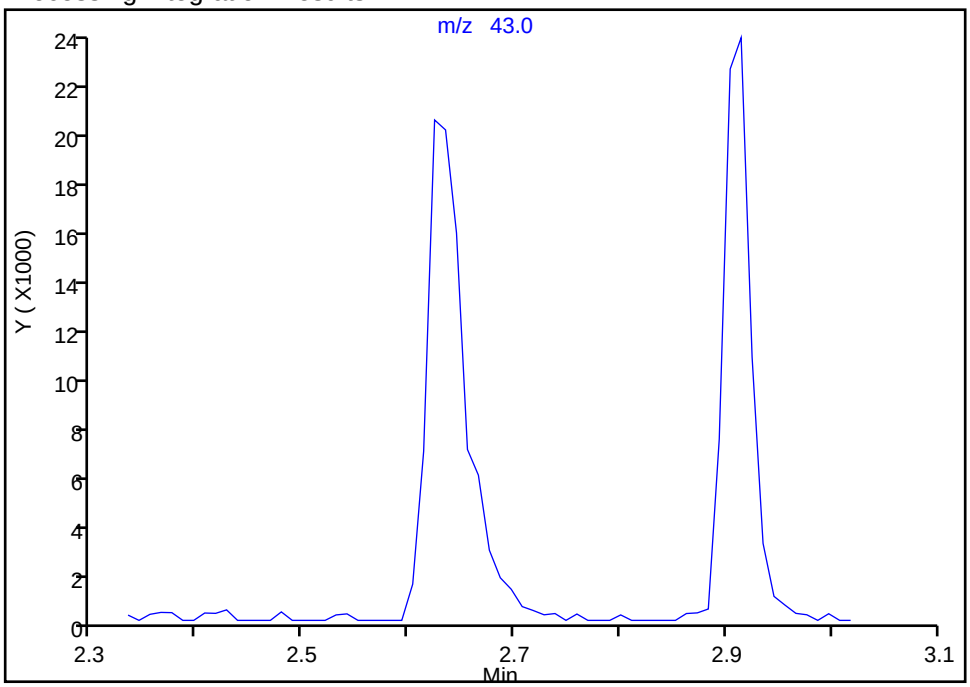
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2267.D
Injection Date: 18-Nov-2020 16:07:30 Instrument ID: HP5973C
Lims ID: IC 2
Client ID:
Operator ID: RF ALS Bottle#: 6 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

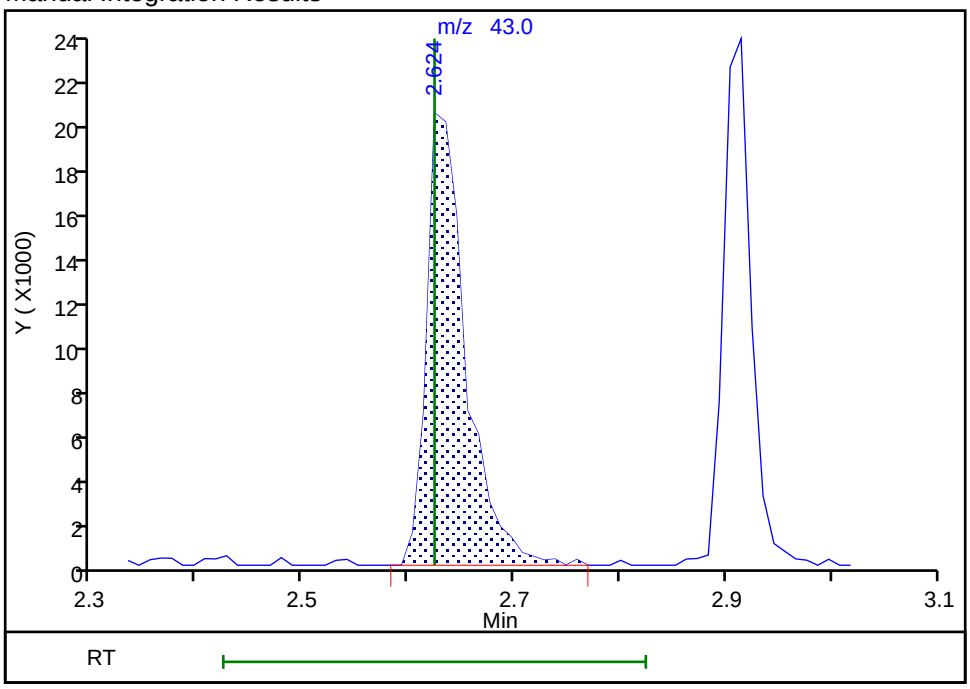
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.62
Area: 52091
Amount: 10.577583
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:05:29
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

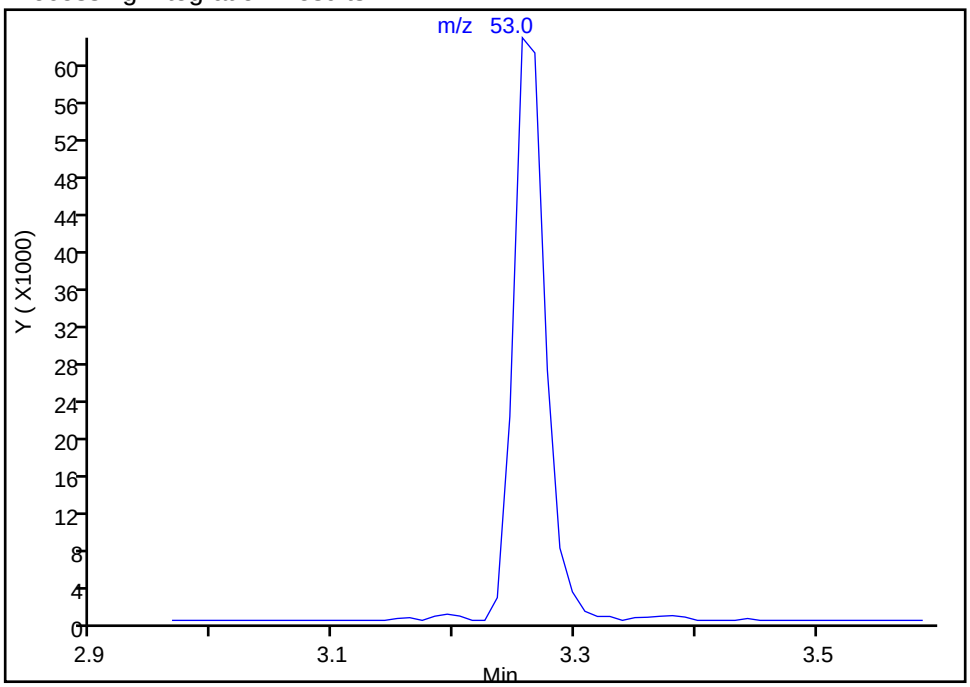
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2267.D
Injection Date: 18-Nov-2020 16:07:30 Instrument ID: HP5973C
Lims ID: IC 2
Client ID:
Operator ID: RF ALS Bottle#: 6 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

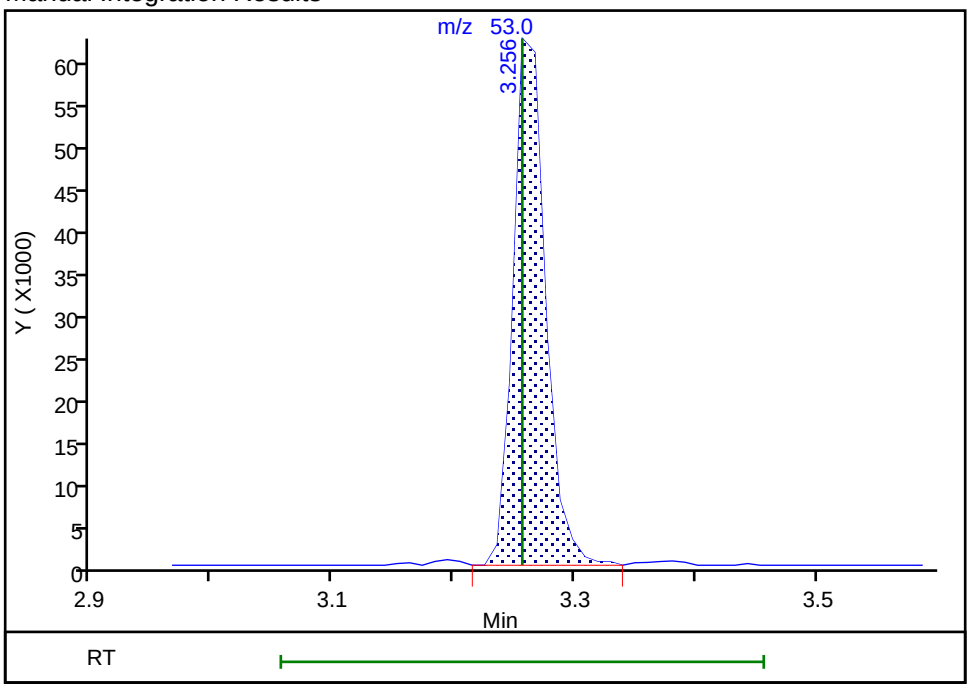
Not Detected
Expected RT: 3.26

Processing Integration Results



Manual Integration Results

RT: 3.26
Area: 115835
Amount: 20.697531
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:05:35
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2268.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-Nov-2020 16:32:30 ALS Bottle#: 7 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 3
Misc. Info.: 480-0095057-016
Operator ID: RF Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 12:03:28 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: farrellr Date: 18-Nov-2020 20:11:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	193260	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	367864	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.111	9.111	0.000	95	389094	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	94	344723	25.0	25.6	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	99	185408	25.0	25.5	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	1020415	25.0	24.7	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	324208	25.0	24.2	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	97	54276	5.00	4.70	
12 Chloromethane	50	1.308	1.308	0.000	99	53115	5.00	4.71	
13 Vinyl chloride	62	1.401	1.401	0.000	98	54881	5.00	4.86	
151 Butadiene	54	1.412	1.412	0.000	89	47561	5.00	4.57	
14 Bromomethane	94	1.691	1.691	0.000	92	50348	5.00	4.87	
15 Chloroethane	64	1.774	1.774	0.000	98	36709	5.00	4.67	
16 Dichlorofluoromethane	67	2.002	2.002	0.000	97	89284	5.00	4.86	
17 Trichlorofluoromethane	101	2.002	2.002	0.000	97	92074	5.00	4.92	
18 Ethyl ether	59	2.293	2.293	0.000	90	44296	5.00	4.91	
20 Acrolein	56	2.479	2.479	0.000	99	15547	25.0	26.3	Ma
22 1,1-Dichloroethene	96	2.510	2.510	0.000	98	52548	5.00	5.17	
21 112TCTFE	101	2.500	2.500	0.000	90	58229	5.00	5.14	
23 Acetone	43	2.624	2.624	0.000	100	130315	25.0	26.0	
25 Iodomethane	142	2.666	2.666	0.000	100	103490	5.00	5.18	
26 Carbon disulfide	76	2.697	2.697	0.000	100	168994	5.00	5.08	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	85	64809	5.00	4.87	
27 Methyl acetate	43	2.904	2.904	0.000	97	111856	10.0	10.6	
30 Methylene Chloride	84	2.997	2.997	0.000	89	63473	5.00	5.36	
31 2-Methyl-2-propanol	59	3.163	3.163	0.000	96	122023	50.0	49.1	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	99	169449	5.00	5.14	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	97	60313	5.00	5.25	
33 Acrylonitrile	53	3.256	3.256	0.000	98	301069	50.0	52.9	
35 Hexane	57	3.381	3.381	0.000	92	68959	5.00	4.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.578	3.578	0.000	96	93505	5.00	5.15	
37 Vinyl acetate	43	3.629	3.629	0.000	98	213266	10.0	9.61	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	90	59457	5.00	5.17	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	77	65529	5.00	5.08	
43 2-Butanone (MEK)	43	4.096	4.096	0.000	99	183059	25.0	25.5	
48 Chlorobromomethane	128	4.262	4.262	0.000	85	36770	5.00	5.02	
49 Tetrahydrofuran	42	4.272	4.272	0.000	85	52211	10.0	9.37	
50 Chloroform	83	4.324	4.324	0.000	93	106119	5.00	5.16	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	98	79384	5.00	5.09	
52 Cyclohexane	56	4.427	4.427	0.000	89	83514	5.00	5.26	
55 Carbon tetrachloride	117	4.531	4.531	0.000	95	68306	5.00	5.07	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	95	74392	5.00	5.27	
57 Benzene	78	4.707	4.707	0.000	95	208389	5.00	5.18	
53 Isobutyl alcohol	43	4.718	4.718	0.000	90	100945	125.0	131.1	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	97	78839	5.00	5.11	
59 n-Heptane	43	4.842	4.842	0.000	87	60957	5.00	4.63	
62 Trichloroethene	95	5.194	5.194	0.000	95	59215	5.00	5.12	
64 Methylcyclohexane	83	5.298	5.298	0.000	87	95766	5.00	5.27	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	91	45813	5.00	4.98	
67 Dibromomethane	93	5.505	5.505	0.000	91	38270	5.00	4.97	
66 1,4-Dioxane	88	5.505	5.505	0.000	39	22858	100.0	114.4	
68 Dichlorobromomethane	83	5.619	5.619	0.000	97	62787	5.00	4.82	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	92	29898	5.00	4.74	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	95	68817	5.00	4.84	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	95	329467	25.0	24.9	
74 Toluene	92	6.158	6.158	0.000	99	122366	5.00	4.95	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	95	60584	5.00	4.77	
75 Ethyl methacrylate	69	6.386	6.386	0.000	87	56018	5.00	4.57	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	90	38081	5.00	4.92	
81 Tetrachloroethene	166	6.572	6.572	0.000	97	58160	5.00	4.96	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	90	77267	5.00	5.06	
80 2-Hexanone	43	6.676	6.676	0.000	96	216085	25.0	24.1	
83 Chlorodibromomethane	129	6.821	6.821	0.000	89	47785	5.00	4.75	
84 Ethylene Dibromide	107	6.904	6.904	0.000	96	50961	5.00	5.00	
87 Chlorobenzene	112	7.267	7.267	0.000	97	142872	5.00	4.94	
88 Ethylbenzene	91	7.319	7.319	0.000	98	228070	5.00	5.01	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	94	48922	5.00	4.90	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	97	89232	5.00	5.04	
91 o-Xylene	106	7.733	7.733	0.000	97	92357	5.00	5.16	
92 Styrene	104	7.754	7.754	0.000	95	135923	5.00	5.08	
95 Bromoform	173	7.951	7.951	0.000	95	32304	5.00	4.65	
94 Isopropylbenzene	105	8.013	8.013	0.000	96	237333	5.00	5.24	
101 Bromobenzene	156	8.303	8.303	0.000	89	61862	5.00	5.11	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	97	74862	5.00	5.17	
99 N-Propylbenzene	91	8.345	8.345	0.000	99	280487	5.00	5.20	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	89	27800	5.00	5.43	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	72	17619	5.00	4.82	
103 2-Chlorotoluene	126	8.438	8.438	0.000	98	62600	5.00	5.42	
102 1,3,5-Trimethylbenzene	105	8.479	8.479	0.000	95	198650	5.00	5.23	
105 4-Chlorotoluene	126	8.531	8.531	0.000	96	61724	5.00	5.29	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	43127	5.00	5.09	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	96	199264	5.00	5.15	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	252696	5.00	5.23	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	97	217013	5.00	5.14	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	98	125032	5.00	5.30	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	95	125330	5.00	5.18	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	203770	5.00	5.25	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	126999	5.00	5.21	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	82	16910	5.00	5.18	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	94	96720	5.00	5.15	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	97	44546	5.00	5.36	
121 Naphthalene	128	10.977	10.977	0.000	96	293303	5.00	5.09	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	96	102250	5.00	5.50	
S 126 1,3-Dichloropropene, Total	1				0			9.62	
S 125 1,2-Dichloroethene, Total	1				0			10.3	
S 123 Total BTEX	1				0			25.3	
S 124 Xylenes, Total	1				0			10.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00198	Amount Added:	5.00	Units: uL	
GAS CORP mix_00427	Amount Added:	5.00	Units: uL	
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent

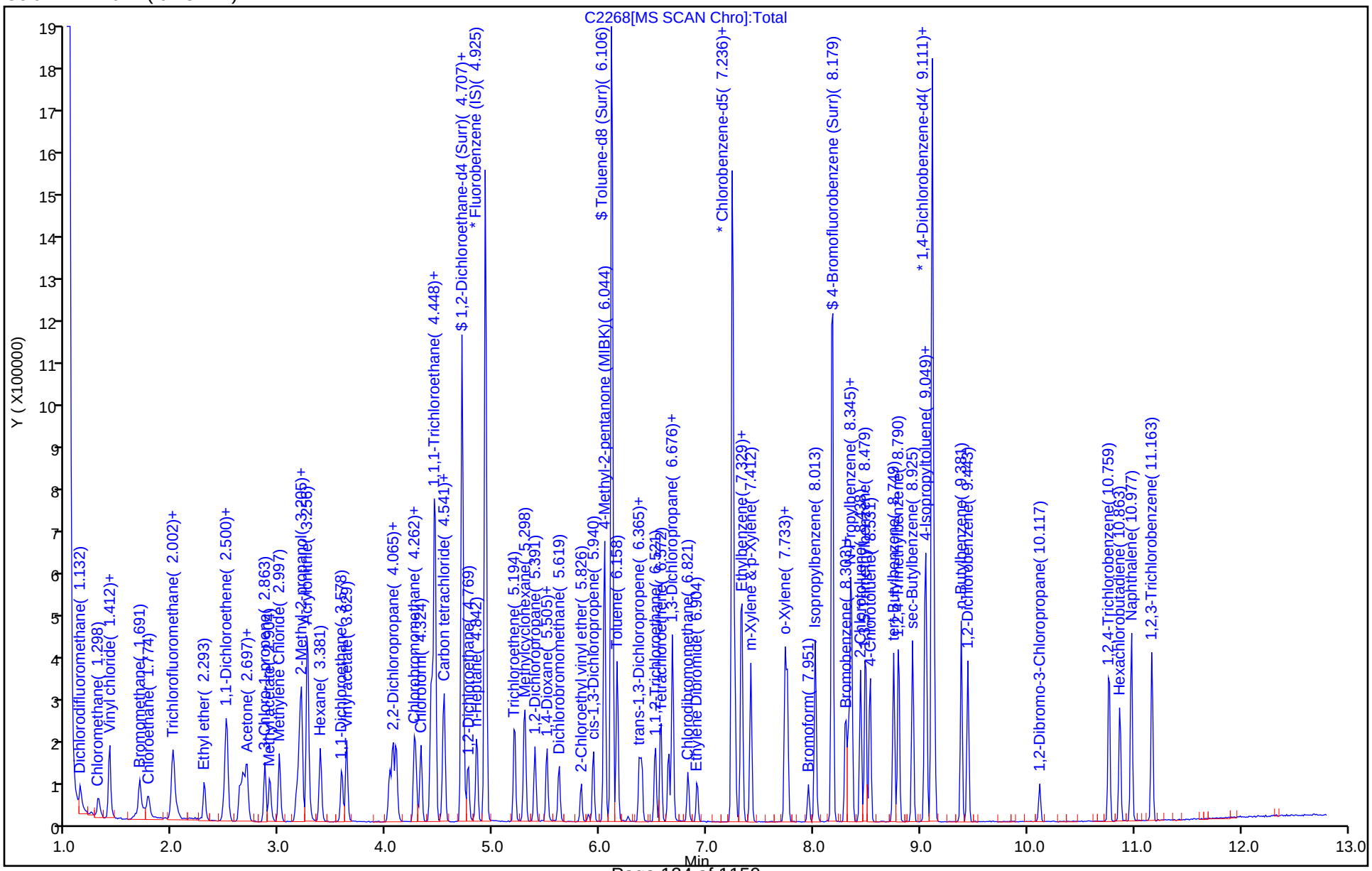
Report Date: 19-Nov-2020 12:03:33 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2268.D

Injection Date:	18-Nov-2020 16:32:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	IC 3			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

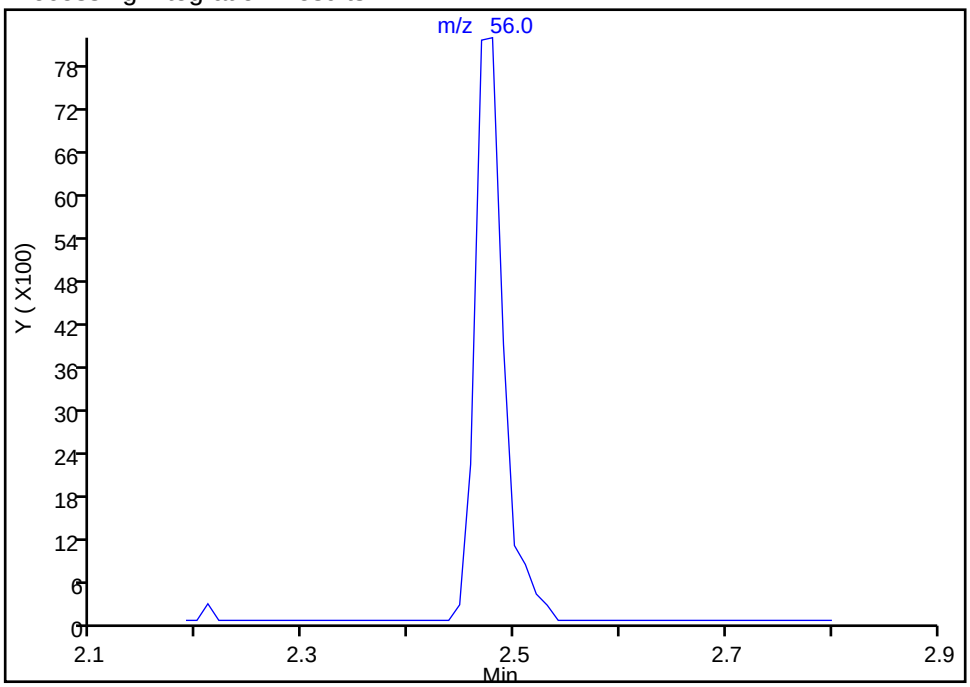
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2268.D
Injection Date: 18-Nov-2020 16:32:30 Instrument ID: HP5973C
Lims ID: IC 3
Client ID:
Operator ID: RF ALS Bottle#: 7 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

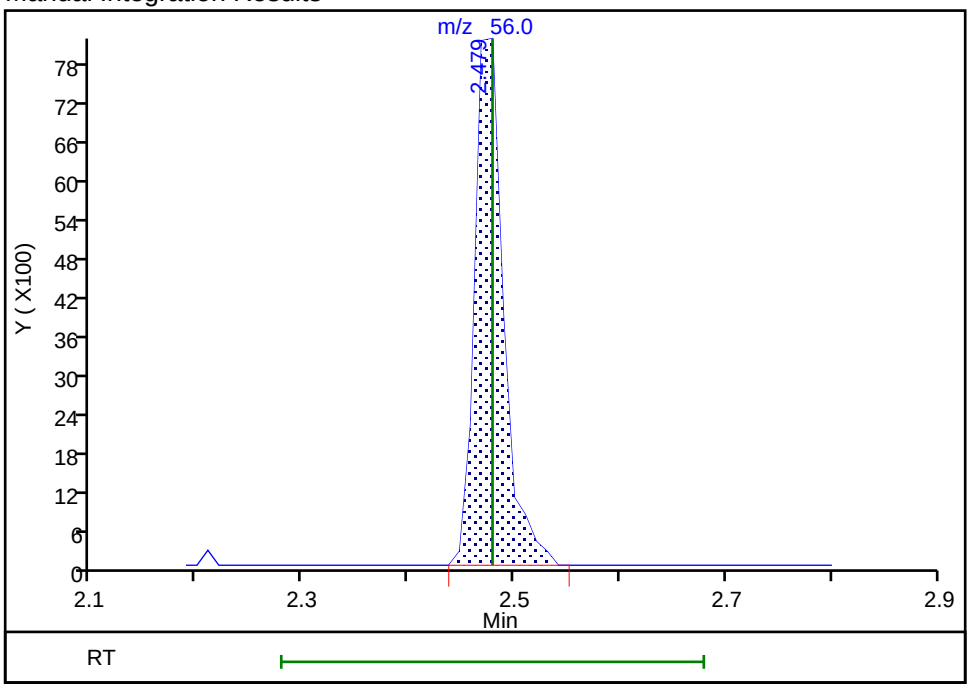
Not Detected
Expected RT: 2.48

Processing Integration Results



Manual Integration Results

RT: 2.48
Area: 15547
Amount: 26.322739
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:10:18
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2269.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Nov-2020 16:57:30 ALS Bottle#: 8 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 4
Misc. Info.: 480-0095057-017
Operator ID: RF Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 12:03:40 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: farrellr Date: 18-Nov-2020 20:15:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	196921	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	86	381962	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.111	0.001	94	401971	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	93	334270	25.0	24.4	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	98	185526	25.0	25.1	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	1099665	25.0	25.6	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	97	345189	25.0	24.8	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	129213	10.0	11.0	
12 Chloromethane	50	1.298	1.308	-0.010	99	116596	10.0	10.1	
13 Vinyl chloride	62	1.401	1.401	0.000	97	116950	10.0	10.2	
151 Butadiene	54	1.412	1.412	0.000	90	109705	10.0	10.4	
14 Bromomethane	94	1.681	1.691	-0.010	92	100737	10.0	9.56	
15 Chloroethane	64	1.775	1.774	0.001	100	80196	10.0	10.0	
16 Dichlorofluoromethane	67	2.003	2.002	0.000	96	192285	10.0	10.3	
17 Trichlorofluoromethane	101	2.003	2.002	0.000	79	203663	10.0	10.7	
18 Ethyl ether	59	2.293	2.293	0.000	89	91101	10.0	9.92	
20 Acrolein	56	2.469	2.479	-0.010	99	29876	50.0	49.6	Ma
21 112TCTFE	101	2.500	2.500	0.000	92	117677	10.0	10.2	
22 1,1-Dichloroethene	96	2.500	2.510	-0.010	97	102737	10.0	9.93	
23 Acetone	43	2.624	2.624	0.000	100	265219	50.0	52.0	
25 Iodomethane	142	2.655	2.666	-0.011	99	203059	10.0	9.97	
26 Carbon disulfide	76	2.686	2.697	-0.011	100	346328	10.0	10.2	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	85	139289	10.0	10.3	
27 Methyl acetate	43	2.904	2.904	0.000	97	223892	20.0	20.8	
30 Methylene Chloride	84	2.997	2.997	0.000	89	123302	10.0	10.6	
31 2-Methyl-2-propanol	59	3.163	3.163	0.000	99	265751	100.0	104.9	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	99	342901	10.0	10.2	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.001	95	120752	10.0	10.3	
33 Acrylonitrile	53	3.256	3.256	0.000	98	629718	100.0	108.7	
35 Hexane	57	3.381	3.381	0.000	92	142632	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.578	3.578	0.000	96	192898	10.0	10.4	
37 Vinyl acetate	43	3.630	3.629	0.001	98	460746	20.0	20.4	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	91	119986	10.0	10.2	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	76	132158	10.0	10.1	
43 2-Butanone (MEK)	43	4.085	4.096	-0.011	99	390479	50.0	53.3	
48 Chlorobromomethane	128	4.262	4.262	0.000	87	74831	10.0	10.0	
49 Tetrahydrofuran	42	4.272	4.272	0.000	80	108774	20.0	19.2	
50 Chloroform	83	4.324	4.324	0.000	94	204650	10.0	9.77	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	97	167273	10.0	10.5	
52 Cyclohexane	56	4.427	4.427	0.000	88	167792	10.0	10.4	
55 Carbon tetrachloride	117	4.531	4.531	0.000	96	143243	10.0	10.4	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	95	151199	10.0	10.5	
57 Benzene	78	4.707	4.707	0.000	94	419282	10.0	10.2	
53 Isobutyl alcohol	43	4.718	4.718	0.000	93	226753	250.0	288.9	
58 1,2-Dichloroethane	62	4.759	4.769	-0.010	97	154030	10.0	9.79	
59 n-Heptane	43	4.842	4.842	0.000	85	132942	10.0	9.92	
62 Trichloroethene	95	5.194	5.194	0.000	96	120532	10.0	10.2	
64 Methylcyclohexane	83	5.298	5.298	0.000	87	196623	10.0	10.6	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	91	95689	10.0	10.2	
66 1,4-Dioxane	88	5.505	5.505	0.000	41	45279	200.0	218.3	M
67 Dibromomethane	93	5.505	5.505	0.000	91	79630	10.0	10.2	
68 Dichlorobromomethane	83	5.619	5.619	0.000	99	133533	10.0	10.1	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	94	70500	10.0	11.0	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	94	150817	10.0	10.4	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	96	740835	50.0	54.0	
74 Toluene	92	6.158	6.158	0.000	98	266688	10.0	10.4	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	94	139611	10.0	10.6	
75 Ethyl methacrylate	69	6.386	6.386	0.000	86	136869	10.0	10.8	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	90	83475	10.0	10.4	
81 Tetrachloroethene	166	6.573	6.572	0.001	96	122909	10.0	10.1	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	89	168206	10.0	10.6	
80 2-Hexanone	43	6.676	6.676	0.000	96	505213	50.0	54.3	
83 Chlorodibromomethane	129	6.821	6.821	0.000	89	108197	10.0	10.4	
84 Ethylene Dibromide	107	6.904	6.904	0.000	98	113656	10.0	10.7	
87 Chlorobenzene	112	7.267	7.267	0.000	98	309553	10.0	10.3	
88 Ethylbenzene	91	7.319	7.319	0.000	98	499264	10.0	10.6	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	93	102968	10.0	9.93	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	97	193664	10.0	10.5	
91 o-Xylene	106	7.733	7.733	0.000	97	190828	10.0	10.3	
92 Styrene	104	7.754	7.754	0.000	95	291709	10.0	10.5	
95 Bromoform	173	7.951	7.951	0.000	95	68685	10.0	9.53	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	511052	10.0	10.9	
101 Bromobenzene	156	8.303	8.303	0.000	88	133250	10.0	10.7	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	97	155994	10.0	10.4	
99 N-Propylbenzene	91	8.345	8.345	0.000	98	597405	10.0	10.7	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	89	57323	10.0	10.8	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	73	39444	10.0	10.4	
103 2-Chlorotoluene	126	8.438	8.438	0.000	97	129682	10.0	10.9	
102 1,3,5-Trimethylbenzene	105	8.490	8.479	0.011	95	421966	10.0	10.8	
105 4-Chlorotoluene	126	8.531	8.531	0.000	97	126803	10.0	10.5	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	97786	10.0	11.2	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	96	429774	10.0	10.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	547016	10.0	11.0	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	96	467233	10.0	10.7	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	99	254409	10.0	10.4	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	96	268345	10.0	10.7	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	434118	10.0	10.8	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	97	262885	10.0	10.4	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	87	34273	10.0	10.2	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	94	202345	10.0	10.4	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	98	87775	10.0	10.2	
121 Naphthalene	128	10.977	10.977	0.000	96	629480	10.0	10.6	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	96	203041	10.0	10.6	
S 126 1,3-Dichloropropene, Total	1				0			21.0	
S 125 1,2-Dichloroethene, Total	1				0			20.4	
S 123 Total BTEX	1				0			52.0	
S 124 Xylenes, Total	1				0			20.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00198	Amount Added:	5.00	Units: uL	
GAS CORP mix_00427	Amount Added:	5.00	Units: uL	
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent

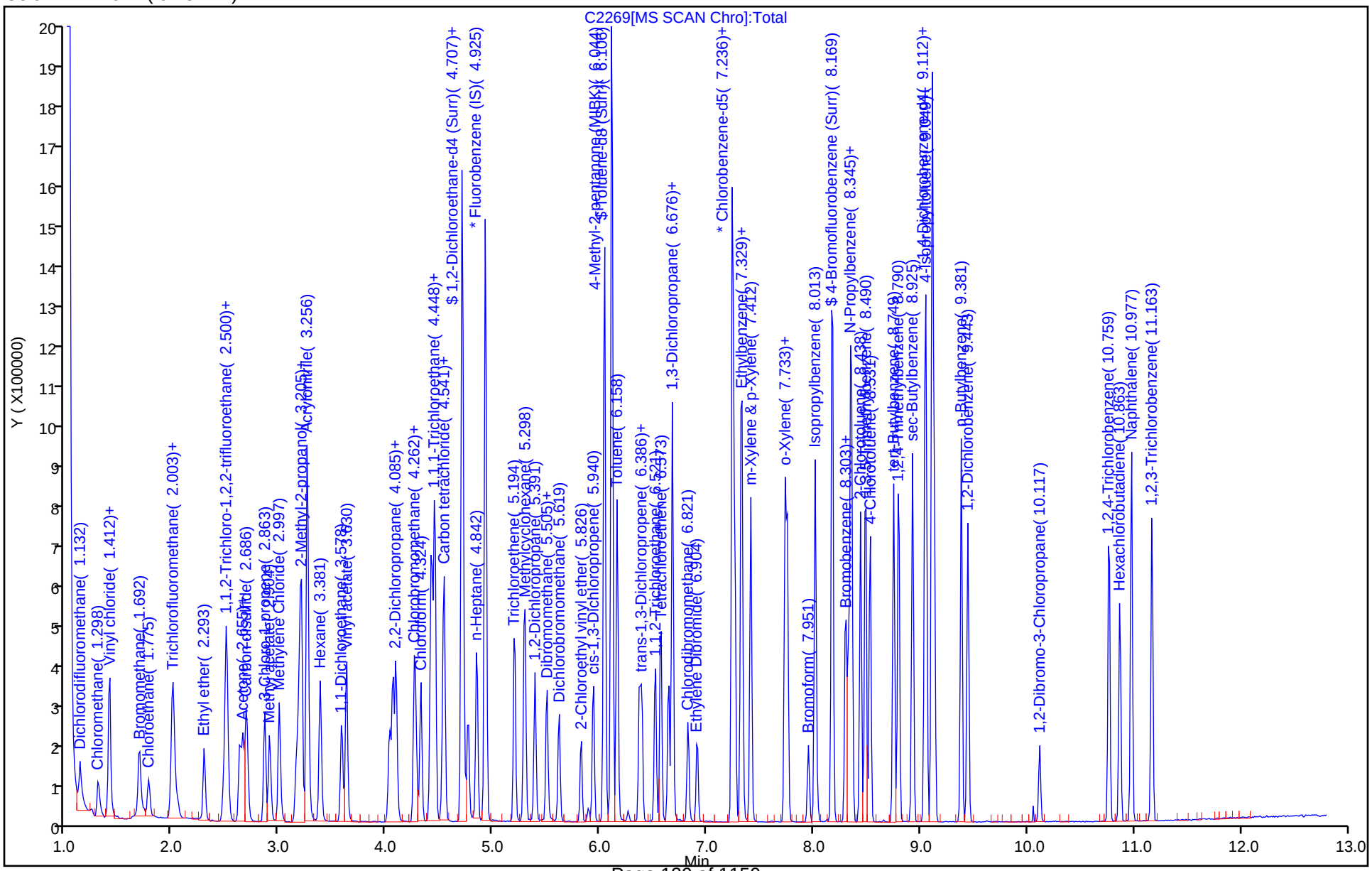
Report Date: 19-Nov-2020 12:03:44 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2269.D

Injection Date:	18-Nov-2020 16:57:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	IC 4			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

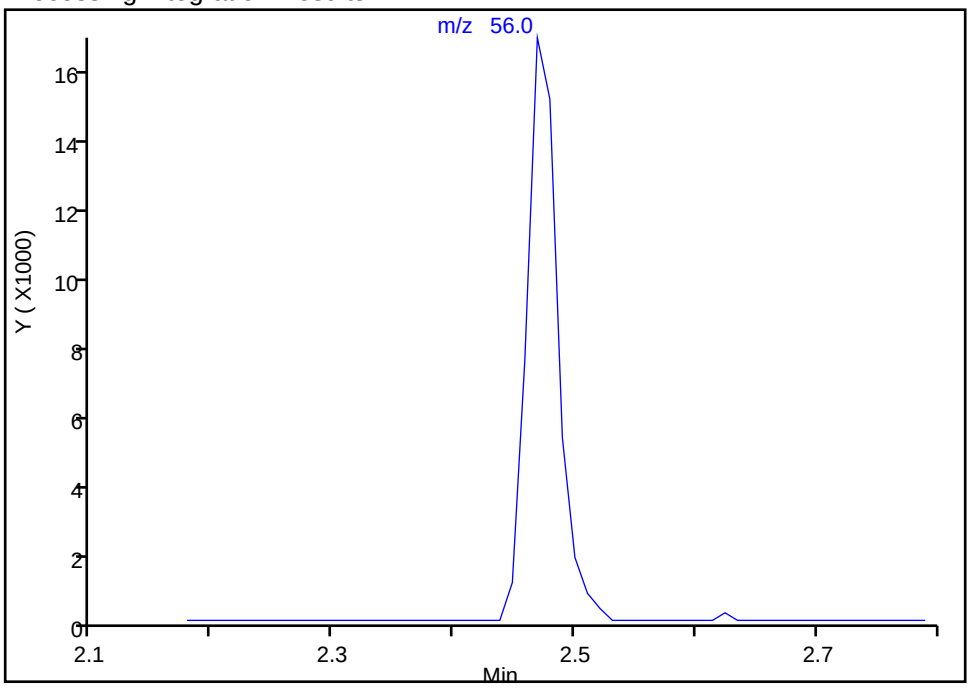
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2269.D
Injection Date: 18-Nov-2020 16:57:30 Instrument ID: HP5973C
Lims ID: IC 4
Client ID:
Operator ID: RF ALS Bottle#: 8 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

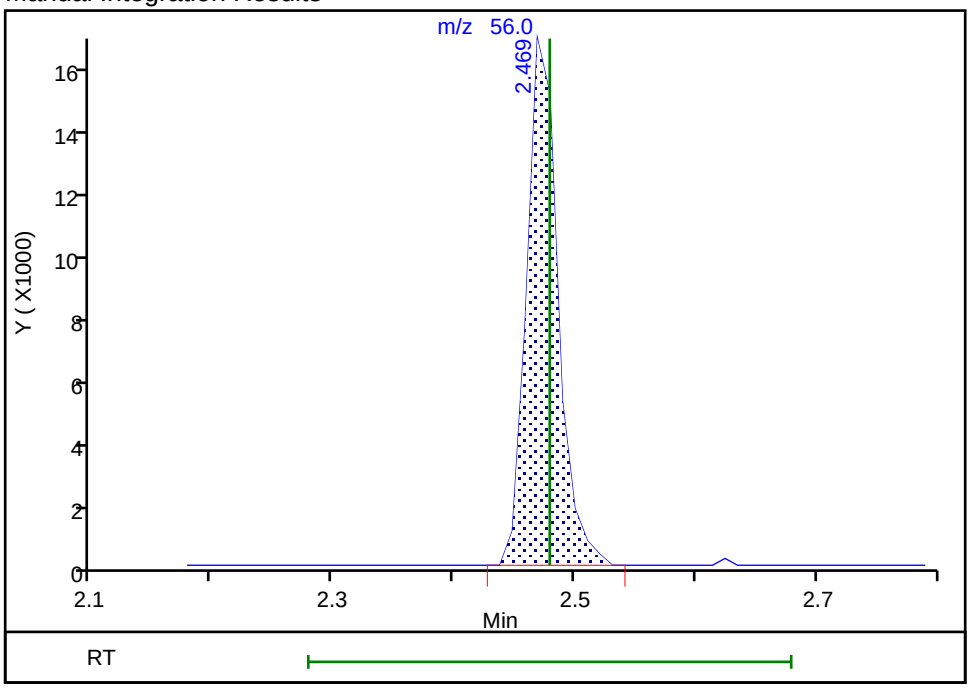
Not Detected
Expected RT: 2.48

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 29876
Amount: 49.642869
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:13:07
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

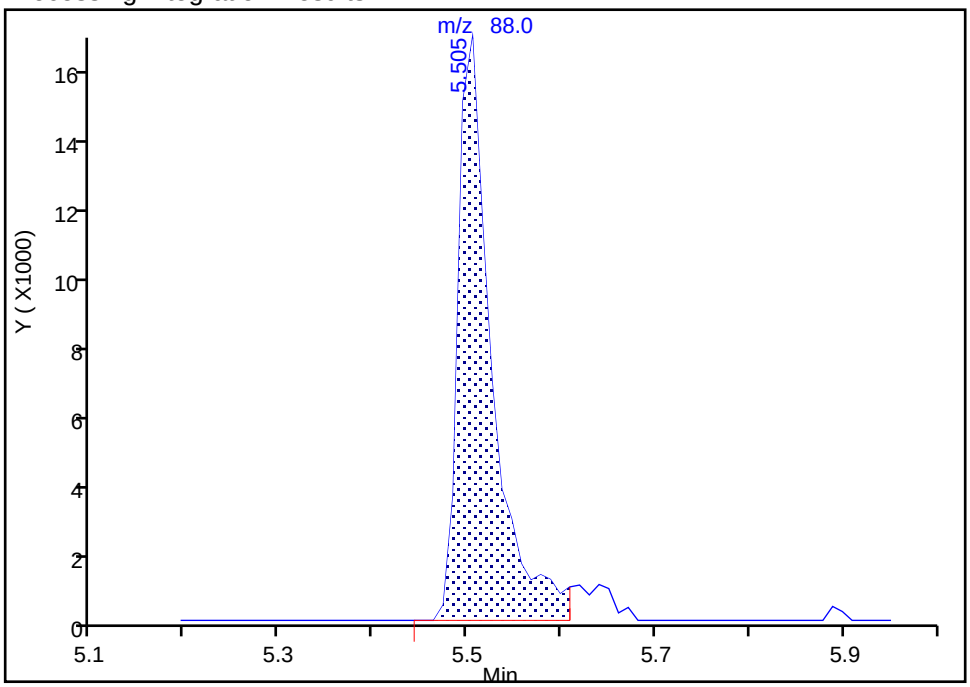
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2269.D
Injection Date: 18-Nov-2020 16:57:30 Instrument ID: HP5973C
Lims ID: IC 4
Client ID:
Operator ID: RF ALS Bottle#: 8 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

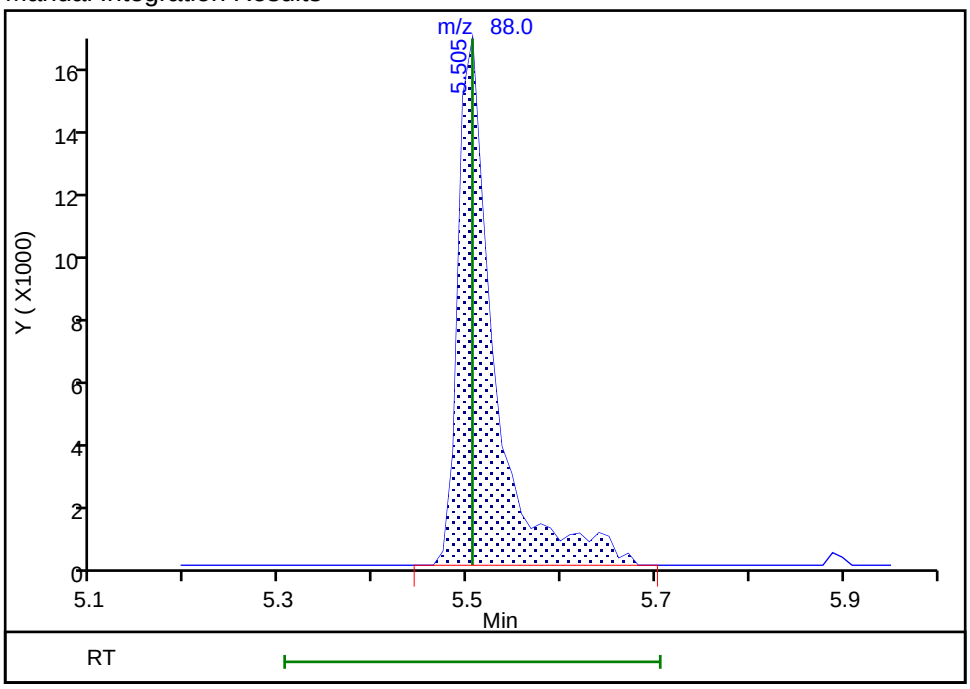
Processing Integration Results

RT: 5.51
Area: 42590
Amount: 206.9664
Amount Units: ug/L



Manual Integration Results

RT: 5.51
Area: 45279
Amount: 218.2512
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:13:42
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2270.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 18-Nov-2020 17:22:30 ALS Bottle#: 9 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: icis 5
Misc. Info.: 480-0095057-018
Operator ID: RF Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 12:03:50 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: farrellr Date: 19-Nov-2020 11:11:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	200563	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	389943	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.111	9.111	0.000	94	434458	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	94	353751	25.0	25.4	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	97	190005	25.0	25.2	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	1056493	25.0	24.1	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	344630	25.0	24.3	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	301280	25.0	25.2	
12 Chloromethane	50	1.308	1.308	0.000	99	292774	25.0	25.0	
13 Vinyl chloride	62	1.401	1.401	0.000	98	300200	25.0	25.6	
151 Butadiene	54	1.412	1.412	0.000	90	269743	25.0	25.0	
14 Bromomethane	94	1.692	1.692	0.000	92	248539	25.0	23.2	
15 Chloroethane	64	1.774	1.774	0.000	100	198747	25.0	24.4	
16 Dichlorofluoromethane	67	2.002	2.002	0.000	95	486563	25.0	25.5	
17 Trichlorofluoromethane	101	2.002	2.002	0.000	80	510171	25.0	26.3	
18 Ethyl ether	59	2.293	2.293	0.000	89	229246	25.0	24.5	
20 Acrolein	56	2.469	2.469	0.000	0	74100	125.0	120.9	M
21 112TCTFE	101	2.500	2.500	0.000	93	285405	25.0	24.3	
22 1,1-Dichloroethene	96	2.500	2.500	0.000	98	259597	25.0	24.6	
23 Acetone	43	2.624	2.624	0.000	100	647713	125.0	124.7	
25 Iodomethane	142	2.655	2.655	0.000	99	518960	25.0	25.0	
26 Carbon disulfide	76	2.697	2.697	0.000	99	850297	25.0	24.6	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	86	345470	25.0	25.0	
27 Methyl acetate	43	2.904	2.904	0.000	97	565322	50.0	51.6	
30 Methylene Chloride	84	2.997	2.997	0.000	90	295405	25.0	25.4	
31 2-Methyl-2-propanol	59	3.163	3.163	0.000	99	634318	250.0	245.9	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	98	856915	25.0	25.1	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	97	300589	25.0	25.2	
33 Acrylonitrile	53	3.256	3.256	0.000	98	1543333	250.0	261.5	
35 Hexane	57	3.381	3.381	0.000	92	347562	25.0	24.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.578	3.578	0.000	96	470404	25.0	25.0	
37 Vinyl acetate	43	3.629	3.629	0.000	97	1185473	50.0	51.5	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	90	310575	25.0	26.0	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	77	332397	25.0	24.8	
43 2-Butanone (MEK)	43	4.085	4.085	0.000	99	946754	125.0	126.9	
48 Chlorobromomethane	128	4.262	4.262	0.000	86	184765	25.0	24.3	
49 Tetrahydrofuran	42	4.272	4.272	0.000	82	255181	50.0	44.1	
50 Chloroform	83	4.324	4.324	0.000	94	509443	25.0	23.9	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	98	411914	25.0	25.4	
52 Cyclohexane	56	4.427	4.427	0.000	89	422999	25.0	25.7	
55 Carbon tetrachloride	117	4.531	4.531	0.000	96	362355	25.0	25.9	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	95	370337	25.0	25.3	
57 Benzene	78	4.707	4.707	0.000	95	1054357	25.0	25.2	
53 Isobutyl alcohol	43	4.718	4.718	0.000	92	551223	625.0	689.7	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	97	392557	25.0	24.5	
59 n-Heptane	43	4.842	4.842	0.000	87	323931	25.0	23.7	
62 Trichloroethene	95	5.194	5.194	0.000	97	301722	25.0	25.1	
64 Methylcyclohexane	83	5.298	5.298	0.000	86	489348	25.0	25.9	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	92	240628	25.0	25.2	
67 Dibromomethane	93	5.505	5.505	0.000	93	203118	25.0	25.4	
66 1,4-Dioxane	88	5.505	5.505	0.000	40	108212	500.0	510.9	
68 Dichlorobromomethane	83	5.619	5.619	0.000	99	344486	25.0	25.5	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	94	168039	25.0	25.6	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	95	384044	25.0	26.0	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	96	1808438	125.0	129.1	
74 Toluene	92	6.158	6.158	0.000	97	629710	25.0	24.0	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	96	343605	25.0	25.5	
75 Ethyl methacrylate	69	6.386	6.386	0.000	87	326993	25.0	25.2	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	91	209141	25.0	25.5	
81 Tetrachloroethene	166	6.573	6.573	0.000	98	301769	25.0	24.3	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	90	400172	25.0	24.7	
80 2-Hexanone	43	6.676	6.676	0.000	96	1185705	125.0	124.8	
83 Chlorodibromomethane	129	6.821	6.821	0.000	89	268898	25.0	25.2	
84 Ethylene Dibromide	107	6.904	6.904	0.000	98	277586	25.0	25.7	
87 Chlorobenzene	112	7.256	7.256	0.000	96	748514	25.0	24.4	
88 Ethylbenzene	91	7.319	7.319	0.000	98	1204062	25.0	24.9	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	94	270324	25.0	25.5	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	96	470976	25.0	25.1	
91 o-Xylene	106	7.733	7.733	0.000	97	475495	25.0	25.1	
92 Styrene	104	7.754	7.754	0.000	95	730911	25.0	25.8	
95 Bromoform	173	7.951	7.951	0.000	96	184764	25.0	25.1	
94 Isopropylbenzene	105	8.013	8.013	0.000	96	1267947	25.0	25.1	
101 Bromobenzene	156	8.303	8.303	0.000	89	327088	25.0	24.2	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	96	393654	25.0	24.3	
99 N-Propylbenzene	91	8.345	8.345	0.000	99	1481958	25.0	24.6	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	89	136268	25.0	23.8	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	80	100367	25.0	24.6	
103 2-Chlorotoluene	126	8.438	8.438	0.000	98	313797	25.0	24.3	
102 1,3,5-Trimethylbenzene	105	8.490	8.490	0.000	95	1080791	25.0	25.5	
105 4-Chlorotoluene	126	8.531	8.531	0.000	96	314084	25.0	24.1	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	244450	25.0	25.8	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	97	1092061	25.0	25.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	1396157	25.0	25.9	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	97	1188821	25.0	25.2	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	98	630521	25.0	23.9	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	96	635438	25.0	23.5	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	1068975	25.0	24.6	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	99	652657	25.0	24.0	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	87	85022	25.0	23.3	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	94	519922	25.0	24.8	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	98	221990	25.0	23.9	
121 Naphthalene	128	10.977	10.977	0.000	96	1630835	25.0	25.4	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	96	511889	25.0	24.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00198	Amount Added:	12.50	Units: uL	
GAS CORP mix_00427	Amount Added:	12.50	Units: uL	
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent

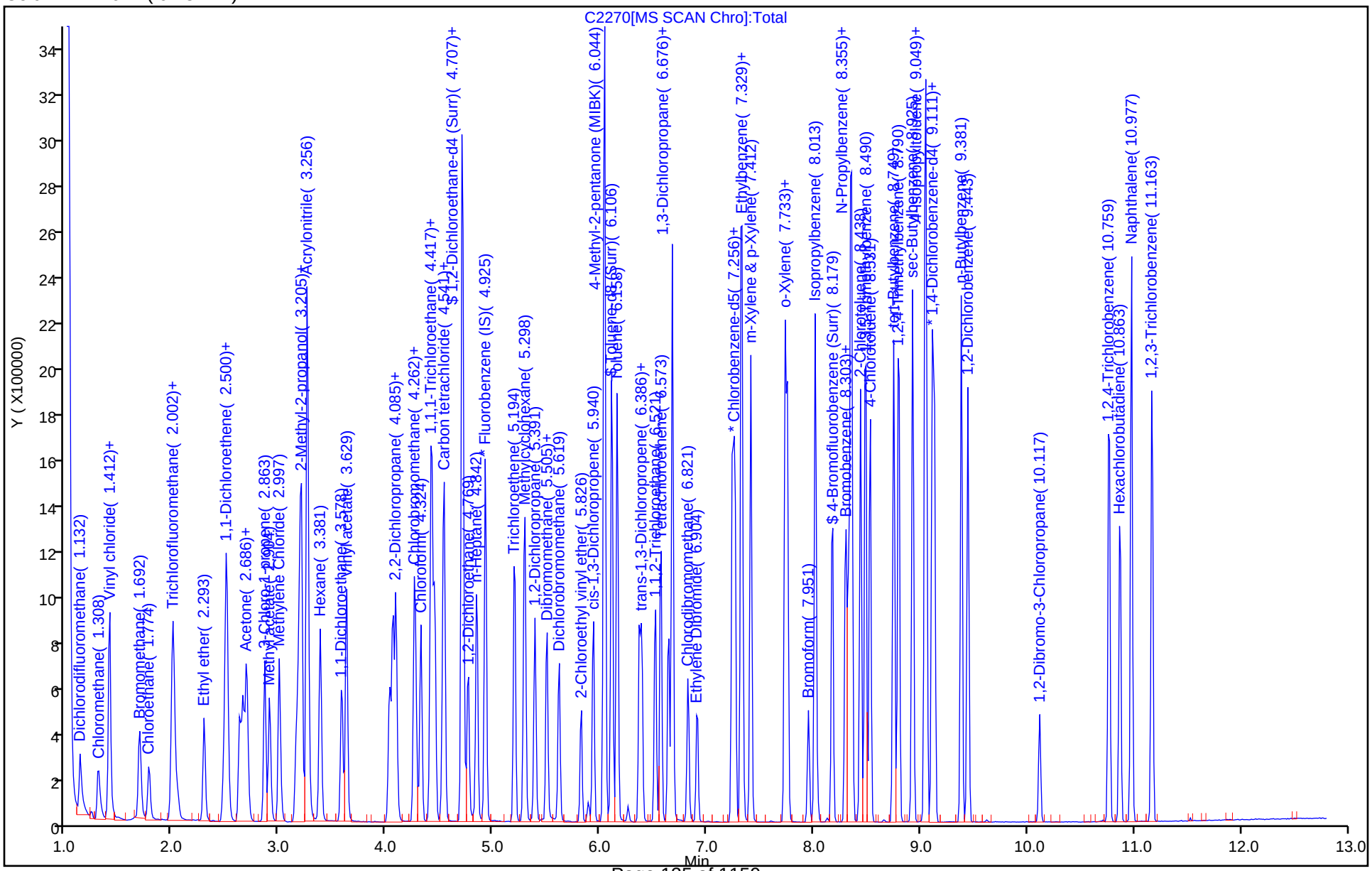
Report Date: 19-Nov-2020 12:03:54 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2270.D

Injection Date:	18-Nov-2020 17:22:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	ICIS 5			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

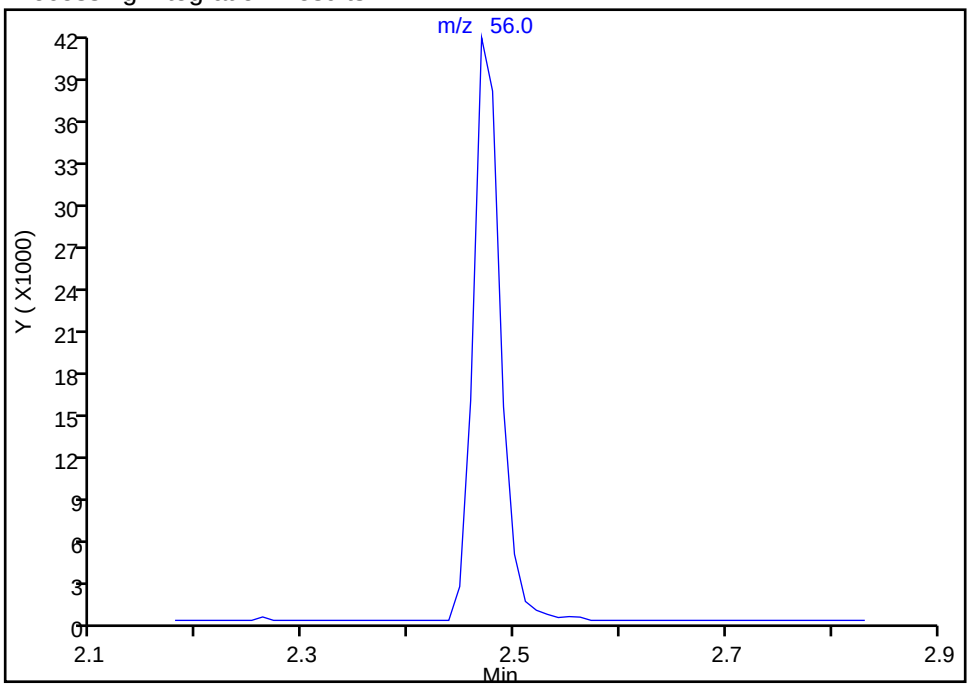
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2270.D
Injection Date: 18-Nov-2020 17:22:30 Instrument ID: HP5973C
Lims ID: ICIS 5
Client ID:
Operator ID: RF ALS Bottle#: 9 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

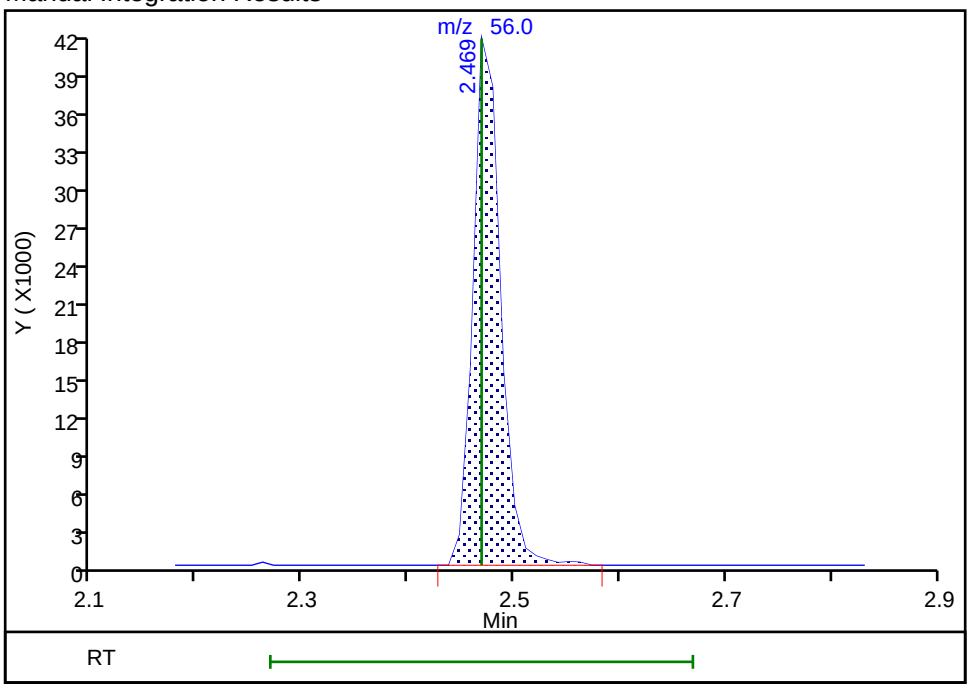
Not Detected
Expected RT: 2.47

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 74100
Amount: 120.8910
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 19:50:33
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2271.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Nov-2020 17:47:30 ALS Bottle#: 10 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 6
Misc. Info.: 480-0095057-019
Operator ID: RF Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 12:04:00 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: farrellr Date: 18-Nov-2020 20:16:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	202510	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	391981	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.111	0.001	93	427701	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	94	343408	25.0	24.4	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	96	186099	25.0	24.4	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	1069390	25.0	24.3	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	97	339137	25.0	23.8	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	628911	50.0	52.0	
12 Chloromethane	50	1.298	1.308	-0.010	99	559369	50.0	47.3	
13 Vinyl chloride	62	1.401	1.401	0.000	98	604108	50.0	51.1	
151 Butadiene	54	1.412	1.412	0.000	90	528544	50.0	48.5	
14 Bromomethane	94	1.681	1.692	-0.011	91	495678	50.0	45.7	
15 Chloroethane	64	1.775	1.774	0.000	100	382871	50.0	46.5	
16 Dichlorofluoromethane	67	2.003	2.002	0.000	95	958288	50.0	49.8	
17 Trichlorofluoromethane	101	2.003	2.002	0.000	82	1017112	50.0	51.9	
18 Ethyl ether	59	2.293	2.293	0.000	89	457628	50.0	48.4	
20 Acrolein	56	2.469	2.469	0.000	99	161955	250.0	261.7	Ma
22 1,1-Dichloroethene	96	2.500	2.500	0.000	97	525990	50.0	49.4	
21 112TCTFE	101	2.500	2.500	0.000	93	588662	50.0	49.6	
23 Acetone	43	2.624	2.624	0.000	99	1345132	250.0	256.5	
25 Iodomethane	142	2.655	2.655	0.000	99	1048048	50.0	50.0	
26 Carbon disulfide	76	2.686	2.697	-0.011	99	1749013	50.0	50.1	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	85	700834	50.0	50.2	
27 Methyl acetate	43	2.904	2.904	0.000	97	1160235	100.0	105.0	
30 Methylene Chloride	84	2.997	2.997	0.000	89	591387	50.0	50.7	
31 2-Methyl-2-propanol	59	3.163	3.163	0.000	99	1359864	500.0	522.2	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	96	1776873	50.0	51.4	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	96	608929	50.0	50.6	
33 Acrylonitrile	53	3.256	3.256	0.000	99	3162608	500.0	530.7	
35 Hexane	57	3.381	3.381	0.000	91	736983	50.0	50.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.578	3.578	0.000	96	943938	50.0	49.6	
37 Vinyl acetate	43	3.629	3.629	0.000	97	2559656	100.0	110.1	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	90	631677	50.0	52.4	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	76	661977	50.0	49.0	
43 2-Butanone (MEK)	43	4.085	4.085	0.000	99	2026410	250.0	269.1	
48 Chlorobromomethane	128	4.262	4.262	0.000	86	374898	50.0	48.9	
49 Tetrahydrofuran	42	4.272	4.272	0.000	83	523557	100.0	89.7	
50 Chloroform	83	4.324	4.324	0.000	94	1028692	50.0	47.7	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	97	856759	50.0	52.4	
52 Cyclohexane	56	4.427	4.427	0.000	88	860590	50.0	51.7	
55 Carbon tetrachloride	117	4.531	4.531	0.000	96	757571	50.0	53.6	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	94	769187	50.0	52.0	
57 Benzene	78	4.707	4.707	0.000	96	2149706	50.0	51.0	
53 Isobutyl alcohol	43	4.718	4.718	0.000	92	1163430	1250.0	1441.6	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	98	804922	50.0	49.8	
59 n-Heptane	43	4.842	4.842	0.000	88	697819	50.0	50.6	
62 Trichloroethene	95	5.194	5.194	0.000	96	618897	50.0	51.1	
64 Methylcyclohexane	83	5.298	5.298	0.000	87	1018913	50.0	53.5	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	92	494574	50.0	51.3	
66 1,4-Dioxane	88	5.505	5.505	0.000	40	215038	1000.0	1010.0	
67 Dibromomethane	93	5.505	5.505	0.000	92	417433	50.0	51.8	
68 Dichlorobromomethane	83	5.619	5.619	0.000	99	725095	50.0	53.1	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	93	370934	50.0	56.1	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	95	821681	50.0	55.2	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	96	3827918	250.0	271.8	
74 Toluene	92	6.158	6.158	0.000	98	1327782	50.0	50.4	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	95	739668	50.0	54.7	
75 Ethyl methacrylate	69	6.386	6.386	0.000	87	714576	50.0	54.8	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	91	423409	50.0	51.4	
81 Tetrachloroethene	166	6.573	6.573	0.000	98	636574	50.0	50.9	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	89	827361	50.0	50.8	
80 2-Hexanone	43	6.676	6.676	0.000	96	2552047	250.0	267.1	
83 Chlorodibromomethane	129	6.821	6.821	0.000	89	581236	50.0	54.2	
84 Ethylene Dibromide	107	6.904	6.904	0.000	98	572652	50.0	52.7	
87 Chlorobenzene	112	7.267	7.256	0.011	97	1543235	50.0	50.1	
88 Ethylbenzene	91	7.319	7.319	0.000	98	2529668	50.0	52.1	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	94	575272	50.0	54.1	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	96	968845	50.0	51.3	
91 o-Xylene	106	7.733	7.733	0.000	97	990228	50.0	51.9	
92 Styrene	104	7.754	7.754	0.000	95	1583476	50.0	55.6	
95 Bromoform	173	7.951	7.951	0.000	96	407055	50.0	55.0	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	2652070	50.0	53.2	
101 Bromobenzene	156	8.303	8.303	0.000	89	683326	50.0	51.4	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	96	809007	50.0	50.8	
99 N-Propylbenzene	91	8.345	8.345	0.000	99	3110458	50.0	52.4	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	87	277937	50.0	49.4	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	73	214566	50.0	53.4	
103 2-Chlorotoluene	126	8.438	8.438	0.000	98	653655	50.0	51.5	
102 1,3,5-Trimethylbenzene	105	8.479	8.490	-0.011	95	2221138	50.0	53.2	
105 4-Chlorotoluene	126	8.531	8.531	0.000	97	653602	50.0	50.9	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	507899	50.0	54.6	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	95	2267429	50.0	53.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	2922923	50.0	55.0	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	97	2539169	50.0	54.7	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	99	1298489	50.0	50.0	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	96	1307306	50.0	49.2	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	2253715	50.0	52.8	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	1341804	50.0	50.0	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	89	185365	50.0	51.7	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	94	1067473	50.0	51.7	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	98	480124	50.0	52.6	
121 Naphthalene	128	10.977	10.977	0.000	96	3424777	50.0	54.1	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	96	1055457	50.0	51.7	
S 126 1,3-Dichloropropene, Total	1				0			109.9	
S 125 1,2-Dichloroethene, Total	1				0			99.6	
S 123 Total BTEX	1				0			256.8	
S 124 Xylenes, Total	1				0			103.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00198	Amount Added: 25.00	Units: uL		
GAS CORP mix_00427	Amount Added: 25.00	Units: uL		
C_8260_IS_00150	Amount Added: 2.00	Units: uL	Run Reagent	
C_8260_Surr_00167	Amount Added: 2.00	Units: uL	Run Reagent	

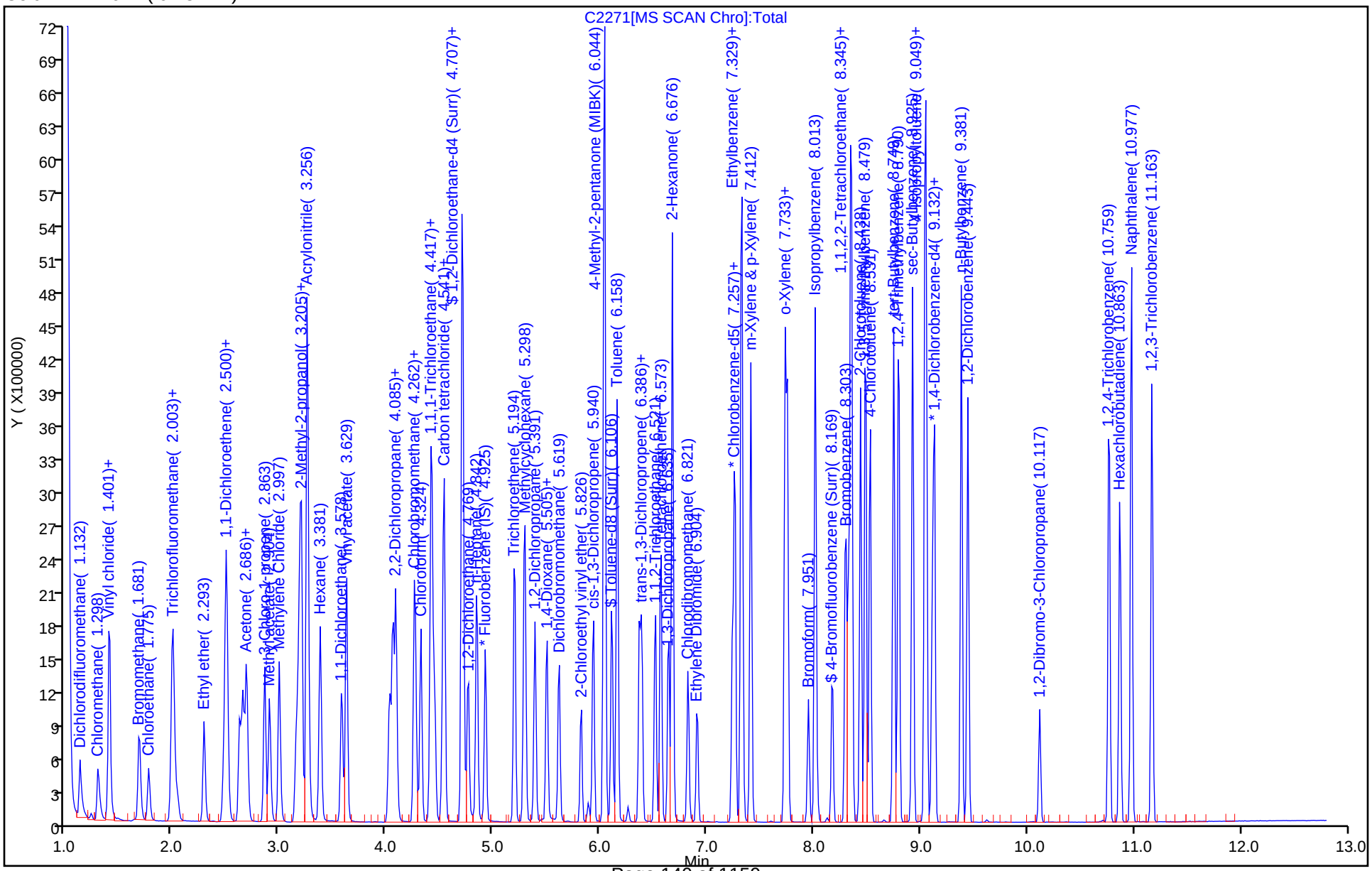
Report Date: 19-Nov-2020 12:04:04 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2271.D

Injection Date:	18-Nov-2020 17:47:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	IC 6			Worklist Smp#:	19
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

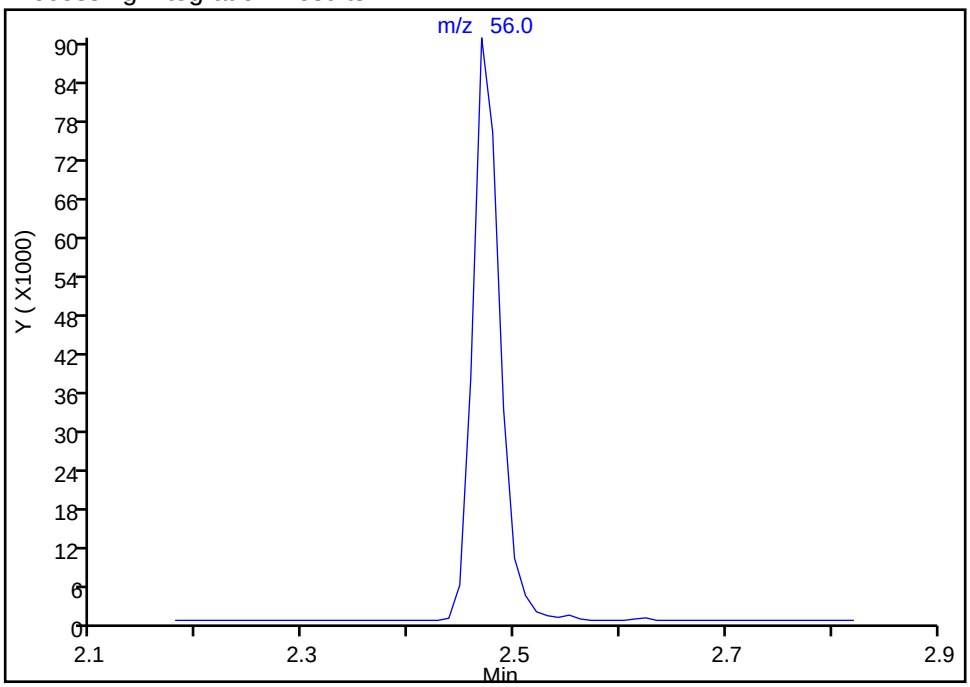
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2271.D
Injection Date: 18-Nov-2020 17:47:30 Instrument ID: HP5973C
Lims ID: IC 6
Client ID:
Operator ID: RF ALS Bottle#: 10 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

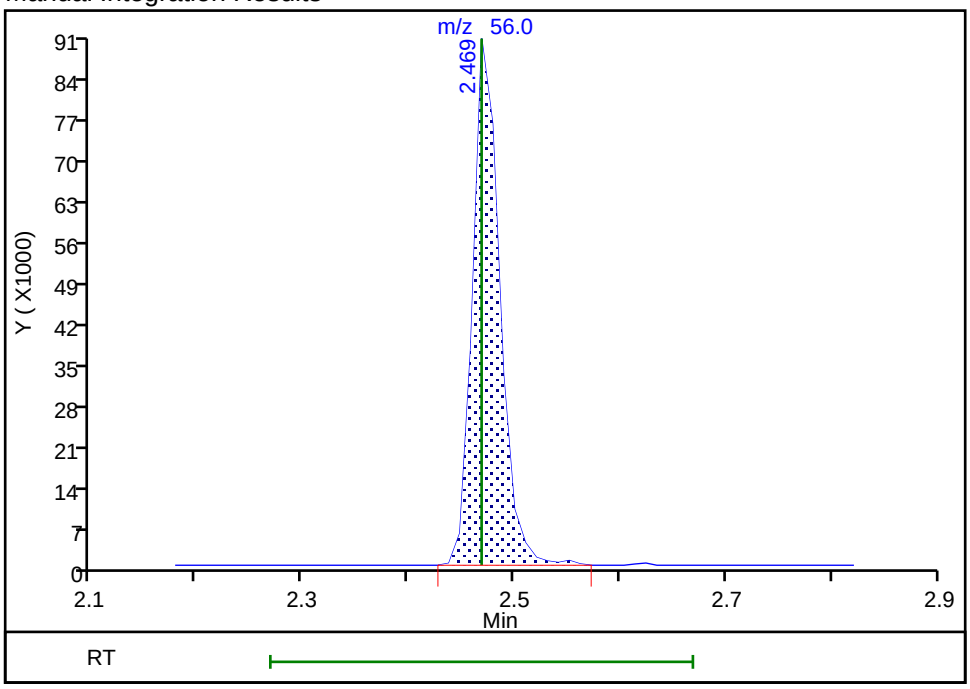
Not Detected
Expected RT: 2.47

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 161955
Amount: 261.6823
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:15:52
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2272.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 18-Nov-2020 18:12:30 ALS Bottle#: 11 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 7
Misc. Info.: 480-0095057-020
Operator ID: RF Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 12:04:10 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: farrellr Date: 18-Nov-2020 20:18:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	203089	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	393310	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.111	0.001	94	407575	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	94	327907	25.0	23.2	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	98	172948	25.0	22.6	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	1104636	25.0	25.0	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	93	382857	25.0	26.7	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	1347540	100.0	111.1	
12 Chloromethane	50	1.298	1.308	-0.010	99	1155002	100.0	97.4	
13 Vinyl chloride	62	1.401	1.401	0.000	98	1245185	100.0	105.0	
151 Butadiene	54	1.401	1.412	-0.011	91	1098185	100.0	100.5	
14 Bromomethane	94	1.692	1.692	0.000	92	1017851	100.0	93.7	
15 Chloroethane	64	1.775	1.774	0.001	100	770595	100.0	93.4	
16 Dichlorofluoromethane	67	2.003	2.002	0.001	95	1953918	100.0	101.3	
17 Trichlorofluoromethane	101	2.003	2.002	0.001	83	2103464	100.0	107.0	
18 Ethyl ether	59	2.293	2.293	0.000	88	862501	100.0	91.0	
20 Acrolein	56	2.469	2.469	0.000	99	241345	500.0	388.8	
22 1,1-Dichloroethene	96	2.500	2.500	0.000	98	1043809	100.0	97.8	
21 112TCTFE	101	2.500	2.500	0.000	93	1208962	100.0	101.5	
23 Acetone	43	2.624	2.624	0.000	100	1416096	500.0	269.3	
25 Iodomethane	142	2.655	2.655	0.000	99	2083024	100.0	99.1	
26 Carbon disulfide	76	2.686	2.697	-0.011	100	3561979	100.0	101.8	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	85	1398365	100.0	99.9	
27 Methyl acetate	43	2.904	2.904	0.000	97	1579810	200.0	142.5	
30 Methylene Chloride	84	2.997	2.997	0.000	89	1142845	100.0	98.0	
31 2-Methyl-2-propanol	59	3.153	3.163	-0.010	99	1330064	1000.0	509.3	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	94	3338648	100.0	96.4	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	96	1210847	100.0	100.4	
33 Acrylonitrile	53	3.256	3.256	0.000	98	4111531	1000.0	687.9	
35 Hexane	57	3.381	3.381	0.000	92	1547025	100.0	106.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.578	3.578	0.000	96	1876974	100.0	98.3	
37 Vinyl acetate	43	3.630	3.629	0.001	97	4768594	200.0	204.5	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	90	1343630	100.0	111.2	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	76	1287821	100.0	95.0	
43 2-Butanone (MEK)	43	4.085	4.085	0.000	99	2847875	500.0	377.1	
48 Chlorobromomethane	128	4.262	4.262	0.000	86	698462	100.0	90.8	
49 Tetrahydrofuran	42	4.272	4.272	0.000	84	695870	200.0	118.8	
50 Chloroform	83	4.324	4.324	0.000	94	2009452	100.0	93.0	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	98	1738544	100.0	106.0	
52 Cyclohexane	56	4.427	4.427	0.000	89	1748623	100.0	104.8	
55 Carbon tetrachloride	117	4.531	4.531	0.000	96	1573909	100.0	111.1	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	95	1549796	100.0	104.5	
57 Benzene	78	4.707	4.707	0.000	96	4282126	100.0	101.3	
53 Isobutyl alcohol	43	4.707	4.718	-0.011	90	1196455	2500.0	1478.3	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	98	1510780	100.0	93.1	
59 n-Heptane	43	4.842	4.842	0.000	87	1679743	100.0	121.5	M
62 Trichloroethene	95	5.194	5.194	0.000	95	1230783	100.0	101.3	
64 Methylcyclohexane	83	5.298	5.298	0.000	87	2023246	100.0	105.9	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	93	979626	100.0	101.2	
67 Dibromomethane	93	5.505	5.505	0.000	92	784984	100.0	97.0	
66 1,4-Dioxane	88	5.495	5.505	-0.010	86	322919	2000.0	1511.6	
68 Dichlorobromomethane	83	5.619	5.619	0.000	99	1461972	100.0	106.8	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	93	736627	100.0	111.0	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	95	1735168	100.0	116.2	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	96	6321038	500.0	447.2	
74 Toluene	92	6.158	6.158	0.000	98	2711951	100.0	102.6	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	95	1635025	100.0	120.5	
75 Ethyl methacrylate	69	6.386	6.386	0.000	86	1525501	100.0	116.5	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	91	873290	100.0	105.6	
81 Tetrachloroethene	166	6.573	6.573	0.000	98	1314971	100.0	104.9	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	89	1718421	100.0	105.2	
80 2-Hexanone	43	6.676	6.676	0.000	96	5126700	500.0	534.8	
83 Chlorodibromomethane	129	6.821	6.821	0.000	89	1267458	100.0	117.8	
84 Ethylene Dibromide	107	6.915	6.904	0.011	98	1217435	100.0	111.6	
87 Chlorobenzene	112	7.267	7.256	0.011	97	3285207	100.0	106.2	
88 Ethylbenzene	91	7.319	7.319	0.000	98	5257654	100.0	108.0	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	94	1196589	100.0	112.1	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	96	2023434	100.0	106.8	
91 o-Xylene	106	7.733	7.733	0.000	97	2044862	100.0	106.8	
92 Styrene	104	7.754	7.754	0.000	95	3382734	100.0	118.3	
95 Bromoform	173	7.951	7.951	0.000	97	923462	100.0	124.4	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	5493116	100.0	115.7	
101 Bromobenzene	156	8.303	8.303	0.000	89	1443347	100.0	113.8	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	96	1681894	100.0	110.8	
99 N-Propylbenzene	91	8.345	8.345	0.000	99	6492227	100.0	114.8	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	86	561736	100.0	104.7	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	73	451869	100.0	118.0	
103 2-Chlorotoluene	126	8.438	8.438	0.000	98	1344508	100.0	111.1	
102 1,3,5-Trimethylbenzene	105	8.490	8.490	0.000	95	4622402	100.0	116.2	
105 4-Chlorotoluene	126	8.531	8.531	0.000	97	1352277	100.0	110.6	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	1079170	100.0	121.6	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	97	4686412	100.0	115.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	6136774	100.0	121.2	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	97	5371774	100.0	121.5	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	99	2713961	100.0	109.8	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	96	2733581	100.0	107.9	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	4744770	100.0	116.6	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	2805654	100.0	109.8	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	90	390373	100.0	114.2	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	94	2208002	100.0	112.2	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	98	1017907	100.0	117.0	
121 Naphthalene	128	10.977	10.977	0.000	96	7028598	100.0	116.5	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	96	2203484	100.0	113.2	
S 126 1,3-Dichloropropene, Total	1				0			236.7	
S 125 1,2-Dichloroethene, Total	1				0			195.4	
S 123 Total BTEX	1				0			525.6	
S 124 Xylenes, Total	1				0			213.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00198	Amount Added:	50.00	Units: uL	
GAS CORP mix_00427	Amount Added:	50.00	Units: uL	
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent

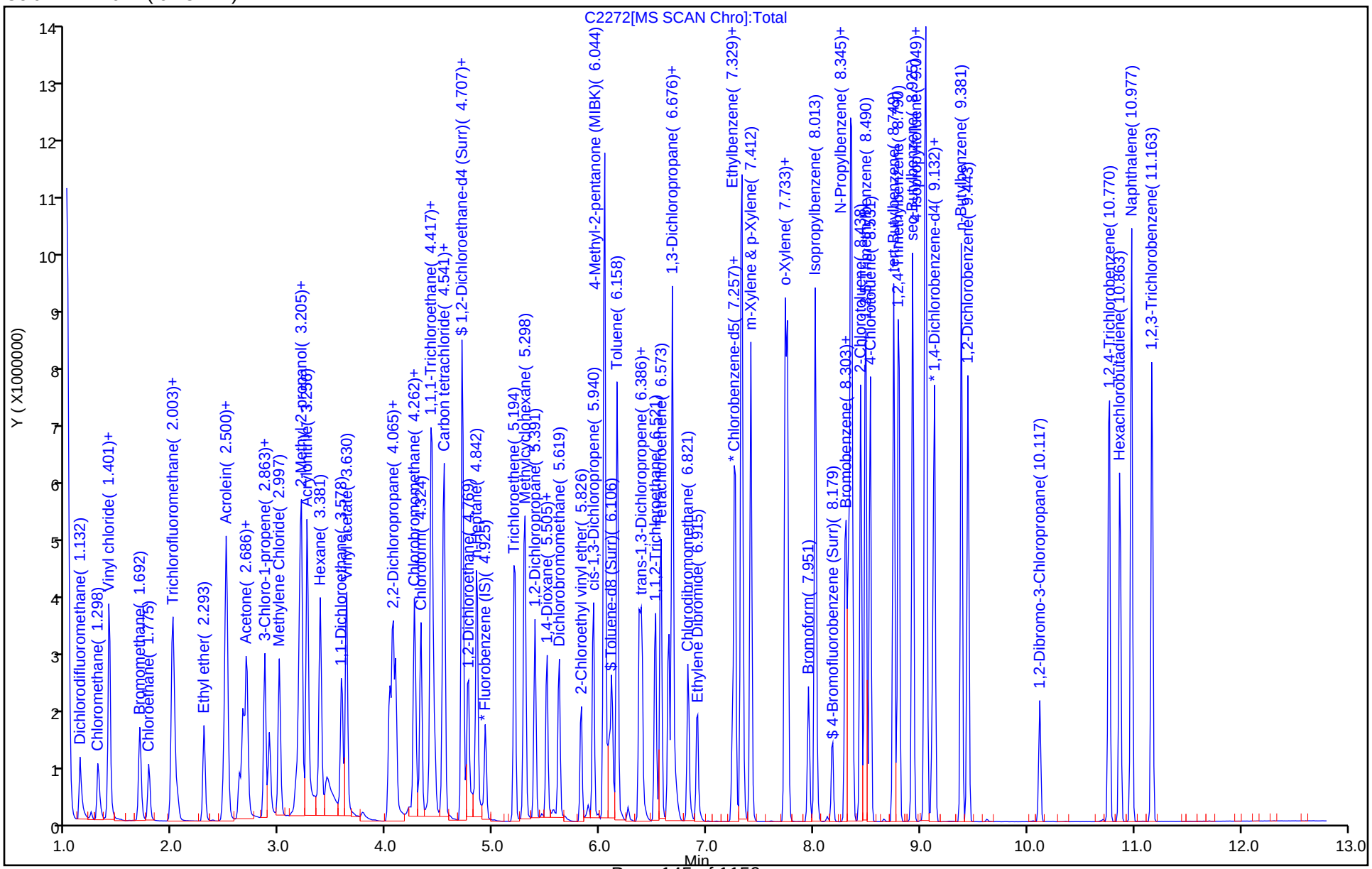
Report Date: 19-Nov-2020 12:04:14 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2272.D

Injection Date:	18-Nov-2020 18:12:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	IC 7			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

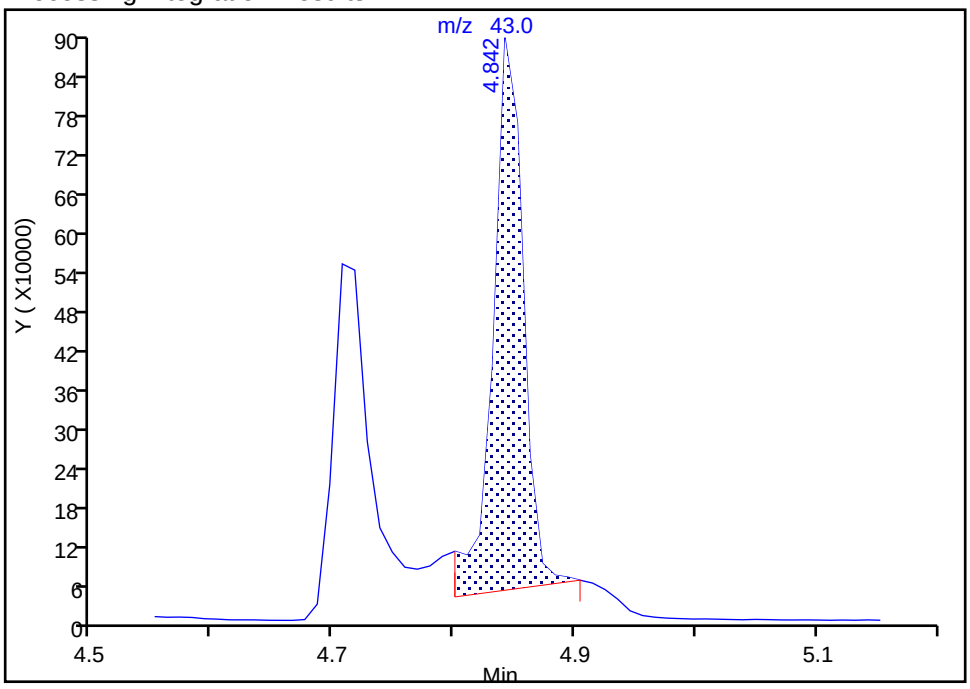
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2272.D
Injection Date: 18-Nov-2020 18:12:30 Instrument ID: HP5973C
Lims ID: IC 7
Client ID:
Operator ID: RF ALS Bottle#: 11 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

59 n-Heptane, CAS: 142-82-5

Signal: 1

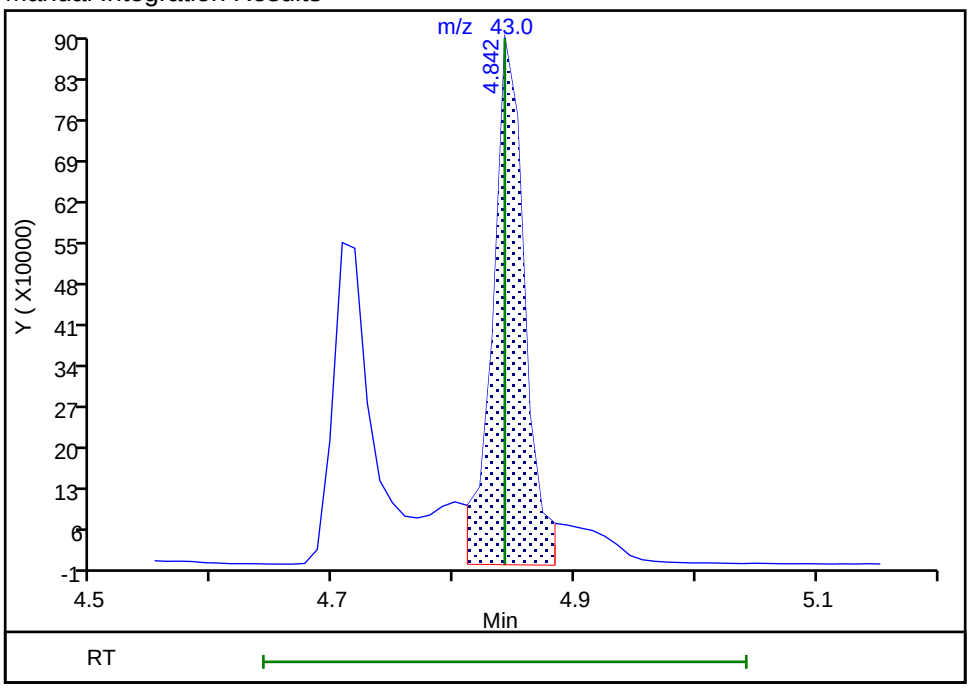
Processing Integration Results

RT: 4.84
Area: 1485680
Amount: 109.4110
Amount Units: ug/L



Manual Integration Results

RT: 4.84
Area: 1679743
Amount: 121.5314
Amount Units: ug/L



Reviewer: farrellr, 18-Nov-2020 20:22:45
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab Sample ID: ICV 480-559712/34 Calibration Date: 11/18/2020 23:57

Instrument ID: HP5973C Calib Start Date: 11/18/2020 15:16

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 11/18/2020 18:12

Lab File ID: C2286.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.493	1.674	0.1000	28.0	25.0	12.2	50.0
Chloromethane	Ave	1.460	1.469	0.1000	25.2	25.0	0.7	30.0
Vinyl chloride	Ave	1.460	1.583	0.1000	27.1	25.0	8.4	30.0
Butadiene	Ave	1.346	1.279		23.8	25.0	-4.9	30.0
Bromomethane	Ave	1.338	1.300	0.1000	24.3	25.0	-2.8	50.0
Chloroethane	Ave	1.016	0.9883	0.1000	24.3	25.0	-2.7	50.0
Dichlorofluoromethane	Ave	2.374	2.468		26.0	25.0	3.9	30.0
Trichlorofluoromethane	Ave	2.419	2.588	0.1000	26.7	25.0	7.0	30.0
Ethyl ether	Ave	1.166	1.197		25.7	25.0	2.7	30.0
Acrolein	Ave	0.0764	0.0375		61.4	125	-50.9*	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.466	1.413	0.1000	24.1	25.0	-3.6	30.0
1,1-Dichloroethene	Ave	1.314	1.320	0.1000	25.1	25.0	0.5	30.0
Acetone	Ave	0.6474	0.6532	0.1000	126	125	0.9	50.0
Iodomethane	Ave	2.587	2.632		25.4	25.0	1.8	30.0
Carbon disulfide	Ave	4.306	4.248	0.1000	24.7	25.0	-1.4	30.0
Allyl chloride	Ave	1.722	1.664		24.2	25.0	-3.4	30.0
Methyl acetate	Ave	1.364	1.554	0.1000	56.9	50.0	13.9	50.0
Methylene Chloride	Lin1		1.653	0.1000	28.5	25.0	14.1	30.0
2-Methyl-2-propanol	Ave	0.3215	0.3445		268	250	7.1	50.0
Methyl tert-butyl ether	Ave	4.264	4.374	0.1000	25.7	25.0	2.6	30.0
trans-1,2-Dichloroethene	Ave	1.485	1.538	0.1000	25.9	25.0	3.6	30.0
Acrylonitrile	Ave	0.7357	0.7993		272	250	8.6	30.0
Hexane	Ave	1.796	1.681		23.4	25.0	-6.4	30.0
1,1-Dichloroethane	Ave	2.349	2.334	0.2000	24.8	25.0	-0.6	30.0
Vinyl acetate	Ave	2.870	2.531		44.1	50.0	-11.8	30.0
2,2-Dichloropropane	Ave	1.487	1.441		24.2	25.0	-3.1	30.0
cis-1,2-Dichloroethene	Ave	1.668	1.674	0.1000	25.1	25.0	0.4	30.0
2-Butanone (MEK)	Ave	0.9297	0.9569	0.1000	129	125	2.9	30.0
Chlorobromomethane	Ave	0.9468	0.9029		23.8	25.0	-4.6	30.0
Tetrahydrofuran	Ave	0.7208	0.6487		45.0	50.0	-10.0	30.0
Chloroform	Ave	2.660	2.530	0.2000	23.8	25.0	-4.9	30.0
1,1,1-Trichloroethane	Ave	2.019	2.083	0.1000	25.8	25.0	3.2	30.0
Cyclohexane	Ave	2.053	2.089	0.1000	25.4	25.0	1.7	30.0
Carbon tetrachloride	Ave	1.744	1.761	0.1000	25.2	25.0	1.0	30.0
1,1-Dichloropropene	Ave	1.825	1.794		24.6	25.0	-1.7	30.0
Benzene	Ave	5.205	5.193	0.5000	24.9	25.0	-0.2	30.0
Isobutyl alcohol	Ave	0.0996	0.1140		715	625	14.5	50.0
1,2-Dichloroethane	Ave	1.997	1.978	0.1000	24.8	25.0	-1.0	30.0
n-Heptane	Ave	1.701	1.494		21.9	25.0	-12.2	30.0
Trichloroethene	Ave	1.496	1.471	0.2000	24.6	25.0	-1.7	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab Sample ID: ICV 480-559712/34 Calibration Date: 11/18/2020 23:57

Instrument ID: HP5973C Calib Start Date: 11/18/2020 15:16

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 11/18/2020 18:12

Lab File ID: C2286.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.352	2.280	0.1000	24.2	25.0	-3.1	30.0
1,2-Dichloropropane	Ave	1.191	1.204	0.1000	25.3	25.0	1.0	30.0
1,4-Dioxane	Ave	0.0136	0.0145		534	500	6.8	50.0
Dibromomethane	Ave	0.996	1.044	0.1000	26.2	25.0	4.8	30.0
Bromodichloromethane	Ave	1.685	1.749	0.2000	25.9	25.0	3.8	30.0
2-Chloroethyl vinyl ether	Ave	0.8167	0.8229		25.2	25.0	0.8	30.0
cis-1,3-Dichloropropene	Ave	1.839	1.864	0.2000	25.3	25.0	1.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8984	0.9296	0.1000	129	125	3.5	30.0
Toluene	Ave	1.680	1.575	0.4000	23.4	25.0	-6.2	30.0
trans-1,3-Dichloropropene	Ave	0.8624	0.7925	0.1000	23.0	25.0	-8.1	30.0
Ethyl methacrylate	Ave	0.8323	0.8281		24.9	25.0	-0.5	30.0
1,1,2-Trichloroethane	Ave	0.5258	0.5052	0.1000	24.0	25.0	-3.9	30.0
Tetrachloroethene	Ave	0.7970	0.7523	0.2000	23.6	25.0	-5.6	30.0
1,3-Dichloropropane	Ave	1.038	0.9862		23.8	25.0	-5.0	30.0
2-Hexanone	Ave	0.6094	0.6027	0.1000	124	125	-1.1	30.0
Dibromochloromethane	Ave	0.6840	0.6641	0.1000	24.3	25.0	-2.9	30.0
1,2-Dibromoethane	Ave	0.6932	0.6900		24.9	25.0	-0.5	30.0
Chlorobenzene	Ave	1.966	1.835	0.5000	23.3	25.0	-6.6	30.0
Ethylbenzene	Ave	3.095	2.953	0.1000	23.9	25.0	-4.6	30.0
1,1,1,2-Tetrachloroethane	Ave	0.6787	0.6788		25.0	25.0	0.0	30.0
m,p-Xylene	Ave	1.204	1.140	0.1000	23.7	25.0	-5.3	30.0
o-Xylene	Ave	1.216	1.207	0.3000	24.8	25.0	-0.8	30.0
Styrene	Ave	1.817	1.829	0.3000	25.2	25.0	0.6	30.0
Bromoform	Ave	0.4717	0.4571	0.1000	24.2	25.0	-3.1	50.0
Isopropylbenzene	Ave	2.911	2.893	0.1000	24.8	25.0	-0.6	30.0
Bromobenzene	Ave	0.7777	0.7110		22.9	25.0	-8.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9312	0.8783	0.3000	23.6	25.0	-5.7	30.0
N-Propylbenzene	Ave	3.469	3.196		23.0	25.0	-7.8	30.0
1,2,3-Trichloropropane	Ave	0.3291	0.3101		23.6	25.0	-5.8	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2348	0.2038		21.7	25.0	-13.2	50.0
2-Chlorotoluene	Ave	0.7425	0.6972		23.5	25.0	-6.1	30.0
1,3,5-Trimethylbenzene	Ave	2.441	2.379		24.4	25.0	-2.5	30.0
4-Chlorotoluene	Ave	0.7501	0.6776		22.6	25.0	-9.7	30.0
tert-Butylbenzene	Ave	0.5442	0.5487		25.2	25.0	0.8	30.0
1,2,4-Trimethylbenzene	Ave	2.485	2.428		24.4	25.0	-2.3	30.0
sec-Butylbenzene	Ave	3.107	3.027		24.4	25.0	-2.6	30.0
4-Isopropyltoluene	Ave	2.711	2.653		24.5	25.0	-2.2	30.0
1,3-Dichlorobenzene	Ave	1.516	1.371	0.6000	22.6	25.0	-9.6	30.0
1,4-Dichlorobenzene	Ave	1.554	1.385	0.5000	22.3	25.0	-10.9	30.0
n-Butylbenzene	Ave	2.496	2.283		22.9	25.0	-8.6	30.0
1,2-Dichlorobenzene	Ave	1.567	1.428	0.4000	22.8	25.0	-8.9	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab Sample ID: ICV 480-559712/34 Calibration Date: 11/18/2020 23:57

Instrument ID: HP5973C Calib Start Date: 11/18/2020 15:16

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 11/18/2020 18:12

Lab File ID: C2286.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2097	0.1968	0.0500	23.5	25.0	-6.1	50.0
1,2,4-Trichlorobenzene	Ave	1.208	1.158	0.2000	24.0	25.0	-4.1	30.0
Hexachlorobutadiene	Ave	0.5337	0.4772		22.4	25.0	-10.6	30.0
Naphthalene	Ave	3.699	3.643		24.6	25.0	-1.5	30.0
1,2,3-Trichlorobenzene	Ave	1.194	1.187		24.8	25.0	-0.6	30.0
Dibromofluoromethane (Surr)	Ave	1.739	1.773		25.5	25.0	2.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.9402	0.9505		25.3	25.0	1.1	30.0
Toluene-d8 (Surr)	Ave	2.807	2.628		23.4	25.0	-6.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.9105	0.8346		22.9	25.0	-8.3	30.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2286.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-Nov-2020 23:57:30 ALS Bottle#: 25 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: icv
Misc. Info.: 480-0095057-034
Operator ID: RF Instrument ID: HP5973C
Sublist:

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Nov-2020 11:45:52 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1624

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	195362	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	385597	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.111	9.111	0.000	94	428468	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	93	346470	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	98	185700	25.0	25.3	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	1013374	25.0	23.4	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	321805	25.0	22.9	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	327130	25.0	28.0	
12 Chloromethane	50	1.298	1.308	-0.010	99	287053	25.0	25.2	
13 Vinyl chloride	62	1.401	1.401	0.000	98	309282	25.0	27.1	
151 Butadiene	54	1.412	1.412	0.000	90	249944	25.0	23.8	
14 Bromomethane	94	1.691	1.681	-0.001	92	253972	25.0	24.3	
15 Chloroethane	64	1.774	1.774	0.000	100	193082	25.0	24.3	
16 Dichlorofluoromethane	67	2.002	2.002	0.000	95	482090	25.0	26.0	
17 Trichlorofluoromethane	101	2.002	2.002	0.000	79	505517	25.0	26.7	
18 Ethyl ether	59	2.293	2.293	0.000	90	233854	25.0	25.7	
20 Acrolein	56	2.469	2.469	0.000	98	36635	125.0	61.4	Ma
22 1,1-Dichloroethene	96	2.500	2.500	0.000	98	257971	25.0	25.1	
21 112TCTFE	101	2.500	2.500	0.000	92	276133	25.0	24.1	
23 Acetone	43	2.624	2.624	0.000	99	638042	125.0	126.1	
25 Iodomethane	142	2.655	2.655	0.000	99	514218	25.0	25.4	
26 Carbon disulfide	76	2.686	2.697	-0.011	99	829893	25.0	24.7	
28 3-Chloro-1-propene	41	2.863	2.863	-0.001	84	325107	25.0	24.2	
27 Methyl acetate	43	2.904	2.904	0.000	97	607116	50.0	56.9	
30 Methylene Chloride	84	2.997	2.997	0.000	89	322916	25.0	28.5	
31 2-Methyl-2-propanol	59	3.163	3.163	0.000	99	672985	250.0	267.9	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	97	854600	25.0	25.7	
34 trans-1,2-Dichloroethene	96	3.204	3.205	-0.001	95	300481	25.0	25.9	
33 Acrylonitrile	53	3.256	3.256	0.000	98	1561490	250.0	271.6	
35 Hexane	57	3.381	3.381	0.000	90	328370	25.0	23.4	
39 1,1-Dichloroethane	63	3.578	3.578	0.000	96	456067	25.0	24.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.629	3.629	0.000	97	989001	50.0	44.1	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	90	281448	25.0	24.2	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	77	327085	25.0	25.1	
43 2-Butanone (MEK)	43	4.085	4.085	0.000	99	934697	125.0	128.6	
48 Chlorobromomethane	128	4.262	4.262	0.000	87	176383	25.0	23.8	
49 Tetrahydrofuran	42	4.272	4.272	0.000	83	253476	50.0	45.0	
50 Chloroform	83	4.324	4.324	0.000	94	494222	25.0	23.8	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	98	406842	25.0	25.8	
52 Cyclohexane	56	4.427	4.427	0.000	89	408053	25.0	25.4	
55 Carbon tetrachloride	117	4.531	4.531	0.000	96	344061	25.0	25.2	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	95	350523	25.0	24.6	
57 Benzene	78	4.707	4.707	0.000	95	1014499	25.0	24.9	
53 Isobutyl alcohol	43	4.717	4.718	-0.001	91	556910	625.0	715.3	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	98	386353	25.0	24.8	
59 n-Heptane	43	4.842	4.842	0.000	89	291774	25.0	21.9	
62 Trichloroethene	95	5.194	5.194	0.000	95	287287	25.0	24.6	
64 Methylcyclohexane	83	5.298	5.298	0.000	87	445391	25.0	24.2	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	93	235143	25.0	25.3	
67 Dibromomethane	93	5.505	5.505	0.000	93	203877	25.0	26.2	
66 1,4-Dioxane	88	5.505	5.505	0.000	41	111832	500.0	534.0	
68 Dichlorobromomethane	83	5.619	5.619	0.000	99	341654	25.0	25.9	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	94	160766	25.0	25.2	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	95	364142	25.0	25.3	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	96	1792306	125.0	129.3	
74 Toluene	92	6.158	6.158	0.000	97	607188	25.0	23.4	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	96	305587	25.0	23.0	
75 Ethyl methacrylate	69	6.386	6.386	0.000	87	319297	25.0	24.9	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	90	194796	25.0	24.0	
81 Tetrachloroethene	166	6.572	6.573	-0.001	98	290075	25.0	23.6	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	88	380283	25.0	23.8	
80 2-Hexanone	43	6.676	6.676	0.000	96	1162053	125.0	123.6	
83 Chlorodibromomethane	129	6.821	6.821	0.000	89	256092	25.0	24.3	
84 Ethylene Dibromide	107	6.904	6.904	0.000	98	266063	25.0	24.9	
87 Chlorobenzene	112	7.267	7.256	0.011	97	707668	25.0	23.3	
88 Ethylbenzene	91	7.319	7.319	0.000	98	1138718	25.0	23.9	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	93	261730	25.0	25.0	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	96	439526	25.0	23.7	
91 o-Xylene	106	7.733	7.733	0.000	97	465266	25.0	24.8	
92 Styrene	104	7.754	7.754	0.000	95	705347	25.0	25.2	
95 Bromoform	173	7.951	7.951	0.000	96	176255	25.0	24.2	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	1239622	25.0	24.8	
101 Bromobenzene	156	8.303	8.303	0.000	89	304625	25.0	22.9	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	96	376313	25.0	23.6	
99 N-Propylbenzene	91	8.345	8.345	0.000	99	1369524	25.0	23.0	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	88	132879	25.0	23.6	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	71	87323	25.0	21.7	
103 2-Chlorotoluene	126	8.438	8.438	0.000	97	298712	25.0	23.5	
102 1,3,5-Trimethylbenzene	105	8.490	8.490	0.000	95	1019136	25.0	24.4	
105 4-Chlorotoluene	126	8.531	8.531	0.000	97	290324	25.0	22.6	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	235084	25.0	25.2	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	95	1040530	25.0	24.4	
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	1296990	25.0	24.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
110 4-Isopropyltoluene	119	9.039	9.039	0.000	97	1136543	25.0	24.5	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	99	587225	25.0	22.6	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	95	593436	25.0	22.3	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	978046	25.0	22.9	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	612034	25.0	22.8	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	86	84341	25.0	23.5	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	93	496300	25.0	24.0	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	98	204461	25.0	22.4	
121 Naphthalene	128	10.977	10.977	0.000	97	1560772	25.0	24.6	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	96	508524	25.0	24.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SS 8260 CORP_00087	Amount Added: 12.50	Units: uL	
SS GAS CORP_00378	Amount Added: 12.50	Units: uL	
C_8260_IS_00150	Amount Added: 2.00	Units: uL	Run Reagent
C_8260_Surr_00167	Amount Added: 2.00	Units: uL	Run Reagent

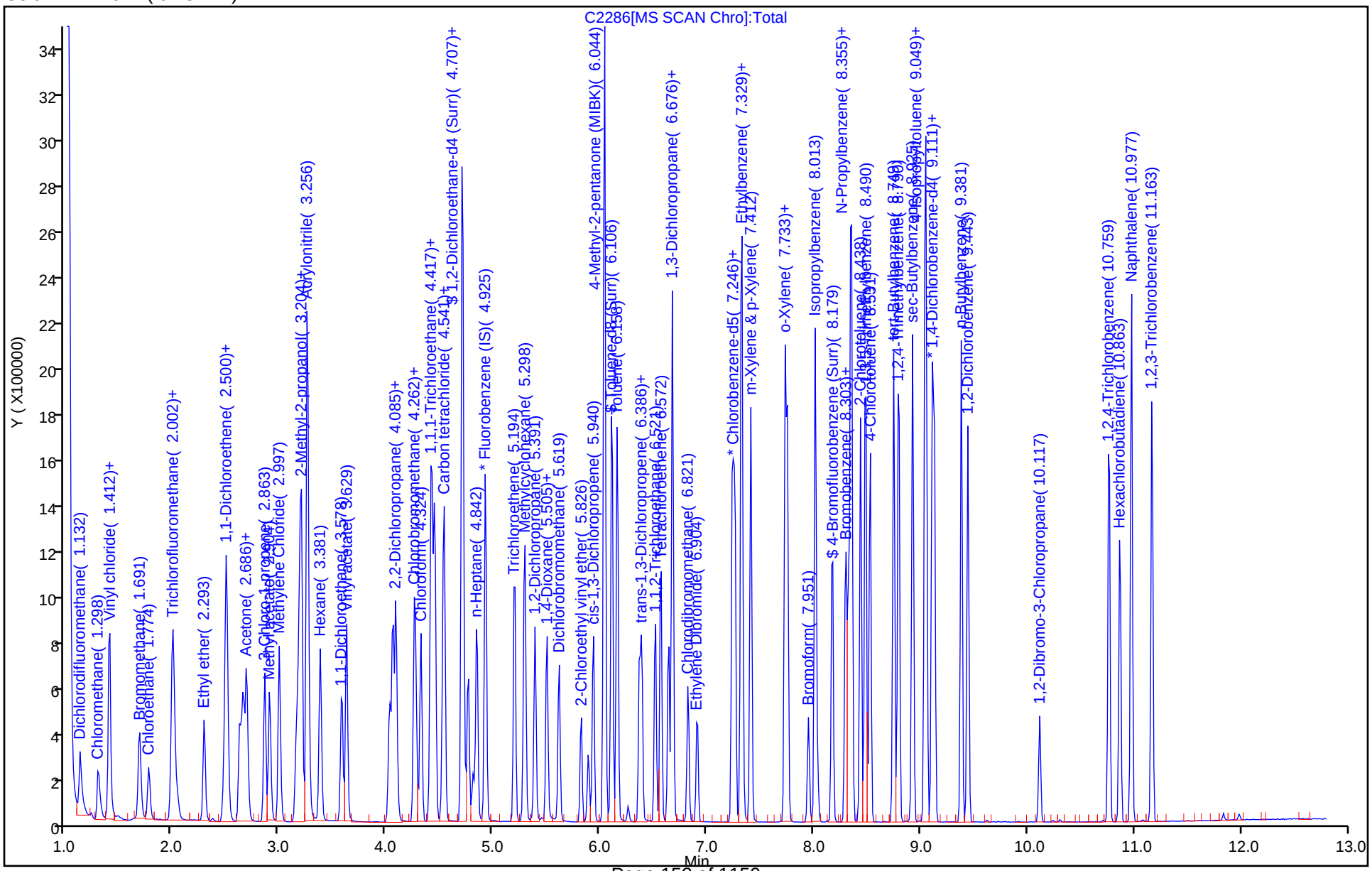
Report Date: 19-Nov-2020 11:46:32 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2286.D

Injection Date:	18-Nov-2020 23:57:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	ICV			Worklist Smp#:	34
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

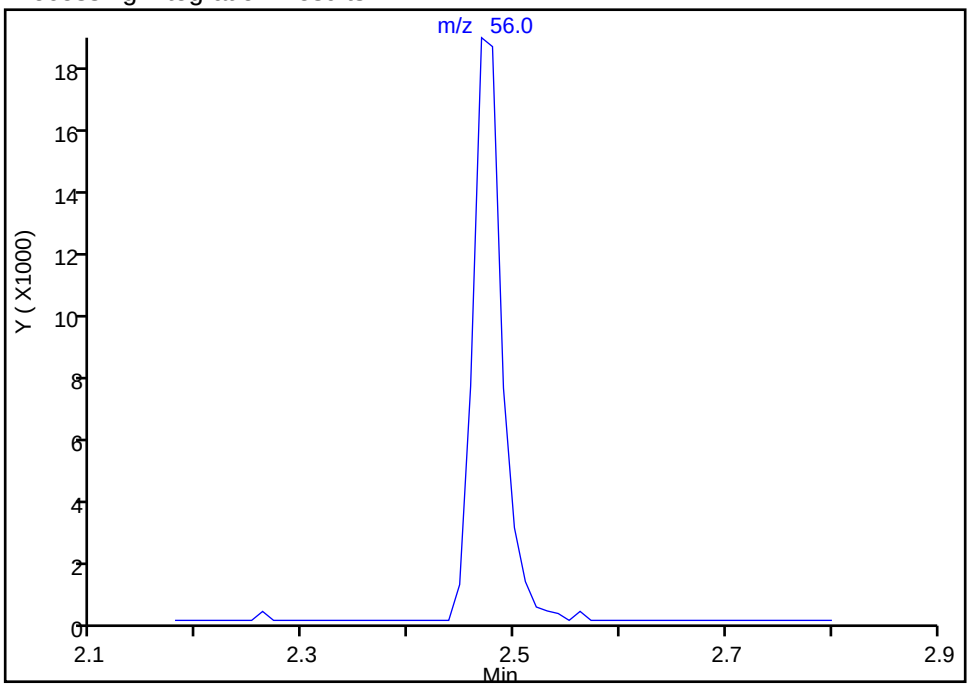
Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2286.D
Injection Date: 18-Nov-2020 23:57:30 Instrument ID: HP5973C
Lims ID: ICV
Client ID:
Operator ID: RF ALS Bottle#: 25 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

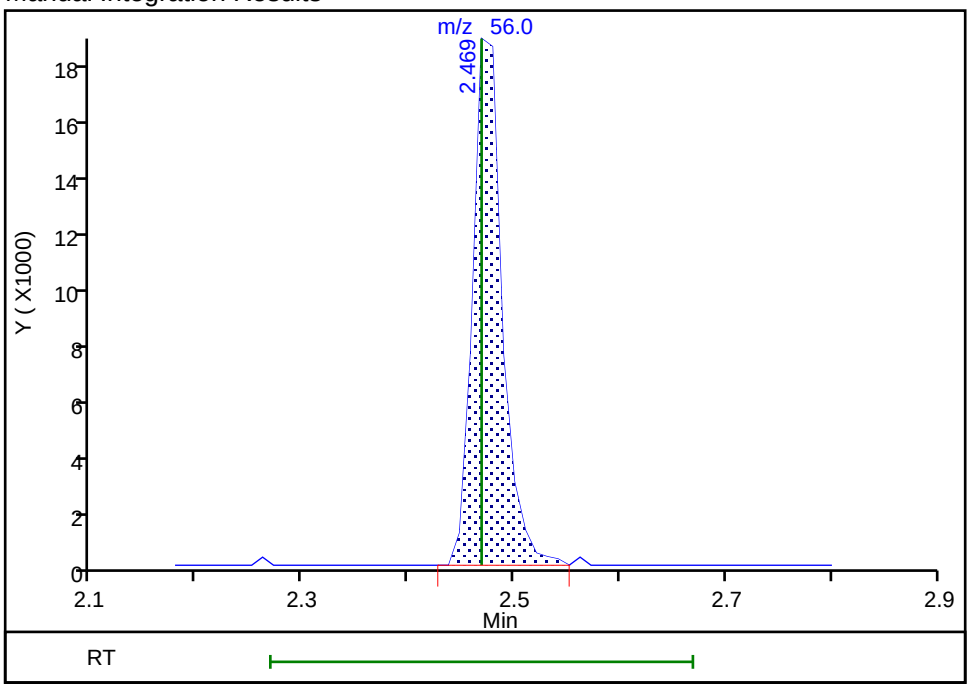
Not Detected
Expected RT: 2.47

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 36635
Amount: 61.359606
Amount Units: ug/L



Reviewer: farrellr, 19-Nov-2020 11:45:13
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCVIS 480-560291/3 Calibration Date: 11/21/2020 08:41

Instrument ID: HP5973C Calib Start Date: 11/18/2020 15:16

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 11/18/2020 18:12

Lab File ID: C2380.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.493	1.495	0.1000	25.0	25.0	0.2	50.0
Chloromethane	Ave	1.460	1.379	0.1000	23.6	25.0	-5.6	20.0
Vinyl chloride	Ave	1.460	1.478	0.1000	25.3	25.0	1.3	20.0
Butadiene	Ave	1.346	1.363		25.3	25.0	1.3	20.0
Bromomethane	Ave	1.338	1.216	0.1000	22.7	25.0	-9.1	50.0
Chloroethane	Ave	1.016	0.9570	0.1000	23.6	25.0	-5.8	50.0
Dichlorofluoromethane	Ave	2.374	2.401		25.3	25.0	1.1	20.0
Trichlorofluoromethane	Ave	2.419	2.555	0.1000	26.4	25.0	5.6	20.0
Ethyl ether	Ave	1.166	1.104		23.7	25.0	-5.3	20.0
Acrolein	Ave	0.0764	0.0571		93.4	125	-25.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.466	1.539	0.1000	26.3	25.0	5.0	20.0
1,1-Dichloroethene	Ave	1.314	1.340	0.1000	25.5	25.0	2.0	20.0
Acetone	Ave	0.6474	0.4248	0.1000	82.0	125	-34.4	50.0
Iodomethane	Ave	2.587	2.649		25.6	25.0	2.4	20.0
Carbon disulfide	Ave	4.306	4.307	0.1000	25.0	25.0	0.0	20.0
Allyl chloride	Ave	1.722	1.720		25.0	25.0	-0.1	20.0
Methyl acetate	Ave	1.364	1.195	0.1000	43.8	50.0	-12.4	50.0
Methylene Chloride	Lin1		1.482	0.1000	25.5	25.0	2.1	20.0
2-Methyl-2-propanol	Ave	0.3215	0.1532		119	250	-52.3*	50.0
Methyl tert-butyl ether	Ave	4.264	4.041	0.1000	23.7	25.0	-5.2	20.0
trans-1,2-Dichloroethene	Ave	1.485	1.580	0.1000	26.6	25.0	6.4	20.0
Acrylonitrile	Ave	0.7357	0.5289		180	250	-28.1*	20.0
Hexane	Ave	1.796	1.859		25.9	25.0	3.5	20.0
1,1-Dichloroethane	Ave	2.349	2.380	0.2000	25.3	25.0	1.3	20.0
Vinyl acetate	Ave	2.870	2.615		45.6	50.0	-8.9	20.0
2,2-Dichloropropane	Ave	1.487	1.771		29.8	25.0	19.1	20.0
cis-1,2-Dichloroethene	Ave	1.668	1.656	0.1000	24.8	25.0	-0.7	20.0
2-Butanone (MEK)	Ave	0.9297	0.7126	0.1000	95.8	125	-23.4*	20.0
Chlorobromomethane	Ave	0.9468	0.8959		23.7	25.0	-5.4	20.0
Tetrahydrofuran	Ave	0.7208	0.4536		31.5	50.0	-37.1*	20.0
Chloroform	Ave	2.660	2.538	0.2000	23.9	25.0	-4.6	20.0
1,1,1-Trichloroethane	Ave	2.019	2.145	0.1000	26.6	25.0	6.3	20.0
Cyclohexane	Ave	2.053	2.222	0.1000	27.0	25.0	8.2	20.0
Carbon tetrachloride	Ave	1.744	1.874	0.1000	26.9	25.0	7.4	20.0
1,1-Dichloropropene	Ave	1.825	1.967		26.9	25.0	7.7	20.0
Benzene	Ave	5.205	5.202	0.5000	25.0	25.0	-0.0	20.0
Isobutyl alcohol	Ave	0.0996	0.0570		357	625	-42.8	50.0
1,2-Dichloroethane	Ave	1.997	1.902	0.1000	23.8	25.0	-4.7	20.0
n-Heptane	Ave	1.701	1.787		26.3	25.0	5.0	20.0
Trichloroethene	Ave	1.496	1.493	0.2000	24.9	25.0	-0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCVIS 480-560291/3 Calibration Date: 11/21/2020 08:41

Instrument ID: HP5973C Calib Start Date: 11/18/2020 15:16

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 11/18/2020 18:12

Lab File ID: C2380.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.352	2.592	0.1000	27.6	25.0	10.2	20.0
1,2-Dichloropropane	Ave	1.191	1.124	0.1000	23.6	25.0	-5.6	20.0
1,4-Dioxane	Ave	0.0136	0.0112		411	500	-17.7	50.0
Dibromomethane	Ave	0.996	0.996	0.1000	25.0	25.0	-0.0	20.0
Bromodichloromethane	Ave	1.685	1.649	0.2000	24.5	25.0	-2.1	20.0
2-Chloroethyl vinyl ether	Ave	0.8167	0.7443		22.8	25.0	-8.9	20.0
cis-1,3-Dichloropropene	Ave	1.839	1.814	0.2000	24.7	25.0	-1.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8984	0.8250	0.1000	115	125	-8.2	20.0
Toluene	Ave	1.680	1.676	0.4000	25.0	25.0	-0.2	20.0
trans-1,3-Dichloropropene	Ave	0.8624	0.8584	0.1000	24.9	25.0	-0.5	20.0
Ethyl methacrylate	Ave	0.8323	0.8183		24.6	25.0	-1.7	20.0
1,1,2-Trichloroethane	Ave	0.5258	0.4962	0.1000	23.6	25.0	-5.6	20.0
Tetrachloroethene	Ave	0.7970	0.7940	0.2000	24.9	25.0	-0.4	20.0
1,3-Dichloropropane	Ave	1.038	0.995		24.0	25.0	-4.1	20.0
2-Hexanone	Ave	0.6094	0.5501	0.1000	113	125	-9.7	20.0
Dibromochloromethane	Ave	0.6840	0.6675	0.1000	24.4	25.0	-2.4	20.0
1,2-Dibromoethane	Ave	0.6932	0.6763		24.4	25.0	-2.4	20.0
Chlorobenzene	Ave	1.966	1.956	0.5000	24.9	25.0	-0.5	20.0
Ethylbenzene	Ave	3.095	3.151	0.1000	25.5	25.0	1.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6787	0.7134		26.3	25.0	5.1	20.0
m,p-Xylene	Ave	1.204	1.261	0.1000	26.2	25.0	4.7	20.0
o-Xylene	Ave	1.216	1.287	0.3000	26.5	25.0	5.8	20.0
Styrene	Ave	1.817	1.941	0.3000	26.7	25.0	6.8	20.0
Bromoform	Ave	0.4717	0.4225	0.1000	22.4	25.0	-10.4	50.0
Isopropylbenzene	Ave	2.911	3.217	0.1000	27.6	25.0	10.5	20.0
Bromobenzene	Ave	0.7777	0.7700		24.8	25.0	-1.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9312	0.9263	0.3000	24.9	25.0	-0.5	20.0
N-Propylbenzene	Ave	3.469	3.662		26.4	25.0	5.6	20.0
1,2,3-Trichloropropane	Ave	0.3291	0.3108		23.6	25.0	-5.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2348	0.1777		18.9	25.0	-24.3	50.0
2-Chlorotoluene	Ave	0.7425	0.7869		26.5	25.0	6.0	20.0
1,3,5-Trimethylbenzene	Ave	2.441	2.673		27.4	25.0	9.5	20.0
4-Chlorotoluene	Ave	0.7501	0.7640		25.5	25.0	1.9	20.0
tert-Butylbenzene	Ave	0.5442	0.6064		27.9	25.0	11.4	20.0
1,2,4-Trimethylbenzene	Ave	2.485	2.698		27.1	25.0	8.5	20.0
sec-Butylbenzene	Ave	3.107	3.510		28.2	25.0	13.0	20.0
4-Isopropyltoluene	Ave	2.711	3.059		28.2	25.0	12.8	20.0
1,3-Dichlorobenzene	Ave	1.516	1.482	0.6000	24.4	25.0	-2.3	20.0
1,4-Dichlorobenzene	Ave	1.554	1.491	0.5000	24.0	25.0	-4.0	20.0
n-Butylbenzene	Ave	2.496	2.661		26.7	25.0	6.6	20.0
1,2-Dichlorobenzene	Ave	1.567	1.600	0.4000	25.5	25.0	2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCVIS 480-560291/3 Calibration Date: 11/21/2020 08:41

Instrument ID: HP5973C Calib Start Date: 11/18/2020 15:16

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 11/18/2020 18:12

Lab File ID: C2380.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2097	0.1829	0.0500	21.8	25.0	-12.8	50.0
1,2,4-Trichlorobenzene	Ave	1.208	1.264	0.2000	26.2	25.0	4.7	20.0
Hexachlorobutadiene	Ave	0.5337	0.5555		26.0	25.0	4.1	20.0
Naphthalene	Ave	3.699	3.814		25.8	25.0	3.1	20.0
1,2,3-Trichlorobenzene	Ave	1.194	1.229		25.7	25.0	2.9	20.0
Dibromofluoromethane (Surr)	Ave	1.739	1.657		23.8	25.0	-4.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.9402	0.8593		22.8	25.0	-8.6	20.0
Toluene-d8 (Surr)	Ave	2.807	2.655		23.6	25.0	-5.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.9105	0.8582		23.6	25.0	-5.7	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2380.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Nov-2020 08:41:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0095148-003
Operator ID: AM Instrument ID: HP5973C
Sublist: chrom-C-8260*sub56

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 09:24:52 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1663

First Level Reviewer: moffata Date: 21-Nov-2020 09:24:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	190432	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	357556	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.112	0.000	94	384074	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.448	0.000	93	315471	25.0	23.8	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	95	163638	25.0	22.8	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	94	949190	25.0	23.6	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	95	306868	25.0	23.6	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	284736	25.0	25.0	
12 Chloromethane	50	1.298	1.298	0.000	99	262513	25.0	23.6	
13 Vinyl chloride	62	1.401	1.401	0.000	98	281508	25.0	25.3	
151 Butadiene	54	1.412	1.412	0.000	90	259546	25.0	25.3	
14 Bromomethane	94	1.692	1.692	0.000	92	231599	25.0	22.7	
15 Chloroethane	64	1.785	1.785	0.000	100	182247	25.0	23.6	
17 Trichlorofluoromethane	101	2.003	2.003	0.000	81	486558	25.0	26.4	
16 Dichlorofluoromethane	67	2.003	2.003	0.000	95	457227	25.0	25.3	
18 Ethyl ether	59	2.293	2.293	0.000	89	210266	25.0	23.7	
20 Acrolein	56	2.469	2.469	0.000	99	54386	125.0	93.4	
22 1,1-Dichloroethene	96	2.500	2.500	0.000	98	255190	25.0	25.5	
21 112TCTFE	101	2.500	2.500	0.000	93	293068	25.0	26.3	
23 Acetone	43	2.624	2.624	0.000	100	404481	125.0	82.0	
25 Iodomethane	142	2.655	2.655	0.000	99	504536	25.0	25.6	
26 Carbon disulfide	76	2.686	2.686	0.000	100	820147	25.0	25.0	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	85	327638	25.0	25.0	
27 Methyl acetate	43	2.904	2.904	0.000	97	455273	50.0	43.8	
30 Methylene Chloride	84	2.997	2.997	0.000	90	282141	25.0	25.5	
31 2-Methyl-2-propanol	59	3.153	3.153	0.000	92	291795	250.0	119.1	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	94	769502	25.0	23.7	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	96	300845	25.0	26.6	
33 Acrylonitrile	53	3.256	3.256	0.000	99	1007280	250.0	179.7	
35 Hexane	57	3.381	3.381	0.000	92	353998	25.0	25.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.578	3.578	0.000	96	453317	25.0	25.3	
37 Vinyl acetate	43	3.630	3.630	0.000	97	996073	50.0	45.6	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	90	337286	25.0	29.8	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	77	315318	25.0	24.8	
43 2-Butanone (MEK)	43	4.086	4.086	0.000	99	678462	125.0	95.8	
48 Chlorobromomethane	128	4.262	4.262	0.000	86	170609	25.0	23.7	
49 Tetrahydrofuran	42	4.272	4.272	0.000	84	172742	50.0	31.5	
50 Chloroform	83	4.324	4.324	0.000	94	483375	25.0	23.9	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	98	408450	25.0	26.6	
52 Cyclohexane	56	4.427	4.427	0.000	90	423068	25.0	27.0	
55 Carbon tetrachloride	117	4.531	4.531	0.000	96	356814	25.0	26.9	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	95	374487	25.0	26.9	
57 Benzene	78	4.707	4.707	0.000	96	990708	25.0	25.0	
53 Isobutyl alcohol	43	4.707	4.707	0.000	49	271215	625.0	357.4	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	98	362275	25.0	23.8	
59 n-Heptane	43	4.842	4.842	0.000	87	340305	25.0	26.3	
62 Trichloroethene	95	5.194	5.194	0.000	96	284297	25.0	24.9	
64 Methylcyclohexane	83	5.298	5.298	0.000	86	493612	25.0	27.6	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	91	214065	25.0	23.6	
66 1,4-Dioxane	88	5.495	5.495	0.000	38	79896	500.0	411.4	
67 Dibromomethane	93	5.505	5.505	0.000	94	189593	25.0	25.0	
68 Dichlorobromomethane	83	5.619	5.619	0.000	99	314040	25.0	24.5	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	93	141743	25.0	22.8	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	94	345385	25.0	24.7	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	95	1474871	125.0	114.8	
74 Toluene	92	6.158	6.158	0.000	98	599416	25.0	25.0	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	95	306923	25.0	24.9	
75 Ethyl methacrylate	69	6.386	6.386	0.000	88	292583	25.0	24.6	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	92	177428	25.0	23.6	
81 Tetrachloroethene	166	6.573	6.573	0.000	96	283911	25.0	24.9	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	90	355902	25.0	24.0	
80 2-Hexanone	43	6.676	6.676	0.000	96	983428	125.0	112.8	
83 Chlorodibromomethane	129	6.821	6.821	0.000	90	238660	25.0	24.4	
84 Ethylene Dibromide	107	6.904	6.904	0.000	97	241819	25.0	24.4	
87 Chlorobenzene	112	7.267	7.267	0.000	97	699361	25.0	24.9	
88 Ethylbenzene	91	7.319	7.319	0.000	98	1126637	25.0	25.5	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	93	255071	25.0	26.3	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	97	450733	25.0	26.2	
91 o-Xylene	106	7.733	7.733	0.000	97	460246	25.0	26.5	
92 Styrene	104	7.754	7.754	0.000	95	694104	25.0	26.7	
95 Bromoform	173	7.951	7.951	0.000	96	151079	25.0	22.4	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	1235447	25.0	27.6	
101 Bromobenzene	156	8.303	8.303	0.000	90	295747	25.0	24.8	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	96	355781	25.0	24.9	
99 N-Propylbenzene	91	8.345	8.345	0.000	99	1406459	25.0	26.4	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	88	119359	25.0	23.6	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	70	68265	25.0	18.9	
103 2-Chlorotoluene	126	8.438	8.438	0.000	97	302211	25.0	26.5	
102 1,3,5-Trimethylbenzene	105	8.490	8.490	0.000	95	1026472	25.0	27.4	
105 4-Chlorotoluene	126	8.531	8.531	0.000	97	293441	25.0	25.5	
106 tert-Butylbenzene	134	8.749	8.749	0.000	93	232899	25.0	27.9	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	95	1036125	25.0	27.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	1348284	25.0	28.2	
110 4-Isopropyltoluene	119	9.039	9.039	0.000	97	1174861	25.0	28.2	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	99	569269	25.0	24.4	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	96	572745	25.0	24.0	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	1022208	25.0	26.7	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	614571	25.0	25.5	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	86	70237	25.0	21.8	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	93	485498	25.0	26.2	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	98	213362	25.0	26.0	
121 Naphthalene	128	10.977	10.977	0.000	96	1465044	25.0	25.8	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	96	472094	25.0	25.7	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00198	Amount Added: 12.50	Units: uL	
GAS CORP mix_00427	Amount Added: 12.50	Units: uL	
C_8260_Surr_00167	Amount Added: 2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added: 2.00	Units: uL	Run Reagent

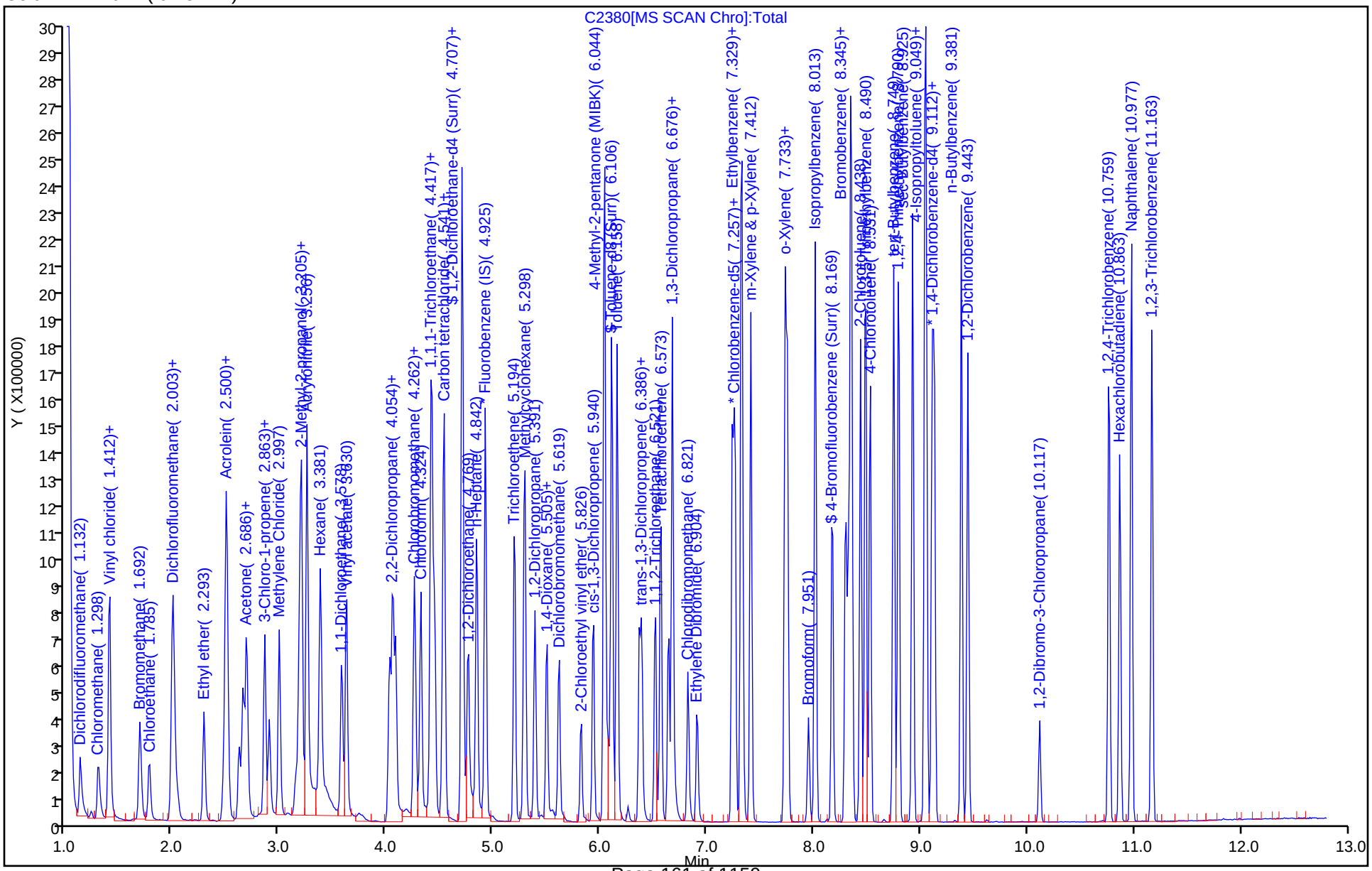
Report Date: 21-Nov-2020 09:24:54 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2380.D

Injection Date:	21-Nov-2020 08:41:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2263.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	18-Nov-2020 14:24:30	ALS Bottle#:	2	Worklist Smp#:	11
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	bfb				
Misc. Info.:	480-0095057-011				
Operator ID:	RF	Instrument ID:	HP5973C		
Method:	\\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	19-Nov-2020 12:02:24	Calib Date:	18-Nov-2020 22:44:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1624				
First Level Reviewer: farrellr		Date:	18-Nov-2020 14:34:35		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	5.669	5.669	0.000	0	148397	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

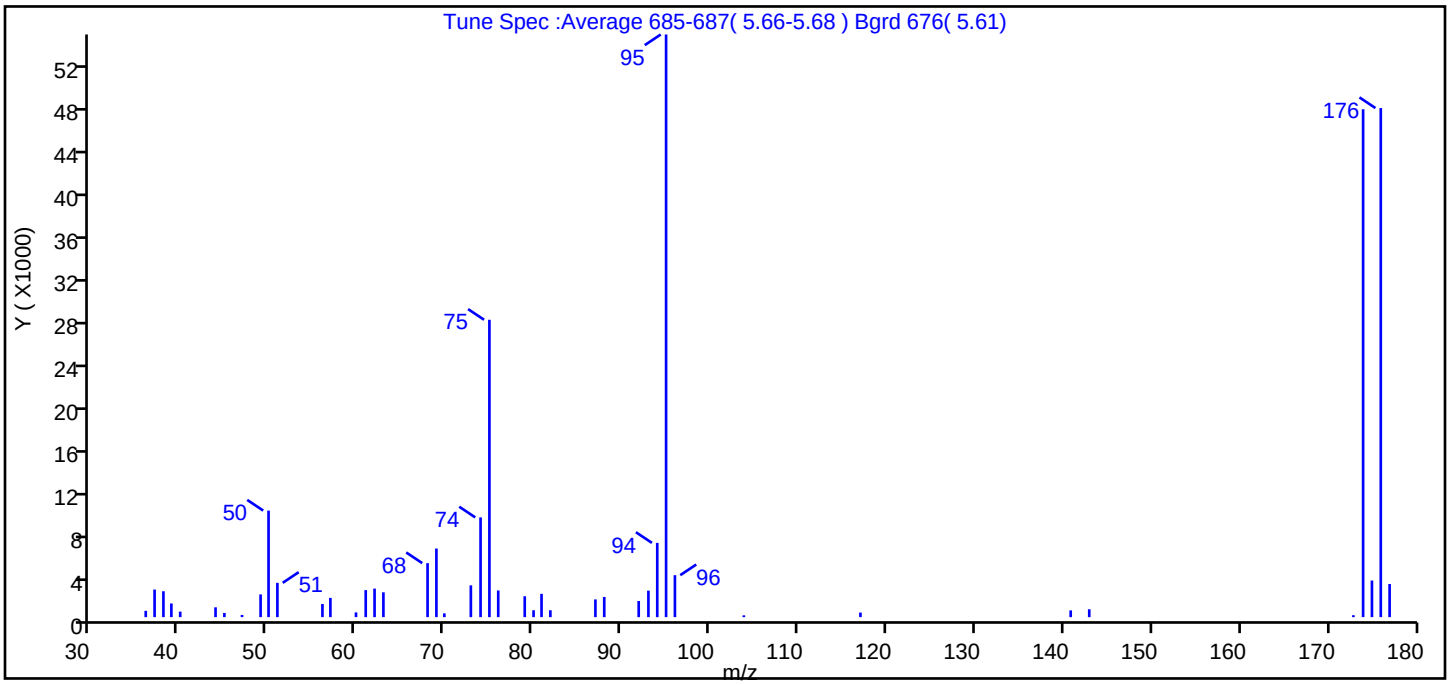
BFB_WRK_00113 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2263.D
Injection Date: 18-Nov-2020 14:24:30 Instrument ID: HP5973C
Lims ID: BFB
Client ID:
Operator ID: RF ALS Bottle#: 2 Worklist Smp#: 11
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.3
75	30 to 60% of m/z 95	51.0
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	87.2
175	5 to 9% of m/z 174	6.3 (7.2)
176	Greater than 95% but less than 101% of m/z 174	87.4 (100.2)
177	5 to 9% of m/z 176	5.7 (6.5)

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2263.D\C-8260.rslt\spectra.d
Injection Date: 18-Nov-2020 14:24:30
Spectrum: Tune Spec :Average 685-687(5.66-5.68) Bgrd 676(5.61)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 44

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	593	56.00	1232	75.00	27936	95.00	54736
37.00	2592	57.00	1811	76.00	2506	96.00	3942
38.00	2434	60.00	447	79.00	1963	104.00	169
39.00	1284	61.00	2540	80.00	650	117.00	431
40.00	518	62.00	2679	81.00	2191	141.00	635
44.00	924	63.00	2333	82.00	648	143.00	738
45.00	393	68.00	5074	87.00	1666	173.00	181
47.00	205	69.00	6447	88.00	1896	174.00	47712
49.00	2136	70.00	356	92.00	1516	175.00	3439
50.00	10010	73.00	2987	93.00	2489	176.00	47824
51.00	3223	74.00	9372	94.00	6976	177.00	3112

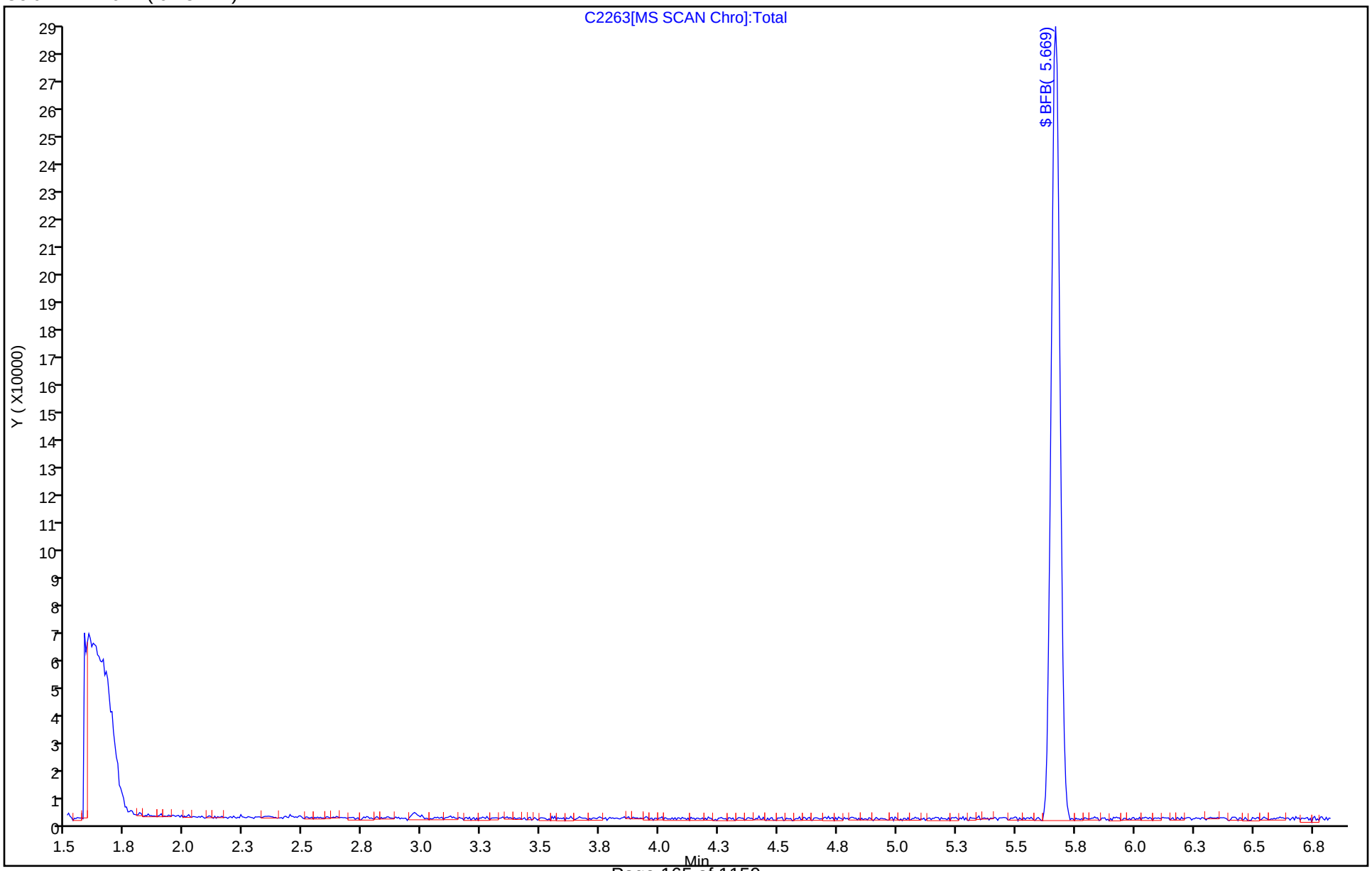
Report Date: 19-Nov-2020 12:02:24 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2263.D

Injection Date:	18-Nov-2020 14:24:30	Instrument ID:	HP5973C	Operator ID:	RF
Lims ID:	BFB			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2379.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 21-Nov-2020 08:06:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0095148-002
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 08:25:42 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1663

First Level Reviewer: moffata Date: 21-Nov-2020 08:25:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	5.657	5.657	0.000	0	255030	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

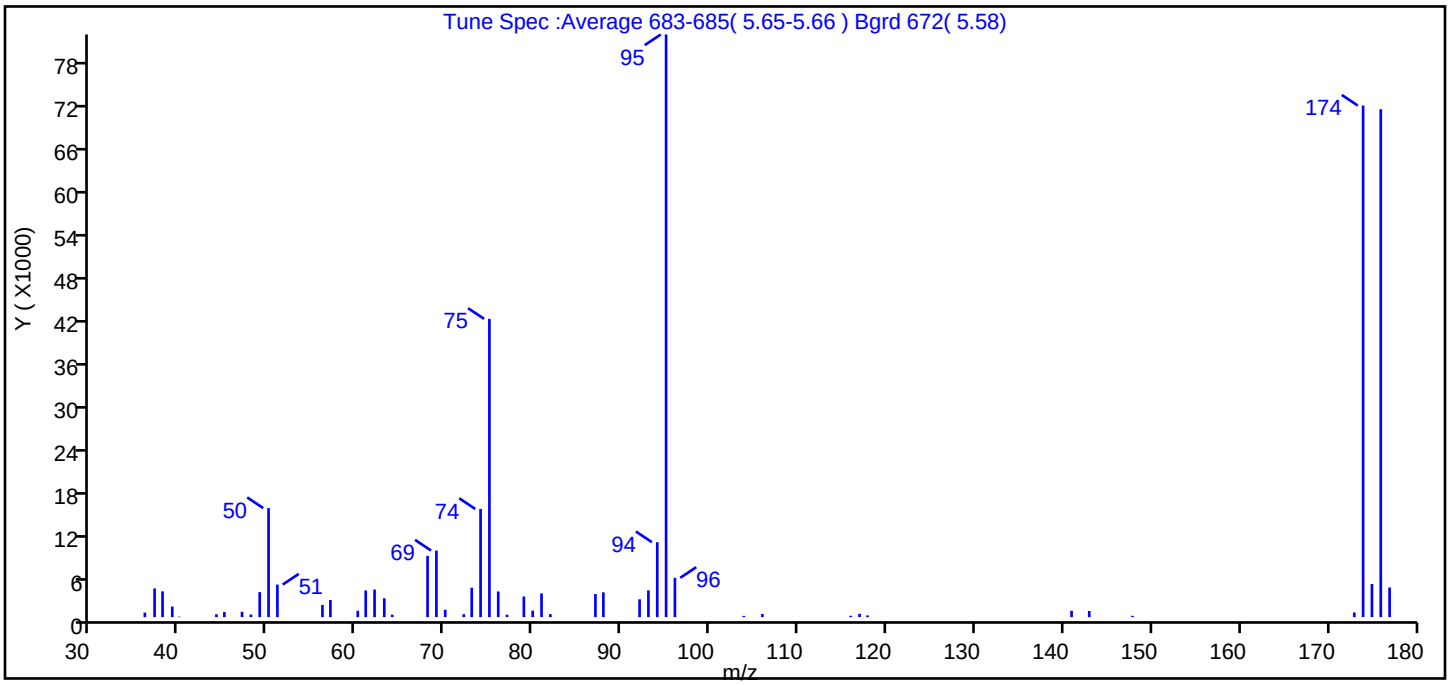
BFB_WRK_00113 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2379.D
Injection Date: 21-Nov-2020 08:06:30 Instrument ID: HP5973C
Lims ID: BFB
Client ID:
Operator ID: AM ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: C-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.7
75	30 to 60% of m/z 95	51.2
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	87.8
175	5 to 9% of m/z 174	5.7 (6.5)
176	Greater than 95% but less than 101% of m/z 174	87.2 (99.3)
177	5 to 9% of m/z 176	5.1 (5.8)

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2379.D\C-8260.rslt\spectra.d
Injection Date: 21-Nov-2020 08:06:30
Spectrum: Tune Spec :Average 683-685(5.65-5.66) Bgrd 672(5.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 52

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	640	57.00	2416	76.00	3609	104.00	180
37.00	4034	60.00	898	77.00	341	106.00	451
38.00	3630	61.00	3749	79.00	2905	116.00	195
39.00	1493	62.00	3871	80.00	923	117.00	472
40.00	71	63.00	2646	81.00	3338	118.00	246
44.00	410	64.00	344	82.00	419	141.00	898
45.00	714	68.00	8611	87.00	3243	143.00	860
47.00	749	69.00	9357	88.00	3486	148.00	187
48.00	368	70.00	1035	92.00	2508	173.00	660
49.00	3520	72.00	417	93.00	3762	174.00	71880
50.00	15324	73.00	4133	94.00	10534	175.00	4658
51.00	4576	74.00	15202	95.00	81872	176.00	71368
56.00	1714	75.00	41912	96.00	5525	177.00	4170

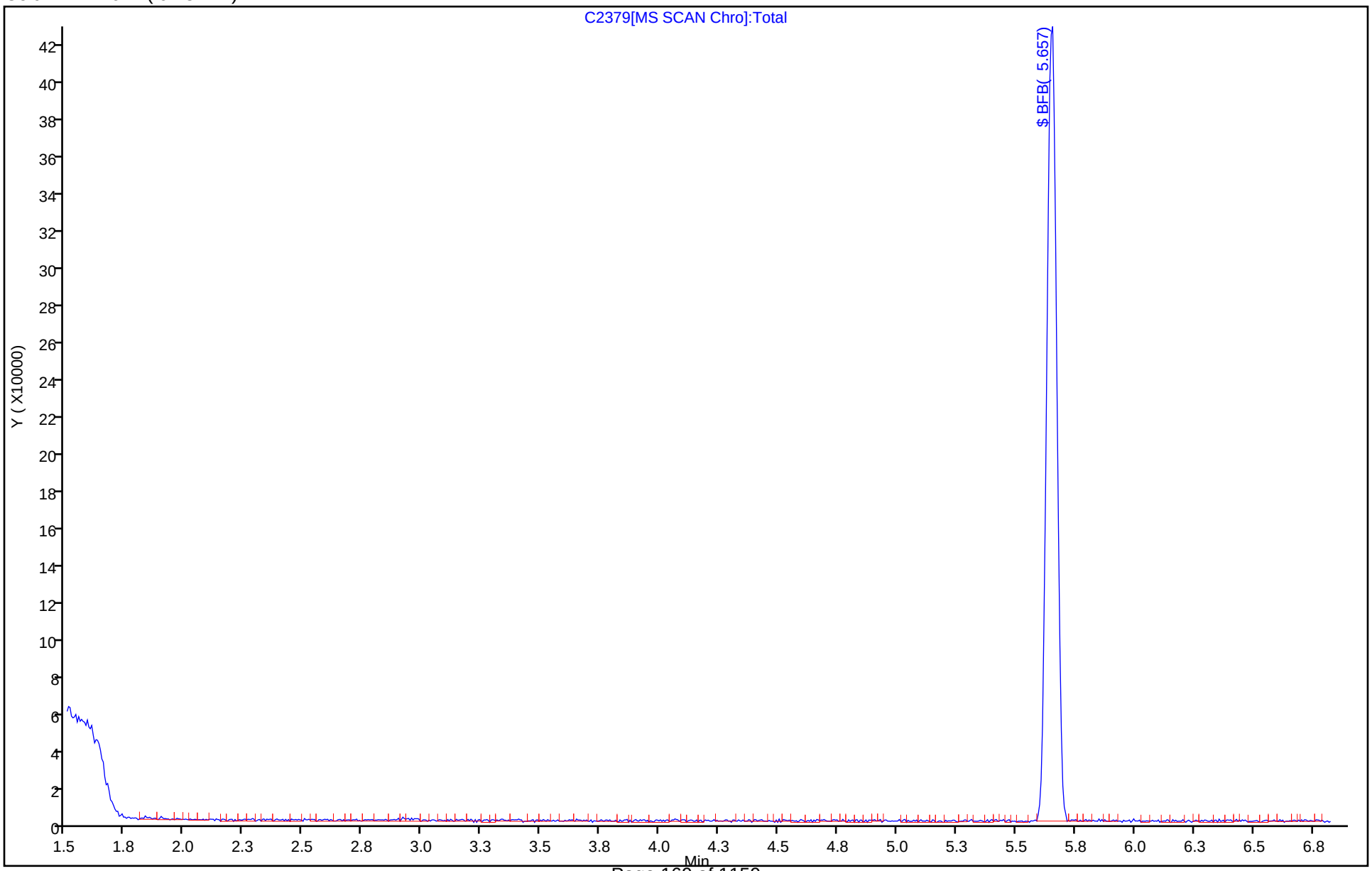
Report Date: 21-Nov-2020 08:25:42 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2379.D

Injection Date:	21-Nov-2020 08:06:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	BFB			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-560291/7

Matrix: Water Lab File ID: C2384.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 10:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-560291/7

Matrix: Water Lab File ID: C2384.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 10:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-20-9	Methyl acetate	ND		2.5	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	93		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		77-120
460-00-4	4-Bromofluorobenzene (Surr)	90		73-120
1868-53-7	Dibromofluoromethane (Surr)	88		75-123

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2384.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-Nov-2020 10:21:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0095148-007
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 10:39:31 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1663

First Level Reviewer: moffata Date: 21-Nov-2020 10:39:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	196160	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	348435	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.111	9.112	-0.001	94	384582	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.458	4.458	0.000	94	301652	25.0	22.1	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	98	170521	25.0	23.1	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	912822	25.0	23.3	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	286144	25.0	22.5	
10 Dichlorodifluoromethane	85		1.132					ND	
11 Chlorodifluoromethane	51		1.153					ND	
12 Chloromethane	50		1.298					ND	
13 Vinyl chloride	62		1.401					ND	
151 Butadiene	54		1.412					ND	
14 Bromomethane	94		1.692					ND	
15 Chloroethane	64		1.785					ND	
17 Trichlorofluoromethane	101		2.003					ND	
16 Dichlorofluoromethane	67		2.003					ND	
18 Ethyl ether	59		2.293					ND	
148 Ethanol	45		2.313					ND	
19 Propene oxide	58		2.386					ND	
20 Acrolein	56		2.469					ND	
22 1,1-Dichloroethene	96		2.500					ND	
21 112TCTFE	101		2.500					ND	
23 Acetone	43		2.624					ND	
25 Iodomethane	142		2.655					ND	
26 Carbon disulfide	76		2.686					ND	
24 Isopropyl alcohol	45		2.811					ND	
28 3-Chloro-1-propene	41		2.863					ND	
27 Methyl acetate	43		2.904					ND	
29 Acetonitrile	40		2.925					ND	
30 Methylene Chloride	84		2.997					ND	7
31 2-Methyl-2-propanol	59		3.153					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		3.194					ND	
34 trans-1,2-Dichloroethene	96		3.205					ND	
33 Acrylonitrile	53		3.256					ND	
35 Hexane	57		3.381					ND	
39 1,1-Dichloroethane	63		3.578					ND	
36 Isopropyl ether	45		3.588					ND	
135 Halothane	117		3.619					ND	
40 2-Chloro-1,3-butadiene	53		3.629					ND	
37 Vinyl acetate	43		3.630					ND	
38 1,1-Dimethoxyethane	75		3.661					ND	
41 Tert-butyl ethyl ether	59		3.889					ND	
44 2,2-Dichloropropane	77		4.034					ND	
45 cis-1,2-Dichloroethene	96		4.065					ND	
43 2-Butanone (MEK)	43		4.086					ND	
42 Ethyl acetate	43		4.117					ND	
46 Propionitrile	54		4.179					ND	
48 Chlorobromomethane	128		4.262					ND	
47 Methacrylonitrile	41		4.272					ND	
49 Tetrahydrofuran	42		4.272					ND	
50 Chloroform	83		4.324					ND	
51 1,1,1-Trichloroethane	97		4.417					ND	
52 Cyclohexane	56		4.427					ND	
55 Carbon tetrachloride	117		4.531					ND	
54 1,1-Dichloropropene	75		4.541					ND	
152 Isooctane	57		4.697					ND	
57 Benzene	78		4.707					ND	
53 Isobutyl alcohol	43		4.707					ND	
147 t-Amyl alcohol	59		4.759					ND	
56 Tert-amyl methyl ether	73		4.769					ND	U
58 1,2-Dichloroethane	62		4.769					ND	
59 n-Heptane	43		4.842					ND	
1 1,4-Difluorobenzene	114		5.018					ND	
141 2,4,4-Trimethyl-1-pentene	55		5.101					ND	
62 Trichloroethene	95		5.194					ND	
60 n-Butanol	56		5.205					ND	
142 Ethyl acrylate	55		5.288					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.288					ND	
64 Methylcyclohexane	83		5.298					ND	
65 1,2-Dichloropropane	63		5.391					ND	
63 Methyl methacrylate	41		5.453					ND	
66 1,4-Dioxane	88		5.495					ND	
67 Dibromomethane	93		5.505					ND	
68 Dichlorobromomethane	83		5.619					ND	
70 2-Nitropropane	43		5.806					ND	
69 2-Chloroethyl vinyl ether	63		5.826					ND	
71 Epichlorohydrin	57		5.899					ND	
72 cis-1,3-Dichloropropene	75		5.940					ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.044					ND	
74 Toluene	92		6.158					ND	
76 2-Methylthiophene	97		6.272					ND	
77 trans-1,3-Dichloropropene	75		6.365					ND	
75 Ethyl methacrylate	69		6.386					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
78 3-Methylthiophene	97		6.396					ND	
79 1,1,2-Trichloroethane	83		6.521					ND	
81 Tetrachloroethene	166		6.573					ND	
82 1,3-Dichloropropane	76		6.645					ND	
80 2-Hexanone	43		6.676					ND	
155 n-Butyl acetate	43		6.749					ND	
83 Chlorodibromomethane	129		6.821					ND	
84 Ethylene Dibromide	107		6.904					ND	
146 1-Chlorohexane	55		7.205					ND	U
85 3-Chlorobenzotrifluoride	180		7.215					ND	
86 4-Chlorobenzotrifluoride	180		7.267					ND	
87 Chlorobenzene	112		7.267					ND	
88 Ethylbenzene	91		7.319					ND	
89 1,1,1,2-Tetrachloroethane	131		7.329					ND	
90 m-Xylene & p-Xylene	106		7.412					ND	
91 o-Xylene	106		7.733					ND	
92 Styrene	104		7.754					ND	
93 2-Chlorobenzotrifluoride	180		7.951					ND	
95 Bromoform	173		7.951					ND	
94 Isopropylbenzene	105		8.013					ND	
96 Cyclohexanone	55		8.158					ND	
101 Bromobenzene	156		8.303					ND	
97 1,1,2,2-Tetrachloroethane	83		8.324					ND	
99 N-Propylbenzene	91		8.345					ND	
100 1,2,3-Trichloropropane	110		8.355					ND	
98 trans-1,4-Dichloro-2-butene	53		8.355					ND	
103 2-Chlorotoluene	126		8.438					ND	
104 3-Chlorotoluene	126		8.490					ND	
102 1,3,5-Trimethylbenzene	105		8.490					ND	
105 4-Chlorotoluene	126		8.531					ND	
106 tert-Butylbenzene	134		8.749					ND	
107 1,2,4-Trimethylbenzene	105		8.790					ND	
108 Pentachloroethane	167		8.811					ND	
109 sec-Butylbenzene	105		8.925					ND	
110 4-Isopropyltoluene	119		9.039					ND	
111 1,3-Dichlorobenzene	146		9.060					ND	U
114 Dicyclopentadiene	66		9.112					ND	
113 1,4-Dichlorobenzene	146		9.132					ND	U
112 1,2,3-Trimethylbenzene	105		9.153					ND	
150 Benzyl chloride	126		9.257					ND	
115 n-Butylbenzene	91		9.381					ND	
116 1,2-Dichlorobenzene	146		9.443					ND	
117 1,2-Dibromo-3-Chloropropane	75		10.117					ND	
118 1,3,5-Trichlorobenzene	180		10.241					ND	
119 1,2,4-Trichlorobenzene	180		10.770					ND	
120 Hexachlorobutadiene	225		10.863					ND	
121 Naphthalene	128		10.977					ND	
122 1,2,3-Trichlorobenzene	180		11.163					ND	
149 2-Methylnaphthalene	142		11.837					ND	
139 cis-1,4-Dichloro-2-butene	88		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
136 Hexachloroethane	117		0.000					ND	
137 Nitrobenzene	77		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
S 126 1,3-Dichloropropene, Total	1		30.000					ND	7
S 125 1,2-Dichloroethene, Total	1		30.000					ND	7
S 123 Total BTEX	1		30.000					ND	7
S 124 Xylenes, Total	1		30.000					ND	7
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent

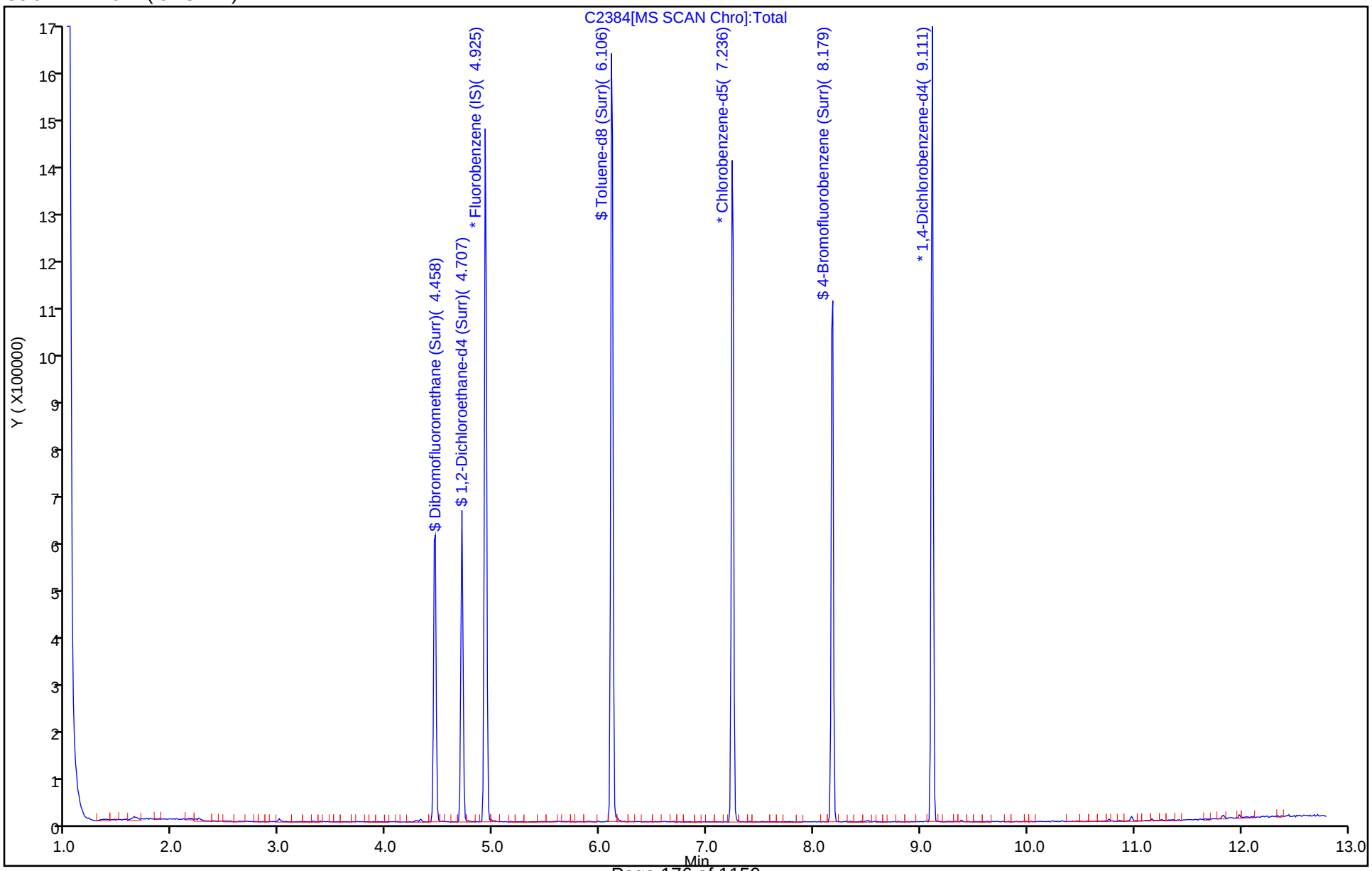
Report Date: 21-Nov-2020 10:39:32 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2384.D

Injection Date:	21-Nov-2020 10:21:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



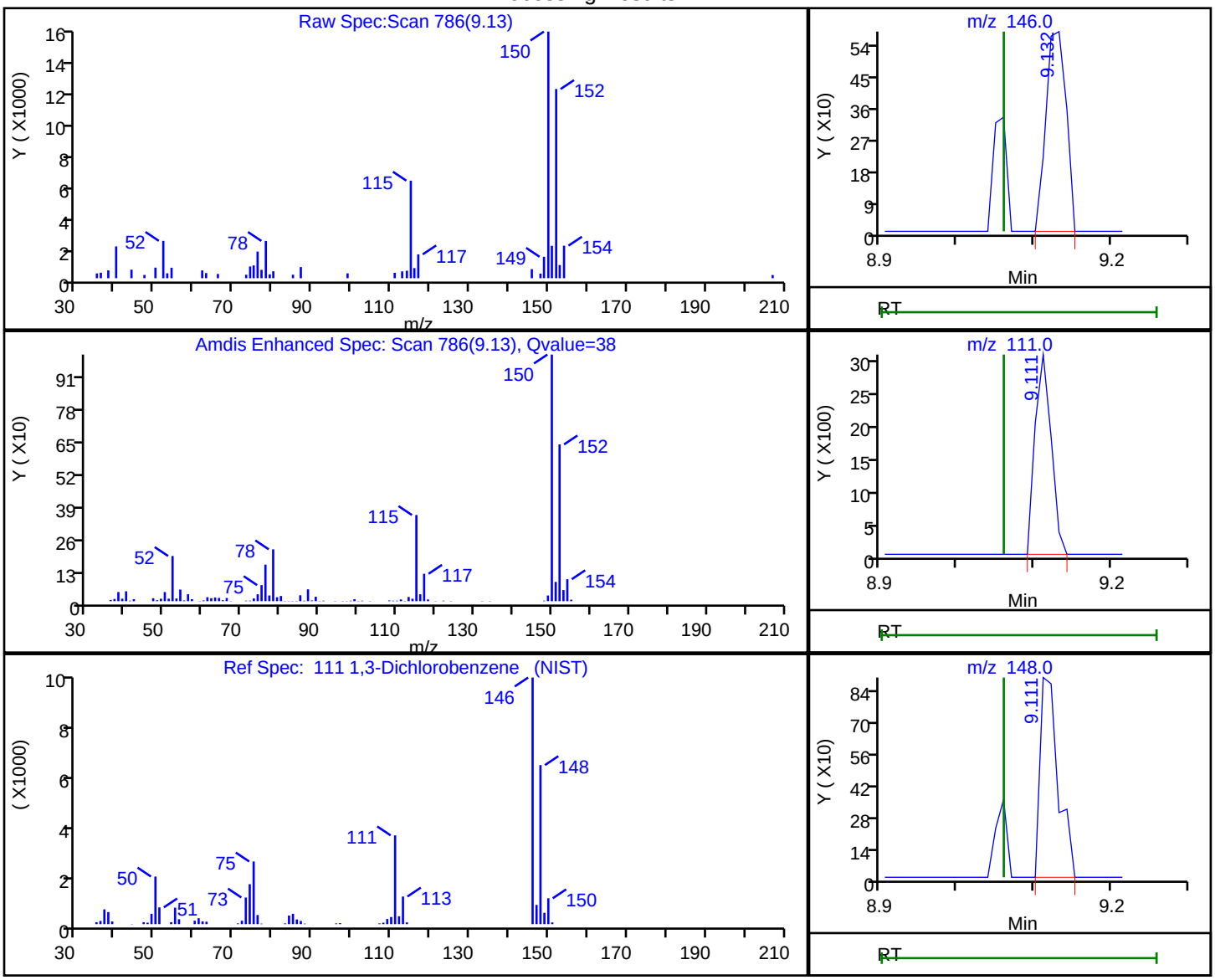
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2384.D				
Injection Date:	21-Nov-2020 10:21:30	Instrument ID:	HP5973C		
Lims ID:	MB				
Client ID:					
Operator ID:	AM	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	C-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

111 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
9.13	146.00	1056	0.045266
9.11	111.00	4529	
9.11	148.00	1466	

Reviewer: moffata, 21-Nov-2020 10:38:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

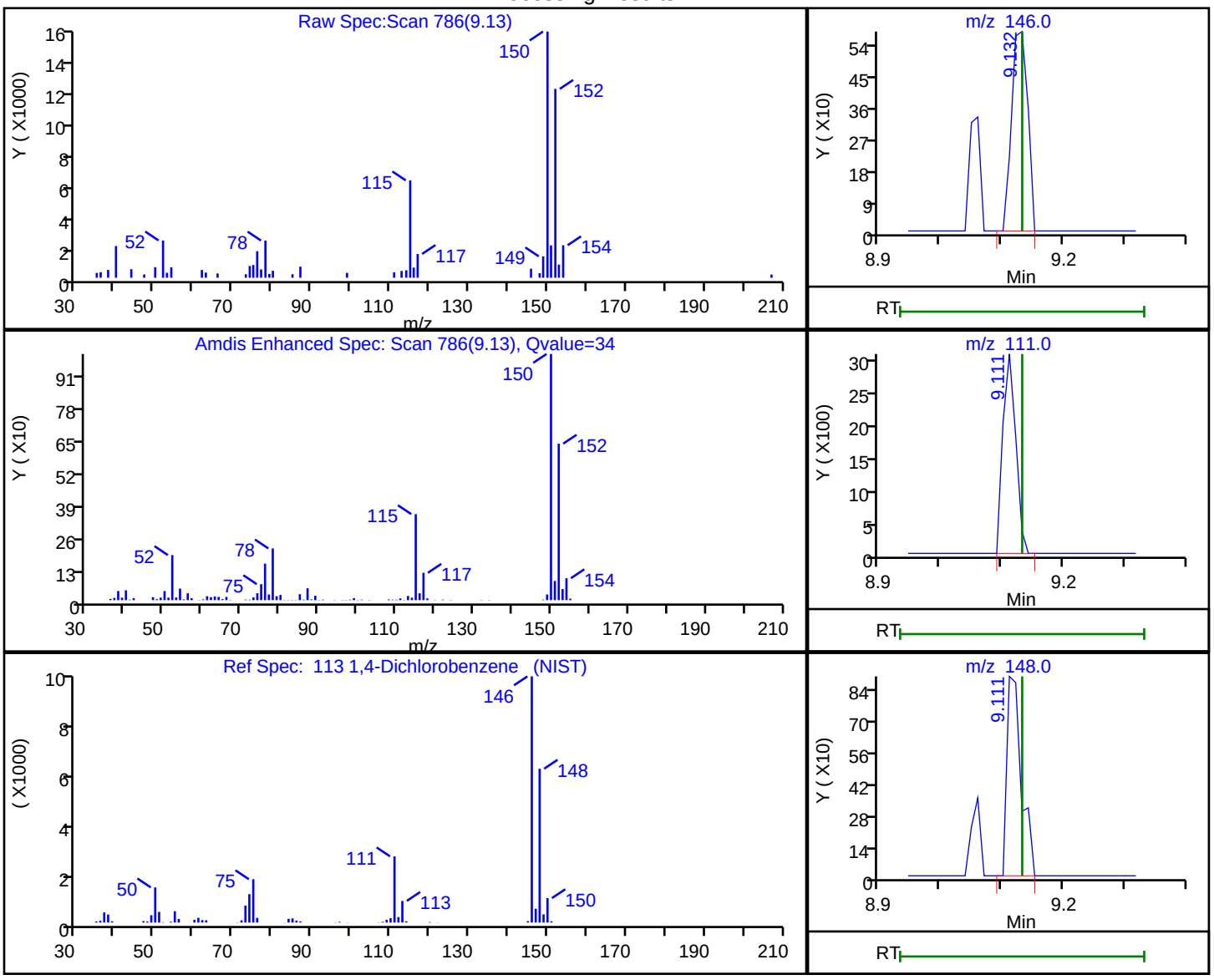
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2384.D				
Injection Date:	21-Nov-2020 10:21:30	Instrument ID:	HP5973C		
Lims ID:	MB				
Client ID:					
Operator ID:	AM	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	C-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

113 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
9.13	146.00	1056	0.044169
9.11	111.00	4529	
9.11	148.00	1466	

Reviewer: moffata, 21-Nov-2020 10:38:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-560291/5

Matrix: Water Lab File ID: C2382.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 09:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	25.4		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	25.3		1.0	
79-00-5	1,1,2-Trichloroethane	24.4		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.6		1.0	
75-34-3	1,1-Dichloroethane	24.6		1.0	
75-35-4	1,1-Dichloroethene	24.7		1.0	
120-82-1	1,2,4-Trichlorobenzene	25.9		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	23.6		1.0	
95-50-1	1,2-Dichlorobenzene	25.7		1.0	
107-06-2	1,2-Dichloroethane	24.9		1.0	
78-87-5	1,2-Dichloropropane	24.3		1.0	
541-73-1	1,3-Dichlorobenzene	25.3		1.0	
106-46-7	1,4-Dichlorobenzene	24.5		1.0	
78-93-3	2-Butanone (MEK)	125		10	
591-78-6	2-Hexanone	122		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	123		5.0	
67-64-1	Acetone	133		10	
71-43-2	Benzene	24.7		1.0	
75-27-4	Bromodichloromethane	24.2		1.0	
75-25-2	Bromoform	22.7		1.0	
74-83-9	Bromomethane	21.4		1.0	
75-15-0	Carbon disulfide	24.3		1.0	
56-23-5	Carbon tetrachloride	25.7		1.0	
108-90-7	Chlorobenzene	24.0		1.0	
124-48-1	Dibromochloromethane	23.8		1.0	
75-00-3	Chloroethane	21.9		1.0	
67-66-3	Chloroform	23.3		1.0	
74-87-3	Chloromethane	22.4		1.0	
156-59-2	cis-1,2-Dichloroethene	24.0		1.0	
10061-01-5	cis-1,3-Dichloropropene	24.5		1.0	
110-82-7	Cyclohexane	26.1		1.0	
75-71-8	Dichlorodifluoromethane	24.0		1.0	
100-41-4	Ethylbenzene	25.1		1.0	
106-93-4	1,2-Dibromoethane	25.0		1.0	
98-82-8	Isopropylbenzene	26.9		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-560291/5

Matrix: Water Lab File ID: C2382.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 09:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-20-9	Methyl acetate	49.3		2.5	
1634-04-4	Methyl tert-butyl ether	25.0		1.0	
108-87-2	Methylcyclohexane	26.1		1.0	
75-09-2	Methylene Chloride	25.4		1.0	
100-42-5	Styrene	25.8		1.0	
127-18-4	Tetrachloroethene	24.9		1.0	
108-88-3	Toluene	23.5		1.0	
156-60-5	trans-1,2-Dichloroethene	24.9		1.0	
10061-02-6	trans-1,3-Dichloropropene	24.7		1.0	
79-01-6	Trichloroethene	24.5		1.0	
75-69-4	Trichlorofluoromethane	25.1		1.0	
75-01-4	Vinyl chloride	24.1		1.0	
1330-20-7	Xylenes, Total	50.2		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-123

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2382.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 21-Nov-2020 09:31:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0095148-005
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 10:05:33 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1663

First Level Reviewer: moffata Date: 21-Nov-2020 10:22:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	199193	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	381700	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.112	0.000	94	404049	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.459	-0.010	93	325017	25.0	23.5	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	98	181311	25.0	24.2	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	975378	25.0	22.8	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	318199	25.0	22.9	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	285386	25.0	24.0	
12 Chloromethane	50	1.298	1.298	0.000	99	260262	25.0	22.4	
13 Vinyl chloride	62	1.401	1.401	0.000	98	280246	25.0	24.1	
151 Butadiene	54	1.412	1.412	0.000	92	266022	25.0	24.8	
14 Bromomethane	94	1.692	1.692	0.000	93	228420	25.0	21.4	
15 Chloroethane	64	1.774	1.785	-0.011	99	177529	25.0	21.9	
17 Trichlorofluoromethane	101	2.002	2.003	-0.001	81	484454	25.0	25.1	
16 Dichlorofluoromethane	67	2.002	2.003	-0.001	95	460631	25.0	24.3	
18 Ethyl ether	59	2.293	2.293	0.000	88	223870	25.0	24.1	
20 Acrolein	56	2.469	2.469	0.000	97	63493	125.0	104.3	
21 112TCTFE	101	2.500	2.500	0.000	93	298482	25.0	25.6	
22 1,1-Dichloroethene	96	2.500	2.500	0.000	98	258977	25.0	24.7	
23 Acetone	43	2.624	2.624	0.000	99	683778	125.0	132.6	
25 Iodomethane	142	2.655	2.655	0.000	100	511546	25.0	24.8	
26 Carbon disulfide	76	2.686	2.686	0.000	100	832683	25.0	24.3	
28 3-Chloro-1-propene	41	2.863	2.863	0.000	85	344852	25.0	25.1	
27 Methyl acetate	43	2.904	2.904	0.000	97	536078	50.0	49.3	
30 Methylene Chloride	84	2.997	2.997	0.000	90	293930	25.0	25.4	
31 2-Methyl-2-propanol	59	3.163	3.153	0.010	100	595506	250.0	232.5	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	96	849178	25.0	25.0	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	96	294826	25.0	24.9	
33 Acrylonitrile	53	3.256	3.256	0.000	97	1464070	250.0	249.7	
35 Hexane	57	3.381	3.381	0.000	92	351931	25.0	24.6	
39 1,1-Dichloroethane	63	3.578	3.578	0.000	96	459871	25.0	24.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.629	3.630	-0.001	97	1143801	50.0	50.0	
44 2,2-Dichloropropane	77	4.034	4.034	0.000	90	324827	25.0	27.4	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	78	318977	25.0	24.0	
43 2-Butanone (MEK)	43	4.085	4.086	0.000	99	924448	125.0	124.8	
48 Chlorobromomethane	128	4.262	4.262	0.000	86	180255	25.0	23.9	
49 Tetrahydrofuran	42	4.272	4.272	0.000	82	237409	50.0	41.3	
50 Chloroform	83	4.324	4.324	0.000	94	493337	25.0	23.3	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	98	409214	25.0	25.4	
52 Cyclohexane	56	4.427	4.427	0.000	89	427766	25.0	26.1	
55 Carbon tetrachloride	117	4.531	4.531	0.000	96	356679	25.0	25.7	
54 1,1-Dichloropropene	75	4.541	4.541	0.000	94	368331	25.0	25.3	
57 Benzene	78	4.707	4.707	0.000	96	1024519	25.0	24.7	
53 Isobutyl alcohol	43	4.718	4.707	0.011	90	486838	625.0	613.3	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	98	396415	25.0	24.9	
59 n-Heptane	43	4.842	4.842	0.000	86	325252	25.0	24.0	
62 Trichloroethene	95	5.194	5.194	0.000	96	292136	25.0	24.5	
64 Methylcyclohexane	83	5.298	5.298	0.000	87	488599	25.0	26.1	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	92	230287	25.0	24.3	
66 1,4-Dioxane	88	5.505	5.495	0.010	39	103383	500.0	498.7	
67 Dibromomethane	93	5.505	5.505	0.000	93	194903	25.0	24.6	
68 Dichlorobromomethane	83	5.619	5.619	0.000	99	324629	25.0	24.2	
69 2-Chloroethyl vinyl ether	63	5.826	5.826	0.000	93	156018	25.0	24.0	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	95	359275	25.0	24.5	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	95	1685252	125.0	122.9	
74 Toluene	92	6.158	6.158	0.000	98	603342	25.0	23.5	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	95	325086	25.0	24.7	
75 Ethyl methacrylate	69	6.386	6.386	0.000	87	312292	25.0	24.6	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	91	196175	25.0	24.4	
81 Tetrachloroethene	166	6.573	6.573	0.000	97	303377	25.0	24.9	
82 1,3-Dichloropropane	76	6.645	6.645	0.000	89	374898	25.0	23.7	
80 2-Hexanone	43	6.676	6.676	0.000	98	1131665	125.0	121.6	
83 Chlorodibromomethane	129	6.821	6.821	0.000	90	249042	25.0	23.8	
84 Ethylene Dibromide	107	6.904	6.904	0.000	98	264314	25.0	25.0	
87 Chlorobenzene	112	7.267	7.267	0.000	98	719171	25.0	24.0	
88 Ethylbenzene	91	7.319	7.319	0.000	98	1183616	25.0	25.1	
89 1,1,1,2-Tetrachloroethane	131	7.329	7.329	0.000	93	266962	25.0	25.8	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	96	459506	25.0	25.0	
91 o-Xylene	106	7.733	7.733	0.000	97	467715	25.0	25.2	
92 Styrene	104	7.754	7.754	0.000	95	715330	25.0	25.8	
95 Bromoform	173	7.951	7.951	0.000	96	163671	25.0	22.7	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	1266019	25.0	26.9	
101 Bromobenzene	156	8.303	8.303	0.000	89	320990	25.0	25.5	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	97	380711	25.0	25.3	
99 N-Propylbenzene	91	8.345	8.345	0.000	99	1465858	25.0	26.1	
100 1,2,3-Trichloropropane	110	8.355	8.355	0.000	88	130469	25.0	24.5	
98 trans-1,4-Dichloro-2-butene	53	8.355	8.355	0.000	71	79208	25.0	20.9	
103 2-Chlorotoluene	126	8.438	8.438	0.000	97	310957	25.0	25.9	
102 1,3,5-Trimethylbenzene	105	8.479	8.490	-0.011	95	1064802	25.0	27.0	
105 4-Chlorotoluene	126	8.531	8.531	0.000	97	307035	25.0	25.3	
106 tert-Butylbenzene	134	8.749	8.749	0.000	92	239720	25.0	27.3	
107 1,2,4-Trimethylbenzene	105	8.790	8.790	0.000	97	1089790	25.0	27.1	
109 sec-Butylbenzene	105	8.925	8.925	0.000	94	1370621	25.0	27.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
110 4-Isopropyltoluene	119	9.039	9.039	0.000	97	1196168	25.0	27.3	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	98	620206	25.0	25.3	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	95	616635	25.0	24.5	
115 n-Butylbenzene	91	9.381	9.381	0.000	97	1064366	25.0	26.4	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	651294	25.0	25.7	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	85	80010	25.0	23.6	
119 1,2,4-Trichlorobenzene	180	10.759	10.770	-0.011	94	504604	25.0	25.9	
120 Hexachlorobutadiene	225	10.863	10.863	0.000	98	219011	25.0	25.4	
121 Naphthalene	128	10.977	10.977	0.000	96	1553733	25.0	26.0	
122 1,2,3-Trichlorobenzene	180	11.163	11.163	0.000	96	506026	25.0	26.2	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00198	Amount Added: 12.50	Units: uL	
GAS CORP mix_00427	Amount Added: 12.50	Units: uL	
C_8260_Surr_00167	Amount Added: 2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added: 2.00	Units: uL	Run Reagent

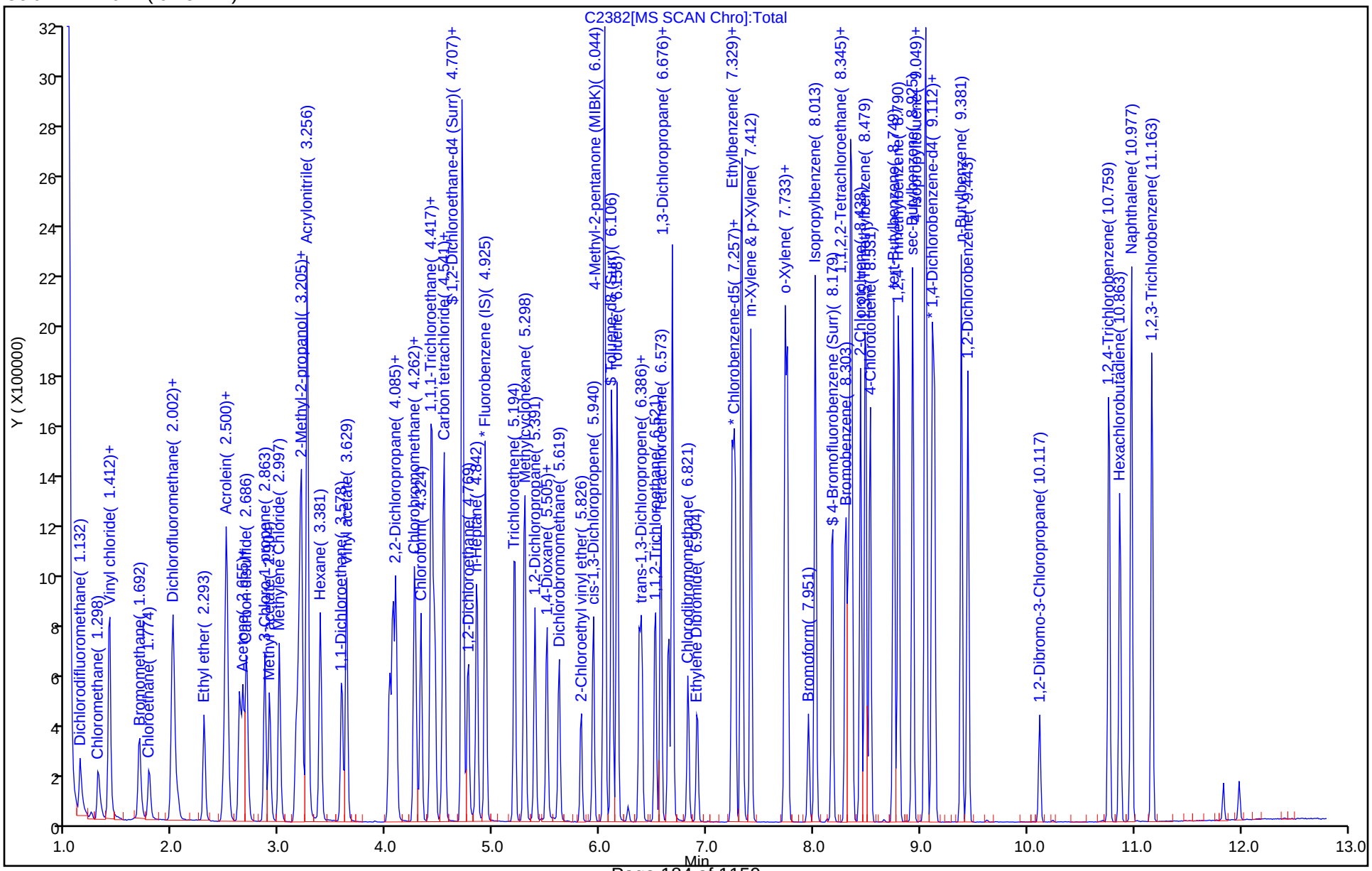
Report Date: 21-Nov-2020 10:22:57 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2382.D

Injection Date:	21-Nov-2020 09:31:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent MS Lab Sample ID: 480-178459-3 MS

Matrix: Water Lab File ID: C2403.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 18:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	23.7		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	21.9		1.0	
79-00-5	1,1,2-Trichloroethane	22.1		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	23.1		1.0	
75-34-3	1,1-Dichloroethane	22.6		1.0	
75-35-4	1,1-Dichloroethene	22.7		1.0	
120-82-1	1,2,4-Trichlorobenzene	20.7		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	19.5		1.0	
95-50-1	1,2-Dichlorobenzene	21.3		1.0	
107-06-2	1,2-Dichloroethane	21.1		1.0	
78-87-5	1,2-Dichloropropane	22.3		1.0	
541-73-1	1,3-Dichlorobenzene	21.1		1.0	
106-46-7	1,4-Dichlorobenzene	21.1		1.0	
78-93-3	2-Butanone (MEK)	88.6		10	
591-78-6	2-Hexanone	106		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	102		5.0	
67-64-1	Acetone	75.3		10	
71-43-2	Benzene	22.4		1.0	
75-27-4	Bromodichloromethane	22.1		1.0	
75-25-2	Bromoform	20.5		1.0	
74-83-9	Bromomethane	20.1		1.0	
75-15-0	Carbon disulfide	20.7		1.0	
56-23-5	Carbon tetrachloride	23.4		1.0	
108-90-7	Chlorobenzene	21.8		1.0	
124-48-1	Dibromochloromethane	21.4		1.0	
75-00-3	Chloroethane	20.4		1.0	
67-66-3	Chloroform	21.3		1.0	
74-87-3	Chloromethane	21.1		1.0	
156-59-2	cis-1,2-Dichloroethene	21.8		1.0	
10061-01-5	cis-1,3-Dichloropropene	21.2		1.0	
110-82-7	Cyclohexane	23.5		1.0	
75-71-8	Dichlorodifluoromethane	22.0		1.0	
100-41-4	Ethylbenzene	22.2		1.0	
106-93-4	1,2-Dibromoethane	22.4		1.0	
98-82-8	Isopropylbenzene	22.8		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent MS Lab Sample ID: 480-178459-3 MS

Matrix: Water Lab File ID: C2403.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 18:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-20-9	Methyl acetate	41.4		2.5	
1634-04-4	Methyl tert-butyl ether	20.8		1.0	
108-87-2	Methylcyclohexane	23.1		1.0	
75-09-2	Methylene Chloride	22.8		1.0	
100-42-5	Styrene	23.3		1.0	
127-18-4	Tetrachloroethene	21.7		1.0	
108-88-3	Toluene	21.5		1.0	
156-60-5	trans-1,2-Dichloroethene	23.0		1.0	
10061-02-6	trans-1,3-Dichloropropene	21.5		1.0	
79-01-6	Trichloroethene	21.8		1.0	
75-69-4	Trichlorofluoromethane	22.5		1.0	
75-01-4	Vinyl chloride	22.6		1.0	
1330-20-7	Xylenes, Total	44.9		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		77-120
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-123

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2403.D
Lims ID: 480-178459-D-3 MS
Client ID: Effluent
Sample Type: MS
Inject. Date: 21-Nov-2020 18:18:30 ALS Bottle#: 19 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-178459-D-3 MS
Misc. Info.: 480-0095148-025
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 20:30:34 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1677

First Level Reviewer: farrellr Date: 21-Nov-2020 20:31:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	190261	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	366874	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.112	0.000	94	400577	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.448	4.459	-0.010	93	307172	25.0	23.2	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	98	160924	25.0	22.5	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	946490	25.0	23.0	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	297498	25.0	22.3	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	250134	25.0	22.0	
12 Chloromethane	50	1.298	1.298	0.000	98	234021	25.0	21.1	
13 Vinyl chloride	62	1.401	1.401	0.000	98	250950	25.0	22.6	
14 Bromomethane	94	1.692	1.692	0.000	92	204702	25.0	20.1	
15 Chloroethane	64	1.774	1.785	-0.011	100	157453	25.0	20.4	
17 Trichlorofluoromethane	101	2.002	2.003	-0.001	81	414141	25.0	22.5	
21 112TCTFE	101	2.500	2.500	0.000	91	257245	25.0	23.1	
22 1,1-Dichloroethene	96	2.500	2.500	0.000	97	227202	25.0	22.7	
23 Acetone	43	2.624	2.624	0.000	100	371137	125.0	75.3	
26 Carbon disulfide	76	2.697	2.686	0.011	100	677877	25.0	20.7	
27 Methyl acetate	43	2.904	2.904	0.000	97	429502	50.0	41.4	
30 Methylene Chloride	84	2.997	2.997	0.000	90	252507	25.0	22.8	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	96	675835	25.0	20.8	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	96	259486	25.0	23.0	
39 1,1-Dichloroethane	63	3.578	3.588	0.000	97	403243	25.0	22.6	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	76	277068	25.0	21.8	
43 2-Butanone (MEK)	43	4.085	4.096	0.000	99	626799	125.0	88.6	
50 Chloroform	83	4.324	4.324	0.000	94	432010	25.0	21.3	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	98	364373	25.0	23.7	
52 Cyclohexane	56	4.427	4.427	0.000	90	367544	25.0	23.5	
55 Carbon tetrachloride	117	4.531	4.531	0.000	96	310060	25.0	23.4	
57 Benzene	78	4.707	4.707	0.000	97	885472	25.0	22.4	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	98	320824	25.0	21.1	
62 Trichloroethene	95	5.194	5.194	0.000	95	247664	25.0	21.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83	5.298	5.298	0.000	87	413142	25.0	23.1	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	91	202250	25.0	22.3	
68 Dichlorobromomethane	83	5.619	5.619	0.000	99	283974	25.0	22.1	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	95	297291	25.0	21.2	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	95	1346441	125.0	102.1	
74 Toluene	92	6.158	6.158	0.000	98	529518	25.0	21.5	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	96	272196	25.0	21.5	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	90	170442	25.0	22.1	
81 Tetrachloroethene	166	6.573	6.573	0.000	96	253640	25.0	21.7	
80 2-Hexanone	43	6.676	6.676	0.000	96	951583	125.0	106.4	
83 Chlorodibromomethane	129	6.821	6.821	0.000	90	214681	25.0	21.4	
84 Ethylene Dibromide	107	6.904	6.904	0.000	98	227877	25.0	22.4	
87 Chlorobenzene	112	7.267	7.267	0.000	97	628197	25.0	21.8	
88 Ethylbenzene	91	7.319	7.319	0.000	98	1007144	25.0	22.2	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	97	396007		22.4	
91 o-Xylene	106	7.733	7.733	0.000	97	402200		22.5	
92 Styrene	104	7.754	7.754	0.000	95	622679	25.0	23.3	
95 Bromoform	173	7.951	7.951	0.000	95	141779	25.0	20.5	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	1062170	25.0	22.8	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	96	326024	25.0	21.9	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	98	512569	25.0	21.1	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	95	524366	25.0	21.1	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	534412	25.0	21.3	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	86	65441	25.0	19.5	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	94	400559	25.0	20.7	
S 124 Xylenes, Total	1				0			44.9	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00198	Amount Added:	12.50	Units: uL	
GAS CORP mix_00427	Amount Added:	12.50	Units: uL	
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent

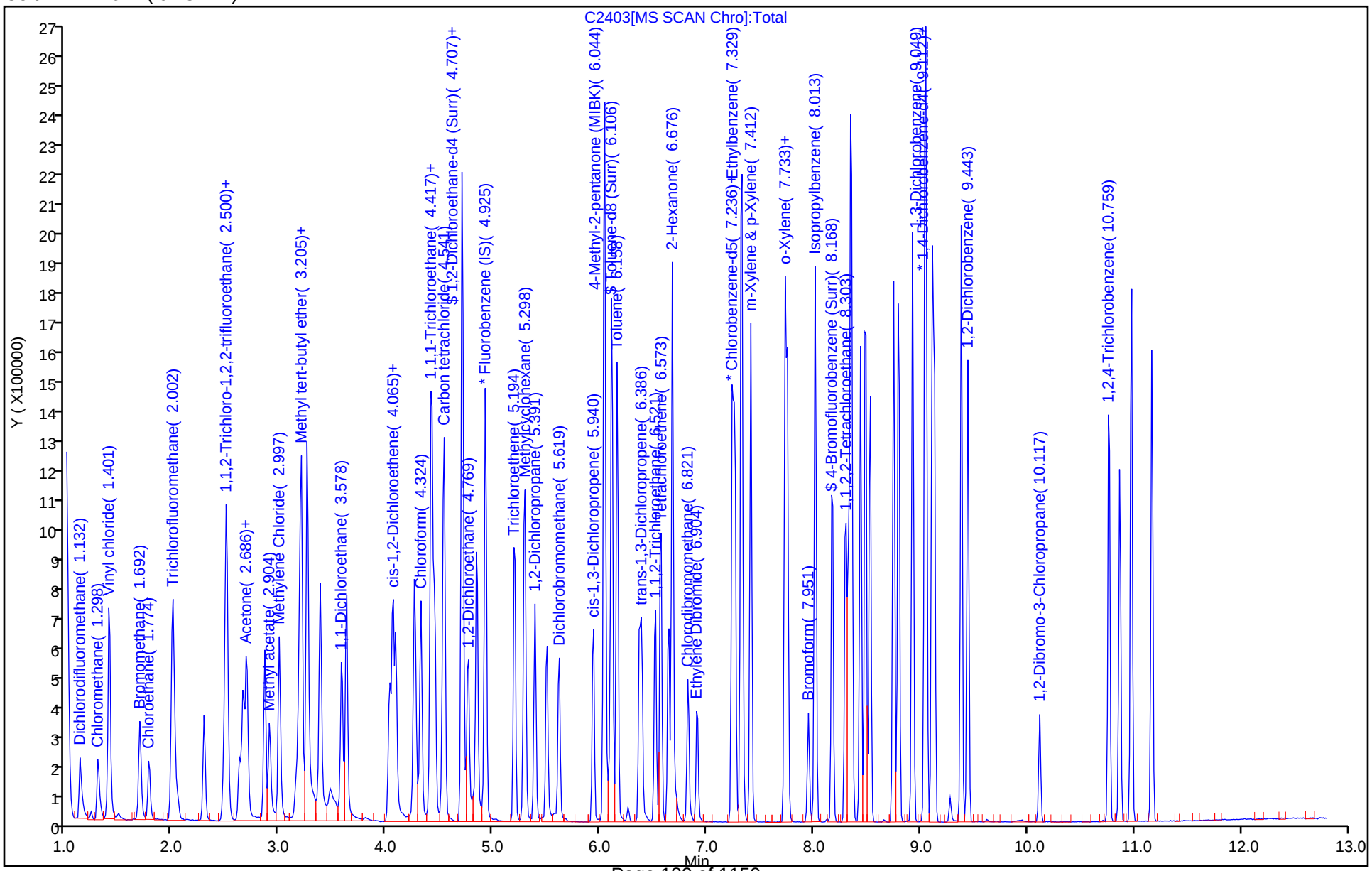
Report Date: 21-Nov-2020 20:31:13 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2403.D

Injection Date:	21-Nov-2020 18:18:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	480-178459-D-3 MS			Worklist Smp#:	25
Client ID:	Effluent				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent MSD Lab Sample ID: 480-178459-3 MSD

Matrix: Water Lab File ID: C2404.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 18:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	26.3		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	25.6		1.0	
79-00-5	1,1,2-Trichloroethane	24.7		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	24.4		1.0	
75-34-3	1,1-Dichloroethane	25.7		1.0	
75-35-4	1,1-Dichloroethene	25.6		1.0	
120-82-1	1,2,4-Trichlorobenzene	25.0		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	23.2		1.0	
95-50-1	1,2-Dichlorobenzene	24.3		1.0	
107-06-2	1,2-Dichloroethane	25.5		1.0	
78-87-5	1,2-Dichloropropane	24.8		1.0	
541-73-1	1,3-Dichlorobenzene	24.0		1.0	
106-46-7	1,4-Dichlorobenzene	23.2		1.0	
78-93-3	2-Butanone (MEK)	119		10	
591-78-6	2-Hexanone	117		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	123		5.0	
67-64-1	Acetone	125		10	
71-43-2	Benzene	25.1		1.0	
75-27-4	Bromodichloromethane	25.1		1.0	
75-25-2	Bromoform	23.3		1.0	
74-83-9	Bromomethane	22.2		1.0	
75-15-0	Carbon disulfide	22.8		1.0	
56-23-5	Carbon tetrachloride	26.0		1.0	
108-90-7	Chlorobenzene	23.9		1.0	
124-48-1	Dibromochloromethane	24.7		1.0	
75-00-3	Chloroethane	23.0		1.0	
67-66-3	Chloroform	24.5		1.0	
74-87-3	Chloromethane	23.6		1.0	
156-59-2	cis-1,2-Dichloroethene	25.1		1.0	
10061-01-5	cis-1,3-Dichloropropene	23.5		1.0	
110-82-7	Cyclohexane	25.3		1.0	
75-71-8	Dichlorodifluoromethane	22.8		1.0	
100-41-4	Ethylbenzene	24.4		1.0	
106-93-4	1,2-Dibromoethane	24.4		1.0	
98-82-8	Isopropylbenzene	25.9		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent MSD Lab Sample ID: 480-178459-3 MSD

Matrix: Water Lab File ID: C2404.D

Analysis Method: 8260C Date Collected: 11/19/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2020 18:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 560291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-20-9	Methyl acetate	47.6		2.5	
1634-04-4	Methyl tert-butyl ether	25.6		1.0	
108-87-2	Methylcyclohexane	25.4		1.0	
75-09-2	Methylene Chloride	26.1		1.0	
100-42-5	Styrene	25.6		1.0	
127-18-4	Tetrachloroethene	23.7		1.0	
108-88-3	Toluene	23.8		1.0	
156-60-5	trans-1,2-Dichloroethene	25.9		1.0	
10061-02-6	trans-1,3-Dichloropropene	24.0		1.0	
79-01-6	Trichloroethene	24.1		1.0	
75-69-4	Trichlorofluoromethane	24.2		1.0	
75-01-4	Vinyl chloride	24.6		1.0	
1330-20-7	Xylenes, Total	49.2		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		77-120
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
1868-53-7	Dibromofluoromethane (Surr)	95		75-123

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2404.D
Lims ID: 480-178459-D-3 MSD
Client ID: Effluent
Sample Type: MSD
Inject. Date: 21-Nov-2020 18:43:30 ALS Bottle#: 20 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-178459-D-3 MSD
Misc. Info.: 480-0095148-026
Operator ID: AM Instrument ID: HP5973C

Method: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Nov-2020 20:30:34 Calib Date: 18-Nov-2020 22:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973C\20201118-95057.b\C2283.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1677

First Level Reviewer: farrellr Date: 21-Nov-2020 20:31:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.925	4.925	0.000	99	189625	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.236	7.236	0.000	84	359709	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.112	9.112	0.000	93	383788	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.459	4.459	0.001	93	314700	25.0	23.9	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.707	4.707	0.000	98	170410	25.0	23.9	
$ 5 Toluene-d8 (Surr)	98	6.106	6.106	0.000	93	915882	25.0	22.7	
$ 6 4-Bromofluorobenzene (Surr)	174	8.179	8.179	0.000	96	292675	25.0	22.3	
10 Dichlorodifluoromethane	85	1.132	1.132	0.000	99	257913	25.0	22.8	
12 Chloromethane	50	1.308	1.298	0.010	99	261489	25.0	23.6	
13 Vinyl chloride	62	1.401	1.401	0.000	98	272089	25.0	24.6	
14 Bromomethane	94	1.692	1.692	0.000	92	225673	25.0	22.2	
15 Chloroethane	64	1.775	1.785	-0.011	100	176891	25.0	23.0	
17 Trichlorofluoromethane	101	2.002	2.003	-0.001	79	443459	25.0	24.2	
21 112TCTFE	101	2.500	2.500	0.000	91	271179	25.0	24.4	
22 1,1-Dichloroethene	96	2.500	2.500	0.000	97	255511	25.0	25.6	
23 Acetone	43	2.624	2.624	0.000	100	613096	125.0	124.9	
26 Carbon disulfide	76	2.697	2.686	0.011	100	744875	25.0	22.8	
27 Methyl acetate	43	2.904	2.904	0.000	96	492737	50.0	47.6	
30 Methylene Chloride	84	2.997	2.997	0.000	90	287060	25.0	26.1	
32 Methyl tert-butyl ether	73	3.194	3.194	0.000	98	828013	25.0	25.6	
34 trans-1,2-Dichloroethene	96	3.205	3.205	0.000	96	291245	25.0	25.9	
39 1,1-Dichloroethane	63	3.588	3.588	0.010	96	458544	25.0	25.7	
45 cis-1,2-Dichloroethene	96	4.065	4.065	0.000	77	317080	25.0	25.1	
43 2-Butanone (MEK)	43	4.085	4.096	0.000	99	839889	125.0	119.1	
50 Chloroform	83	4.324	4.324	0.000	94	493442	25.0	24.5	
51 1,1,1-Trichloroethane	97	4.417	4.417	0.000	98	401935	25.0	26.3	
52 Cyclohexane	56	4.427	4.427	0.000	89	394030	25.0	25.3	
55 Carbon tetrachloride	117	4.531	4.531	0.000	97	343664	25.0	26.0	
57 Benzene	78	4.707	4.707	0.000	96	992671	25.0	25.1	
58 1,2-Dichloroethane	62	4.769	4.769	0.000	98	386658	25.0	25.5	
62 Trichloroethene	95	5.205	5.194	0.011	95	273577	25.0	24.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83	5.298	5.298	0.000	87	453429	25.0	25.4	
65 1,2-Dichloropropane	63	5.391	5.391	0.000	92	224506	25.0	24.8	
68 Dichlorobromomethane	83	5.619	5.619	0.000	98	320456	25.0	25.1	
72 cis-1,3-Dichloropropene	75	5.940	5.940	0.000	94	328245	25.0	23.5	
73 4-Methyl-2-pentanone (MIBK)	43	6.044	6.044	0.000	96	1593551	125.0	123.3	
74 Toluene	92	6.158	6.158	0.000	97	574023	25.0	23.8	
77 trans-1,3-Dichloropropene	75	6.365	6.365	0.000	96	298073	25.0	24.0	
79 1,1,2-Trichloroethane	83	6.521	6.521	0.000	92	186892	25.0	24.7	
81 Tetrachloroethene	166	6.573	6.573	0.000	97	271318	25.0	23.7	
80 2-Hexanone	43	6.676	6.676	0.000	96	1027576	125.0	117.2	
83 Chlorodibromomethane	129	6.821	6.821	0.000	89	243282	25.0	24.7	
84 Ethylene Dibromide	107	6.904	6.904	0.000	99	243064	25.0	24.4	
87 Chlorobenzene	112	7.267	7.267	0.000	97	676556	25.0	23.9	
88 Ethylbenzene	91	7.319	7.319	0.000	98	1088110	25.0	24.4	
90 m-Xylene & p-Xylene	106	7.412	7.412	0.000	97	422857		24.4	
91 o-Xylene	106	7.733	7.733	0.000	97	433481		24.8	
92 Styrene	104	7.754	7.754	0.000	95	668428	25.0	25.6	
95 Bromoform	173	7.951	7.951	0.000	96	158303	25.0	23.3	
94 Isopropylbenzene	105	8.013	8.013	0.000	95	1155683	25.0	25.9	
97 1,1,2,2-Tetrachloroethane	83	8.324	8.324	0.000	96	366653	25.0	25.6	
111 1,3-Dichlorobenzene	146	9.060	9.060	0.000	98	559333	25.0	24.0	
113 1,4-Dichlorobenzene	146	9.132	9.132	0.000	96	553266	25.0	23.2	
116 1,2-Dichlorobenzene	146	9.443	9.443	0.000	98	584661	25.0	24.3	
117 1,2-Dibromo-3-Chloropropane	75	10.117	10.117	0.000	87	74805	25.0	23.2	
119 1,2,4-Trichlorobenzene	180	10.770	10.770	0.000	93	463385	25.0	25.0	
S 124 Xylenes, Total	1				0			49.2	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00198	Amount Added:	12.50	Units: uL	
GAS CORP mix_00427	Amount Added:	12.50	Units: uL	
C_8260_Surr_00167	Amount Added:	2.00	Units: uL	Run Reagent
C_8260_IS_00150	Amount Added:	2.00	Units: uL	Run Reagent

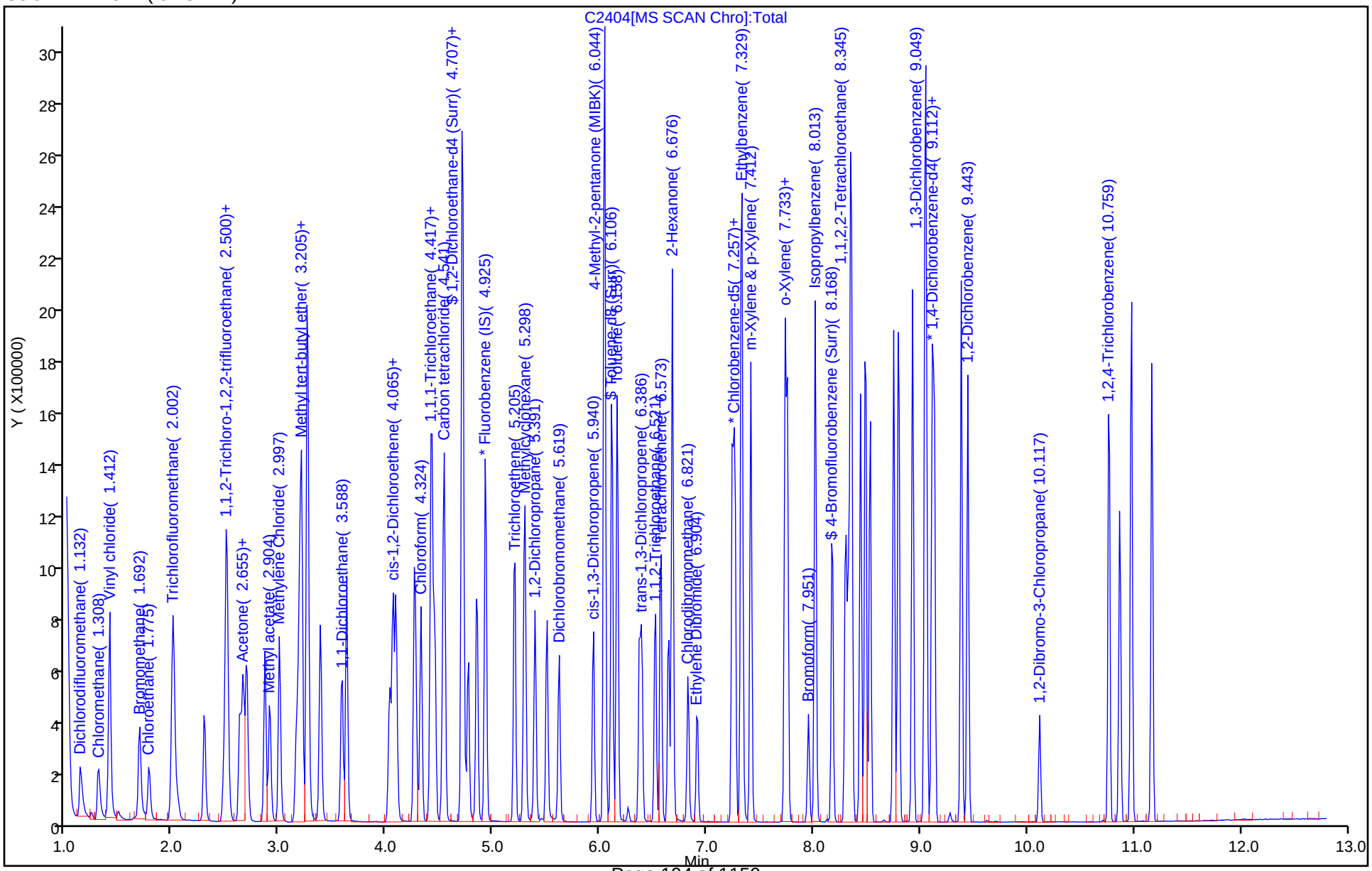
Report Date: 21-Nov-2020 20:31:40 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973C\20201121-95148.b\C2404.D

Injection Date:	21-Nov-2020 18:43:30	Instrument ID:	HP5973C	Operator ID:	AM
Lims ID:	480-178459-D-3 MSD			Worklist Smp#:	26
Client ID:	Effluent				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	C-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: HP5973C Start Date: 11/18/2020 14:24

Analysis Batch Number: 559712 End Date: 11/19/2020 00:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-559712/11		11/18/2020 14:24	1	C2263.D	ZB-624 (20) 0.18(mm)
IC 480-559712/13		11/18/2020 15:16	1	C2265.D	ZB-624 (20) 0.18(mm)
IC 480-559712/14		11/18/2020 15:42	1	C2266.D	ZB-624 (20) 0.18(mm)
IC 480-559712/15		11/18/2020 16:07	1	C2267.D	ZB-624 (20) 0.18(mm)
IC 480-559712/16		11/18/2020 16:32	1	C2268.D	ZB-624 (20) 0.18(mm)
IC 480-559712/17		11/18/2020 16:57	1	C2269.D	ZB-624 (20) 0.18(mm)
ICIS 480-559712/18		11/18/2020 17:22	1	C2270.D	ZB-624 (20) 0.18(mm)
IC 480-559712/19		11/18/2020 17:47	1	C2271.D	ZB-624 (20) 0.18(mm)
IC 480-559712/20		11/18/2020 18:12	1	C2272.D	ZB-624 (20) 0.18(mm)
MDLV 480-559712/22		11/18/2020 19:02	1		ZB-624 (20) 0.18(mm)
MDLV 480-559712/23		11/18/2020 19:26	1		ZB-624 (20) 0.18(mm)
IC 480-559712/25		11/18/2020 20:16	1		ZB-624 (20) 0.18(mm)
IC 480-559712/26		11/18/2020 20:41	1		ZB-624 (20) 0.18(mm)
IC 480-559712/27		11/18/2020 21:05	1		ZB-624 (20) 0.18(mm)
IC 480-559712/28		11/18/2020 21:30	1		ZB-624 (20) 0.18(mm)
IC 480-559712/29		11/18/2020 21:55	1		ZB-624 (20) 0.18(mm)
IC 480-559712/30		11/18/2020 22:19	1		ZB-624 (20) 0.18(mm)
IC 480-559712/31		11/18/2020 22:44	1		ZB-624 (20) 0.18(mm)
MDLV 480-559712/33		11/18/2020 23:33	1		ZB-624 (20) 0.18(mm)
ICV 480-559712/34		11/18/2020 23:57	1	C2286.D	ZB-624 (20) 0.18(mm)
ICV 480-559712/35		11/19/2020 00:22	1		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: HP5973C Start Date: 11/21/2020 08:06

Analysis Batch Number: 560291 End Date: 11/21/2020 18:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-560291/2		11/21/2020 08:06	1	C2379.D	ZB-624 (20) 0.18(mm)
CCVIS 480-560291/3		11/21/2020 08:41	1	C2380.D	ZB-624 (20) 0.18(mm)
CCV 480-560291/4		11/21/2020 09:06	1		ZB-624 (20) 0.18(mm)
LCS 480-560291/5		11/21/2020 09:31	1	C2382.D	ZB-624 (20) 0.18(mm)
RL 480-560291/6		11/21/2020 09:56	1		ZB-624 (20) 0.18(mm)
MB 480-560291/7		11/21/2020 10:21	1	C2384.D	ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 10:50	10		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 11:15	25		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 11:40	25		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 12:05	200		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 12:30	200		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 12:55	80		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 13:20	40		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 13:45	40		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 14:10	40		ZB-624 (20) 0.18(mm)
480-178459-1	Influent	11/21/2020 14:35	1	C2394.D	ZB-624 (20) 0.18(mm)
480-178459-2	Mid	11/21/2020 15:00	1	C2395.D	ZB-624 (20) 0.18(mm)
480-178459-3	Effluent	11/21/2020 15:24	1	C2396.D	ZB-624 (20) 0.18(mm)
480-178459-4	DUP	11/21/2020 15:49	1	C2397.D	ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 16:14	1		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 16:39	1		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 17:04	1		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 17:28	1		ZB-624 (20) 0.18(mm)
ZZZZZ		11/21/2020 17:53	1		ZB-624 (20) 0.18(mm)
480-178459-3 MS	Effluent MS	11/21/2020 18:18	1	C2403.D	ZB-624 (20) 0.18(mm)
480-178459-3 MSD	Effluent MSD	11/21/2020 18:43	1	C2404.D	ZB-624 (20) 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Batch Number: 559712 Batch Start Date: 11/18/20 14:24 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260 CORP mix 00198	BFB_WRK 00113	C_8260_IS 00150	C_8260_Surr 00167
BFB 480-559712/11		8260C		1 uL	1 uL		1 uL		
IC 480-559712/13		8260C		5 mL	5 mL	0.4 uL		2 uL	2 uL
IC 480-559712/14		8260C		5 mL	5 mL	1 uL		2 uL	2 uL
IC 480-559712/15		8260C		5 mL	5 mL	2 uL		2 uL	2 uL
IC 480-559712/16		8260C		5 mL	5 mL	5 uL		2 uL	2 uL
IC 480-559712/17		8260C		5 mL	5 mL	5 uL		2 uL	2 uL
ICIS 480-559712/18		8260C		5 mL	5 mL	12.5 uL		2 uL	2 uL
IC 480-559712/19		8260C		5 mL	5 mL	25 uL		2 uL	2 uL
IC 480-559712/20		8260C		5 mL	5 mL	50 uL		2 uL	2 uL
ICV 480-559712/34		8260C		5 mL	5 mL			2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	GAS CORP mix 00427	SS 8260 CORP 00087	SS GAS CORP 00378			
BFB 480-559712/11		8260C							
IC 480-559712/13		8260C		0.4 uL					
IC 480-559712/14		8260C		1 uL					
IC 480-559712/15		8260C		2 uL					
IC 480-559712/16		8260C		5 uL					
IC 480-559712/17		8260C		5 uL					
ICIS 480-559712/18		8260C		12.5 uL					
IC 480-559712/19		8260C		25 uL					
IC 480-559712/20		8260C		50 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Batch Number: 559712 Batch Start Date: 11/18/20 14:24 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	GAS CORP mix 00427	SS 8260 CORP 00087	SS GAS CORP 00378			
ICV 480-559712/34		8260C			12.5 uL	12.5 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Batch Number: 560291 Batch Start Date: 11/21/20 08:06 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00198	BFB_WRK 00113	C_8260_IS 00150
BFB 480-560291/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-560291/3		8260C		5 mL	5 mL		12.5 uL		2 uL
LCS 480-560291/5		8260C		5 mL	5 mL		12.5 uL		2 uL
MB 480-560291/7		8260C		5 mL	5 mL				2 uL
480-178459-D-1	Influent	8260C	T	5 mL	5 mL	<2 SU			2 uL
480-178459-D-2	Mid	8260C	T	5 mL	5 mL	<2 SU			2 uL
480-178459-D-3	Effluent	8260C	T	5 mL	5 mL	<2 SU			2 uL
480-178459-D-4	DUP	8260C	T	5 mL	5 mL	<2 SU			2 uL
480-178459-D-3 MS	Effluent	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		2 uL
480-178459-D-3 MSD	Effluent	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	C_8260_Surr 00167	GAS CORP mix 00427				
BFB 480-560291/2		8260C							
CCVIS 480-560291/3		8260C		2 uL	12.5 uL				
LCS 480-560291/5		8260C		2 uL	12.5 uL				
MB 480-560291/7		8260C		2 uL					
480-178459-D-1	Influent	8260C	T	2 uL					
480-178459-D-2	Mid	8260C	T	2 uL					
480-178459-D-3	Effluent	8260C	T	2 uL					
480-178459-D-4	DUP	8260C	T	2 uL					
480-178459-D-3 MS	Effluent	8260C	T	2 uL	12.5 uL				
480-178459-D-3 MSD	Effluent	8260C	T	2 uL	12.5 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Batch Number: 560291 Batch Start Date: 11/21/20 08:06 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date:

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method PFAS DW

Fluorinated Alkyl Substances (DW) by Ws-LC-0025 Attach 1

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	C3PFBS #	C4PFHA #	PFHxS #	PFOA #	PFOS #	PFNA #
Influent	480-178459-1	87	104	109	110	106	108
Mid	480-178459-2	90	111	110	106	104	106
Effluent	480-178459-3	90	106	107	104	105	109
DUP	480-178459-4	92	113	112	109	105	113
	MB 320-434591/1-A	89	101	101	95	99	99
	LCS 320-434591/2-A	97	106	112	107	107	108
Effluent MS	480-178459-3 MS	94	113	114	107	106	116
Effluent MSD	480-178459-3 MSD	91	111	105	110	105	111

	QC LIMITS
C3PFBS = 13C3 PFBS	25-150
C4PFHA = 13C4 PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
PFOA = 13C4 PFOA	70-130
PFOS = 13C4 PFOS	70-130
PFNA = 13C5 PFNA	25-150

Column to be used to flag recovery values

FORM II WS-LC-0025 Att1

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2020.11.23_A10_DI_A_008.d

Lab ID: LCS 320-434591/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanesulfonic acid (PFBS)	17.7	16.8	95	72-151	
Perfluorohexanesulfonic acid (PFHxS)	18.2	16.7	92	73-157	
Perfluoroheptanoic acid (PFHpA)	20.0	17.0	85	71-138	
Perfluorooctanoic acid (PFOA)	20.0	16.6	83	70-130	
Perfluorooctanesulfonic acid (PFOS)	18.6	16.5	89	70-130	
Perfluorononanoic acid (PFNA)	20.0	18.0	90	73-147	
18O2 PFHxS	78.5	88.2	112	25-150	
13C4 PFHpA	83.0	87.6	106	25-150	
13C4 PFOA	83.0	88.5	107	70-130	
13C4 PFOS	79.3	84.5	107	70-130	
13C5 PFNA	83.0	89.3	108	25-150	
13C3 PFBS	77.2	75.1	97	25-150	

Column to be used to flag recovery and RPD values

FORM III WS-LC-0025 Att1

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2020.11.23_A10_DI_A_012.d

Lab ID: 480-178459-3 MS Client ID: Effluent MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorobutanesulfonic acid (PFBS)	15.4	ND	14.7	96	72-151	
Perfluorohexanesulfonic acid (PFHxS)	15.8	ND	13.8	87	73-157	
Perfluoroheptanoic acid (PFHpA)	17.4	ND	14.3	82	71-138	
Perfluorooctanoic acid (PFOA)	17.4	ND	15.9	91	70-130	
Perfluorooctanesulfonic acid (PFOS)	16.1	ND	14.4	89	70-130	
Perfluorononanoic acid (PFNA)	17.4	ND	15.2	88	73-147	
18O2 PFHxS	78.5	84	89.4	114	25-150	
13C4 PFHpA	83.0	88	94.0	113	25-150	
13C4 PFOA	83.0	86	88.6	107	70-130	
13C4 PFOS	79.3	83	84.2	106	70-130	
13C5 PFNA	83.0	91	96.0	116	25-150	
13C3 PFBS	77.2	69	72.5	94	25-150	

Column to be used to flag recovery and RPD values

FORM III WS-LC-0025 Att1

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2020.11.23_A10_DI_A_013.d

Lab ID: 480-178459-3 MSD Client ID: Effluent MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanesulfonic acid (PFBS)	15.7	15.4	98	5	30	72-151	
Perfluorohexanesulfonic acid (PFHxS)	16.2	15.8	97	13	30	73-157	
Perfluoroheptanoic acid (PFHpA)	17.8	15.5	87	8	30	71-138	
Perfluorooctanoic acid (PFOA)	17.8	16.7	94	5	20	70-130	
Perfluorooctanesulfonic acid (PFOS)	16.5	18.4	111	24	20	70-130	F2
Perfluorononanoic acid (PFNA)	17.8	19.0	107	22	30	73-147	
18O2 PFHxS	78.5	82.6	105			25-150	
13C4 PFHpA	83.0	92.0	111			25-150	
13C4 PFOA	83.0	91.4	110			70-130	
13C4 PFOS	79.3	83.5	105			70-130	
13C5 PFNA	83.0	92.4	111			25-150	
13C3 PFBS	77.2	70.2	91			25-150	

Column to be used to flag recovery and RPD values

FORM III WS-LC-0025 Att1

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Lab File ID: 2020.11.23_A10_DI_A_007.d Lab Sample ID: MB 320-434591/1-A

Matrix: Water Date Extracted: 11/23/2020 05:50

Instrument ID: A10 Date Analyzed: 11/23/2020 11:35

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-434591/2-A	2020.11.23_A10_DI_A_008.d	11/23/2020 11:54
Influent	480-178459-1	2020.11.23_A10_DI_A_009.d	11/23/2020 12:12
Mid	480-178459-2	2020.11.23_A10_DI_A_010.d	11/23/2020 12:31
Effluent	480-178459-3	2020.11.23_A10_DI_A_011.d	11/23/2020 12:49
Effluent MS	480-178459-3 MS	2020.11.23_A10_DI_A_012.d	11/23/2020 13:07
Effluent MSD	480-178459-3 MSD	2020.11.23_A10_DI_A_013.d	11/23/2020 13:26
DUP	480-178459-4	2020.11.23_A10_DI_A_014.d	11/23/2020 13:44

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: Influent Lab Sample ID: 480-178459-1

Matrix: Water Lab File ID: 2020.11.23_A10_DI_A_009.d

Analysis Method: WS-LC-0025 Att1 Date Collected: 11/19/2020 09:45

Extraction Method: PFAS Prep Date Extracted: 11/23/2020 05:50

Sample wt/vol: 1.00(mL) Date Analyzed: 11/23/2020 12:12

Con. Extract Vol.: 1.66(mL) Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 434683 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.2		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	20		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	18		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	79		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	24	I	2.0	
375-95-1	Perfluorononanoic acid (PFNA)	3.3		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	109		25-150
STL01892	13C4 PFHpA	104		25-150
STL00990	13C4 PFOA	110		70-130
STL00991	13C4 PFOS	106		70-130
STL00995	13C5 PFNA	108		25-150
STL02337	13C3 PFBS	87		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_009.d
Lims ID: 480-178459-A-1-A
Client ID: Influent
Sample Type: Client
Inject. Date: 23-Nov-2020 12:12:37 ALS Bottle#: 9 Worklist Smp#: 6
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: 480-178459-a-1-a
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:27:39 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:27:39
Ratio Calibration: CCV Sample: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C3 PFBS										
301.90 > 80.00	6.316	6.316	0.0		1696483	0.0404		86.8	1059	
6 Perfluorobutanesulfonic acid										M
298.90 > 80.00	6.293	6.316	-0.023	0.996	69856	0.001934	Target=1.49		12.1	M
298.90 > 99.00	6.316	6.316	0.0	1.000	46576		1.50(0.74-2.23)		12.9	
16 Perfluorohexanesulfonic acid										
399.00 > 80.00	7.244	7.244	0.0	1.003	380885	0.0119	Target=5.50		80.0	
399.00 > 99.00	7.226	7.244	-0.018	1.000	64443		5.91(2.75-8.25)		56.1	
D 15 18O2 PFHxS										
403.00 > 84.00	7.226	7.244	-0.018		1330133	0.0514		109	6917	
D 17 13C4 PFHpA										
367.00 > 322.00	7.244	7.244	0.0		1902794	0.0520		104	14958	
18 Perfluoroheptanoic acid										
363.00 > 319.00	7.244	7.244	0.0	1.000	414421	0.0106	Target=7.99		36.7	
363.00 > 169.00	7.244	7.244	0.0	1.000	52145		7.95(4.00-11.99)		219	
24 Perfluorooctanoic acid										
413.00 > 369.00	7.803	7.805	-0.002	1.000	2171104	0.0478	Target=1.36		345	
413.00 > 169.00	7.803	7.805	-0.002	1.000	1705100		1.27(0.68-2.04)		1681	
D 25 13C4 PFOA										
417.00 > 372.00	7.803	7.805	-0.002		2341519	0.0550		110	19187	
D 20 13C2 PFOA										
415.00 > 370.00	7.803	7.974	-0.171		4515	NC		0.0	62.8	
27 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	8.146	8.362	-0.216	0.975	289957	0.0145	Target=3.30		222	RM
499.00 > 99.00	8.359	8.362	-0.003	1.000	57715		5.02(1.65-4.96)		88.8	
D 26 13C4 PFOS										
503.00 > 80.00	8.359	8.362	-0.003		936745	0.0508		106	1791	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
29 Perfluorononanoic acid										
463.00 > 419.00	8.393	8.397	-0.004	1.000	68713	0.002004	Target=6.56		21.0	
463.00 > 169.00	8.393	8.397	-0.004	1.000	11017		6.24(3.28-9.84)		45.3	
D 28 13C5 PFNA										
468.00 > 423.00	8.393	8.397	-0.004		1938067	0.0541		108	14193	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- R - Failed Signal Ratio Test

Review Flags
- M - Manually Integrated

Report Date: 24-Nov-2020 08:27:39 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_009.d

Injection Date: 23-Nov-2020 12:12:37 Instrument ID: A10

Lims ID: 480-178459-A-1-A Lab Sample ID: 320-178459-1

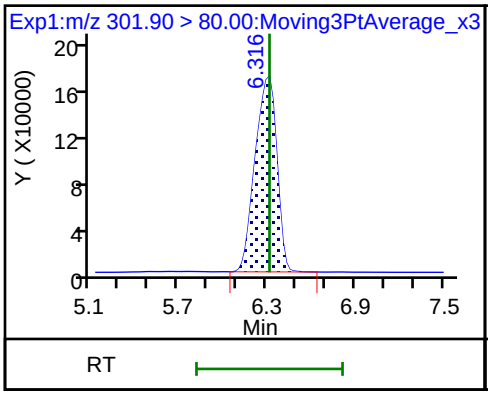
Client ID: Influent

Operator ID: Sac_inst_A10 ALS Bottle#: 9 Worklist Smp#: 6

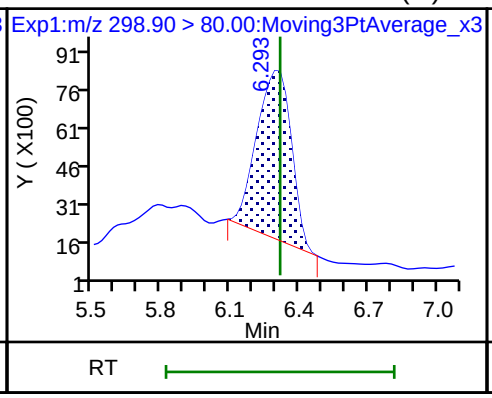
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

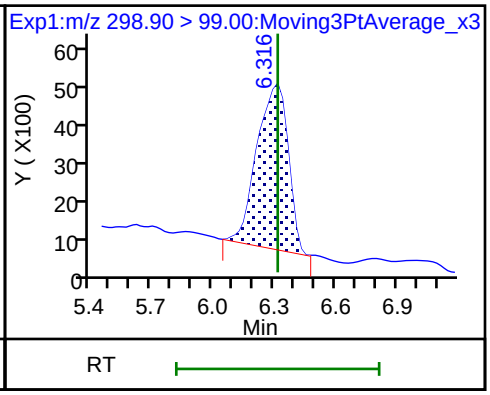
D 3 13C3 PFBS



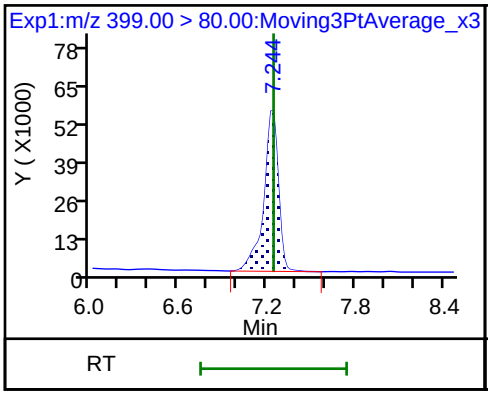
6 Perfluorobutanesulfonic acid (M)



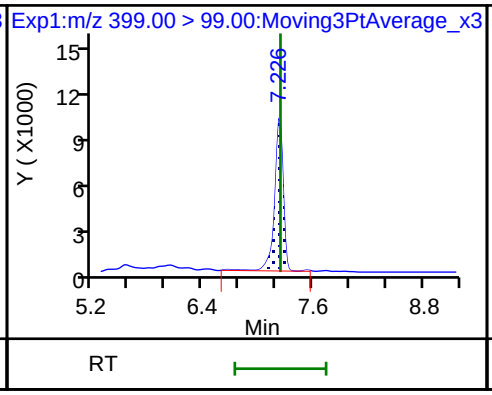
6 Perfluorobutanesulfonic acid



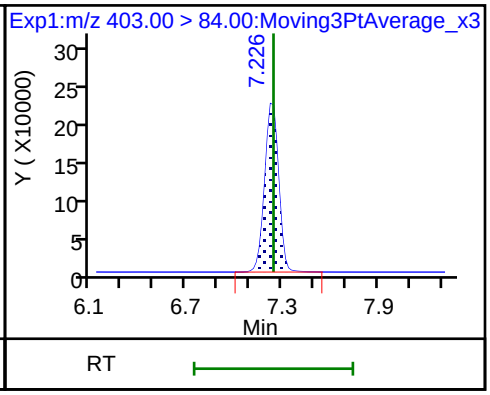
16 Perfluorohexanesulfonic acid



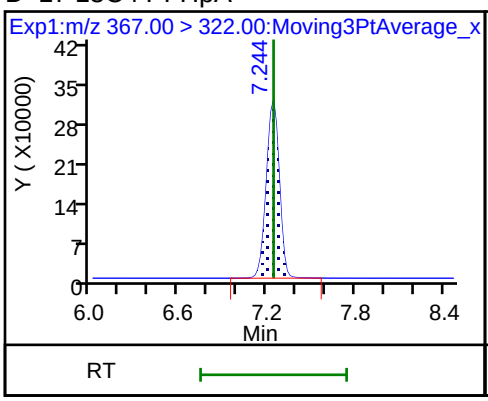
16 Perfluorohexanesulfonic acid



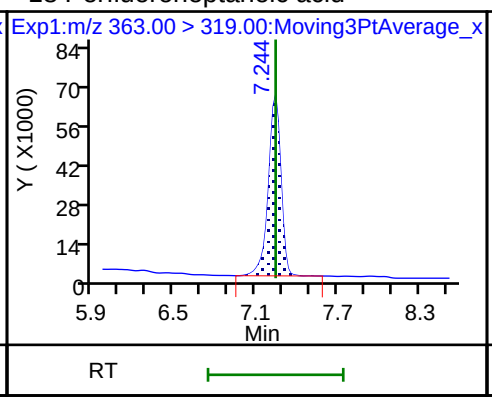
D 15 18O2 PFHxS



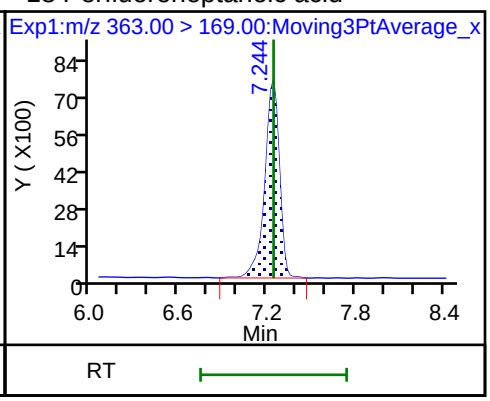
D 17 13C4 PFHpA



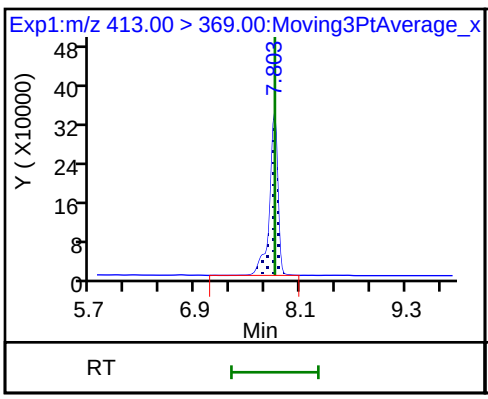
18 Perfluoroheptanoic acid



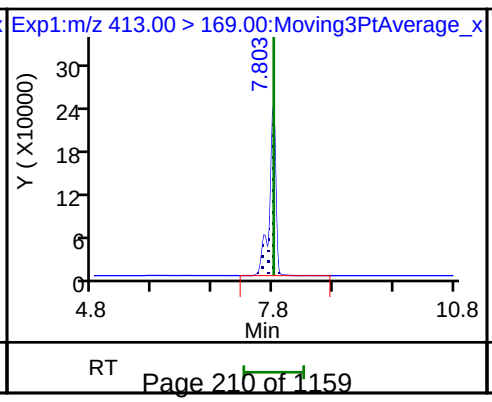
18 Perfluoroheptanoic acid



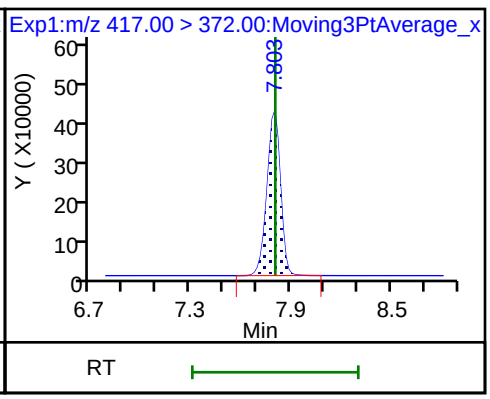
24 Perfluorooctanoic acid



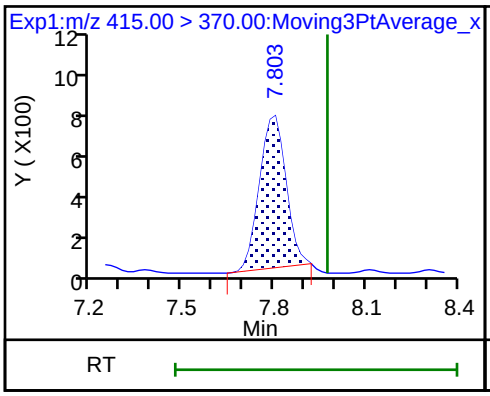
24 Perfluorooctanoic acid



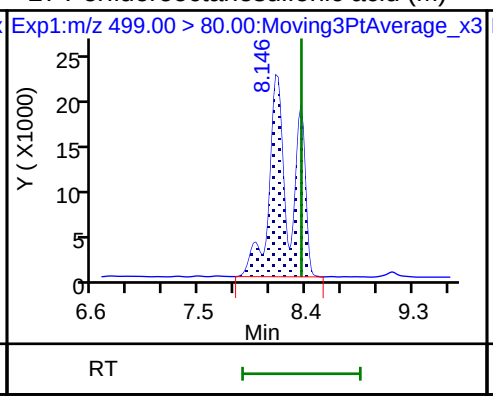
D 25 13C4 PFOA



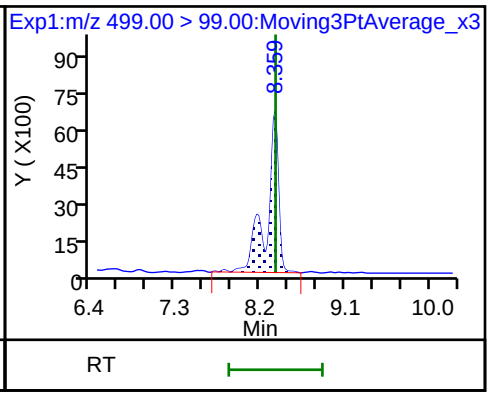
D 20 13C2 PFOA



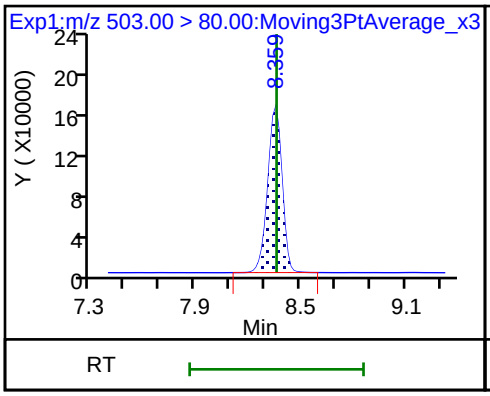
27 Perfluorooctanesulfonic acid (M)



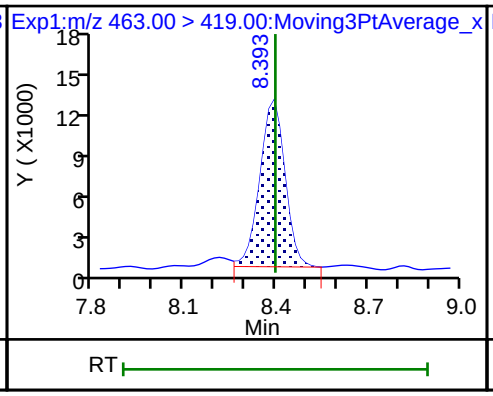
27 Perfluorooctanesulfonic acid



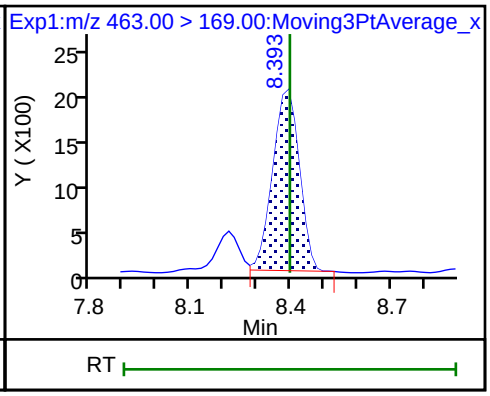
D 26 13C4 PFOS



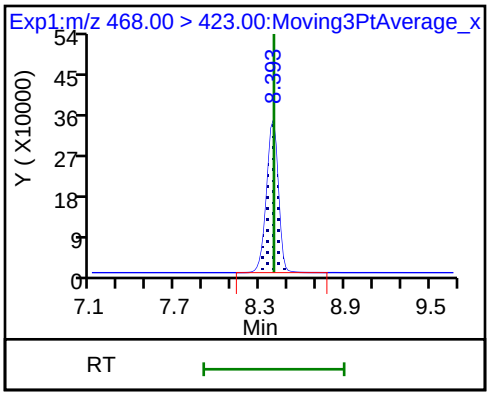
29 Perfluorononanoic acid



29 Perfluorononanoic acid



D 28 13C5 PFNA



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

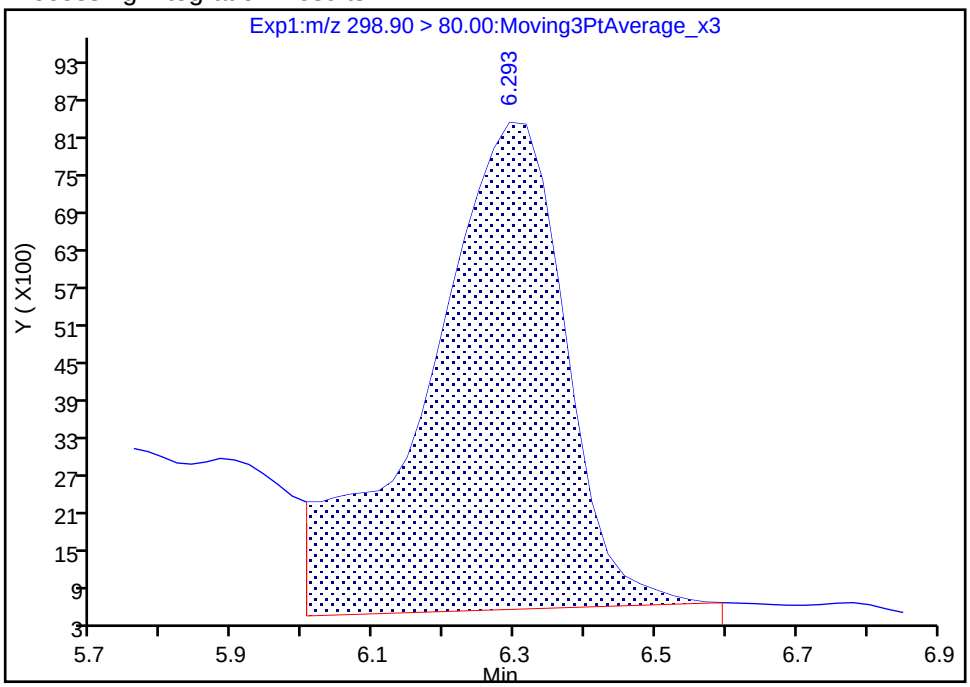
Data File:	\\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_009.d				
Injection Date:	23-Nov-2020 12:12:37	Instrument ID:	A10		
Lims ID:	480-178459-A-1-A	Lab Sample ID:	320-178459-1		
Client ID:	Influent				
Operator ID:	Sac_inst_A10	ALS Bottle#:	9	Worklist Smp#:	6
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm ID)	Detector	EXP1		

6 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

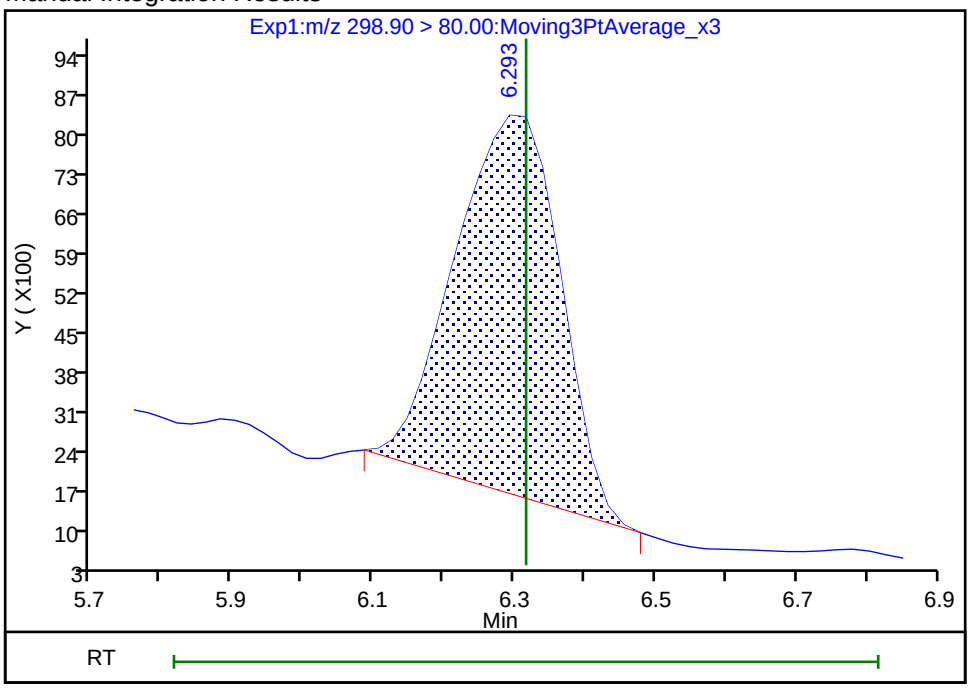
Processing Integration Results

RT: 6.29
Area: 106709
Amount: 0.002955
Amount Units: ng/ml



Manual Integration Results

RT: 6.29
Area: 69856
Amount: 0.001934
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:27:16

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

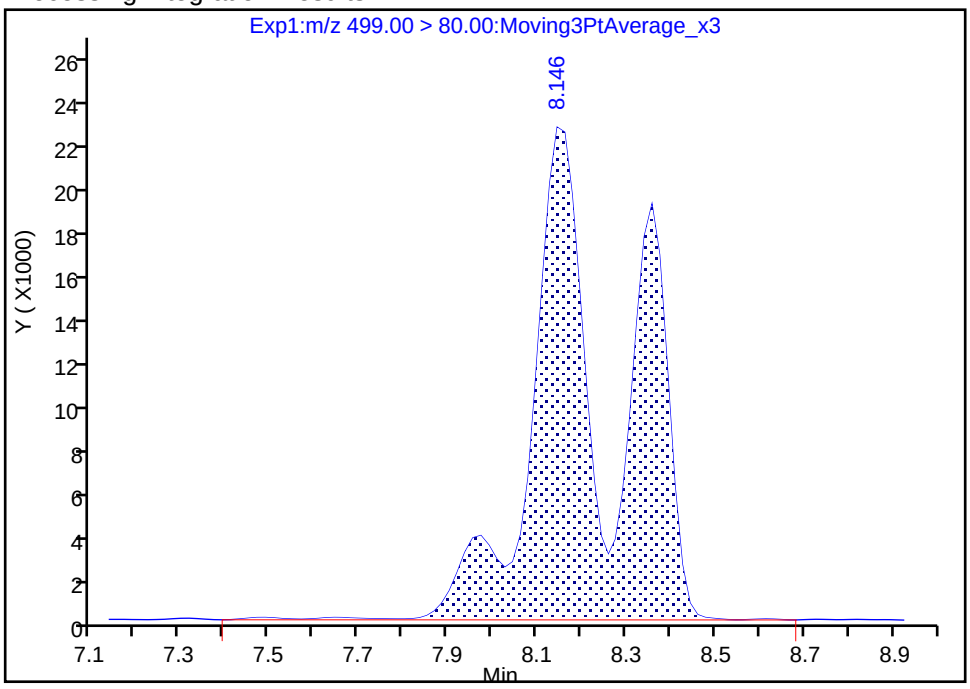
Data File:	\\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_009.d				
Injection Date:	23-Nov-2020 12:12:37	Instrument ID:	A10		
Lims ID:	480-178459-A-1-A	Lab Sample ID:	320-178459-1		
Client ID:	Influent				
Operator ID:	Sac_inst_A10	ALS Bottle#:	9	Worklist Smp#:	6
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

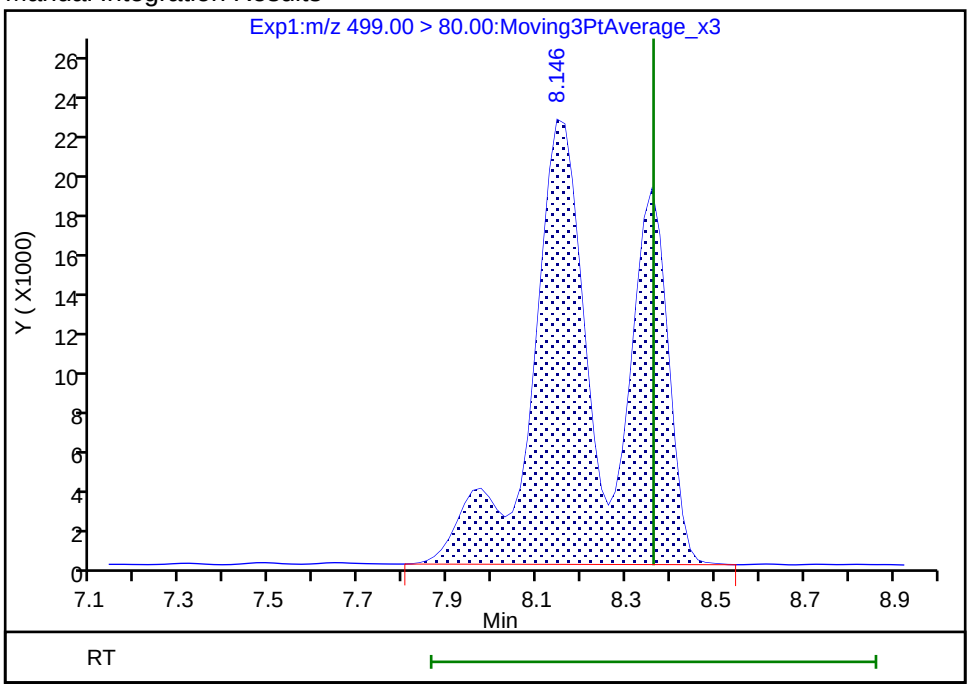
Processing Integration Results

RT: 8.15
Area: 292475
Amount: 0.014581
Amount Units: ng/ml



Manual Integration Results

RT: 8.15
Area: 289957
Amount: 0.014456
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:27:34

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: Mid Lab Sample ID: 480-178459-2

Matrix: Water Lab File ID: 2020.11.23_A10_DI_A_010.d

Analysis Method: WS-LC-0025 Att1 Date Collected: 11/19/2020 09:35

Extraction Method: PFAS Prep Date Extracted: 11/23/2020 05:50

Sample wt/vol: 1.00(mL) Date Analyzed: 11/23/2020 12:31

Con. Extract Vol.: 1.66(mL) Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 434683 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	110		25-150
STL01892	13C4 PFHpA	111		25-150
STL00990	13C4 PFOA	106		70-130
STL00991	13C4 PFOS	104		70-130
STL00995	13C5 PFNA	106		25-150
STL02337	13C3 PFBS	90		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_010.d
Lims ID: 480-178459-A-2-A
Client ID: Mid
Sample Type: Client
Inject. Date: 23-Nov-2020 12:31:02 ALS Bottle#: 10 Worklist Smp#: 7
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: 480-178459-a-2-a
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:28:05 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:28:05
Ratio Calibration: CCV Sample: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C3 PFBS										
301.90 > 80.00	6.293	6.316	-0.023		1757713	0.0418		89.9	8918	
D 15 18O2 PFHxS										
403.00 > 84.00	7.226	7.244	-0.018		1349120	0.0521		110	29062	
D 17 13C4 PFHpA										
367.00 > 322.00	7.226	7.244	-0.018		2025687	0.0553		111	18464	
24 Perfluorooctanoic acid										M
413.00 > 369.00	7.803	7.805	-0.002	1.002	7381	0.000169	Target=1.36		2.1	M
413.00 > 169.00	7.787	7.805	-0.018	1.000	3763		1.96(0.68-2.04)		20.2	
D 25 13C4 PFOA										
417.00 > 372.00	7.787	7.805	-0.018		2253207	0.0529		106	15996	
D 20 13C2 PFOA										
415.00 > 370.00	7.803	7.974	-0.171		2441	NC		0.0	33.9	
D 26 13C4 PFOS										
503.00 > 80.00	8.342	8.362	-0.020		916579	0.0497		104	3945	
D 28 13C5 PFNA										
468.00 > 423.00	8.376	8.397	-0.021		1901449	0.0531		106	14414	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 24-Nov-2020 08:28:06 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_010.d

Injection Date: 23-Nov-2020 12:31:02 Instrument ID: A10

Lims ID: 480-178459-A-2-A Lab Sample ID: 320-178459-2

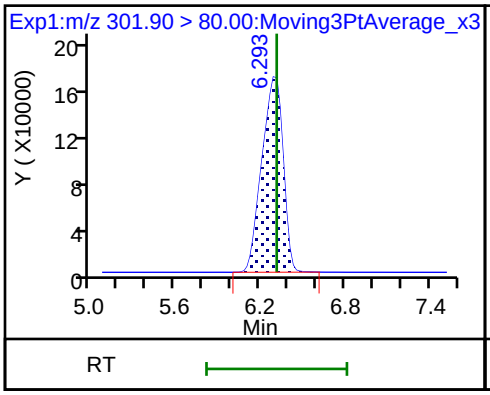
Client ID: Mid

Operator ID: Sac_inst_A10 ALS Bottle#: 10 Worklist Smp#: 7

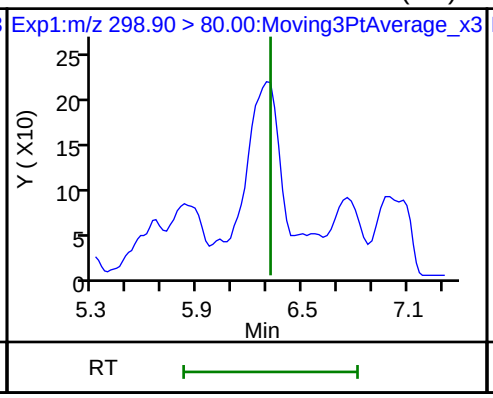
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

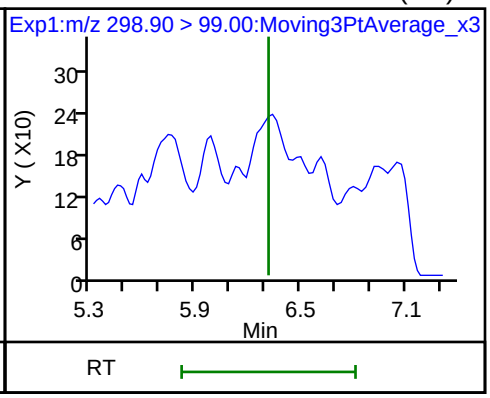
D 3 13C3 PFBS



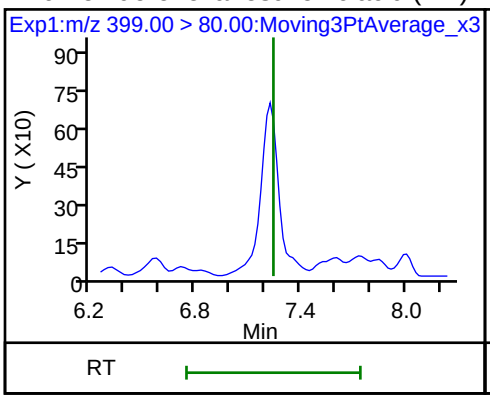
6 Perfluorobutanesulfonic acid (ND)



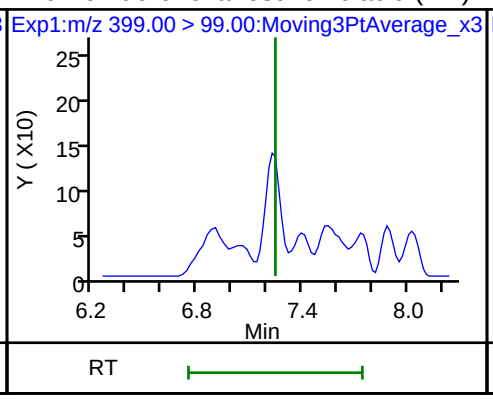
6 Perfluorobutanesulfonic acid (ND)



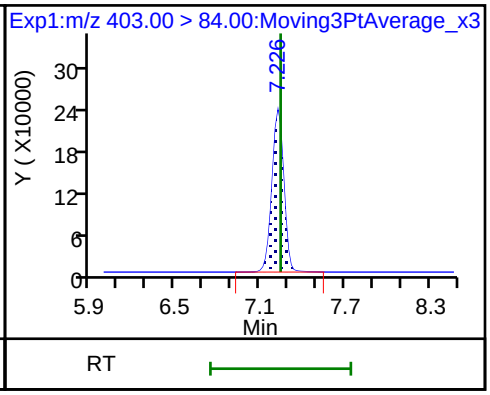
16 Perfluorohexanesulfonic acid (ND)



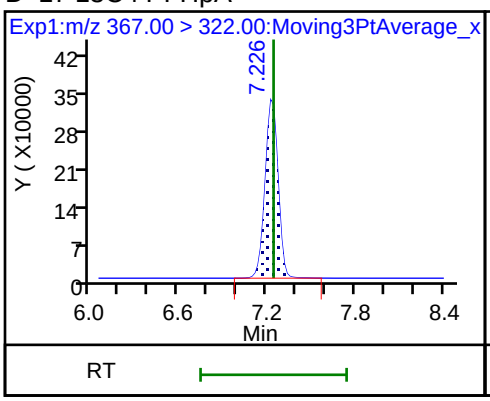
16 Perfluorohexanesulfonic acid (ND)



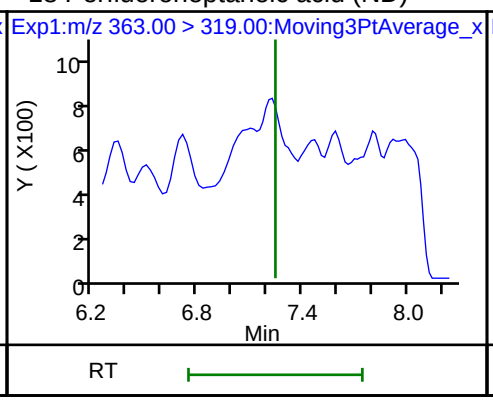
D 15 18O2 PFHxS



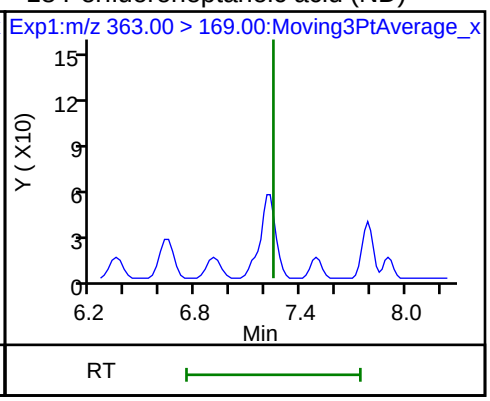
D 17 13C4 PFHpA



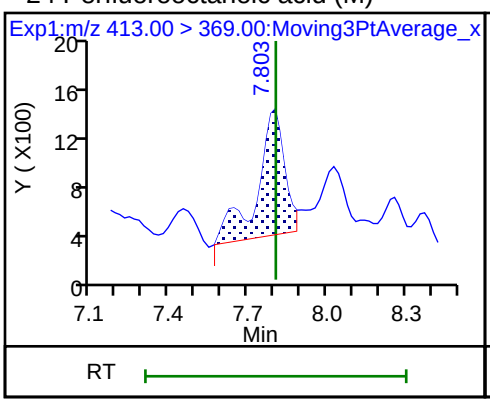
18 Perfluoroheptanoic acid (ND)



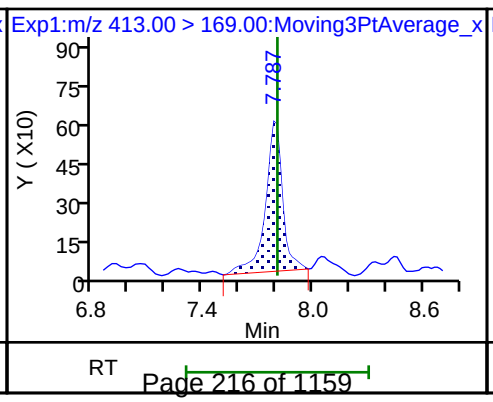
18 Perfluoroheptanoic acid (ND)



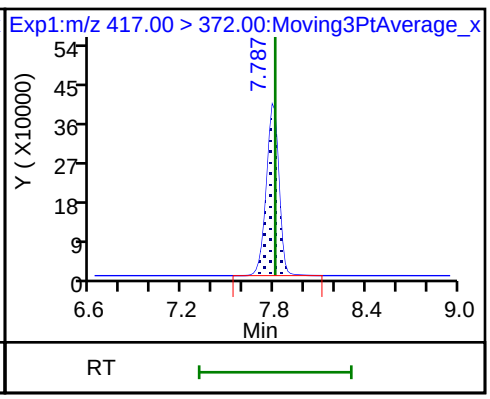
24 Perfluorooctanoic acid (M)



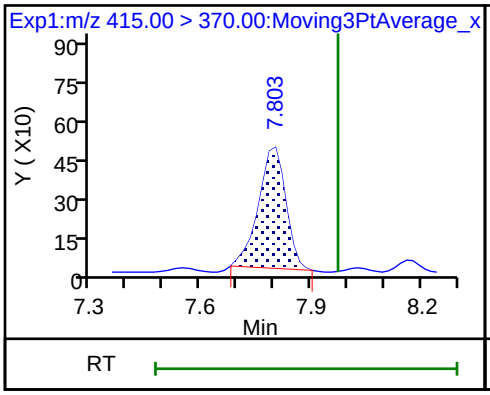
24 Perfluorooctanoic acid



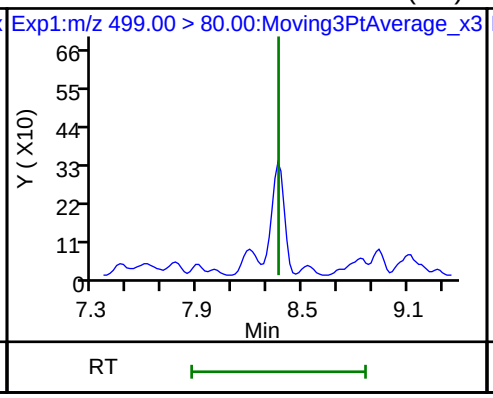
D 25 13C4 PFOA



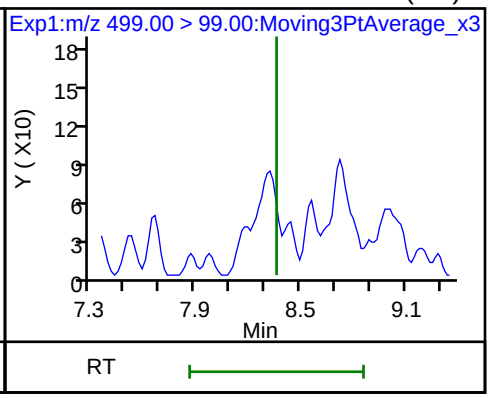
D 20 13C2 PFOA



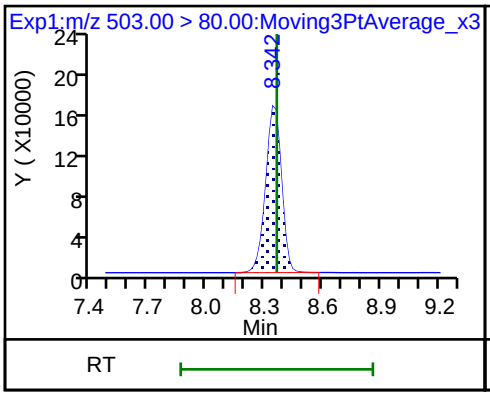
27 Perfluorooctanesulfonic acid (ND)



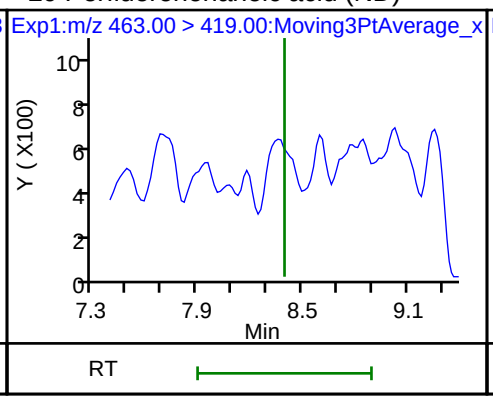
27 Perfluorooctanesulfonic acid (ND)



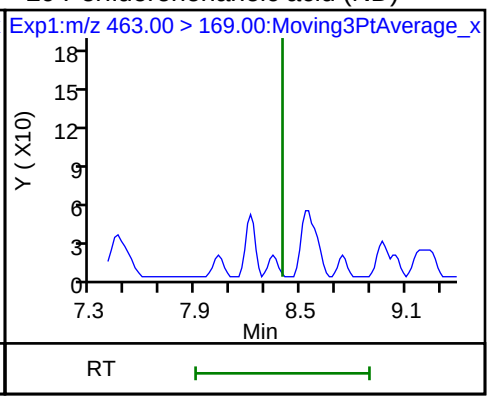
D 26 13C4 PFOS



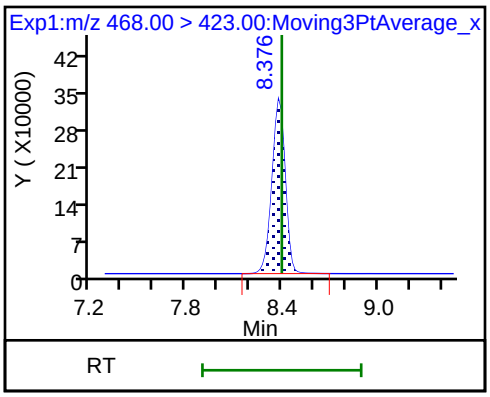
29 Perfluorononanoic acid (ND)



29 Perfluorononanoic acid (ND)



D 28 13C5 PFNA



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

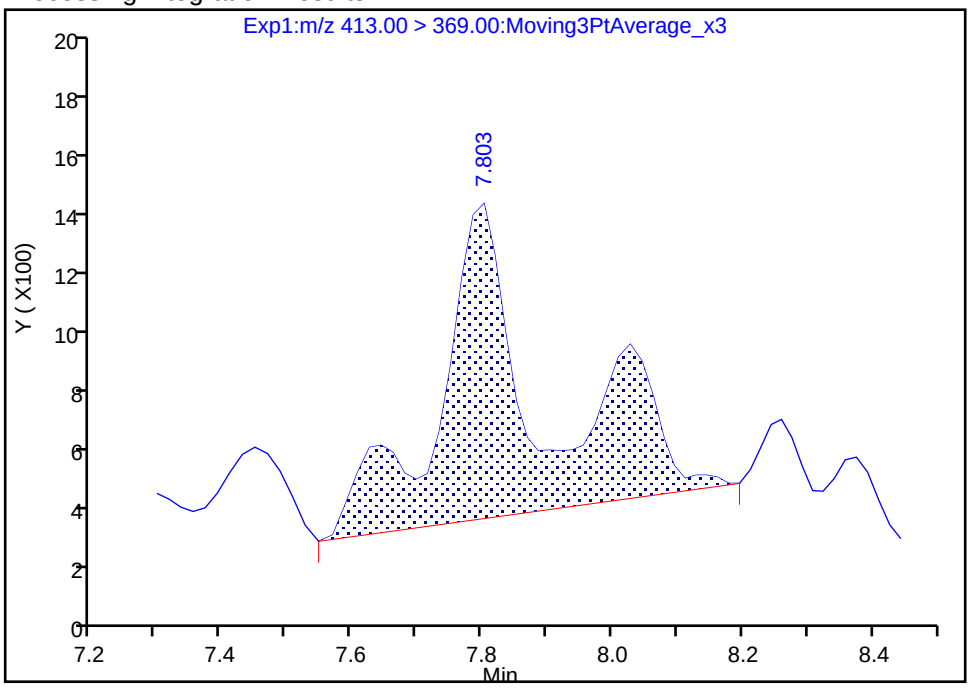
Data File:	\\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_010.d				
Injection Date:	23-Nov-2020 12:31:02	Instrument ID:	A10		
Lims ID:	480-178459-A-2-A	Lab Sample ID:	320-178459-2		
Client ID:	Mid				
Operator ID:	Sac_inst_A10	ALS Bottle#:	10	Worklist Smp#:	7
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

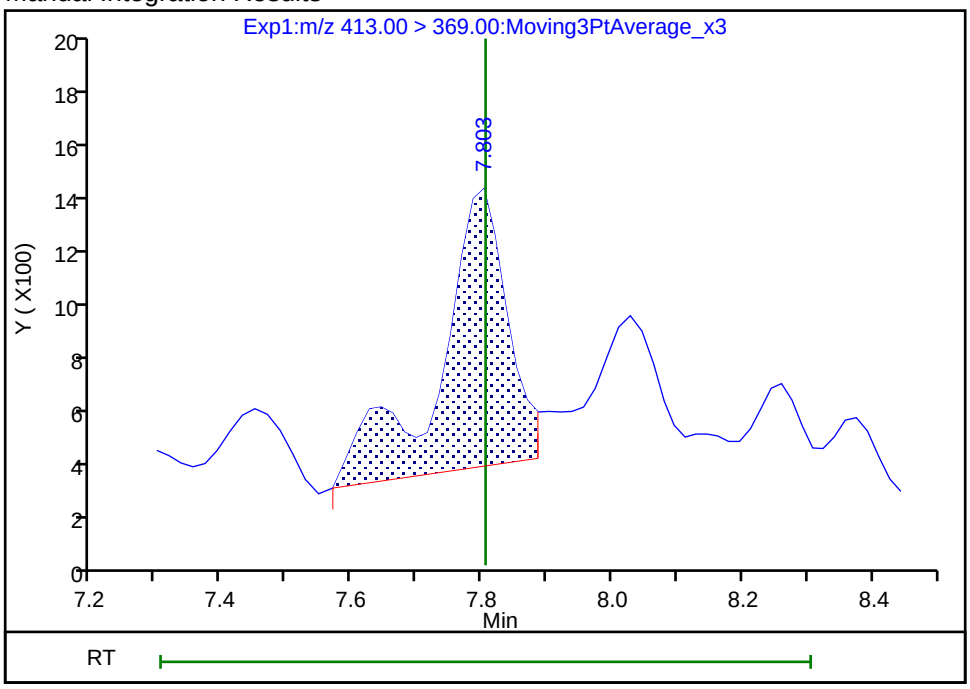
Processing Integration Results

RT: 7.80
Area: 11709
Amount: 0.000268
Amount Units: ng/ml



Manual Integration Results

RT: 7.80
Area: 7381
Amount: 0.000169
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:28:02

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent Lab Sample ID: 480-178459-3

Matrix: Water Lab File ID: 2020.11.23_A10_DI_A_011.d

Analysis Method: WS-LC-0025 Att1 Date Collected: 11/19/2020 09:10

Extraction Method: PFAS Prep Date Extracted: 11/23/2020 05:50

Sample wt/vol: 1.00(mL) Date Analyzed: 11/23/2020 12:49

Con. Extract Vol.: 1.66(mL) Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 434683 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND	F2	2.0	
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	107		25-150
STL01892	13C4 PFHpA	106		25-150
STL00990	13C4 PFOA	104		70-130
STL00991	13C4 PFOS	105		70-130
STL00995	13C5 PFNA	109		25-150
STL02337	13C3 PFBS	90		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_011.d
Lims ID: 480-178459-A-3-A
Client ID: Effluent
Sample Type: Client
Inject. Date: 23-Nov-2020 12:49:29 ALS Bottle#: 11 Worklist Smp#: 8
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: 480-178459-a-3-a
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:28:19 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:28:19
Ratio Calibration: CCV Sample: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
217.00 > 172.00	5.804	5.800	0.004		1209853	0.0305		61.0	184	
D 4 13C5 PFPeA										
267.90 > 223.00	6.275	6.250	0.025		1550845	0.0457		91.3	9933	
D 3 13C3 PFBS										
301.90 > 80.00	6.297	6.316	-0.019		1754719	0.0418		89.8	9534	
D 7 M2-4:2 FTS										
329.00 > 81.00	6.669	6.688	-0.019		325497	NC			798	
D 9 13C2 PFHxA										
315.00 > 270.00	6.715	6.734	-0.019		1738212	0.0481		96.1	21046	
D 12 13C3 HFPO-DA										
332.10 > 287.00	6.856	6.876	-0.020		104322	NC			840	
D 15 18O2 PFHxS										
403.00 > 84.00	7.230	7.244	-0.014		1307871	0.0505		107	11530	
D 17 13C4 PFHpA										
367.00 > 322.00	7.230	7.244	-0.014		1938216	0.0529		106	18366	
D 22 M2-6:2 FTS										
429.00 > 81.00	7.755	7.771	-0.016		476411	0.0367		77.4	1699	
23 6:2 FTS										
427.00 > 407.00	7.755	7.771	-0.016	1.000	64853	0.002605	Target=2.58		484	
427.00 > 81.00	7.773	7.771	0.002	1.002	24578		2.64(1.29-3.87)		102	
24 Perfluorooctanoic acid										
413.00 > 369.00	7.790	7.805	-0.015	1.000	7527	0.000176	Target=1.36		2.2	
413.00 > 169.00	7.790	7.805	-0.015	1.000	5185		1.45(0.68-2.04)		24.4	
D 25 13C4 PFOA										
417.00 > 372.00	7.790	7.805	-0.015		2207296	0.0518		104	12548	
D 26 13C4 PFOS										
503.00 > 80.00	8.346	8.362	-0.016		920841	0.0500		105	4105	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 28 13C5 PFNA										
468.00 > 423.00	8.380	8.397	-0.017		1961970	0.0547		109	14317	
D 30 13C8 FOSA										
506.00 > 78.00	8.944	8.943	0.001		1304736	0.0595		119	7643	
D 33 13C2 PFDA										
515.00 > 470.00	8.959	8.974	-0.015		1919581	0.0543		109	22077	
D 34 M2-8:2 FTS										
529.00 > 81.00	8.959	8.989	-0.030		557883	0.0408		85.3	3433	
D 37 d3-NMeFOSAA										
573.00 > 419.00	9.234	9.264	-0.030		897361	0.0364		72.7	5767	
D 42 13C2 PFUnA										
565.00 > 520.00	9.516	9.531	-0.015		1911352	0.0525		105	14927	
D 40 d5-NEtFOSAA										
589.00 > 419.00	9.516	9.548	-0.032		1037263	0.0376		75.1	2960	
D 45 13C2 PFDoA										
615.00 > 570.00	10.042	10.064	-0.022		1996502	0.0545		109	18255	
D 51 13C2 PFTeDA										
715.00 > 670.00	10.986	11.017	-0.031		1629562	0.0674		135	10458	
D 52 13C2 PFHxDA										
815.00 > 770.00	11.828	11.864	-0.036		1001438	0.0667		133	5796	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 24-Nov-2020 08:28:20 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_011.d

Injection Date: 23-Nov-2020 12:49:29 Instrument ID: A10

Lims ID: 480-178459-A-3-A Lab Sample ID: 320-178459-3

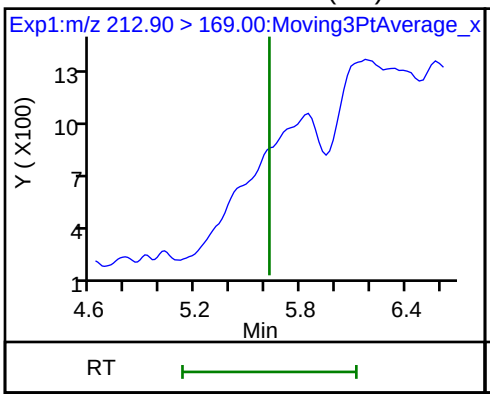
Client ID: Effluent

Operator ID: Sac_inst_A10 ALS Bottle#: 11 Worklist Smp#: 8

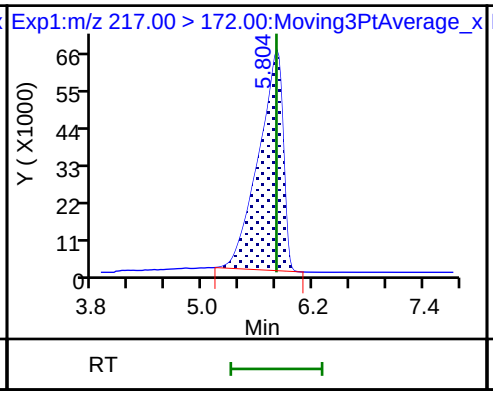
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

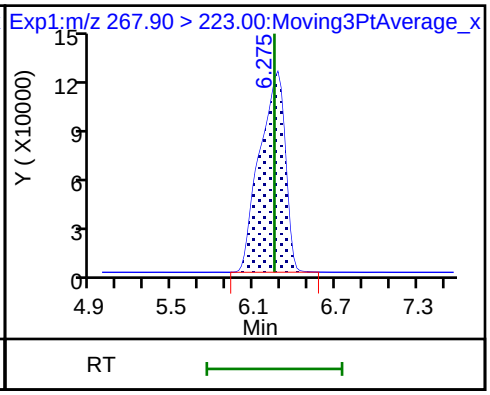
1 Perfluorobutanoic acid (ND)



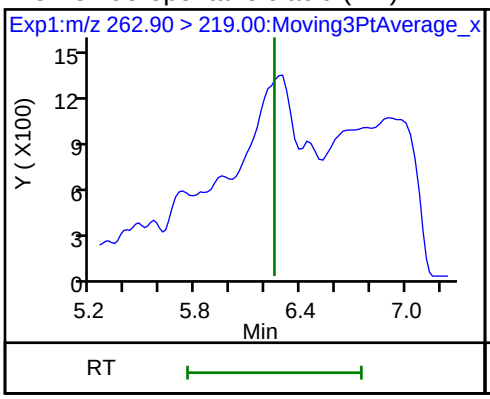
D 2 13C4 PFBA



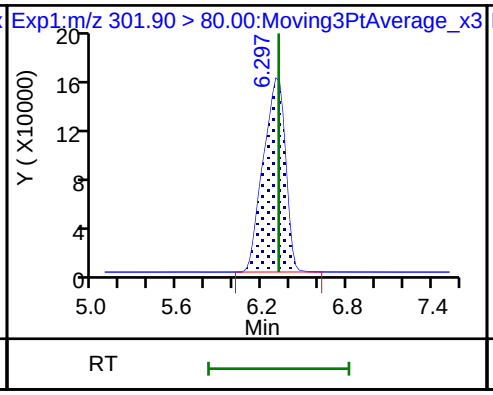
D 4 13C5 PFPeA



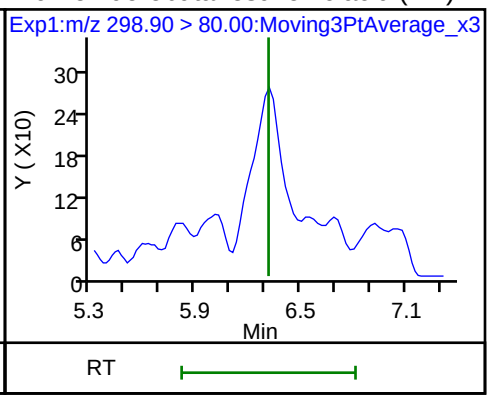
5 Perfluoropentanoic acid (ND)



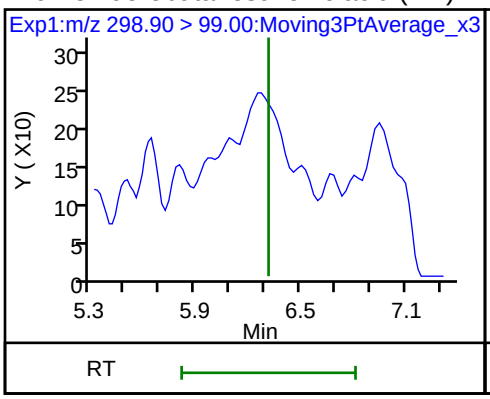
D 3 13C3 PFBS



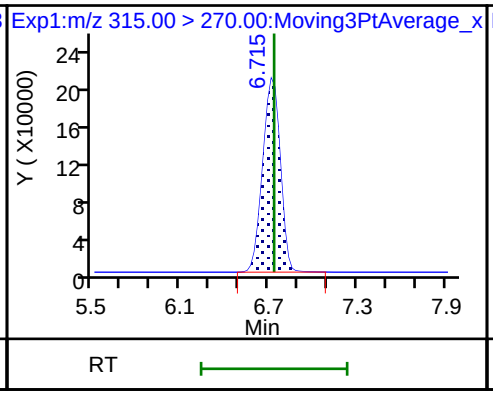
6 Perfluorobutanesulfonic acid (ND)



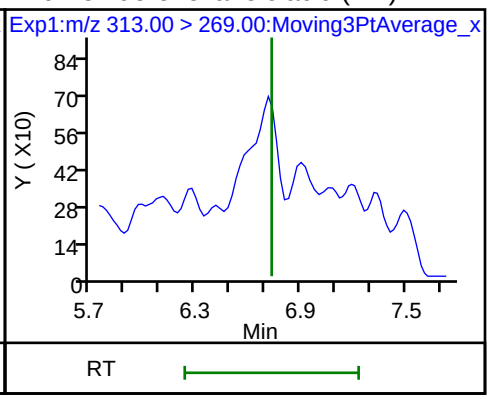
6 Perfluorobutanesulfonic acid (ND)



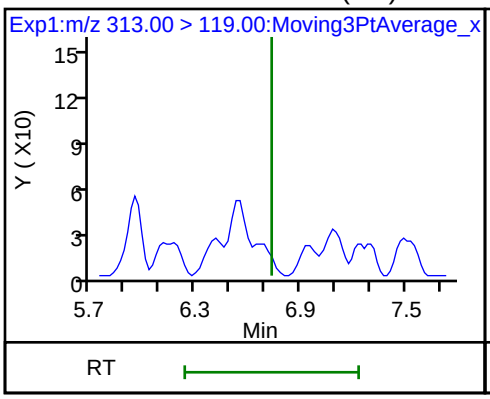
D 9 13C2 PFHxA



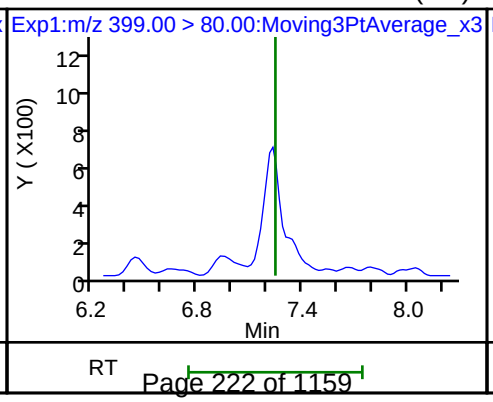
10 Perfluorohexanoic acid (ND)



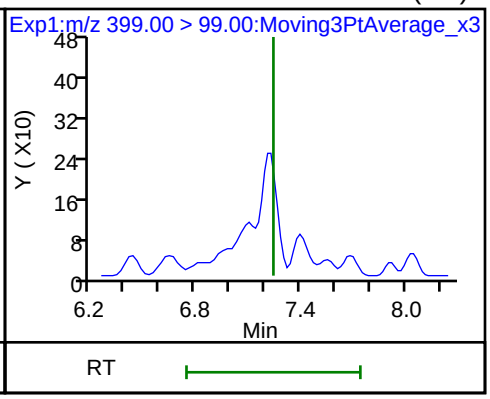
10 Perfluorohexanoic acid (ND)



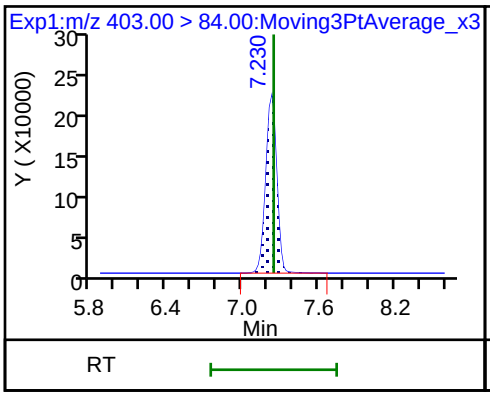
16 Perfluorohexanesulfonic acid (ND)



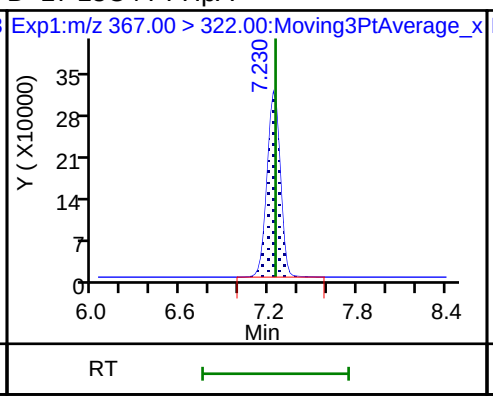
16 Perfluorohexanesulfonic acid (ND)



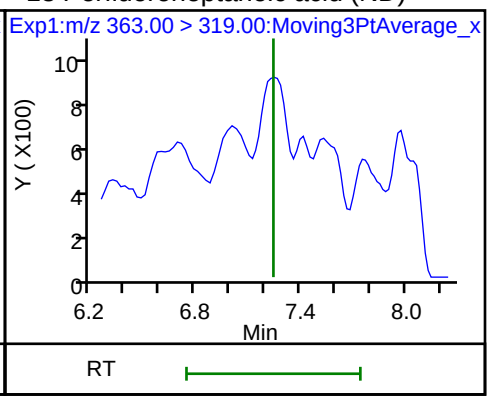
D 15 18O2 PFHxS



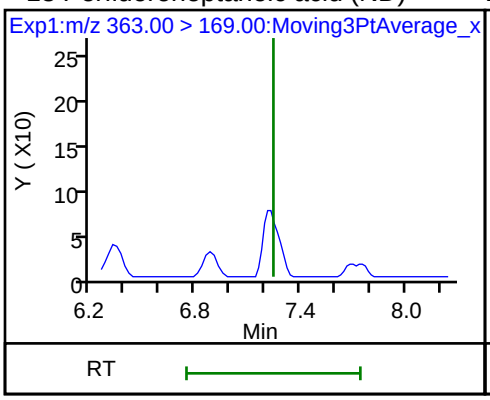
D 17 13C4 PFHpA



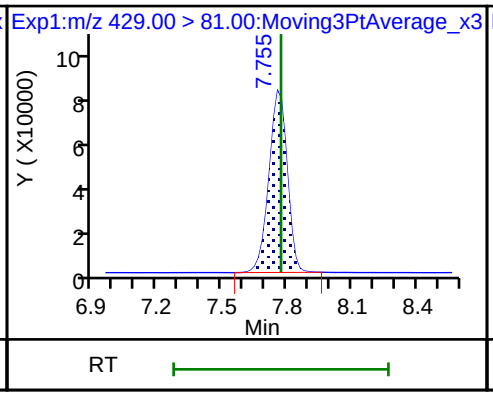
18 Perfluoroheptanoic acid (ND)



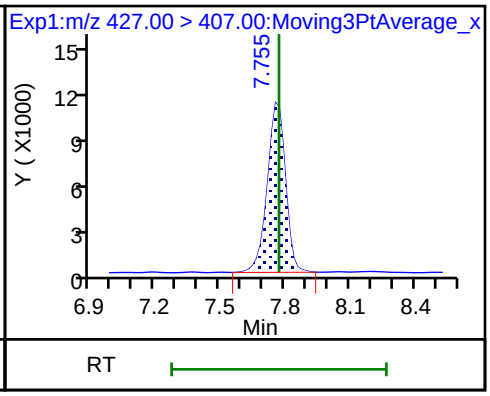
18 Perfluoroheptanoic acid (ND)



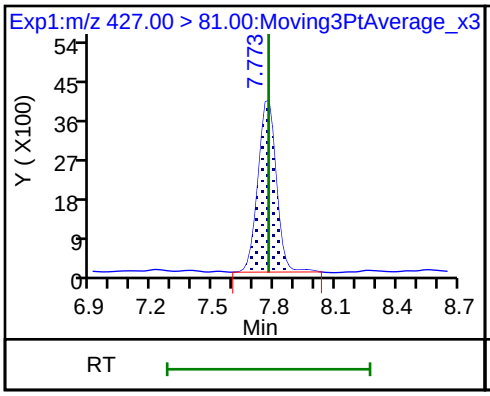
D 22 M2-6:2 FTS



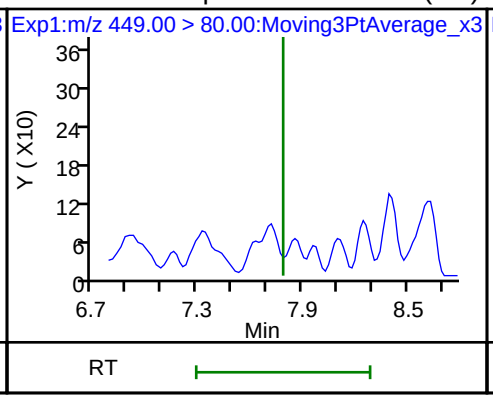
23 6:2 FTS



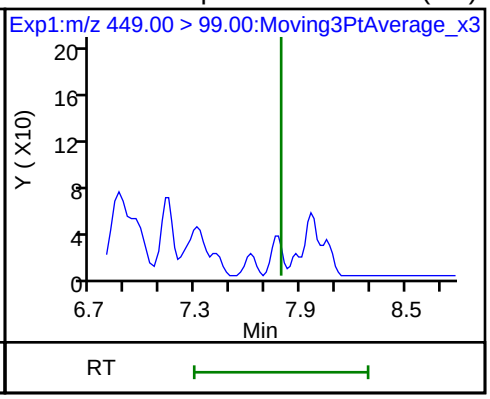
23 6:2 FTS



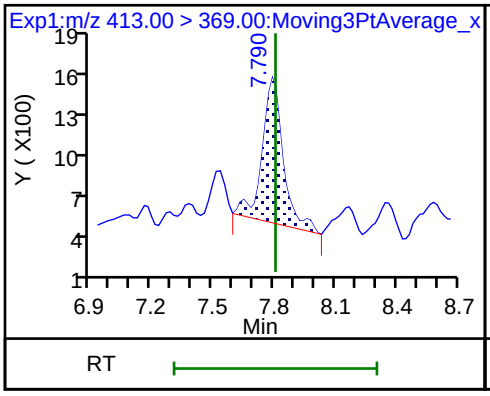
21 Perfluoroheptanesulfonic acid (ND)



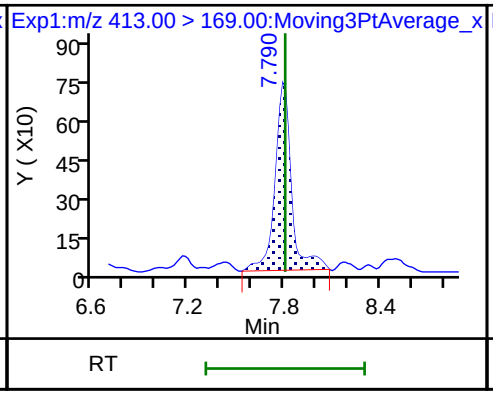
21 Perfluoroheptanesulfonic acid (ND)



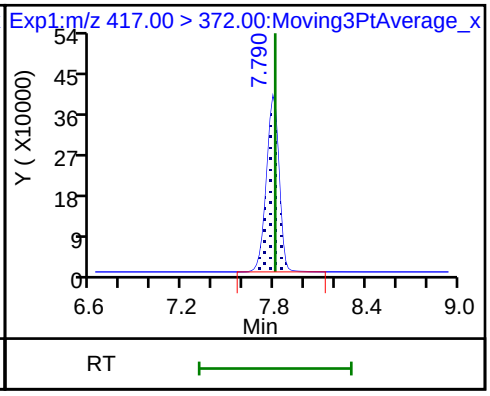
24 Perfluorooctanoic acid



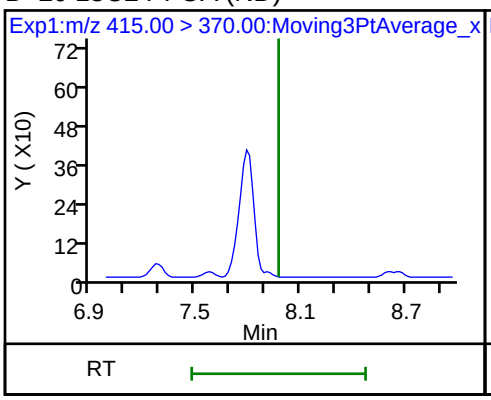
24 Perfluorooctanoic acid



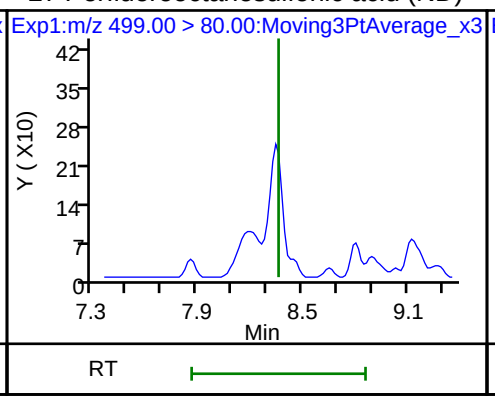
D 25 13C4 PFOA



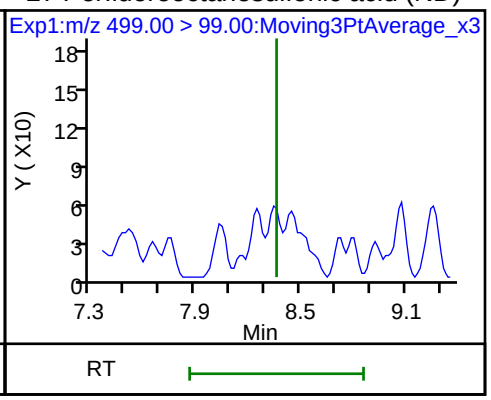
D 20 13C2 PFOA (ND)



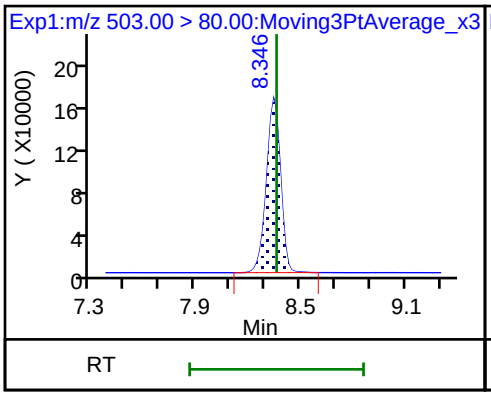
27 Perfluorooctanesulfonic acid (ND)



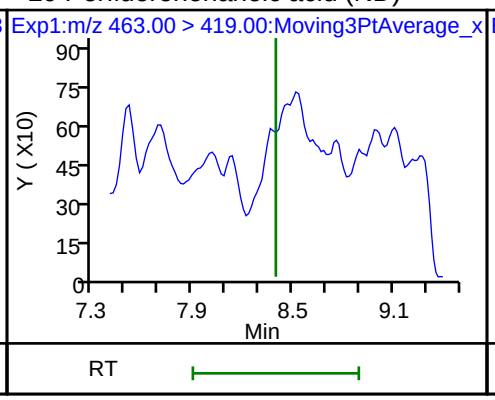
27 Perfluorooctanesulfonic acid (ND)



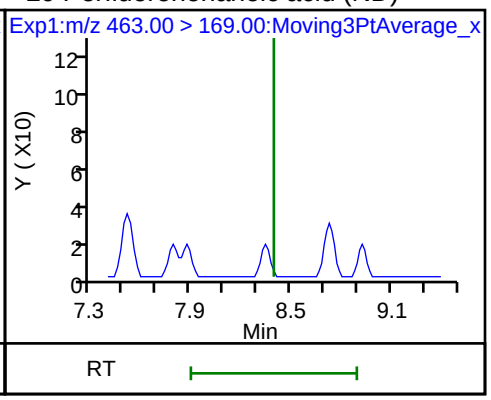
D 26 13C4 PFOS



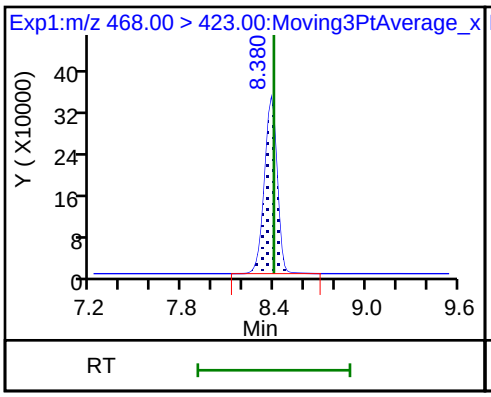
29 Perfluorononanoic acid (ND)



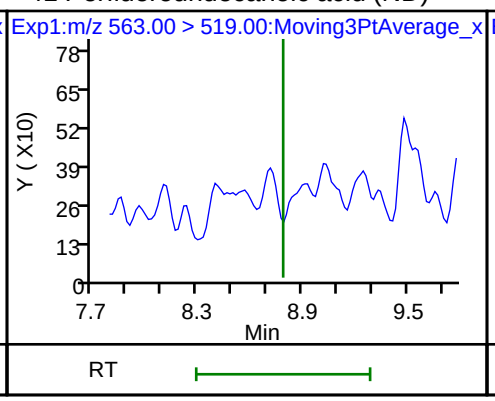
29 Perfluorononanoic acid (ND)



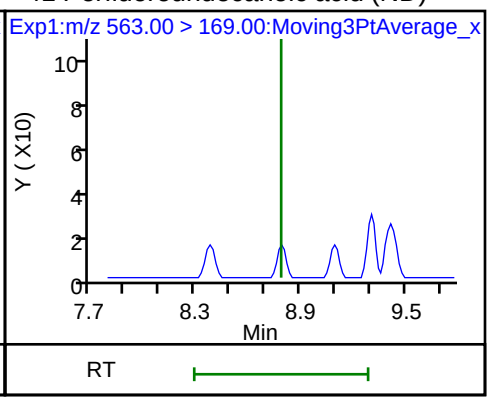
D 28 13C5 PFNA



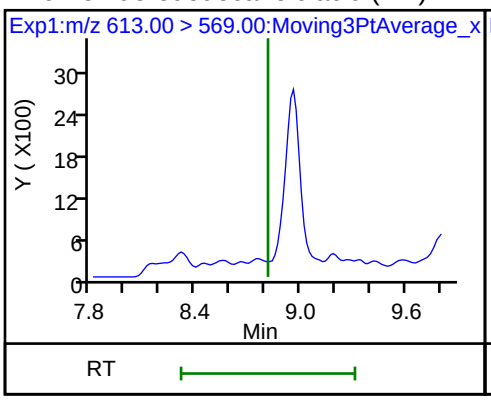
41 Perfluoroundecanoic acid (ND)



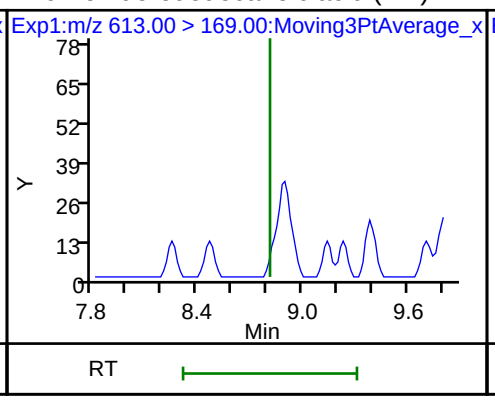
41 Perfluoroundecanoic acid (ND)



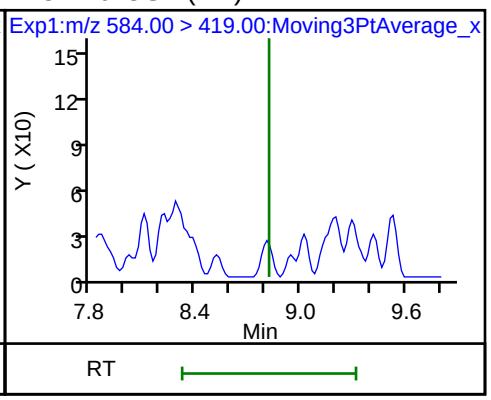
46 Perfluorododecanoic acid (ND)



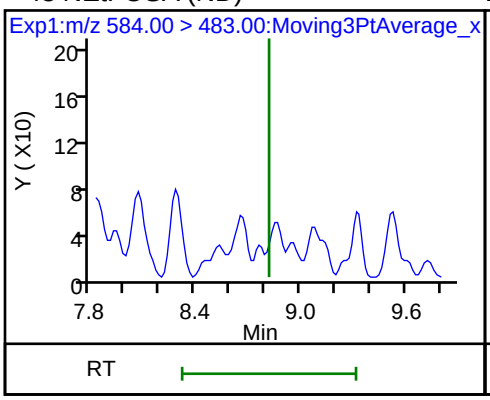
46 Perfluorododecanoic acid (ND)



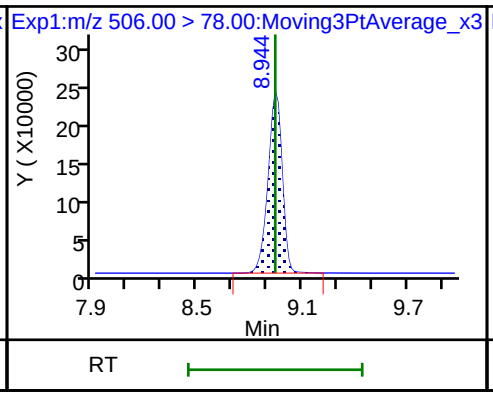
43 NEtFOSA (ND)



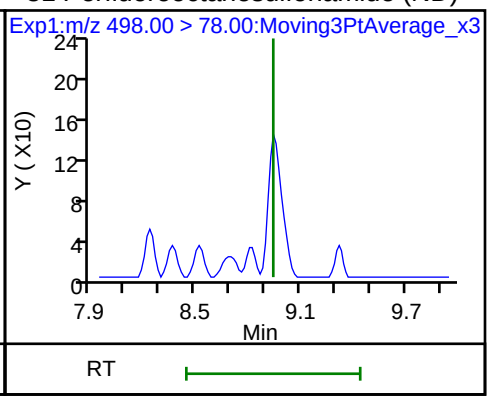
43 NEtFOSA (ND)



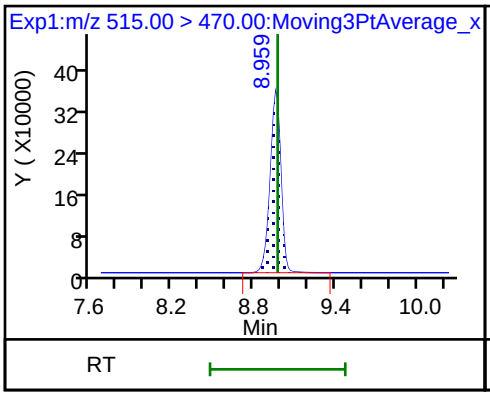
D 30 13C8 FOSA



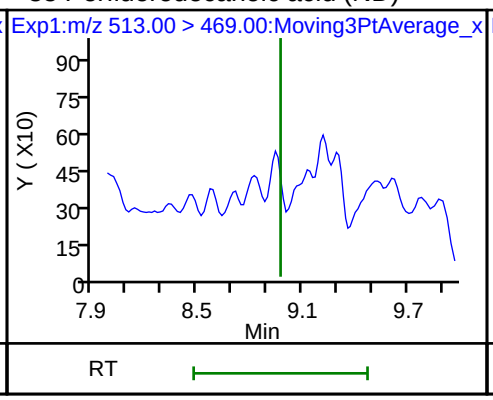
31 Perfluorooctanesulfonamide (ND)



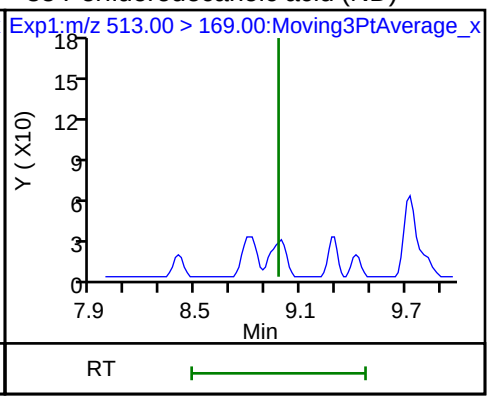
D 33 13C2 PFDA



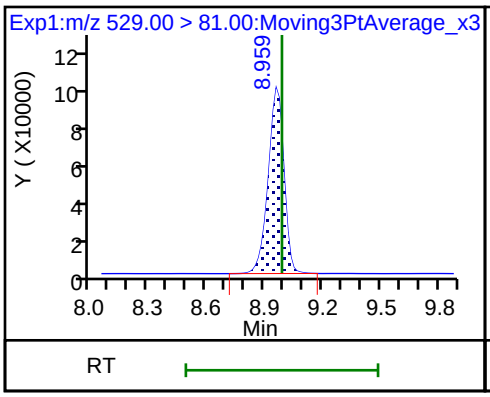
35 Perfluorodecanoic acid (ND)



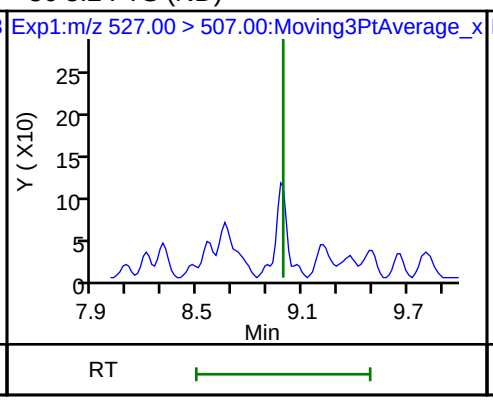
35 Perfluorodecanoic acid (ND)



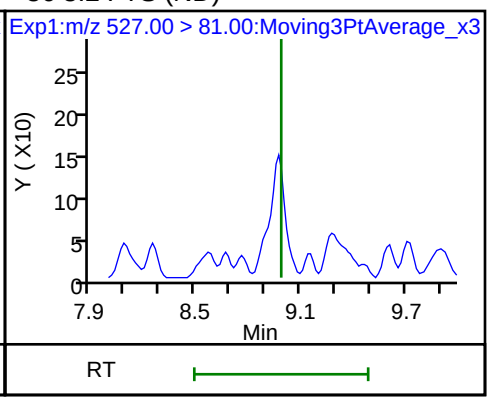
D 34 M2-8:2 FTS



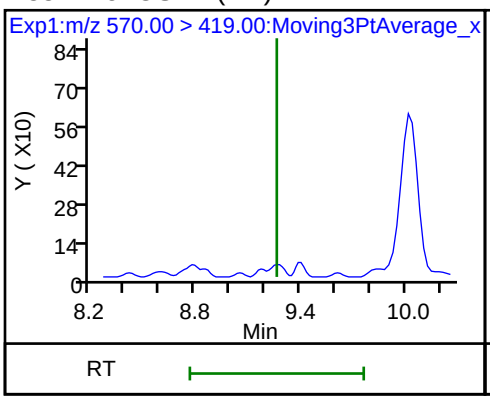
36 8:2 FTS (ND)



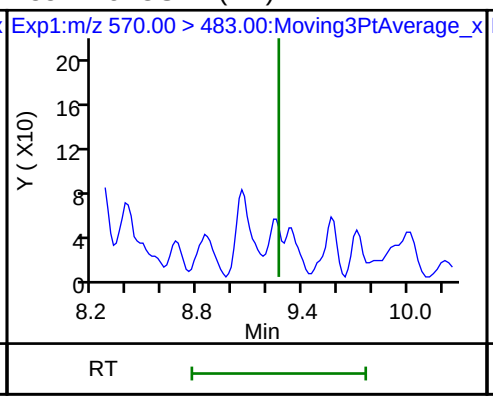
36 8:2 FTS (ND)



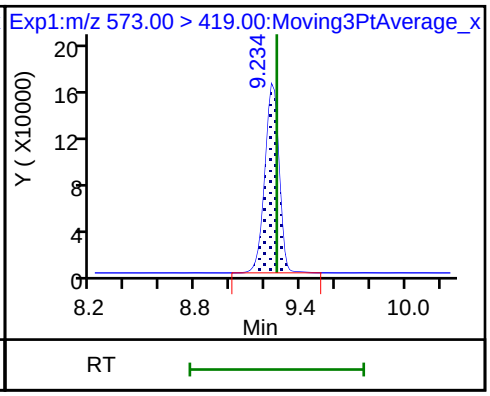
38 NMeFOSAA (ND)



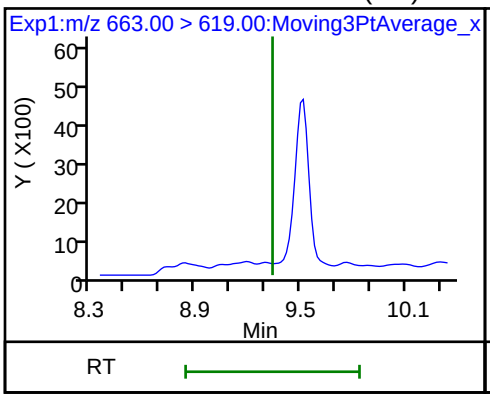
38 NMeFOSAA (ND)



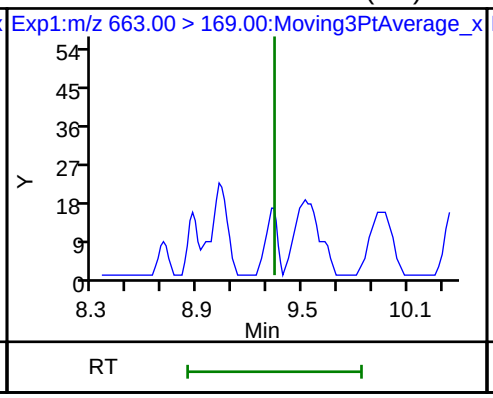
D 37 d3-NMeFOSAA



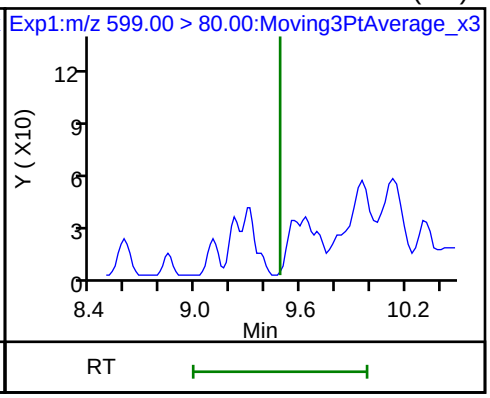
49 Perfluorotridecanoic acid (ND)



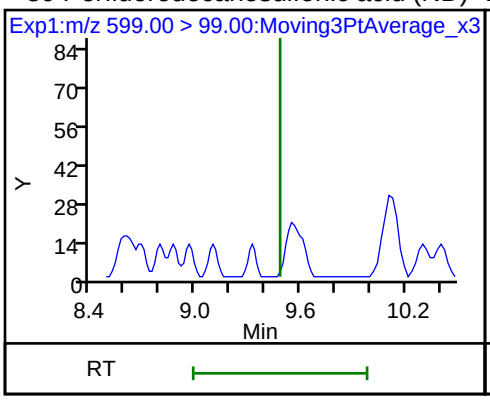
49 Perfluorotridecanoic acid (ND)



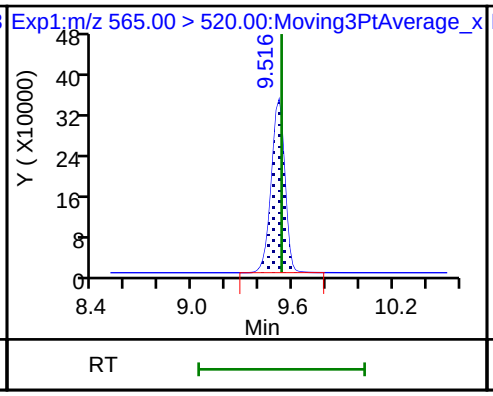
39 Perfluorodecanesulfonic acid (ND)



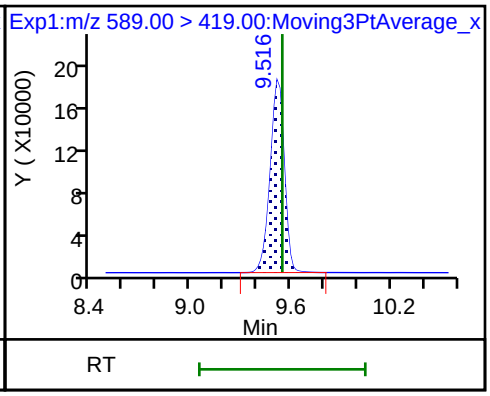
39 Perfluorodecanesulfonic acid (ND)



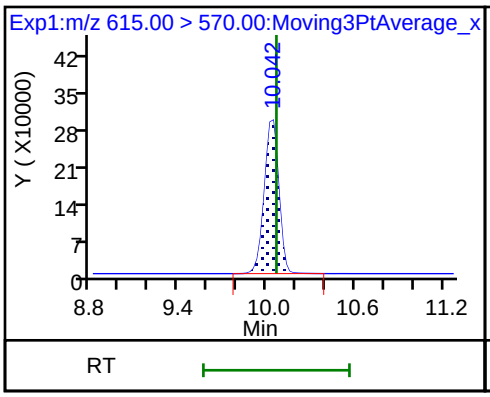
D 42 13C2 PFUnA



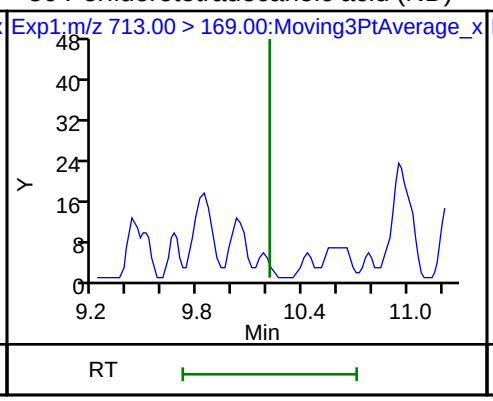
D 40 d5-NEtFOSAA



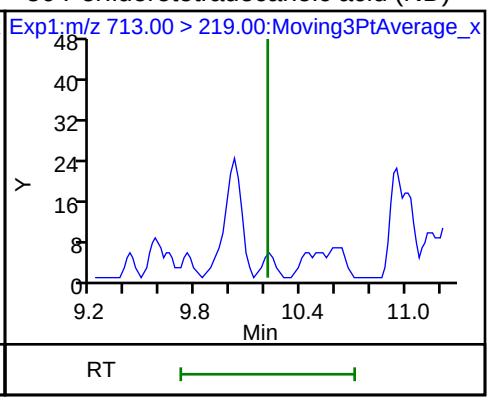
D 45 13C2 PFDoA



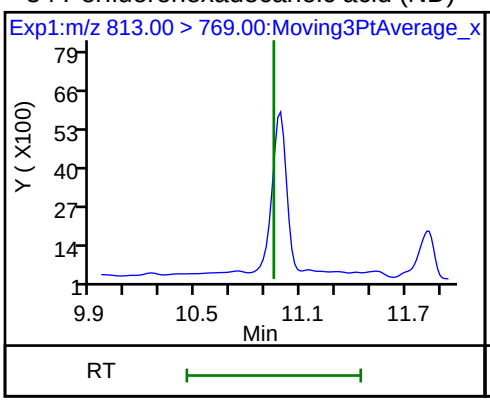
50 Perfluorotetradecanoic acid (ND)



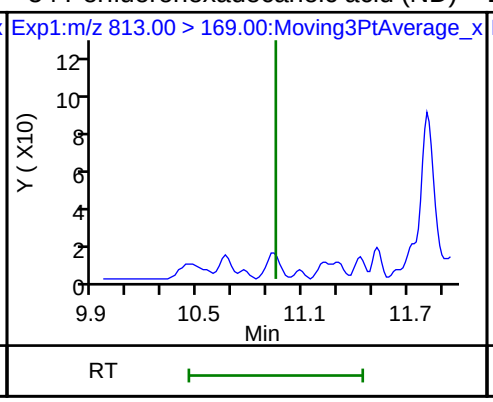
50 Perfluorotetradecanoic acid (ND)



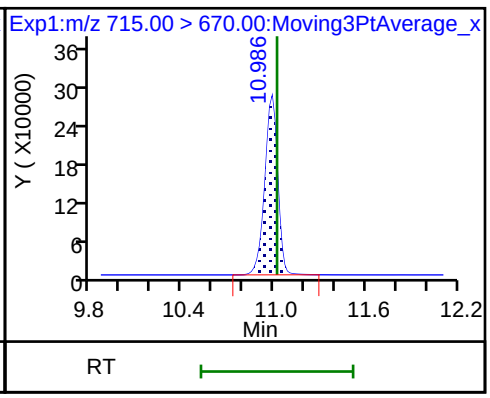
54 Perfluorohexadecanoic acid (ND)



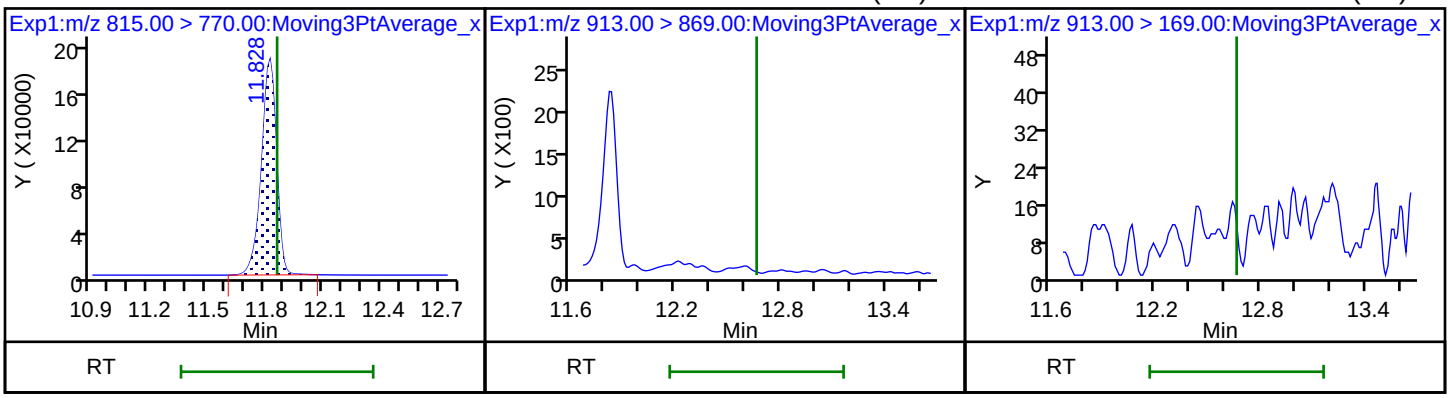
54 Perfluorohexadecanoic acid (ND)



D 51 13C2 PFTeDA



D 52 13C2 PFHxDA | 53 Perfluorooctadecanoic acid (ND) | 53 Perfluorooctadecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: DUP Lab Sample ID: 480-178459-4

Matrix: Water Lab File ID: 2020.11.23_A10_DI_A_014.d

Analysis Method: WS-LC-0025 Att1 Date Collected: 11/19/2020 00:00

Extraction Method: PFAS Prep Date Extracted: 11/23/2020 05:50

Sample wt/vol: 1.00(mL) Date Analyzed: 11/23/2020 13:44

Con. Extract Vol.: 1.66(mL) Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 434683 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	112		25-150
STL01892	13C4 PFHpA	113		25-150
STL00990	13C4 PFOA	109		70-130
STL00991	13C4 PFOS	105		70-130
STL00995	13C5 PFNA	113		25-150
STL02337	13C3 PFBS	92		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_014.d
Lims ID: 480-178459-A-4-A
Client ID: DUP
Sample Type: Client
Inject. Date: 23-Nov-2020 13:44:49 ALS Bottle#: 14 Worklist Smp#: 11
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: 480-178459-a-4-a
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:29:30 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:29:30
Ratio Calibration: CCV Sample: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C3 PFBS										
301.90 > 80.00	6.316	6.316	0.0		1788452	0.0426		91.5	8086	
D 15 18O2 PFHxS										
403.00 > 84.00	7.225	7.244	-0.019		1368471	0.0529		112	11284	
D 17 13C4 PFHpA										
367.00 > 322.00	7.225	7.244	-0.019		2073783	0.0566		113	17163	
D 25 13C4 PFOA										
417.00 > 372.00	7.787	7.805	-0.018		2331579	0.0547		109	17890	
D 20 13C2 PFOA										
415.00 > 370.00	7.787	7.974	-0.187		2686	NC		0.0	28.0	
D 26 13C4 PFOS										
503.00 > 80.00	8.345	8.362	-0.017		924654	0.0502		105	4564	
D 28 13C5 PFNA										
468.00 > 423.00	8.379	8.397	-0.018		2025631	0.0565		113	15175	

QC Flag Legend

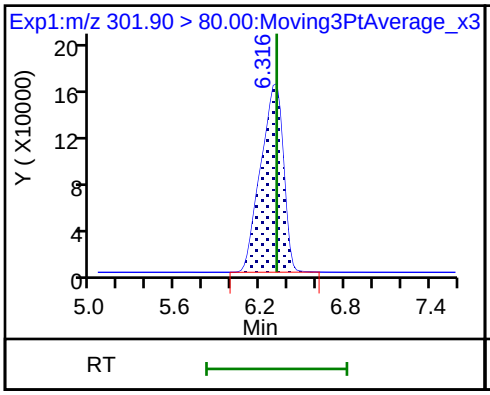
Processing Flags
NC - Not Calibrated

Report Date: 24-Nov-2020 08:29:31 Chrom Revision: 2.3 12-Nov-2020 21:52:08

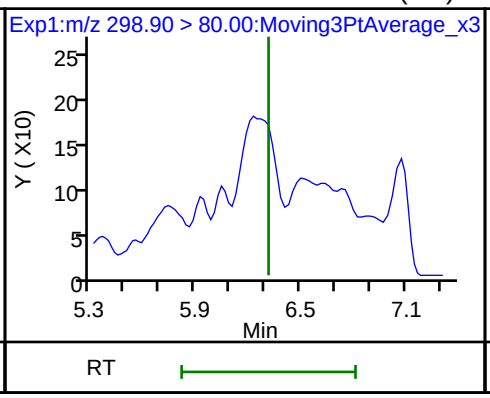
Eurofins TestAmerica, Sacramento

Data File:	\\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_014.d				
Injection Date:	23-Nov-2020 13:44:49	Instrument ID:	A10		
Lims ID:	480-178459-A-4-A	Lab Sample ID:	320-178459-4		
Client ID:	DUP				
Operator ID:	Sac_inst_A10	ALS Bottle#:	14	Worklist Smp#:	11
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		

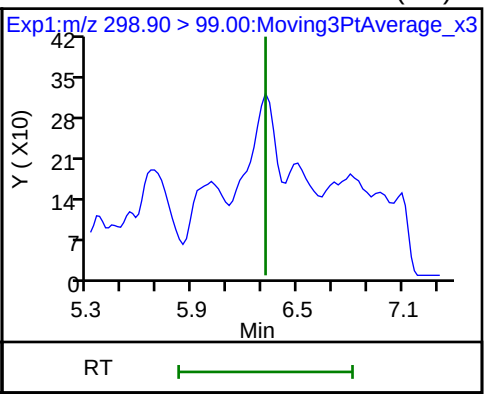
D 3 13C3 PFBS



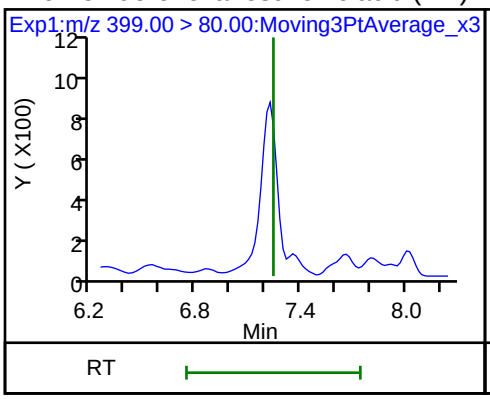
6 Perfluorobutanesulfonic acid (ND)



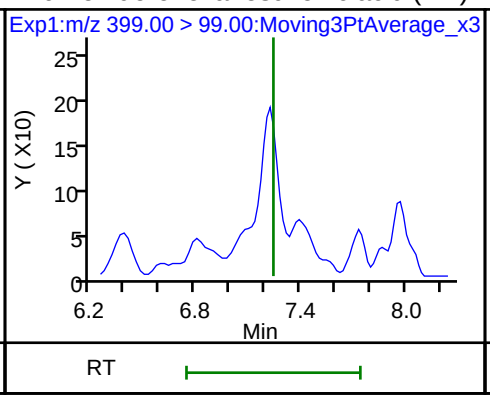
6 Perfluorobutanesulfonic acid (ND)



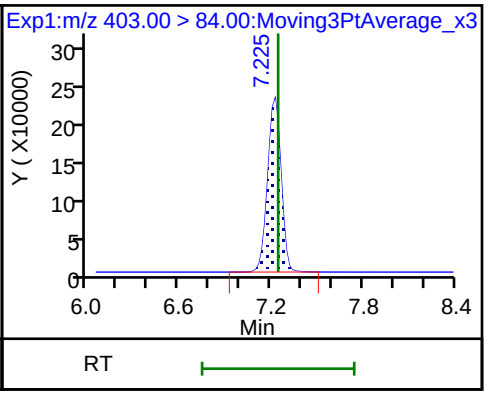
16 Perfluorohexanesulfonic acid (ND)



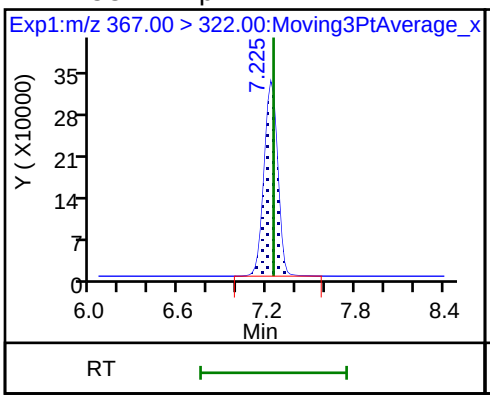
16 Perfluorohexanesulfonic acid (ND)



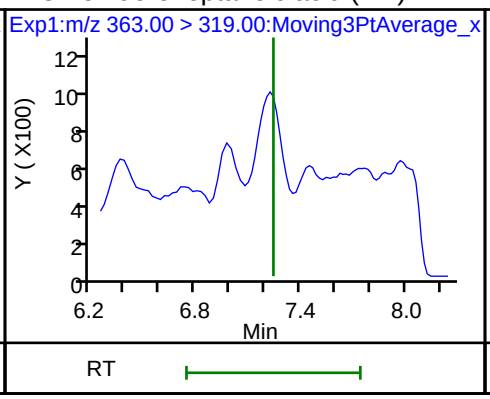
D 15 18O2 PFHxS



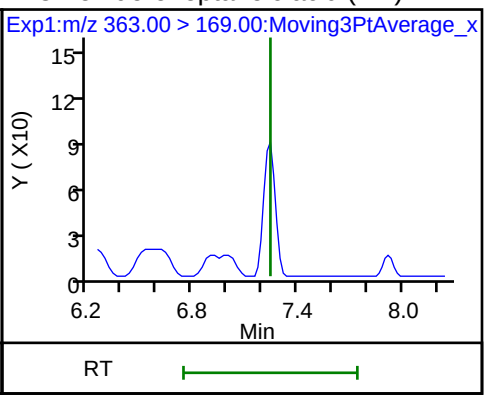
D 17 13C4 PFHpA



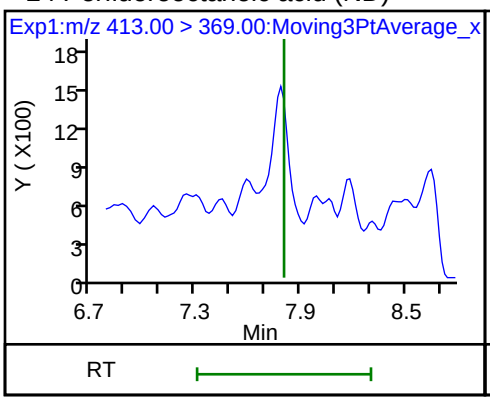
18 Perfluoroheptanoic acid (ND)



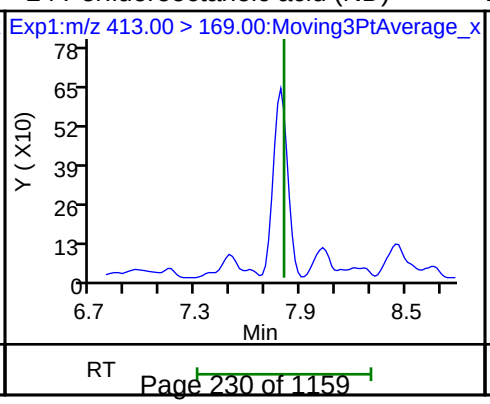
18 Perfluoroheptanoic acid (ND)



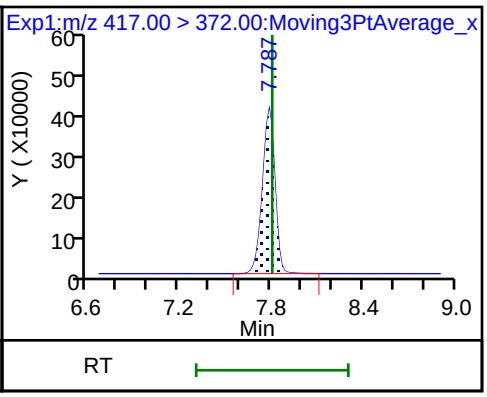
24 Perfluorooctanoic acid (ND)



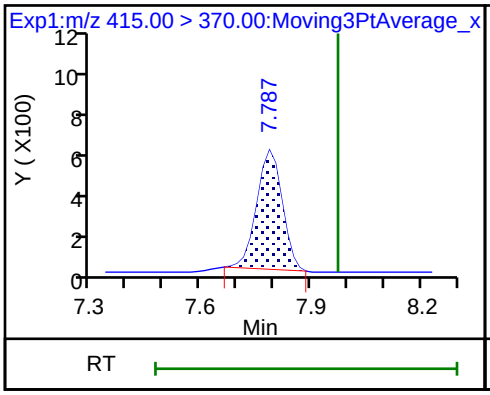
24 Perfluorooctanoic acid (ND)



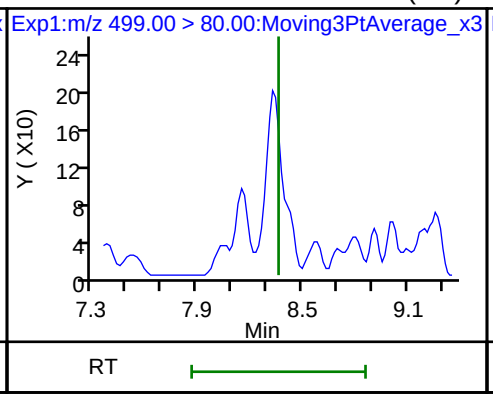
D 25 13C4 PFOA



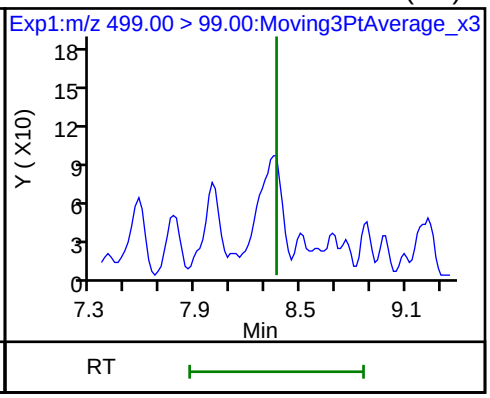
D 20 13C2 PFOA



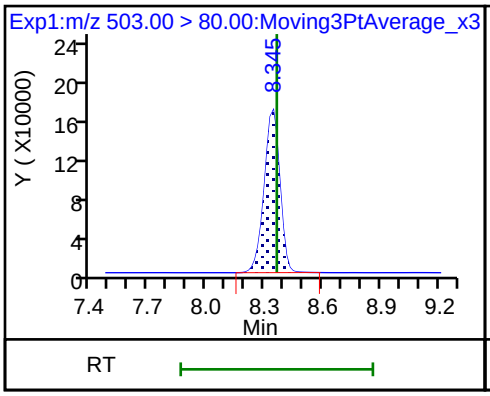
27 Perfluorooctanesulfonic acid (ND)



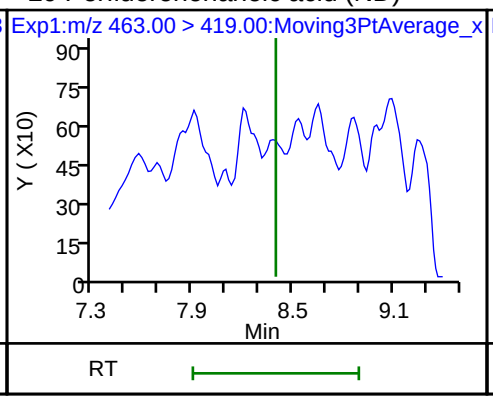
27 Perfluorooctanesulfonic acid (ND)



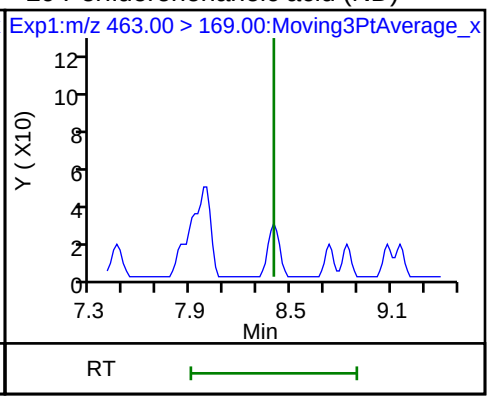
D 26 13C4 PFOS



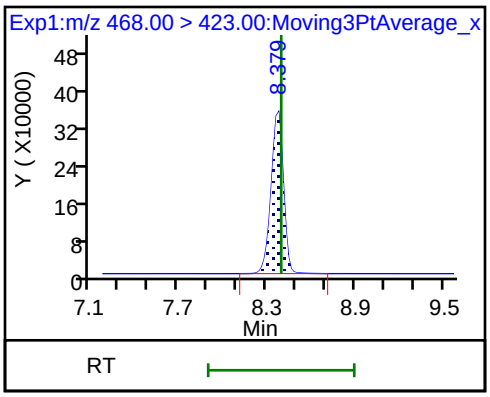
29 Perfluorononanoic acid (ND)



29 Perfluorononanoic acid (ND)



D 28 13C5 PFNA



FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-420930/2	2020.10.12_A10_DI_ICAL_004.d
Level 2	IC 320-420930/3	2020.10.12_A10_DI_ICAL_005.d
Level 3	IC 320-420930/4	2020.10.12_A10_DI_ICAL_006.d
Level 4	IC 320-420930/5	2020.10.12_A10_DI_ICAL_007.d
Level 5	IC 320-420930/6	2020.10.12_A10_DI_ICAL_008.d
Level 6	IC 320-420930/7	2020.10.12_A10_DI_ICAL_009.d
Level 7	IC 320-420930/8	2020.10.12_A10_DI_ICAL_010.d
Level 8	IC 320-420930/9	2020.10.12_A10_DI_ICAL_011.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Perfluorobutanoic acid	5.677	5.678	5.639	5.639	5.639	5.638	5.642	5.621			5.147 - 6.147	5.647
Perfluoropentanoic acid	6.271	6.271	6.250	6.250	6.250	6.250	6.254	6.230			5.753 - 6.753	6.253
Perfluorobutanesulfonic acid (PFBS)	6.316	6.316	6.317	6.317	6.316	6.293	6.297	6.293			5.808 - 6.808	6.308
Perfluorohexanoic acid	6.757	6.758	6.735	6.758	6.734	6.734	6.738	6.734			6.244 - 7.244	6.744
Perfluorohexanesulfonic acid (PFHxS)	7.281	7.281	7.263	7.263	7.263	7.244	7.248	7.237			6.760 - 7.760	7.260
Perfluoroheptanoic acid (PFHpA)	7.300	7.281	7.282	7.282	7.263	7.263	7.248	7.257			6.772 - 7.772	7.272
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	7.853	7.836	7.820	7.820	7.803	7.787	7.790	7.792			7.313 - 8.313	7.813
Perfluoroheptanesulfonic acid	7.853	7.853	7.820	7.820	7.820	7.803	7.807	7.792			7.321 - 8.321	7.821
Perfluorooctanoic acid (PFOA)	7.886	7.869	7.853	7.853	7.837	7.821	7.823	7.829			7.346 - 8.346	7.846
Perfluorooctanesulfonic acid (PFOS)	8.444	8.444	8.427	8.410	8.410	8.398	8.389	8.379			7.913 - 8.913	8.413
Perfluorononanoic acid (PFNA)	8.478	8.478	8.462	8.444	8.444	8.433	8.424	8.417			7.948 - 8.948	8.448
Perfluorooctanesulfonamide	8.985	8.987	8.972	8.972	8.972	8.953	8.960	8.953			8.469 - 9.469	8.969
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.077	9.063	9.048	9.048	9.033	9.014	9.007	9.003			8.537 - 9.537	9.037
Perfluorodecanoic acid	9.077	9.063	9.048	9.048	9.033	9.014	9.007	9.003			8.537 - 9.537	9.037
N-methylperfluorooctanesulfonamidoacetic acid	9.369	9.358	9.333	9.333	9.320	9.303	9.302	9.302			8.827 - 9.827	9.328
Perfluorodecanesulfonic acid	9.592	9.578	9.562	9.546	9.529	9.523	9.523	9.516			9.046 - 10.046	9.546
Perfluoroundecanoic acid	9.641	9.626	9.610	9.594	9.594	9.571	9.571	9.565			9.097 - 10.097	9.597
N-ethylperfluorooctanesulfonamidoacetic acid	9.657	9.642	9.626	9.610	9.610	9.587	9.588	9.582			9.113 - 10.113	9.613
Perfluorododecanoic acid	10.188	10.167	10.145	10.123	10.123	10.095	10.096	10.076			9.627 - 10.627	10.127
Perfluorotridecanoic acid	10.683	10.666	10.631	10.631	10.614	10.591	10.591	10.572			10.122 - 11.122	10.622
Perfluorotetradecanoic acid	11.167	11.139	11.109	11.093	11.077	11.056	11.059	11.052			10.594 - 11.594	11.094
Perfluorohexadecanoic acid	12.056	12.032	11.983	11.971	11.946	11.929	11.914	11.907			11.467 - 12.467	11.967
Perfluorooctadecanoic acid	12.056	12.020	11.983	11.971	12.811	12.785	12.762	12.754			11.893 - 12.893	12.393
13C4 PFBA	5.657	5.678	5.639	5.639	5.639	5.638	5.642	5.621			5.144 - 6.144	5.644
13C5 PFPeA	6.271	6.271	6.250	6.250	6.250	6.250	6.254	6.230			5.753 - 6.753	6.253
13C3 PFBS	6.316	6.316	6.317	6.317	6.293	6.293	6.297	6.293			5.805 - 6.805	6.305
13C2 PFHxA	6.757	6.758	6.735	6.734	6.734	6.734	6.738	6.734			6.241 - 7.241	6.741
18O2 PFHxS	7.281	7.281	7.263	7.263	7.263	7.244	7.248	7.237			6.760 - 7.760	7.260
13C4 PFHpA	7.300	7.281	7.282	7.282	7.263	7.244	7.248	7.257			6.770 - 7.770	7.270
M2-6:2 FTS	7.853	7.836	7.820	7.820	7.803	7.787	7.790	7.792			7.313 - 8.313	7.813

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
13C4 PFOA	7.869	7.869	7.853	7.853	7.837	7.821	7.823	7.810			7.342 - 8.342	7.842
13C4 PFOS	8.444	8.444	8.427	8.410	8.410	8.398	8.389	8.379			7.913 - 8.913	8.413
13C5 PFNA	8.478	8.478	8.444	8.444	8.444	8.415	8.424	8.417			7.943 - 8.943	8.443
13C8 FOSA	8.985	8.972	8.972	8.972	8.972	8.953	8.960	8.953			8.468 - 9.468	8.967
13C2 PFDA	9.077	9.063	9.048	9.033	9.033	9.014	9.007	9.003			8.535 - 9.535	9.035
M2-8:2 FTS	9.077	9.063	9.048	9.048	9.033	9.014	9.007	9.003			8.537 - 9.537	9.037
d3-NMeFOSAA	9.369	9.345	9.333	9.320	9.306	9.289	9.288	9.286			8.817 - 9.817	9.317
13C2 PFUnA	9.641	9.626	9.610	9.594	9.578	9.571	9.571	9.565			9.095 - 10.095	9.595
d5-NEtFOSAA	9.657	9.642	9.610	9.610	9.594	9.571	9.571	9.565			9.103 - 10.103	9.603
13C2 PFDoA	10.188	10.167	10.145	10.123	10.123	10.095	10.096	10.076			9.627 - 10.627	10.127
13C2 PFTeDA	11.167	11.139	11.109	11.093	11.077	11.056	11.059	11.035			10.592 - 11.592	11.092
13C2 PFHxDA	12.056	12.020	11.983	11.971	11.946	11.929	11.914	11.907			11.466 - 12.466	11.966

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-420930/2	2020.10.12_A10_DI_ICAL_004.d
Level 2	IC 320-420930/3	2020.10.12_A10_DI_ICAL_005.d
Level 3	IC 320-420930/4	2020.10.12_A10_DI_ICAL_006.d
Level 4	IC 320-420930/5	2020.10.12_A10_DI_ICAL_007.d
Level 5	IC 320-420930/6	2020.10.12_A10_DI_ICAL_008.d
Level 6	IC 320-420930/7	2020.10.12_A10_DI_ICAL_009.d
Level 7	IC 320-420930/8	2020.10.12_A10_DI_ICAL_010.d
Level 8	IC 320-420930/9	2020.10.12_A10_DI_ICAL_011.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
13C4 PFBA	41055020 43322140	36871900 38076100	40629740 35711800	40403900 41147860	Ave		39652307.5				6.4		50.0			
13C5 PFPeA	34875020 35701280	32228460 32961840	35141840 32542340	34329360 33883340	Ave		33957935.0				3.8		50.0			
13C3 PFBS	42001871 43908043	39513978 41619656	43037204 39821505	42756645 43545484	Ave		42025548.4				3.9		50.0			
13C2 PFHxA	37683300 38547060	35688940 34429760	37709180 33831760	36546640 34927860	Ave		36170562.5				4.8		50.0			
18O2 PFHxS	26442262 27541480	25314926 25030719	26621776 24261395	26647780 25151247	Ave		25876448.2				4.2		50.0			
13C4 PFHpA	37253580 40272780	34141320 36560900	37454500 34475320	37344860 35502240	Ave		36625687.5				5.4		50.0			
M2-6:2 FTS	15376884 13347747	13352821 12202526	13961453 11455284	13962337 10057916	Ave		12964621.1				12.8		50.0			
13C4 PFOA	44251120 45583700	41086540 40533840	43043220 40810560	45765820 39713420	Ave		42598527.5				5.6		50.0			
13C4 PFOS	17763013 19306004	17845042 18207238	18659017 17855377	18832866 18942197	Ave		18426344.1				3.2		50.0			
13C5 PFNA	37372080 38076500	33442280 35855360	38779880 34078800	35342240 33757340	Ave		35838060.0				5.7		50.0			
13C8 FOSA	23390620 20479260	21227360 17592000	21670400 24890960	27121620 19031380	Ave		21925450.0				14.2		50.0			
13C2 PFDA	37120680 36424380	34787600 34789880	35814500 35385600	35631260 32638960	Ave		35324107.5				3.8		50.0			
M2-8:2 FTS	17299687 14395908	14509040 12293779	14124614 10942818	14495846 11205950	Ave		13658455.1				15.3		50.0			
d3-NMeFOSAA	26216380 25680620	24812820 23399080	25164100 23467900	25843340 22902820	Ave		24685882.5				5.1		50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
13C2 PFUnA	37765420 38202820	34153620 34276560	36647680 36730620	38528580 34959140	Ave		36408055.0				4.8		50.0			
d5-NEtFOSAA	31283880 28977960	28184420 26023860	28421040 24977160	29331520 23697420	Ave		27612157.5				9.1		50.0			
13C2 PFDoA	37030080 35961800	37255800 32831440	35569560 38848780	40851320 34814000	Ave		36645347.5				6.7		50.0			
13C2 PFTeDA	21382280 20428020	21271760 14038940	20641580 36335940	35132540 24208700	Ave		24179970.0				31.8		50.0			
13C2 PFHxDA	12012160 14199120	13280140 12234760	12279040 24067280	16849580 15261880	Ave		15022995.0				26.8		50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid	1.0008 0.8789	0.8414 0.8582	0.8959 0.8675	0.8521	0.8419	AveID		0.8796				6.0		35.0			
Perfluoropentanoic acid	1.2345 1.0810	1.0199 1.0470	1.1230 1.0546	1.0421	1.0169	AveID		1.0774				6.7		35.0			
Perfluorobutanesulfonic acid (PFBS)	0.9807 1.0130	0.9166 1.0115	1.0199 1.0064	1.0097	0.9616	AveID		0.9899				3.6		35.0			
Perfluorohexanoic acid	1.0121 0.9663	0.8153 0.9462	0.9372 0.9133	0.9563	0.8785	AveID		0.9282				6.5		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.3216 1.1074	1.0881 1.1298	1.0693 1.1412	1.1200	1.1002	AveID		1.1347				7.0		35.0			
Perfluoroheptanoic acid (PFHpA)	1.2107 0.9539	1.2062 0.9481	1.0148 0.9742	0.9611	0.9114	AveID		1.0226				11.6		35.0			
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	2.6297 2.4730	2.5033 2.3873	2.3673 2.4896	2.5224	2.4850	AveID		2.4822				3.3		35.0			
Perfluoroheptanesulfonic acid	1.4296 1.2067	1.1006 1.1965	1.2209 1.1523	1.2229	1.1245	AveID		1.2067				8.4		50.0			
Perfluorooctanoic acid (PFOA)	1.0894 0.9638	0.9036 0.9051	1.0694 0.9722	0.9498	0.9128	AveID		0.9707				7.4		35.0			
Perfluorooctanesulfonic acid (PFOS)	1.1222 1.0211	0.9284 1.0217	1.0532 1.0045	1.0342	1.0030	AveID		1.0235				5.3		35.0			
Perfluorononanoic acid (PFNA)	0.9421 0.8494	0.8874 0.8599	0.8622 0.8988	0.9180	0.8592	AveID		0.8846				3.7		35.0			
Perfluorooctanesulfonamide	0.9079 1.0264	0.9479 1.0363	1.0623 1.0304	1.0182	0.9848	AveID		1.0018				5.1		35.0			
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	2.1287 2.2480	2.2731 2.3053	2.4359 2.0739	2.2509	2.0377	AveID		2.2192				5.9		35.0			
Perfluorodecanoic acid	0.7841 0.8098	0.7738 0.7723	0.8172 0.8169	0.8562	0.7973	AveID		0.8034				3.5		35.0			
N-methylperfluorooctanesulfonamidoacetic acid	0.8374 0.8442	0.7515 0.8417	0.8412 0.8545	0.8698	0.8105	AveID		0.8314				4.4		35.0			
Perfluorodecanesulfonic acid	0.8042 0.7287	0.6374 0.8199	0.7195 0.7359	0.7996	0.7286	AveID		0.7467				8.0		50.0			
Perfluoroundecanoic acid	0.9354 0.8997	0.8366 0.8651	0.9102 0.8385	0.8903	0.8776	AveID		0.8817				3.9		35.0			
N-ethylperfluorooctanesulfonamidoacetic acid	0.7373 0.8118	0.7092 0.8240	0.8221 0.8208	0.8148	0.7771	AveID		0.7896				5.6		35.0			
Perfluorododecanoic acid	0.9196 0.8165	0.7189 0.8392	0.7640 0.8435	0.8885	0.7736	AveID		0.8205				8.1		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Perfluorotridecanoic acid	0.8458 0.7751	0.6544 1.0599	0.8659 0.8917	1.1059	0.7836	AveID		0.8728				17.1		50.0			
Perfluorotetradecanoic acid	0.0703 0.0559	0.0468 0.0474	0.0469 0.0478	0.0485	0.0463	AveID		0.0512				16.2		35.0			
Perfluorohexadecanoic acid	1.3237 0.8812	1.0055 0.8758	0.9452 0.9122	0.9877	0.8719	L2ID	0.0004	0.8793							0.9970		0.9900
Perfluorooctadecanoic acid	0.4982 0.3279	0.2258 0.1135	0.0865 0.1965	0.0544	0.2528	AveID		0.2195				66.1	*	50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-420930/2	2020.10.12_A10_DI_ICAL_004.d
Level 2	IC 320-420930/3	2020.10.12_A10_DI_ICAL_005.d
Level 3	IC 320-420930/4	2020.10.12_A10_DI_ICAL_006.d
Level 4	IC 320-420930/5	2020.10.12_A10_DI_ICAL_007.d
Level 5	IC 320-420930/6	2020.10.12_A10_DI_ICAL_008.d
Level 6	IC 320-420930/7	2020.10.12_A10_DI_ICAL_009.d
Level 7	IC 320-420930/8	2020.10.12_A10_DI_ICAL_010.d
Level 8	IC 320-420930/9	2020.10.12_A10_DI_ICAL_011.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
13C4 PFBA	Ave	2052751 1903805	1843595 1785590	2031487 2057393	2020195	2166107	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C5 PFPeA	Ave	1743751 1648092	1611423 1627117	1757092 1694167	1716468	1785064	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C3 PFBS	Ave	1953087 1935314	1837400 1851700	2001230 2024865	1988184	2041724	0.0465 0.0465	0.0465 0.0465	0.0465 0.0465	0.0465	0.0465
13C2 PFHxA	Ave	1884165 1721488	1784447 1691588	1885459 1746393	1827332	1927353	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
18O2 PFHxS	Ave	1250719 1183953	1197396 1147564	1259210 1189654	1260440	1302712	0.0473 0.0473	0.0473 0.0473	0.0473 0.0473	0.0473	0.0473
13C4 PFHpA	Ave	1862679 1828045	1707066 1723766	1872725 1775112	1867243	2013639	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
M2-6:2 FTS	Ave	730402 579620	634259 544126	663169 477751	663211	634018	0.0475 0.0475	0.0475 0.0475	0.0475 0.0475	0.0475	0.0475
13C4 PFOA	Ave	2212556 2026692	2054327 2040528	2152161 1985671	2288291	2279185	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C4 PFOS	Ave	849072 870306	852993 853487	891901 905437	900211	922827	0.0478 0.0478	0.0478 0.0478	0.0478 0.0478	0.0478	0.0478
13C5 PFNA	Ave	1868604 1792768	1672114 1703940	1938994 1687867	1767112	1903825	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C8 FOSA	Ave	1169531 879600	1061368 1244548	1083520 951569	1356081	1023963	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C2 PFDA	Ave	1856034 1739494	1739380 1769280	1790725 1631948	1781563	1821219	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
M2-8:2 FTS	Ave	828655 588872	694983 524161	676569 536765	694351	689564	0.0479 0.0479	0.0479 0.0479	0.0479 0.0479	0.0479	0.0479
d3-NMeFOSAA	Ave	1310819 1169954	1240641 1173395	1258205 1145141	1292167	1284031	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C2 PFUnA	Ave	1888271 1713828	1707681 1836531	1832384 1747957	1926429	1910141	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
d5-NEtFOSAA	Ave	1564194 1301193	1409221 1248858	1421052 1184871	1466576	1448898	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C2 PFDoA	Ave	1851504 1641572	1862790 1942439	1778478 1740700	2042566	1798090	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C2 PFTeDA	Ave	1069114 701947	1063588 1816797	1032079 1210435	1756627	1021401	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500
13C2 PFHxDA	Ave	600608 611738	664007 1203364	613952 763094	842479	709956	0.0500 0.0500	0.0500 0.0500	0.0500 0.0500	0.0500	0.0500

Curve Type Legend:
Ave = Average

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-420930/2	2020.10.12_A10_DI_ICAL_004.d
Level 2	IC 320-420930/3	2020.10.12_A10_DI_ICAL_005.d
Level 3	IC 320-420930/4	2020.10.12_A10_DI_ICAL_006.d
Level 4	IC 320-420930/5	2020.10.12_A10_DI_ICAL_007.d
Level 5	IC 320-420930/6	2020.10.12_A10_DI_ICAL_008.d
Level 6	IC 320-420930/7	2020.10.12_A10_DI_ICAL_009.d
Level 7	IC 320-420930/8	2020.10.12_A10_DI_ICAL_010.d
Level 8	IC 320-420930/9	2020.10.12_A10_DI_ICAL_011.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Perfluorobutanoic acid		AveID	41086 1673314	62047 3064886	182003 7138911	344263	729492	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluoropentanoic acid		AveID	43052 1781643	65741 3407309	197323 7146366	357743	726093	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorobutanesulfonic acid (PFBS)		AveID	36412 1863430	64035 3560733	194017 7748130	381625	746468	0.000884 0.0442	0.00177 0.0884	0.00442 0.177	0.00884	0.0177
Perfluorohexanoic acid		AveID	38140 1663500	58195 3201246	176708 6380174	349501	677265	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorohexanesulfonic acid (PFHxS)		AveID	31802 1261243	50130 2494444	129518 5223690	271592	551500	0.000910 0.0455	0.00182 0.0910	0.00455 0.182	0.00910	0.0182
Perfluoroheptanoic acid (PFHpA)		AveID	45104 1743823	82365 3268529	190038 6917140	358908	734130	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)		AveID	38334 1430377	63375 2592525	156661 4747633	333878	628888	0.000948 0.0474	0.00190 0.0948	0.00474 0.190	0.00948	0.0190
Perfluoroheptanesulfonic acid		AveID	24175 1045790	37394 2033930	108437 4155825	219246	413359	0.000952 0.0476	0.00190 0.0952	0.00476 0.190	0.00952	0.0190
Perfluorooctanoic acid (PFOA)		AveID	48205 1953409	74252 3693911	230153 7721517	434661	832136	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorooctanesulfonic acid (PFOS)		AveID	18498 862656	30749 1692988	91186 3531370	180747	359393	0.000928 0.0464	0.00186 0.0928	0.00464 0.186	0.00928	0.0186
Perfluorononanoic acid (PFNA)		AveID	35209 1522814	59356 2930305	167173 6068035	324429	654287	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorooctanesulfonamide		AveID	21237 902797	40241 2579348	115098 3921909	276156	403379	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)		AveID	35279 1323761	63192 2416653	164803 4452801	312580	562044	0.000958 0.0479	0.00192 0.0958	0.00479 0.192	0.00958	0.0192
Perfluorodecanoic acid		AveID	29107 1408573	53835 2732717	146331 5332236	305085	580791	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
N-methylperfluorooctanesulfonamidoacetic acid		AveID	21954 987696	37296 1975395	105839 3913986	224775	416265	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1 Analy Batch No.: 420930

SDG No.:

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/12/2020 11:30 Calibration End Date: 10/12/2020 13:39 Calibration ID: 52412

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Perfluorodecanesulfonic acid		AveID	13770 639531	21929 1411298	64705 2687493	145160	271201	0.000964 0.0482	0.00193 0.0964	0.00482 0.193	0.00964	0.0193
Perfluoroundecanoic acid		AveID	35326 1541966	57149 3177429	166778 5862917	343014	670565	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
N-ethylperfluorooctanesulfonamidoacetic acid		AveID	23066 1056253	39976 2058073	116829 3890344	239003	450352	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorododecanoic acid		AveID	34052 1340410	53570 3260016	135884 5872778	362982	556381	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorotridecanoic acid		AveID	31321 1272457	48763 4117765	153990 6208662	451763	563580	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorotetradecanoic acid		AveID	1503 39221	1989 172413	4838 231247	17040	18920	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorohexadecanoic acid		L2ID	15900 539056	26706 2107903	58033 2784275	166423	247600	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200
Perfluorooctadecanoic acid		AveID	5985 200602	5998 273176	5309 599789	9170	71782	0.00100 0.0500	0.00200 0.100	0.00500 0.200	0.0100	0.0200

Curve Type Legend:

AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Lims ID: IC STD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-Oct-2020 11:30:36 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 1
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:23:11 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: vangmy Date: 12-Oct-2020 12:16:38
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.657	5.644	0.013		2052751	0.0518		104	15249	
1 Perfluorobutanoic acid										M
169	5.677	5.647	0.030	1.004	41086	0.001138		114	7.3	M
D 4 13C5 PFPeA										
223	6.271	6.253	0.018		1743751	0.0514		103	14270	
5 Perfluoropentanoic acid										
219	6.271	6.253	0.018	1.000	43052	0.001146		115	8.8	
D 3 13C3 PFBS										
80	6.316	6.305	0.011		1953087	0.0465		99.9	5966	
6 Perfluorobutanesulfonic acid										
80	6.316	6.308	0.008	1.000	36412	0.000876	Target=1.50	99.1	62.8	
99	6.316	6.308	0.008	1.000	25479		1.43(0.75-2.26)	99.1	24.3	
D 7 M2-4:2 FTS										
81	6.711	6.688	0.023		628650	NC			1331	
8 4:2 FTS										
307	6.711	6.688	0.023	1.000	32844	NC	Target=2.45		467	
81	6.711	6.688	0.023	1.000	14398		2.28(1.22-3.67)		29.7	
D 9 13C2 PFHxA										
270	6.757	6.741	0.016		1884165	0.0521		104	18464	
10 Perfluorohexanoic acid										Ma
269	6.757	6.744	0.013	1.000	38140	0.001090	Target=17.92	109	21.3	a
119	6.757	6.744	0.013	1.000	2103		18.14(8.96-26.88)	109	14.0	M
11 Perfluoropentanesulfonic acid										
80	6.780	6.755	0.025	0.931	30569	NC	Target=1.47		41.4	
99	6.780	6.755	0.025	0.931	20502		1.49(0.74-2.21)		36.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.899	6.888	0.011		131481	NC			785	
13 HPFO-DA										
285	6.899	6.891	0.008	1.000	7137	NC			7.0	
14 9ClFOS										M
351	7.528	7.212	0.316	0.892	1923	NC			1.5	M
D 15 18O2 PFHxS										
84	7.281	7.260	0.021		1250719	0.0483		102	9443	
16 Perfluorohexanesulfonic acid										M
80	7.281	7.260	0.021	1.000	31802	0.001060	Target=5.60	116	60.0	M
99	7.281	7.260	0.021	1.000	5824		5.46(2.80-8.40)	116	17.5	M
D 17 13C4 PFHpA										
322	7.300	7.270	0.030		1862679	0.0509		102	14578	
18 Perfluoroheptanoic acid										M
319	7.300	7.272	0.028	1.000	45104	0.001184	Target=8.55	118	16.7	
169	7.300	7.272	0.028	1.000	5028		8.97(4.27-12.82)	118	77.3	M
19 DONA										
251	7.355	7.328	0.027	0.871	149318	NC	Target=2.62		671	
85	7.355	7.328	0.027	0.871	58299		2.56(1.31-3.93)		202	
D 22 M2-6:2 FTS										
81	7.853	7.813	0.040		730402	0.0563		119	1690	
23 6:2 FTS										
407	7.853	7.813	0.040	1.000	38334	0.001004	Target=2.55	106	378	
81	7.853	7.813	0.040	1.000	15430		2.48(1.27-3.82)	106	46.2	
21 Perfluoroheptanesulfonic acid										
80	7.853	7.821	0.032	0.930	24175	0.001128	Target=6.95	118	86.7	
99	7.853	7.821	0.032	0.930	2692		8.98(3.48-10.43)	118	14.2	
D 25 13C4 PFOA										
372	7.869	7.842	0.027		2212556	0.0519		104	17876	
24 Perfluorooctanoic acid										M
369	7.886	7.846	0.040	1.002	48205	0.001122	Target=1.41	112	9.5	
169	7.869	7.846	0.023	1.000	35130		1.37(0.71-2.12)	112	157	M
27 Perfluorooctanesulfonic acid										M
80	8.444	8.413	0.031	1.000	18498	0.001017	Target=3.36	110	75.3	M
99	8.444	8.413	0.031	1.000	6586		2.81(1.68-5.04)	110	20.0	M
D 26 13C4 PFOS										
80	8.444	8.413	0.031		849072	0.0461		96.4	3060	
D 28 13C5 PFNA										
423	8.478	8.443	0.035		1868604	0.0521		104	14801	
29 Perfluorononanoic acid										
419	8.478	8.448	0.030	1.000	35209	0.001065	Target=6.88	107	16.0	
169	8.478	8.448	0.030	1.000	5256		6.70(3.44-10.32)	107	53.9	
D 30 13C8 FOSA										
78	8.985	8.968	0.017		1169531	0.0533		107	8061	
31 Perfluorooctanesulfonamide										
78	8.985	8.969	0.016	1.000	21237	0.000906		90.6	295	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
32 Perfluorononanesulfonic acid										
80	9.031	8.994	0.037	1.070	14349	NC	Target=6.23		95.9	
99	9.031	8.994	0.037	1.070	1978		7.25(3.11-9.34)		12.0	
D 33 13C2 PFDA										
470	9.077	9.035	0.042		1856034	0.0525		105	11538	
35 Perfluorodecanoic acid										
469	9.077	9.037	0.040	1.000	29107	0.000976	Target=14.44	97.6	20.6	
169	9.077	9.037	0.040	1.000	2437		11.94(7.22-21.66)	97.6	30.9	
D 34 M2-8:2 FTS										
81	9.077	9.037	0.040		828655	0.0607		127	3244	
36 8:2 FTS										
507	9.077	9.037	0.040	1.000	35279	0.000919	Target=2.16	95.9	453	
81	9.077	9.037	0.040	1.000	15900		2.22(1.08-3.24)	95.9	64.9	
D 37 d3-NMeFOSAA										
419	9.369	9.317	0.052		1310819	0.0531		106	6413	
38 NMeFOSAA										M
419	9.369	9.327	0.042	1.000	21954	0.001007	Target=13.31	101	74.2	
483	9.382	9.327	0.055	1.001	1302		16.86(6.65-19.96)	101	13.5	M
39 Perfluorodecanesulfonic acid										
80	9.592	9.546	0.046	1.136	13770	0.001038	Target=2.51	108	117	
99	9.592	9.546	0.046	1.136	6117		2.25(1.26-3.77)	108	86.9	
D 42 13C2 PFUnA										
520	9.641	9.595	0.046		1888271	0.0519		104	20752	
41 Perfluoroundecanoic acid										M
519	9.641	9.597	0.044	1.000	35326	0.001061	Target=19.91	106	26.5	
169	9.641	9.597	0.044	1.000	1733		20.38(9.95-29.86)	106	29.6	M
D 40 d5-NEtFOSAA										
419	9.657	9.603	0.054		1564194	0.0566		113	6050	
43 NEtFOSA										M
419	9.657	9.613	0.044	1.000	23066	0.000934	Target=13.66	93.4	220	
483	9.673	9.613	0.060	1.002	2012		11.46(6.83-20.48)	93.4	20.3	M
44 11ClFOS										
451	9.872	9.828	0.044	1.169	80448	NC			127	
46 Perfluorododecanoic acid										
569	10.188	10.127	0.061	1.000	34052	0.001121	Target=12.99	112	12.8	
169	10.166	10.127	0.039	0.998	2621		12.99(6.50-19.49)	112	52.9	
D 45 13C2 PFDoA										
570	10.188	10.127	0.061		1851504	0.0505		101	16219	
47 10:2 FTS										M
607	10.210	10.152	0.058	1.125	40762	NC	Target=27.54		505	
81	10.188	10.152	0.036	1.122	1382		29.49(13.77-41.31)		24.3	M
48 PFDoS										
80	10.613	10.555	0.058	1.257	3127	NC	Target=0.45		18.2	
99	10.613	10.555	0.058	1.257	8789		0.36(0.22-0.67)		55.7	
49 Perfluorotridecanoic acid										
619	10.683	10.622	0.061	1.049	31321	0.000969	Target=16.38	96.9	10.1	
169	10.683	10.622	0.061	1.049	2002		15.64(8.19-24.57)	96.9	42.2	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 51 13C2 PFTeDA										
670	11.167	11.092	0.075		1069114	0.0442		88.4	8015	
50 Perfluorotetradecanoic acid										M
169	11.167	11.094	0.073	1.000	1503	0.001372	Target=1.23	137	28.1	M
219	11.167	11.094	0.073	1.000	1235		1.22(0.62-1.85)	137	30.1	M
D 52 13C2 PFHxDA										a
770	12.056	11.966	0.090		600608	0.0400		80.0	3875	a
54 Perfluorohexadecanoic acid										M
769	12.056	11.967	0.089	1.000	15900	0.001042	Target=23.79	104	13.3	
169	12.068	11.967	0.101	1.001	752		21.14(11.89-35.68)	104	9.4	M
53 Perfluorooctadecanoic acid										Ma
869	12.056	12.393	-0.337	1.000	5985	0.002270	Target=92.79	227	12.7	a
169	12.154	12.393	-0.239	1.008	51		117.35(46.39-139.18)	227	1.1	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

LCPFC-LL-L1_00025 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:23:12 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d

Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10

Lims ID: IC STD 1

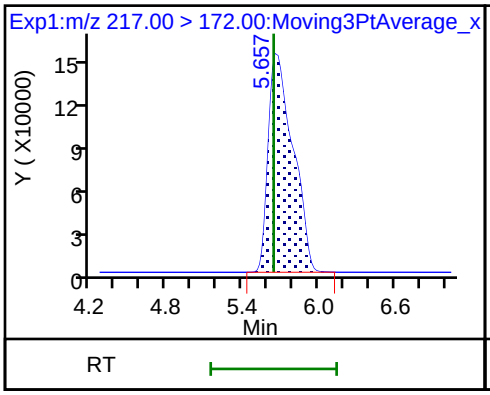
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2

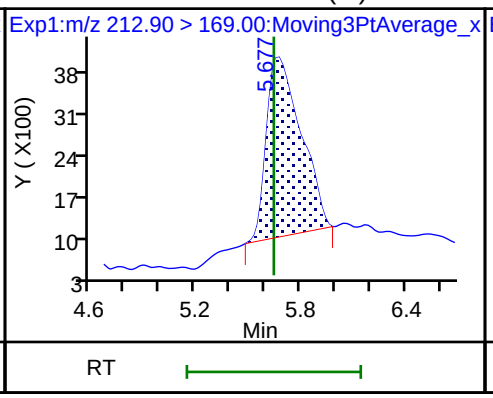
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

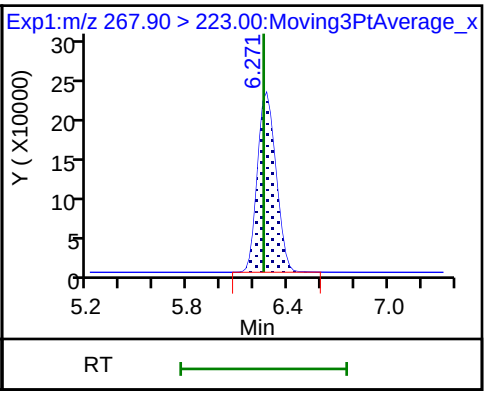
D 2 13C4 PFBA



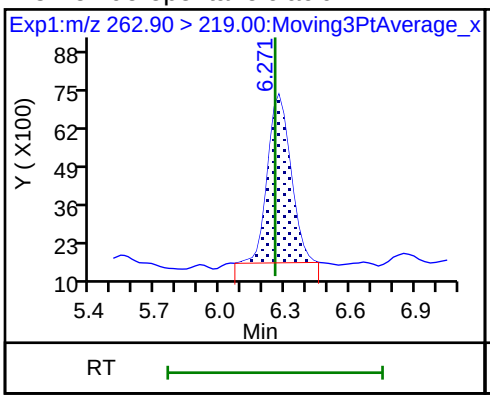
1 Perfluorobutanoic acid (M)



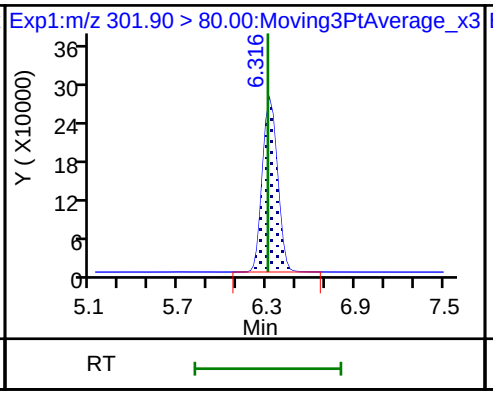
D 4 13C5 PFPeA



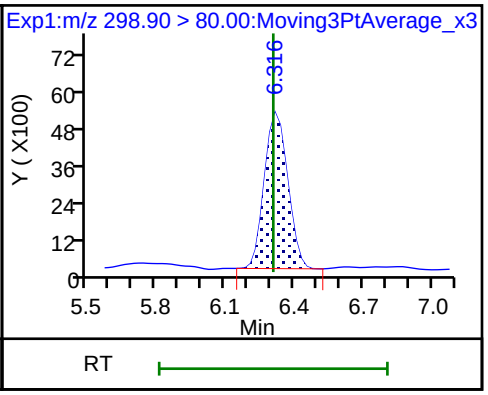
5 Perfluoropentanoic acid



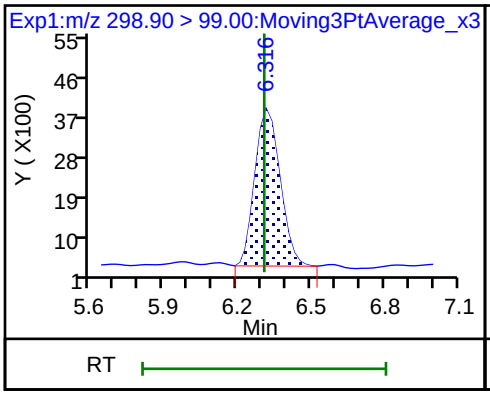
D 3 13C3 PFBS



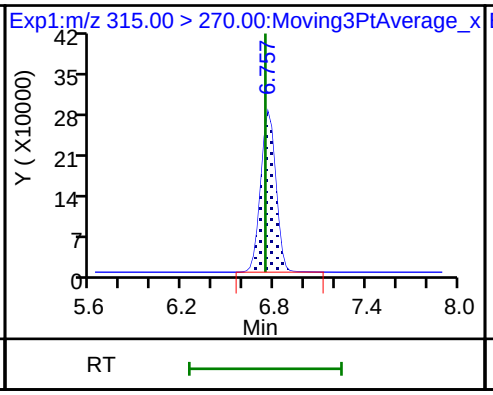
6 Perfluorobutanesulfonic acid



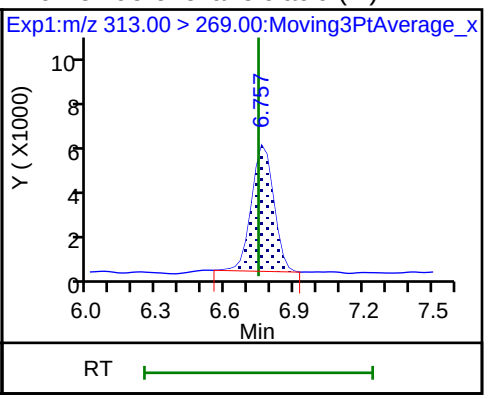
6 Perfluorobutanesulfonic acid



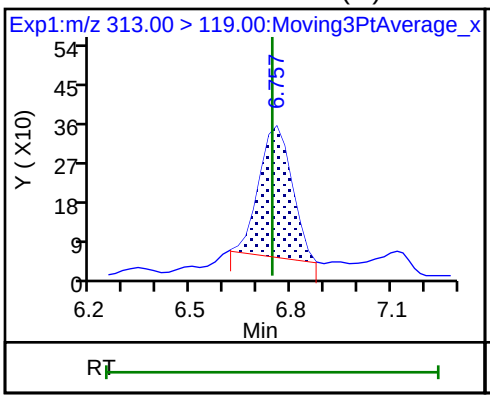
D 9 13C2 PFHxA



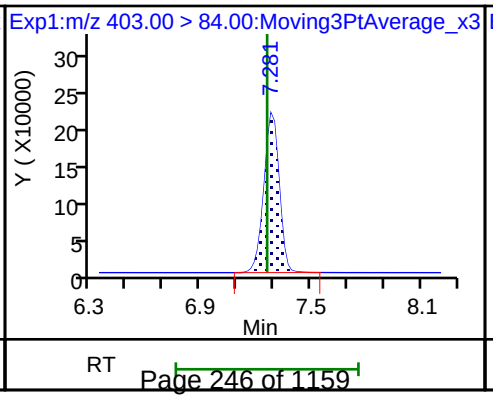
10 Perfluorohexanoic acid (M)



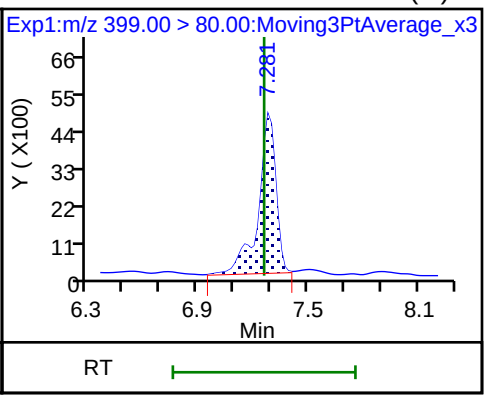
10 Perfluorohexanoic acid (M)



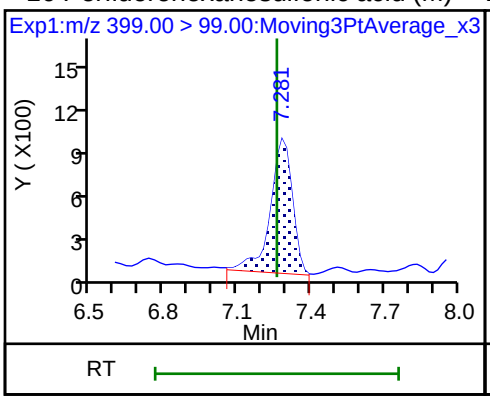
D 15 18O2 PFHxS



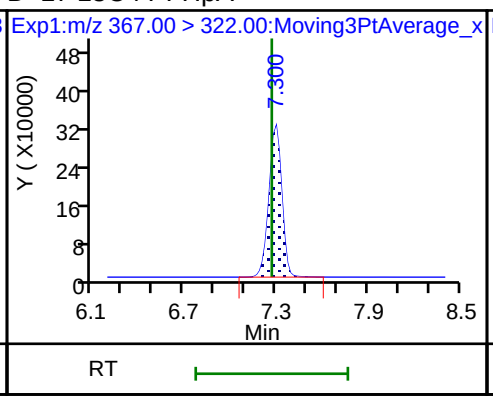
16 Perfluorohexanesulfonic acid (M)



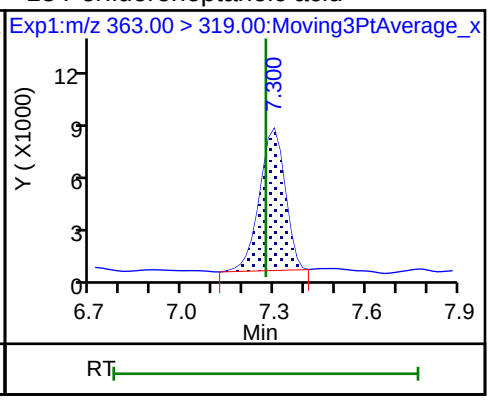
16 Perfluorohexanesulfonic acid (M)



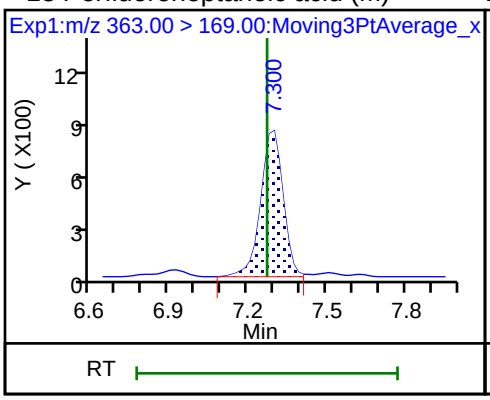
D 17 13C4 PFHpA



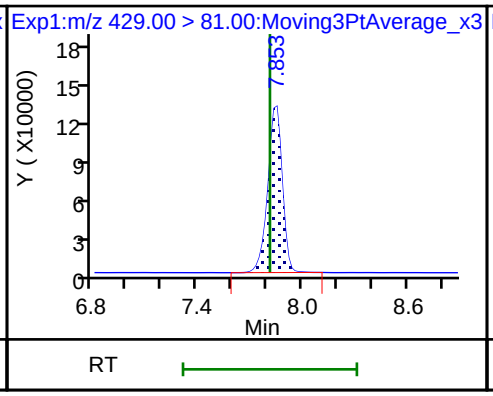
18 Perfluoroheptanoic acid



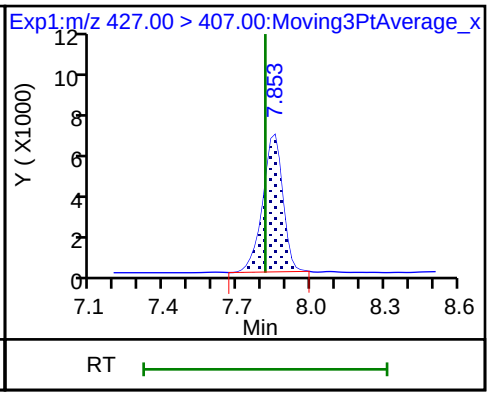
18 Perfluoroheptanoic acid (M)



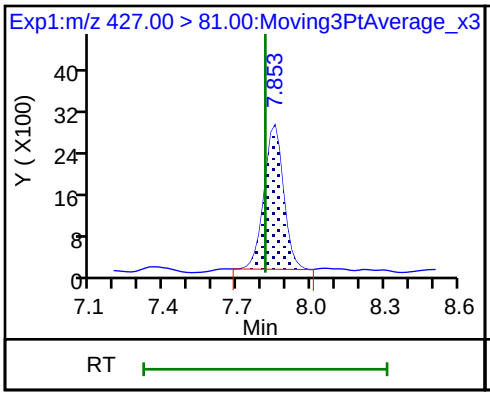
D 22 M2-6:2 FTS



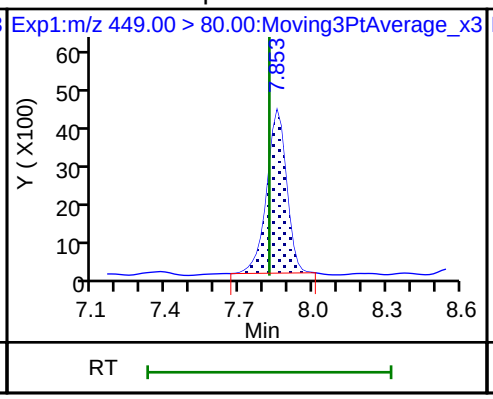
23 6:2 FTS



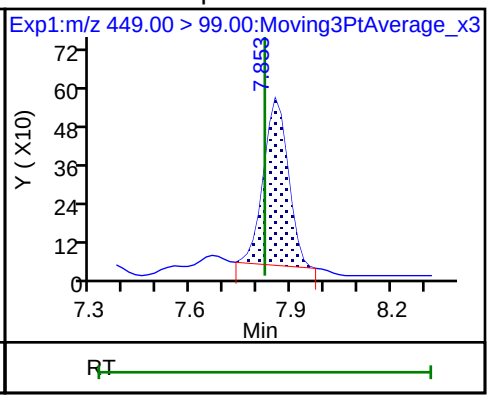
23 6:2 FTS



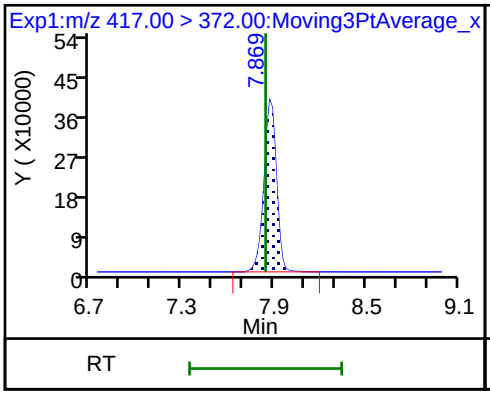
21 Perfluoroheptanesulfonic acid



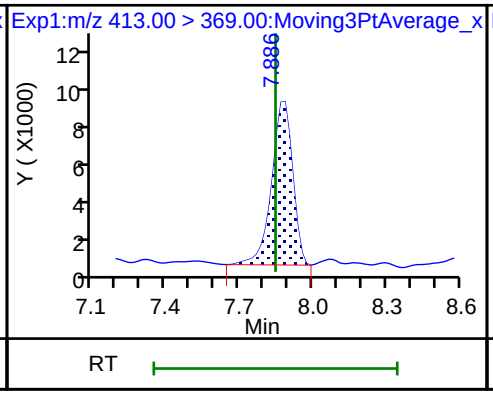
21 Perfluoroheptanesulfonic acid



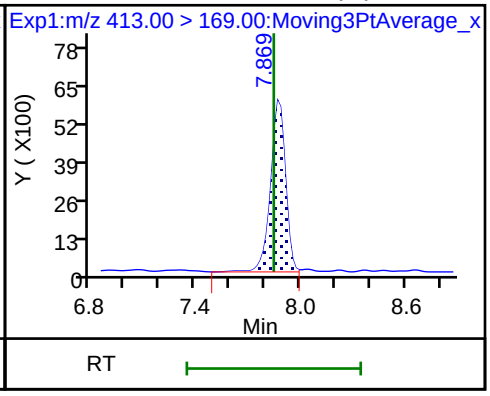
D 25 13C4 PFOA



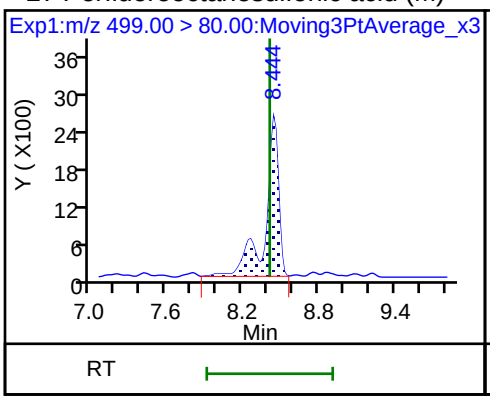
24 Perfluorooctanoic acid



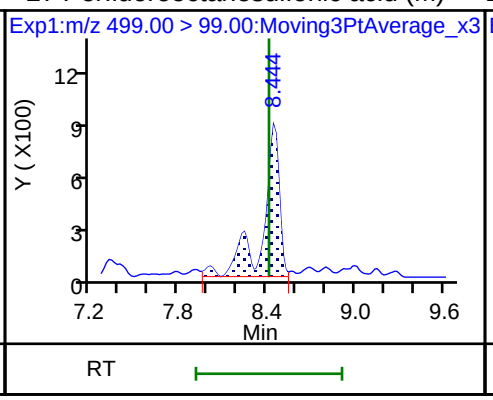
24 Perfluorooctanoic acid (M)



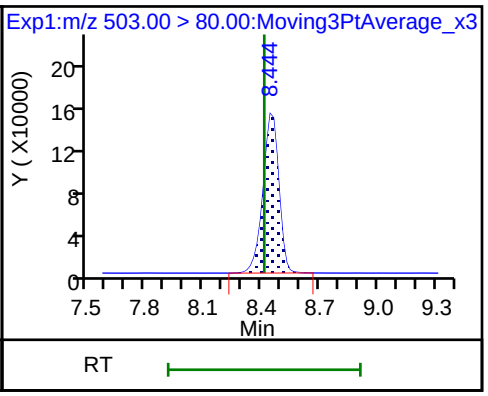
27 Perfluorooctanesulfonic acid (M)



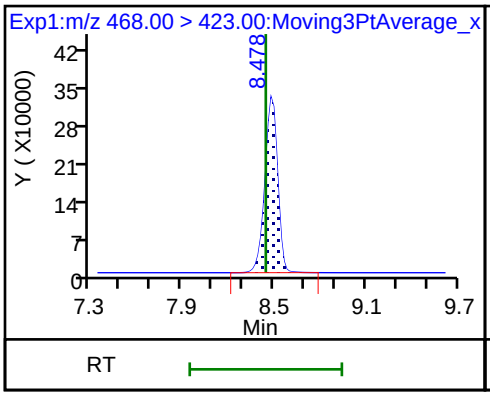
27 Perfluorooctanesulfonic acid (M)



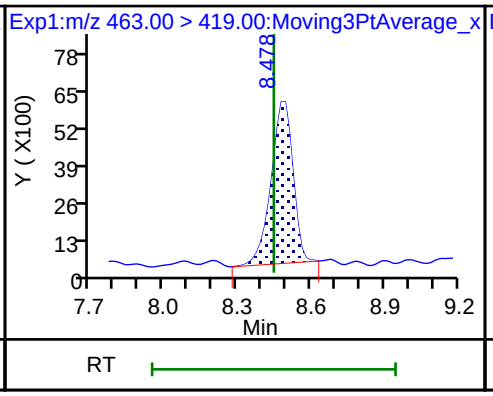
D 26 13C4 PFOS



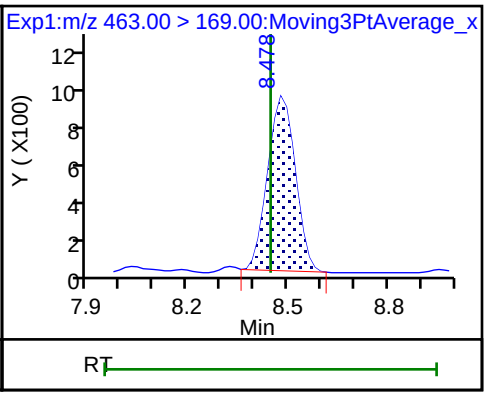
D 28 13C5 PFNA



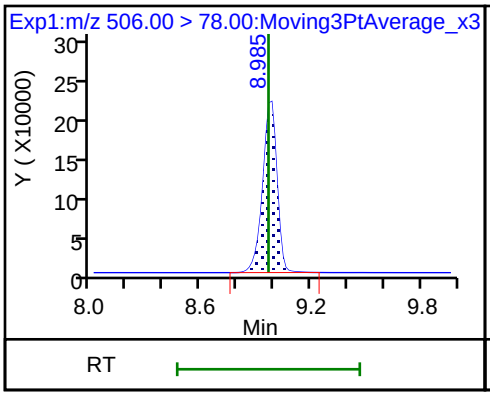
29 Perfluorononanoic acid



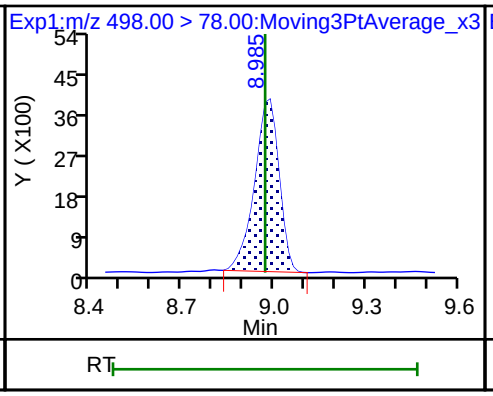
29 Perfluorononanoic acid



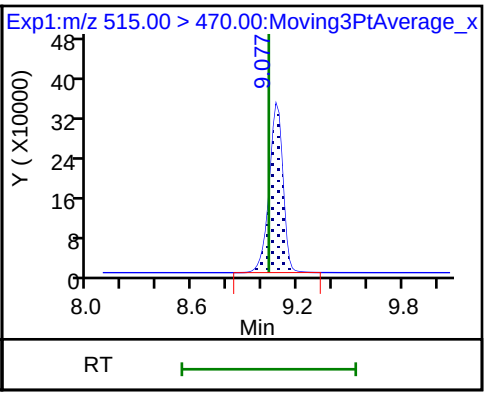
D 30 13C8 FOSA



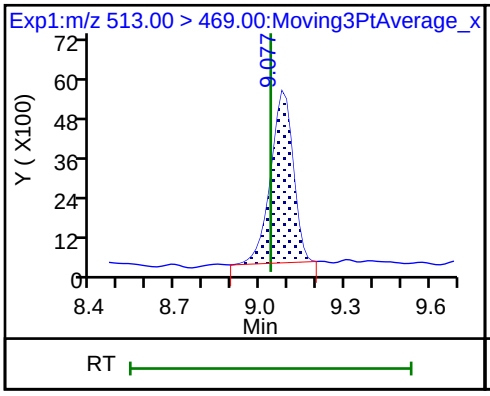
31 Perfluorooctanesulfonamide



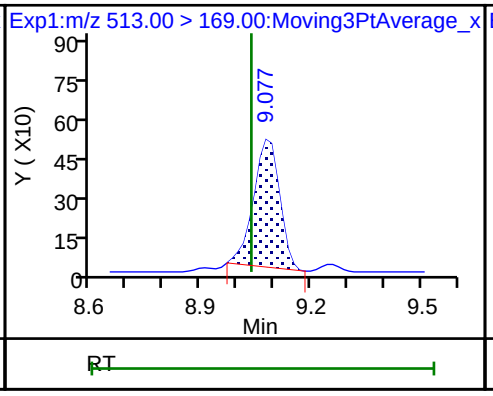
D 33 13C2 PFDA



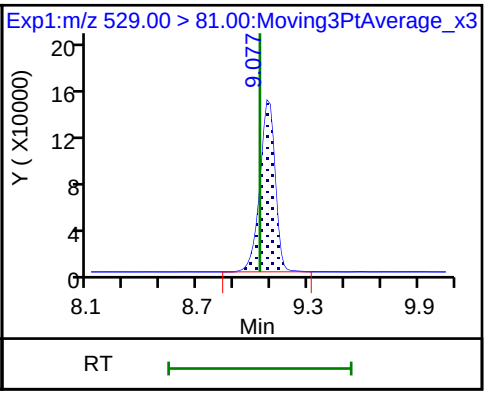
35 Perfluorodecanoic acid



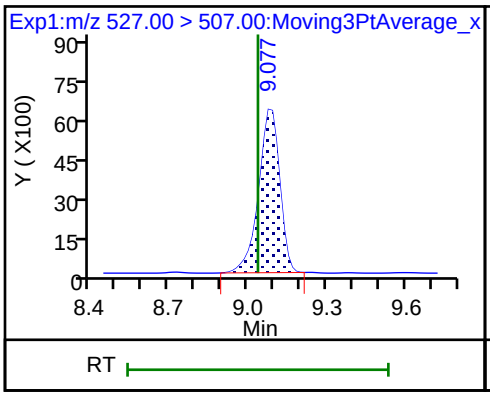
35 Perfluorodecanoic acid



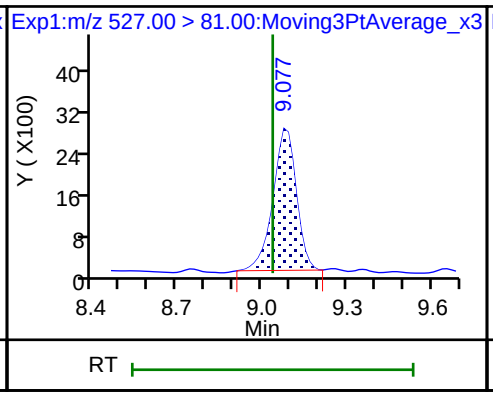
D 34 M2-8:2 FTS



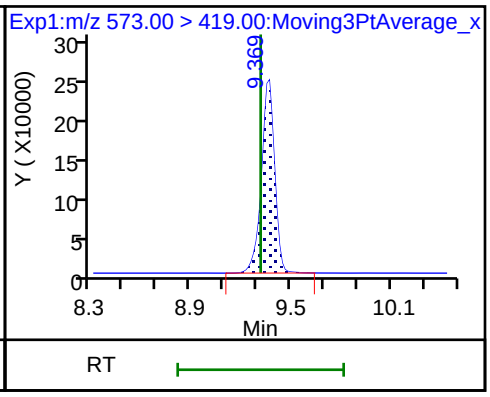
36 8:2 FTS



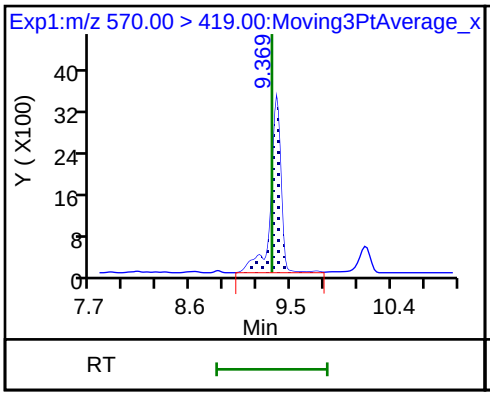
36 8:2 FTS



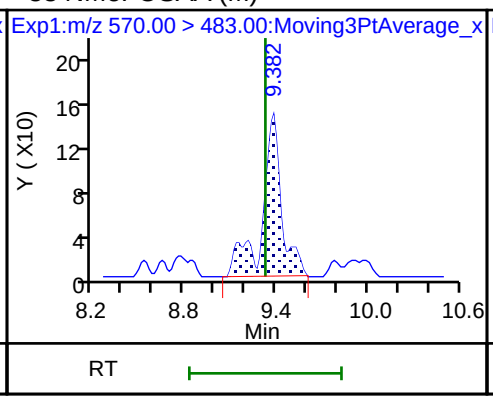
D 37 d3-NMeFOSAA



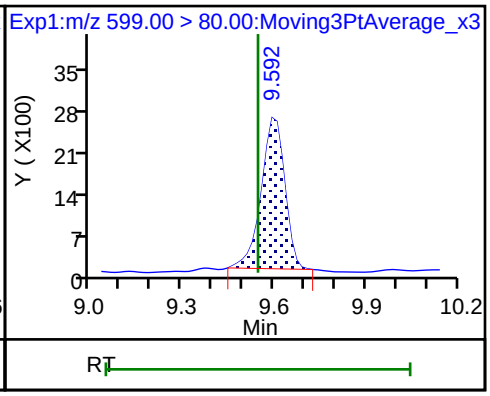
38 NMeFOSAA



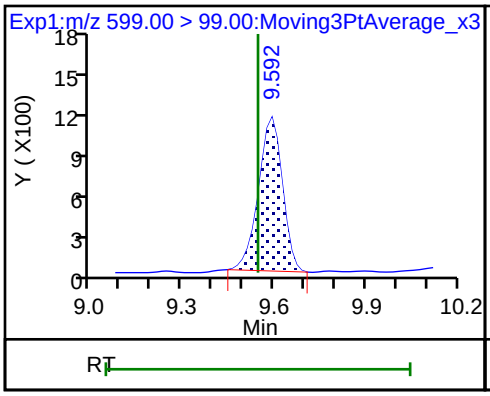
38 NMeFOSAA (M)



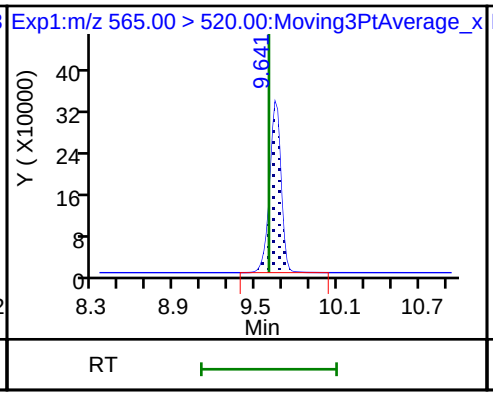
39 Perfluorodecanesulfonic acid



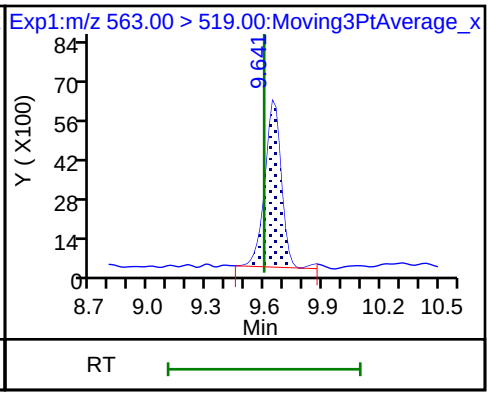
39 Perfluorodecanesulfonic acid



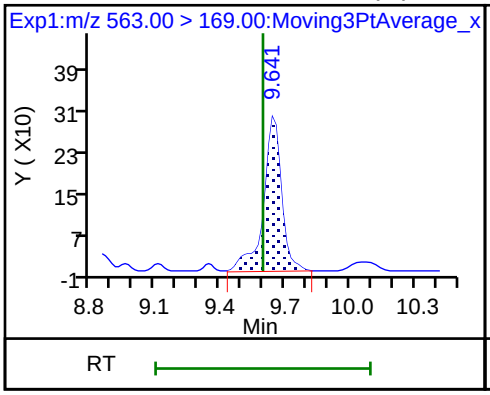
D 42 13C2 PFUnA



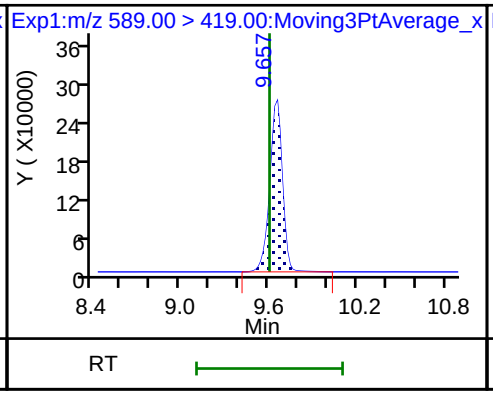
41 Perfluoroundecanoic acid



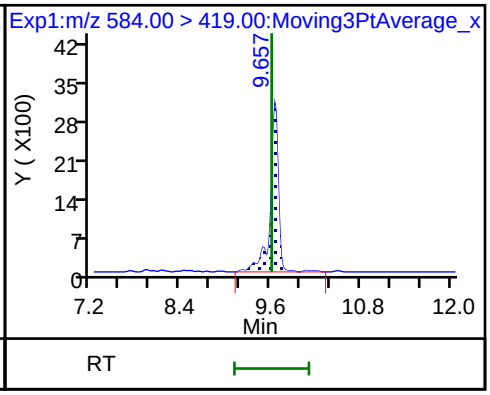
41 Perfluoroundecanoic acid (M)



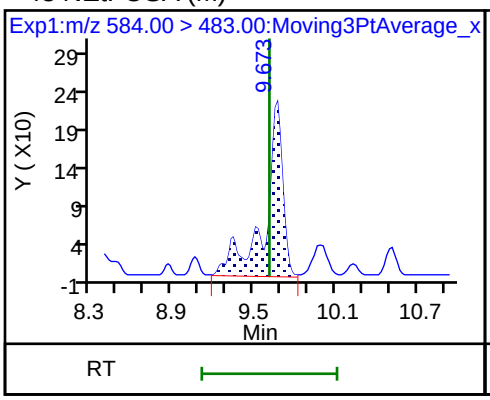
D 40 d5-NEtFOSAA



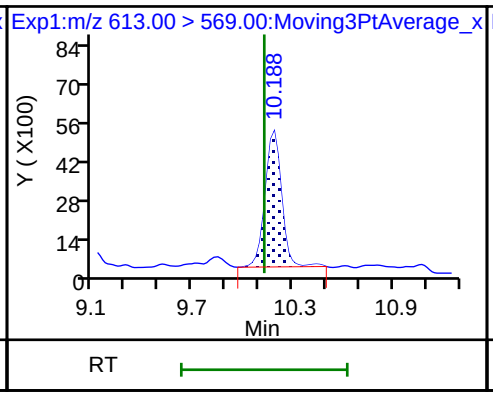
43 NEtFOSA



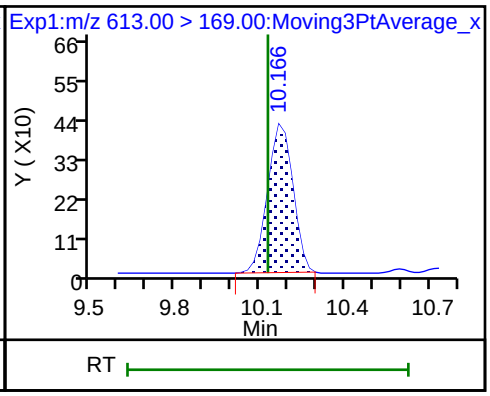
43 NEtFOSA (M)



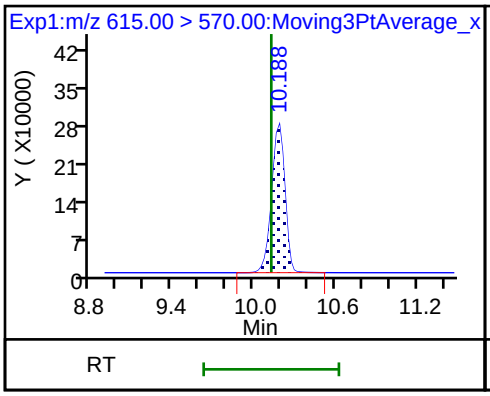
46 Perfluorododecanoic acid



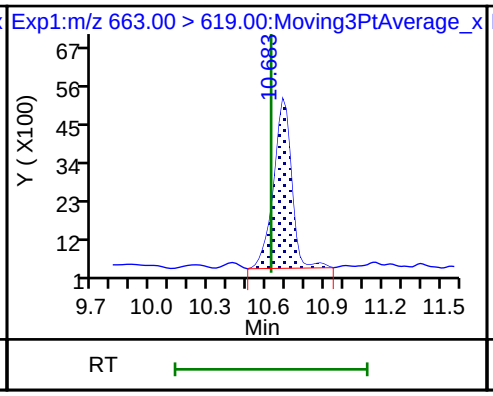
46 Perfluorododecanoic acid



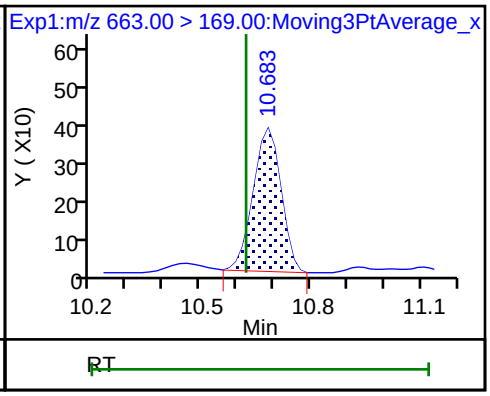
D 45 13C2 PFDoA



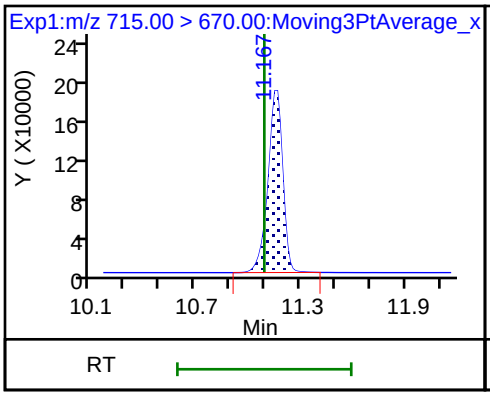
49 Perfluorotridecanoic acid



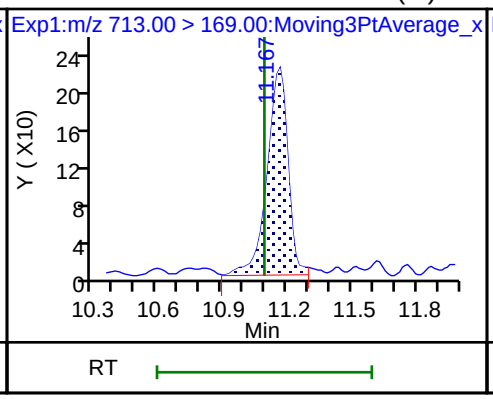
49 Perfluorotridecanoic acid



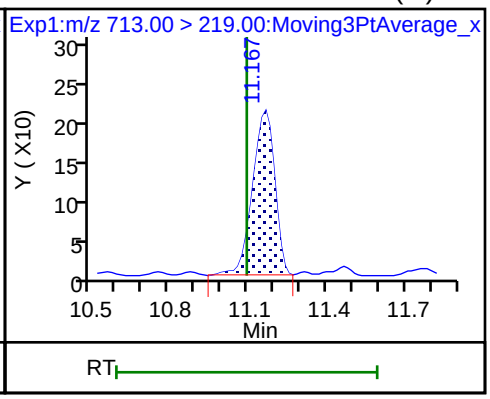
D 51 13C2 PFTeDA



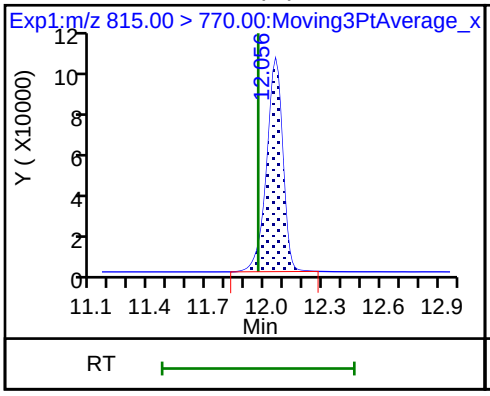
50 Perfluorotetradecanoic acid (M)



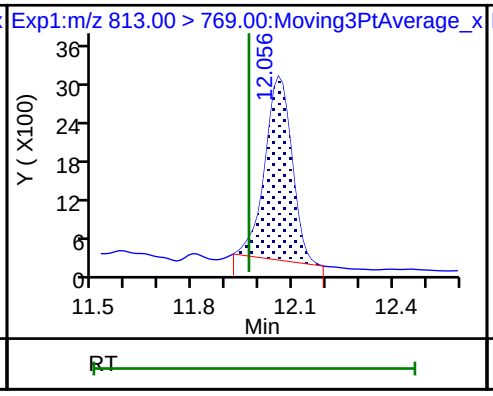
50 Perfluorotetradecanoic acid (M)



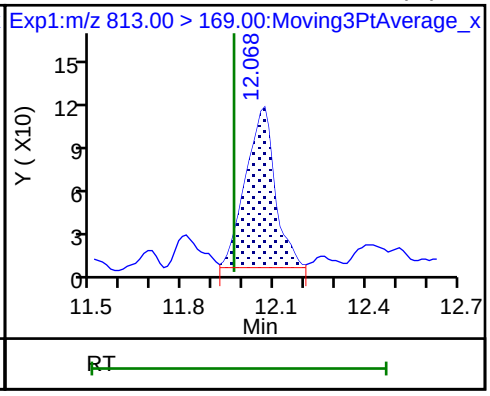
D 52 13C2 PFHxDA (M)



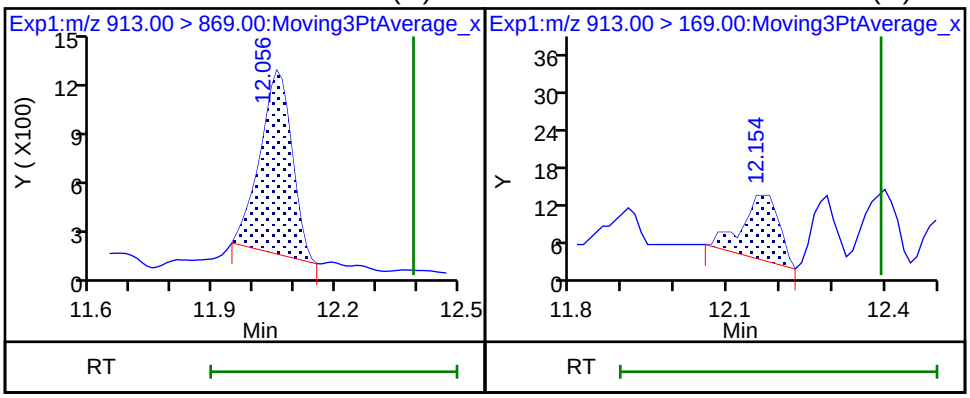
54 Perfluorohexadecanoic acid



54 Perfluorohexadecanoic acid (M)



53 Perfluorooctadecanoic acid (M) 53 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

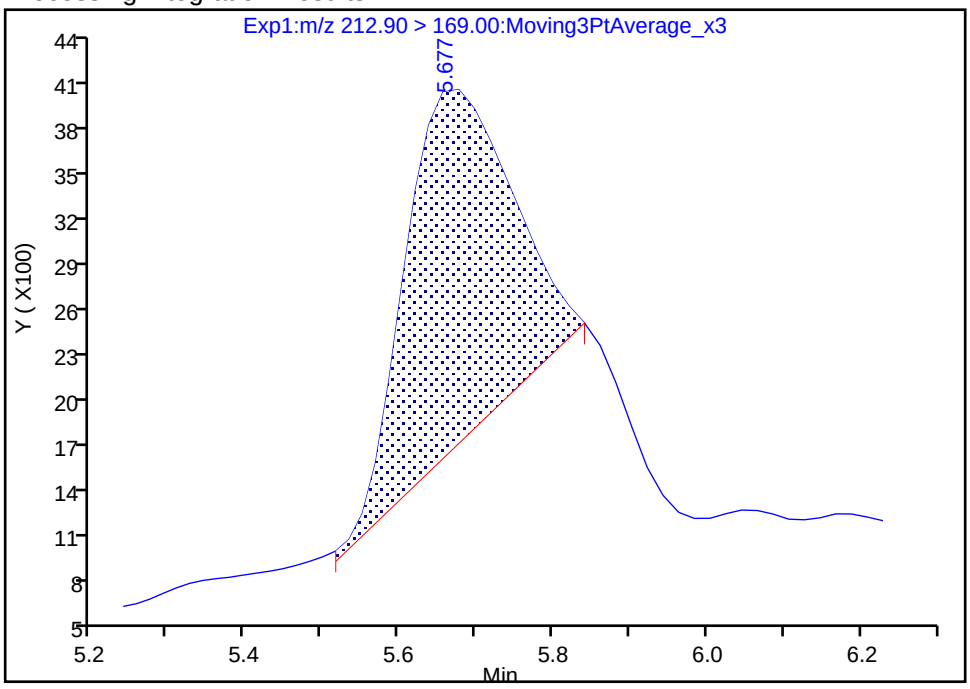
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

1 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

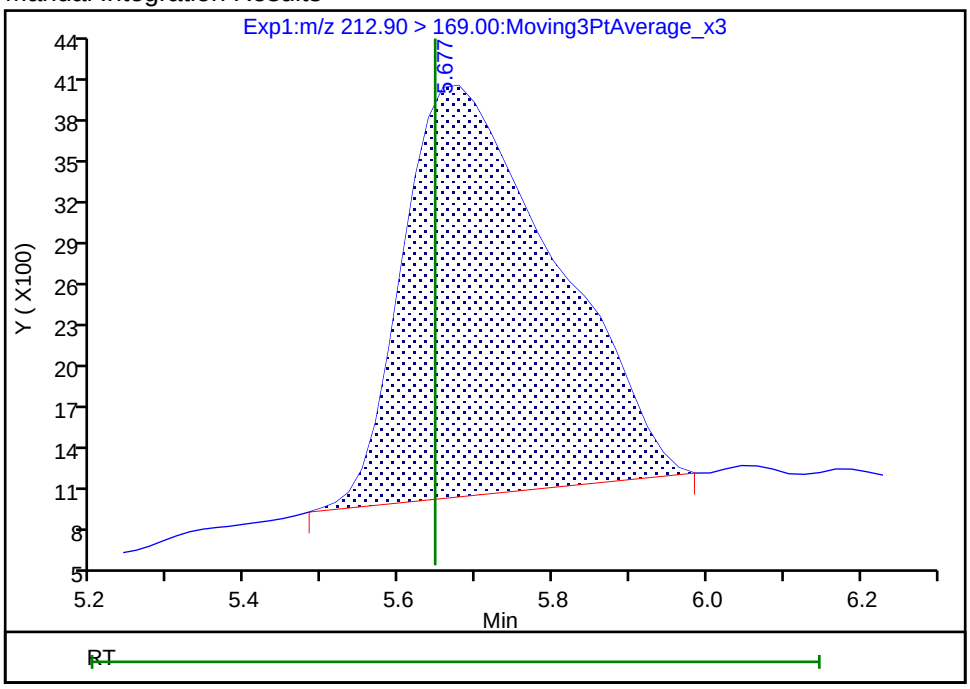
Processing Integration Results

RT: 5.68
Area: 22907
Amount: 0.000860
Amount Units: ng/ml



Manual Integration Results

RT: 5.68
Area: 41086
Amount: 0.001138
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 12:53:00
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

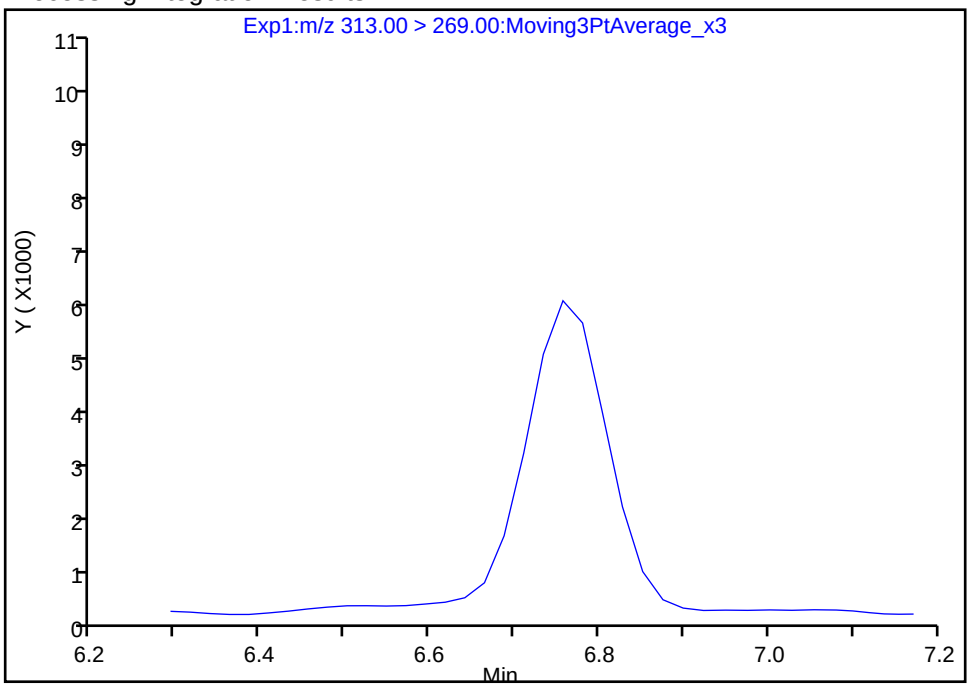
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

10 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

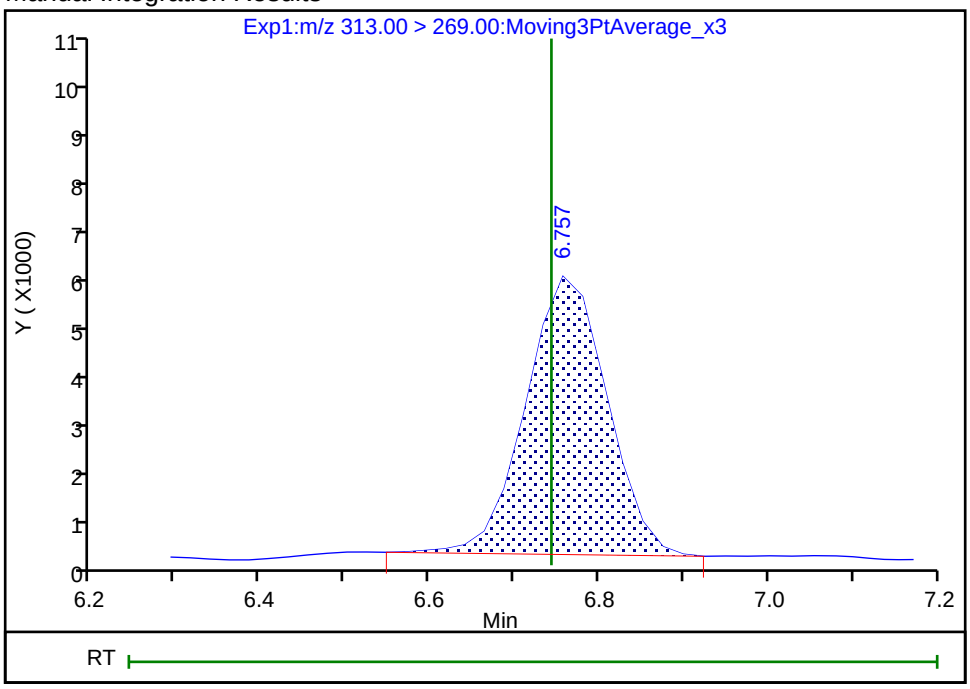
Not Detected
Expected RT: 6.74

Processing Integration Results



Manual Integration Results

RT: 6.76
Area: 38140
Amount: 0.001090
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:17:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

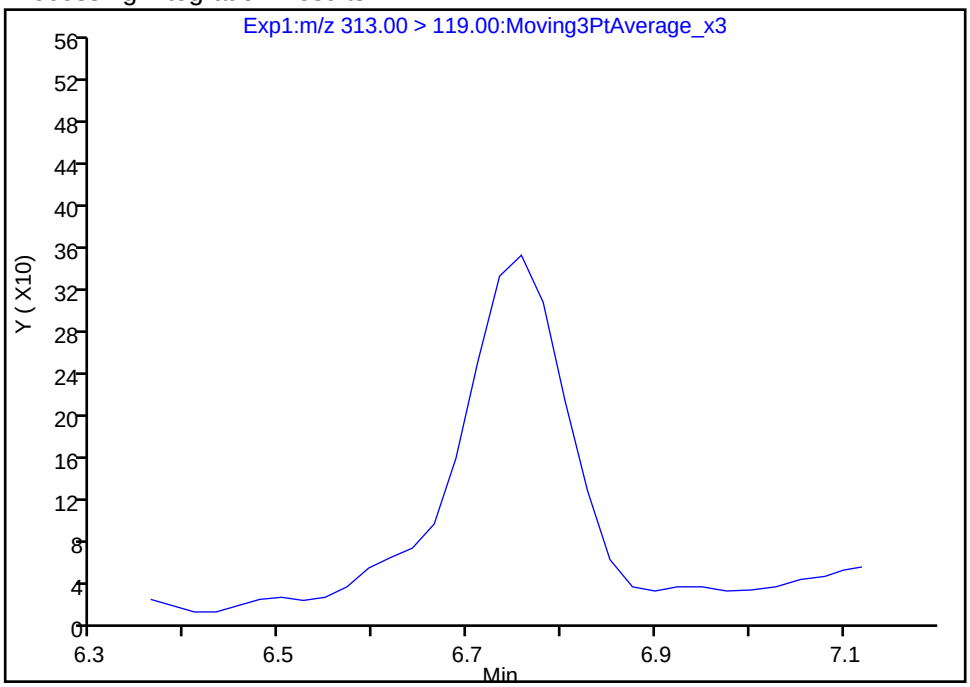
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

10 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

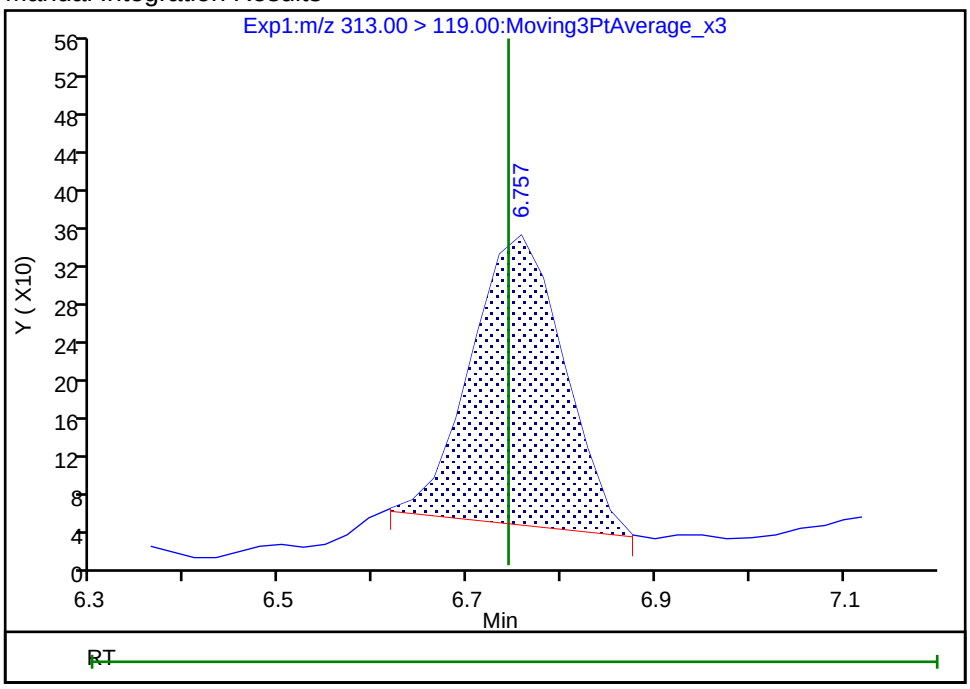
Not Detected
Expected RT: 6.74

Processing Integration Results



Manual Integration Results

RT: 6.76
Area: 2103
Amount: 0.001090
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:17:28
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

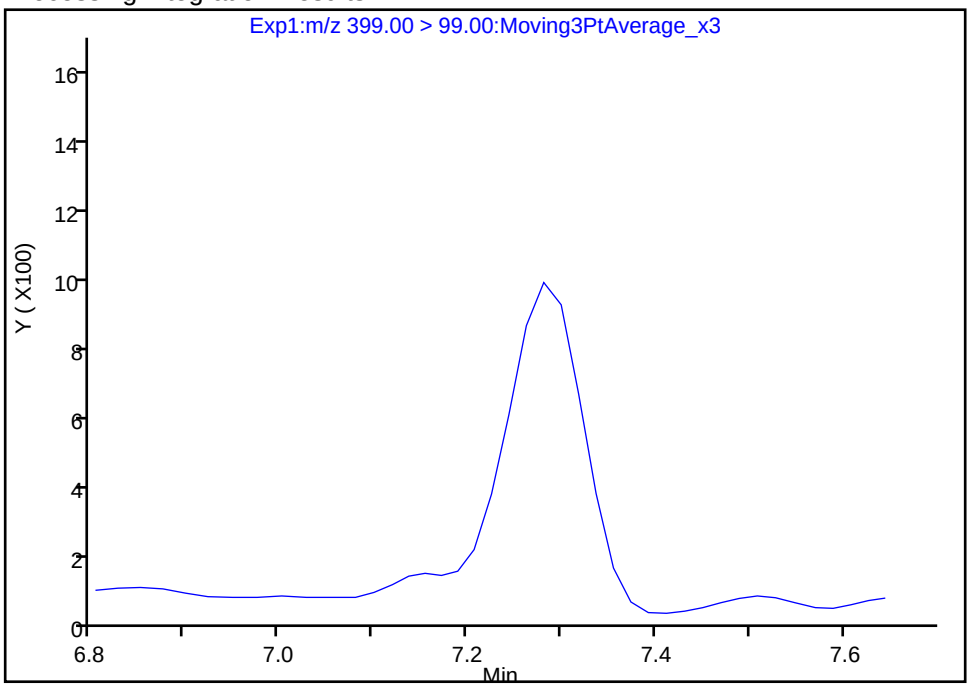
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

16 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

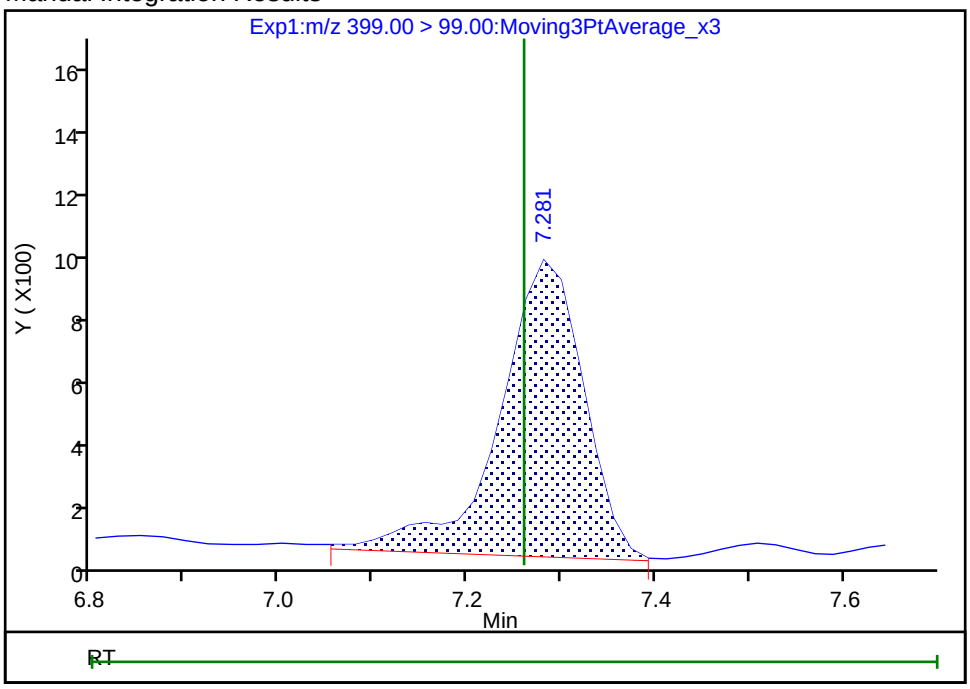
Not Detected
Expected RT: 7.26

Processing Integration Results



Manual Integration Results

RT: 7.28
Area: 5824
Amount: 0.001060
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:17:50
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

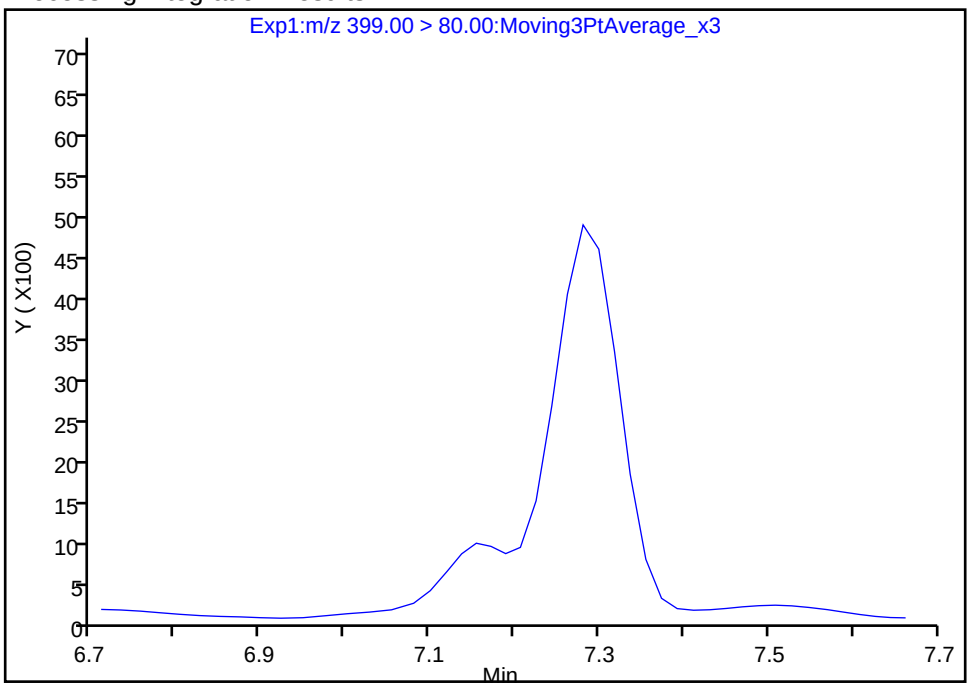
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

16 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

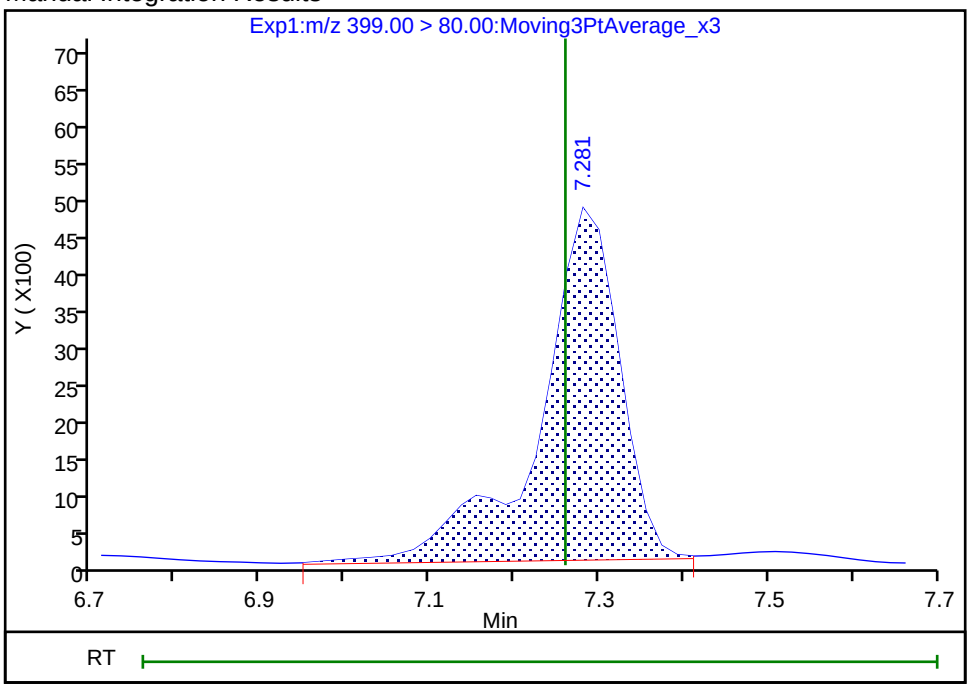
Processing Integration Results

Not Detected
Expected RT: 7.26



Manual Integration Results

RT: 7.28
Area: 31802
Amount: 0.001060
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:17:57
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

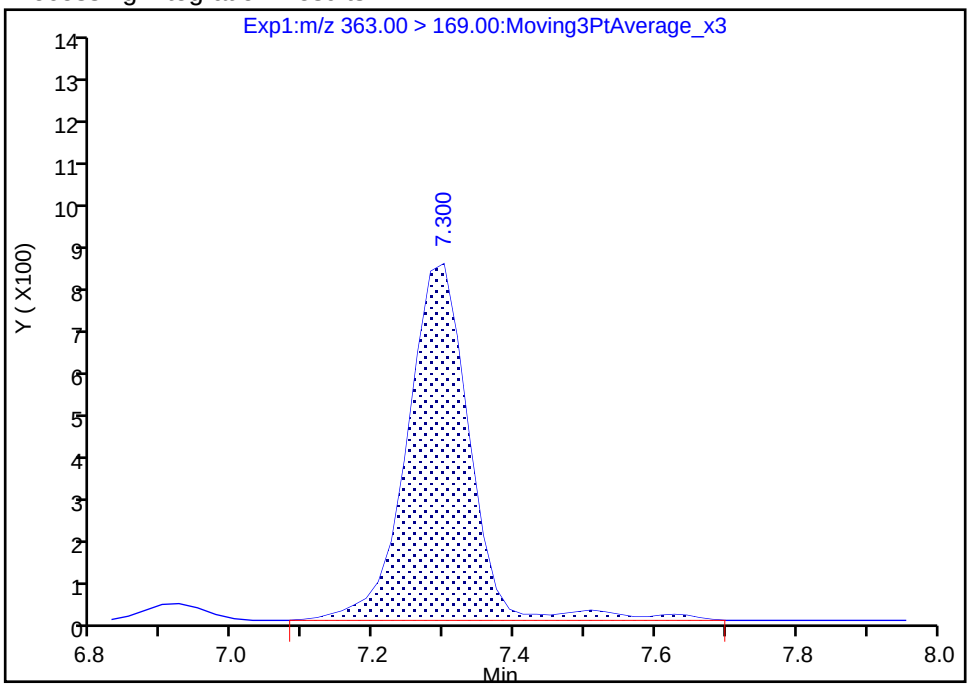
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d				
Injection Date:	12-Oct-2020 11:30:36	Instrument ID:	A10		
Lims ID:	IC STD 1				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	4	Worklist Smp#:	2
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

18 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

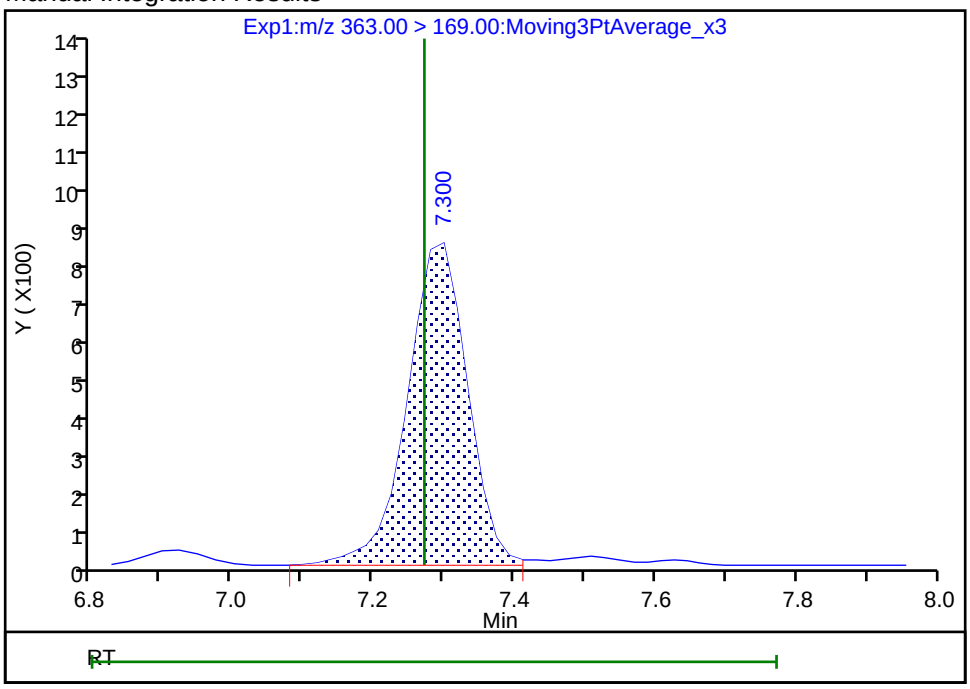
Processing Integration Results

RT: 7.30
Area: 5247
Amount: 0.001000
Amount Units: ng/ml



Manual Integration Results

RT: 7.30
Area: 5028
Amount: 0.001184
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:18:09

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

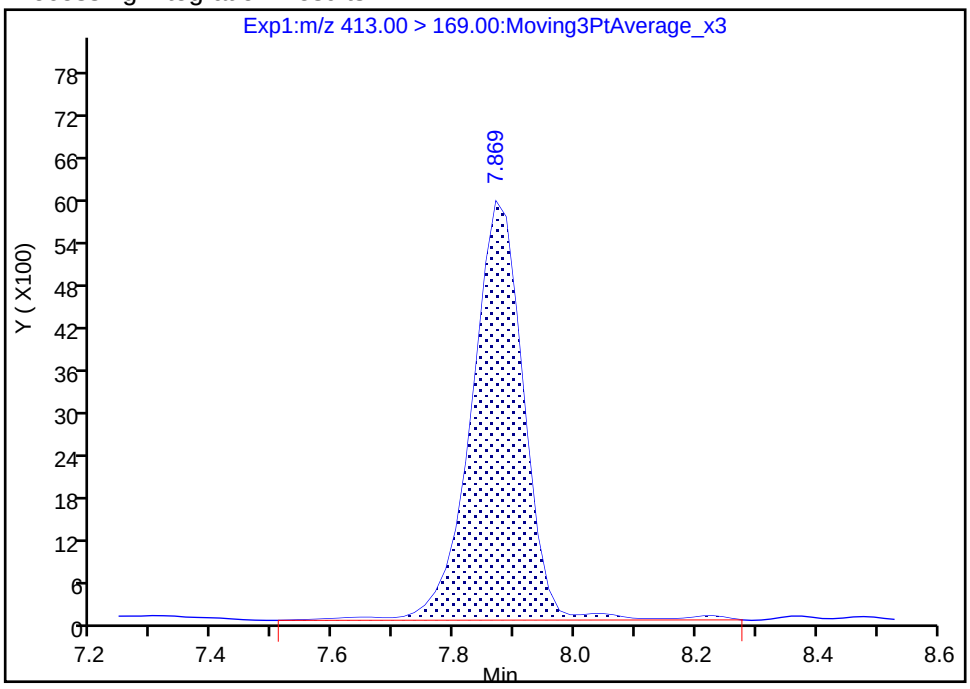
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

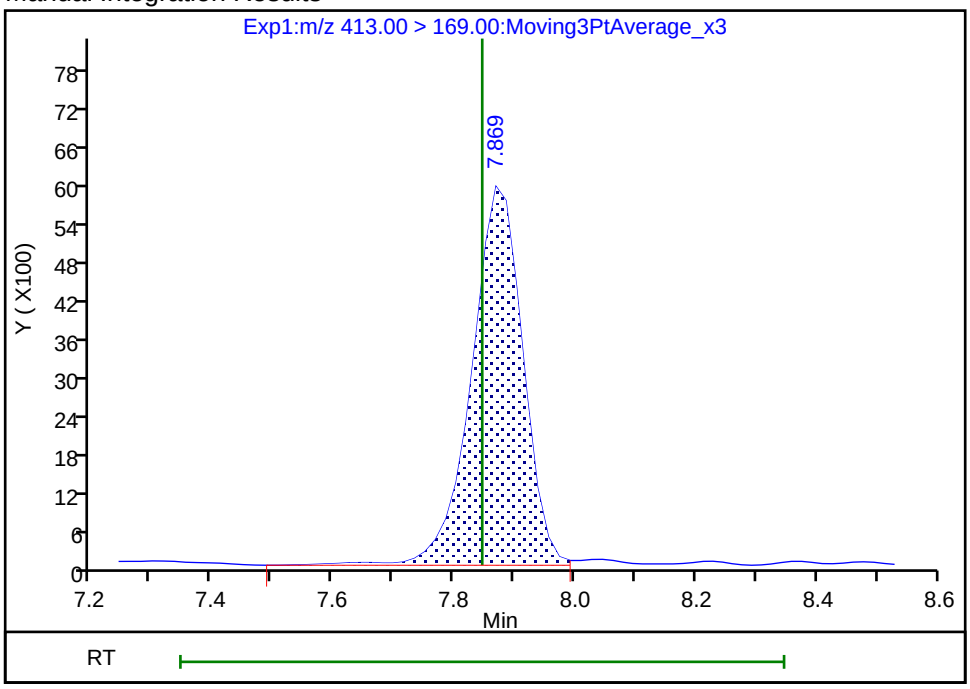
Processing Integration Results

RT: 7.87
Area: 35786
Amount: 0.001000
Amount Units: ng/ml



Manual Integration Results

RT: 7.87
Area: 35130
Amount: 0.001122
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:18:38
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

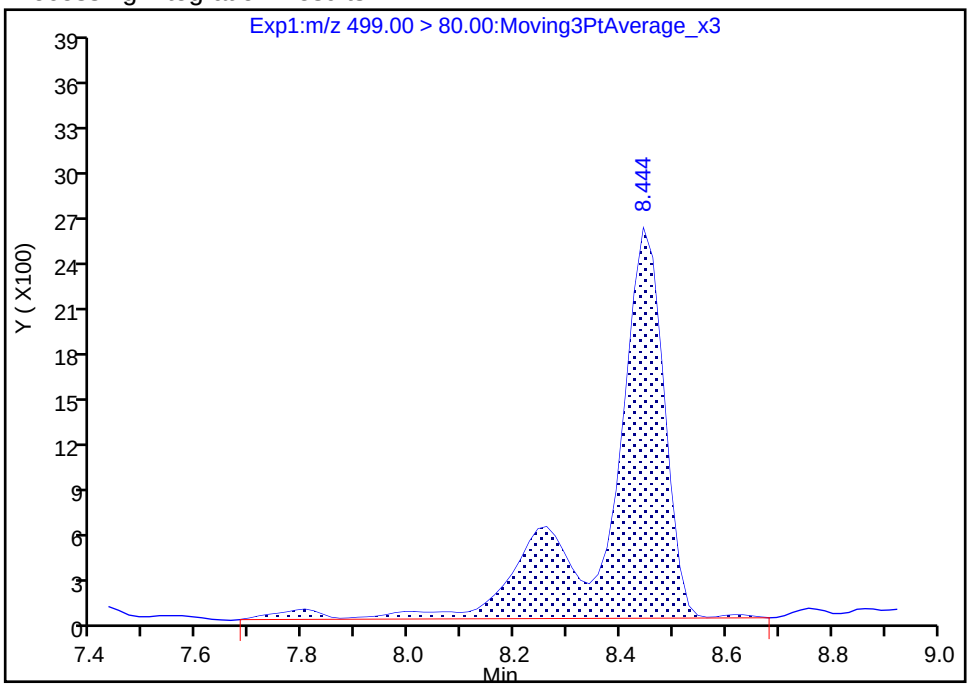
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

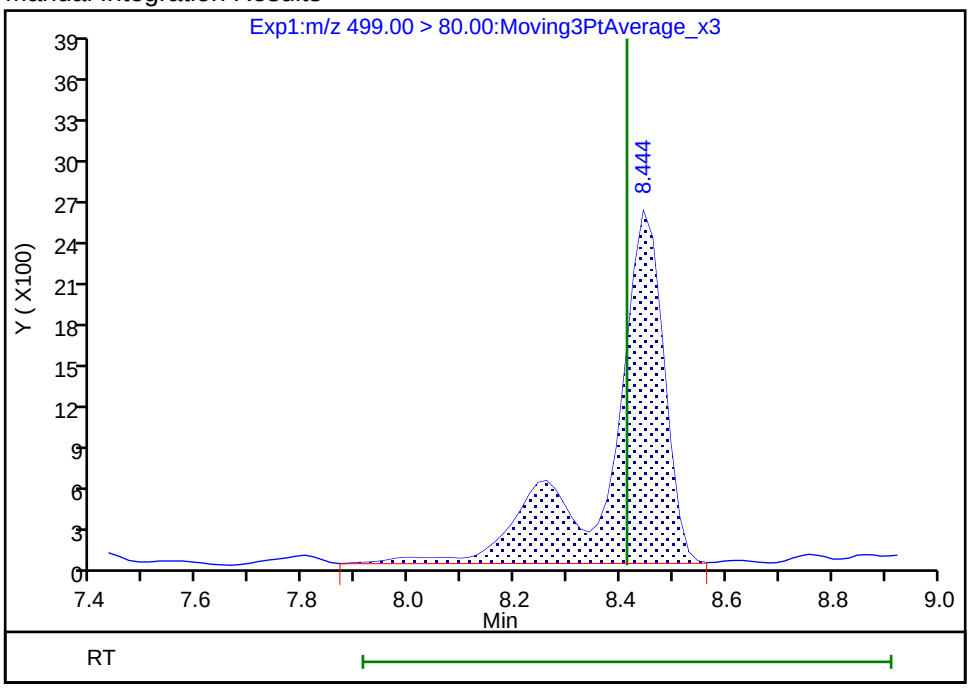
Processing Integration Results

RT: 8.44
Area: 19006
Amount: 0.000928
Amount Units: ng/ml



Manual Integration Results

RT: 8.44
Area: 18498
Amount: 0.001017
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:18:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

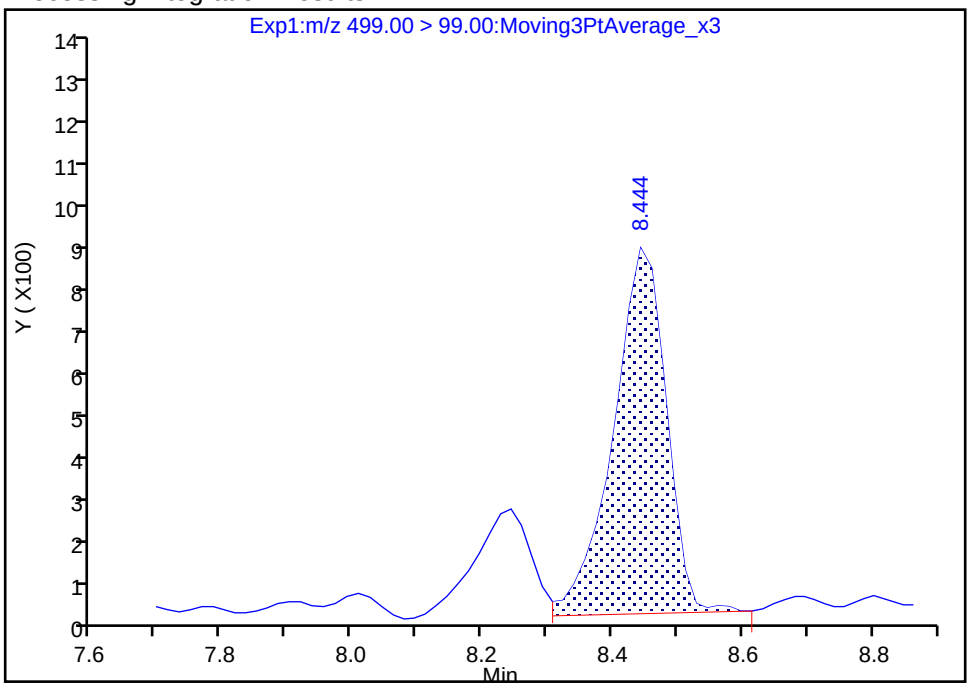
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

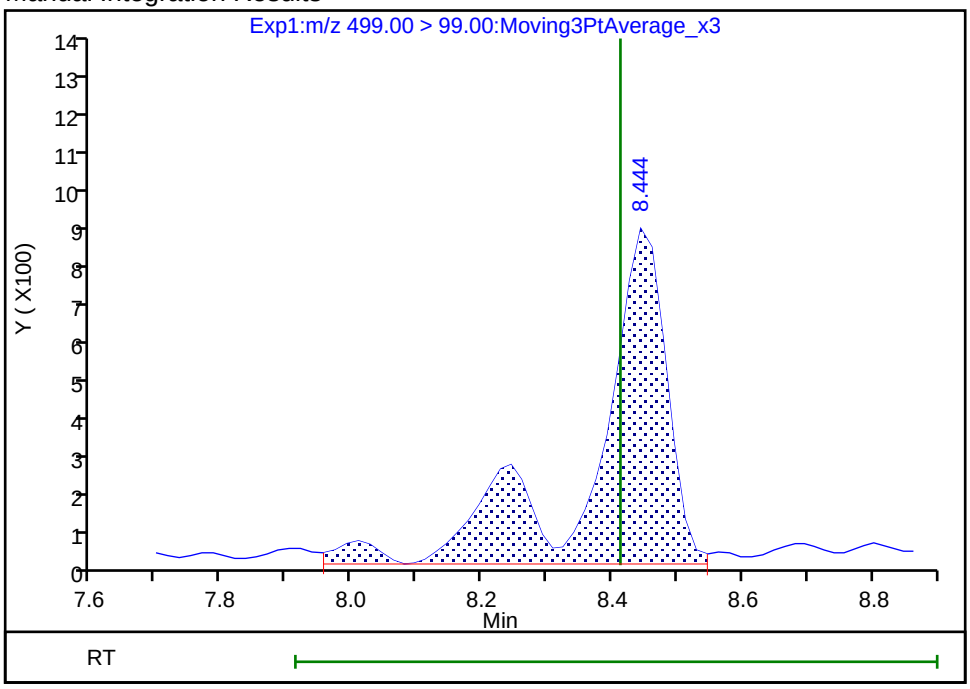
Processing Integration Results

RT: 8.44
Area: 4673
Amount: 0.000928
Amount Units: ng/ml



Manual Integration Results

RT: 8.44
Area: 6586
Amount: 0.001017
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 12:48:42
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

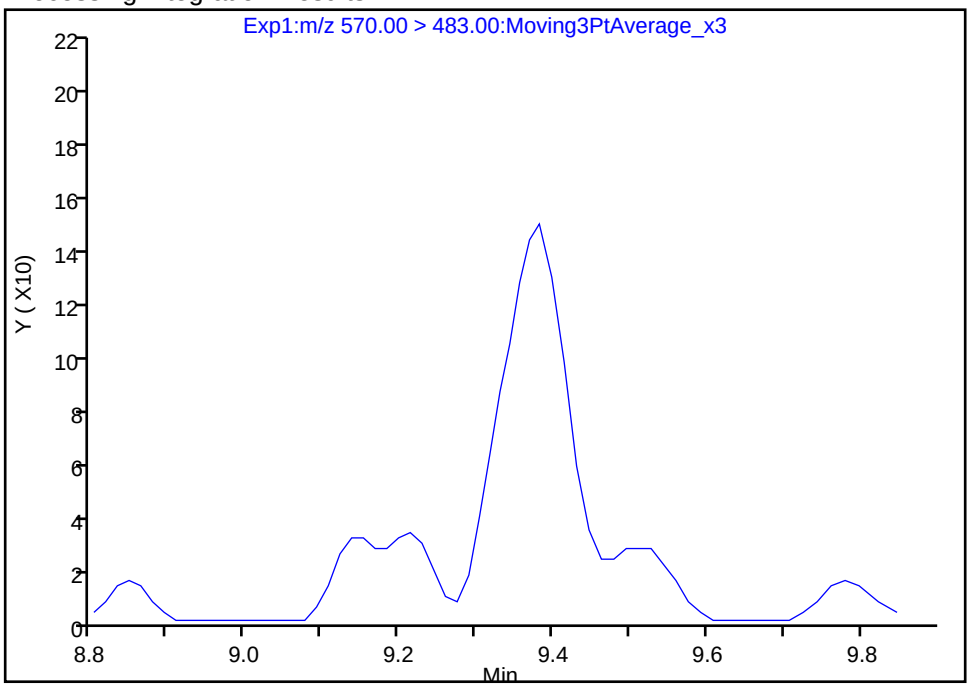
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d				
Injection Date:	12-Oct-2020 11:30:36	Instrument ID:	A10		
Lims ID:	IC STD 1				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	4	Worklist Smp#:	2
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

38 NMeFOSAA, CAS: 2355-31-9

Signal: 2

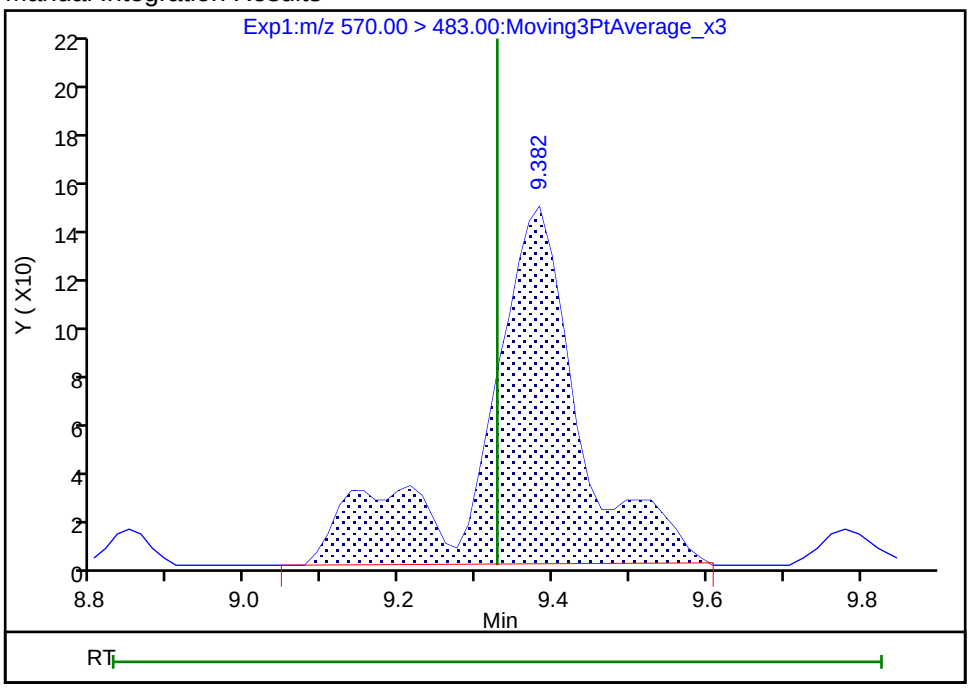
Not Detected
Expected RT: 9.33

Processing Integration Results



Manual Integration Results

RT: 9.38
Area: 1302
Amount: 0.001007
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:19:16
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d				
Injection Date:	12-Oct-2020 11:30:36	Instrument ID:	A10		
Lims ID:	IC STD 1				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	4	Worklist Smp#:	2
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

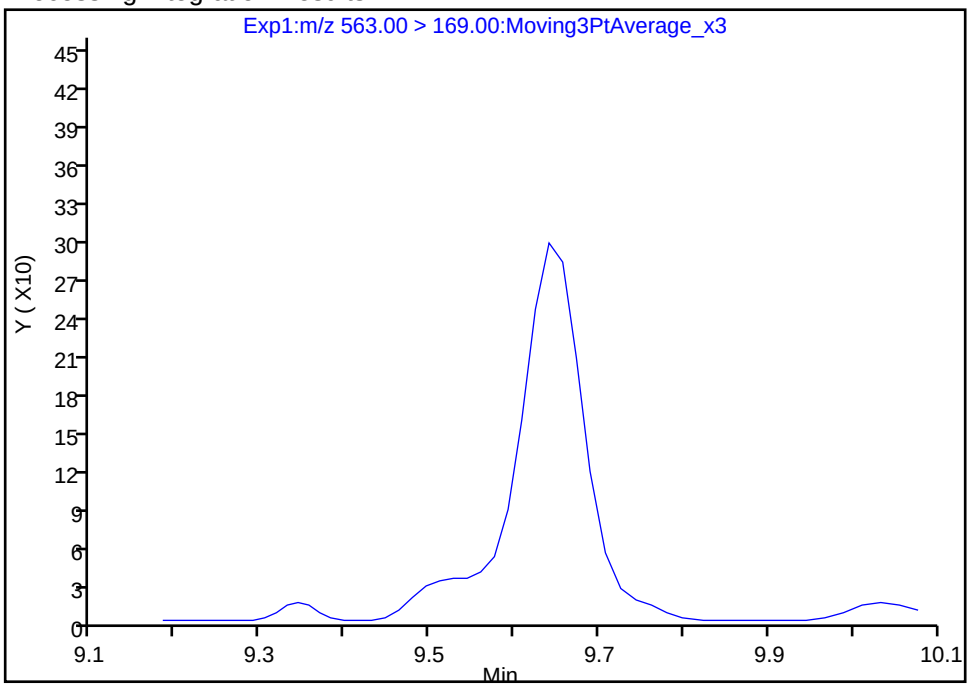
41 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

Processing Integration Results

Not Detected

Expected RT: 9.60



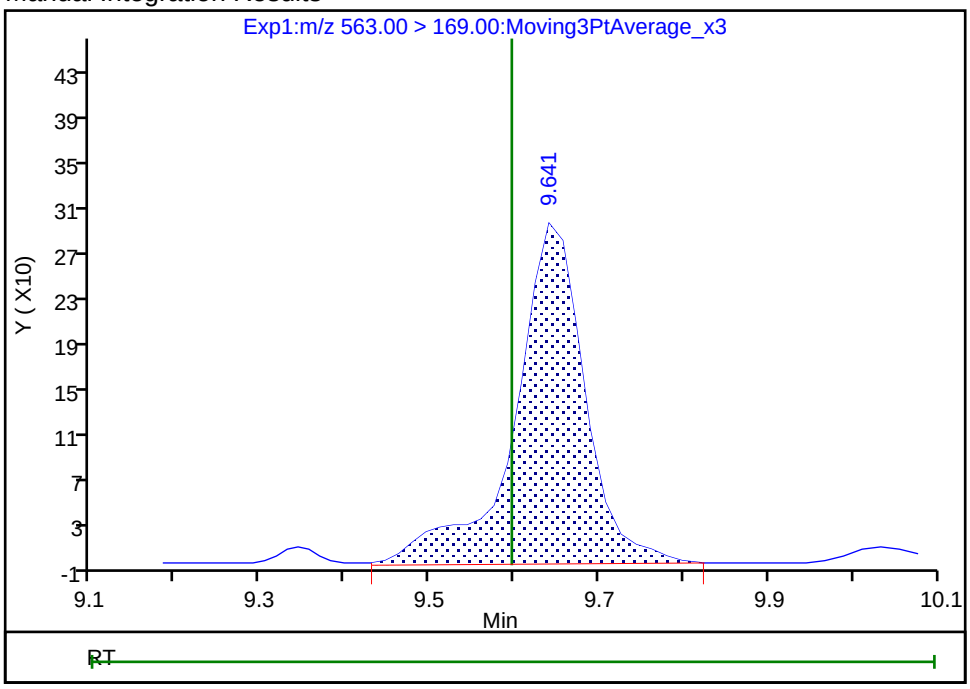
Manual Integration Results

RT: 9.64

Area: 1733

Amount: 0.001061

Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:19:22

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

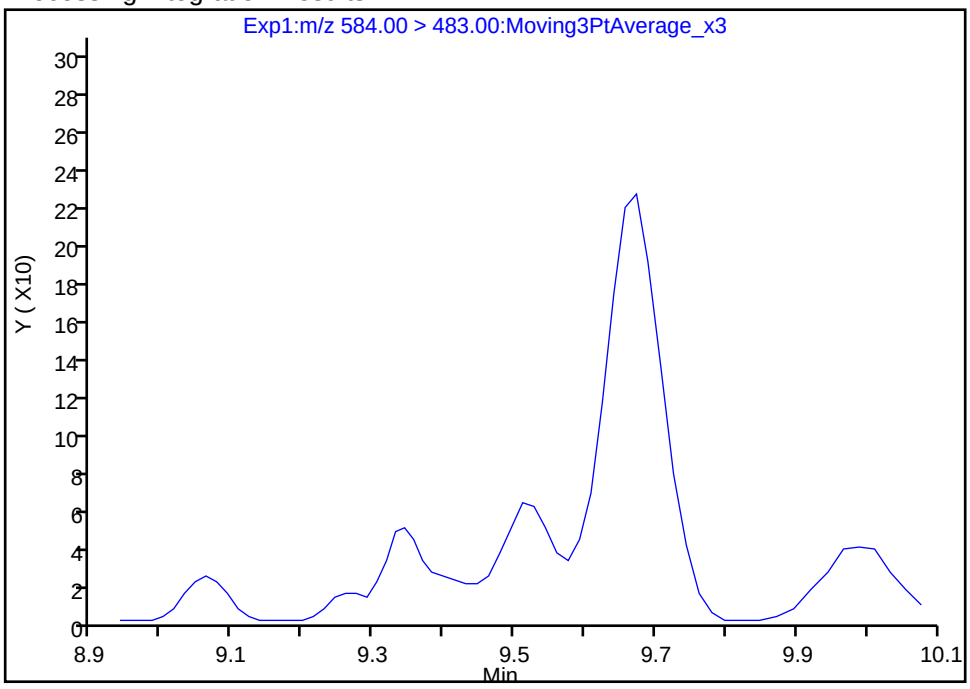
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

43 NEtFOSA, CAS: 2991-50-6

Signal: 2

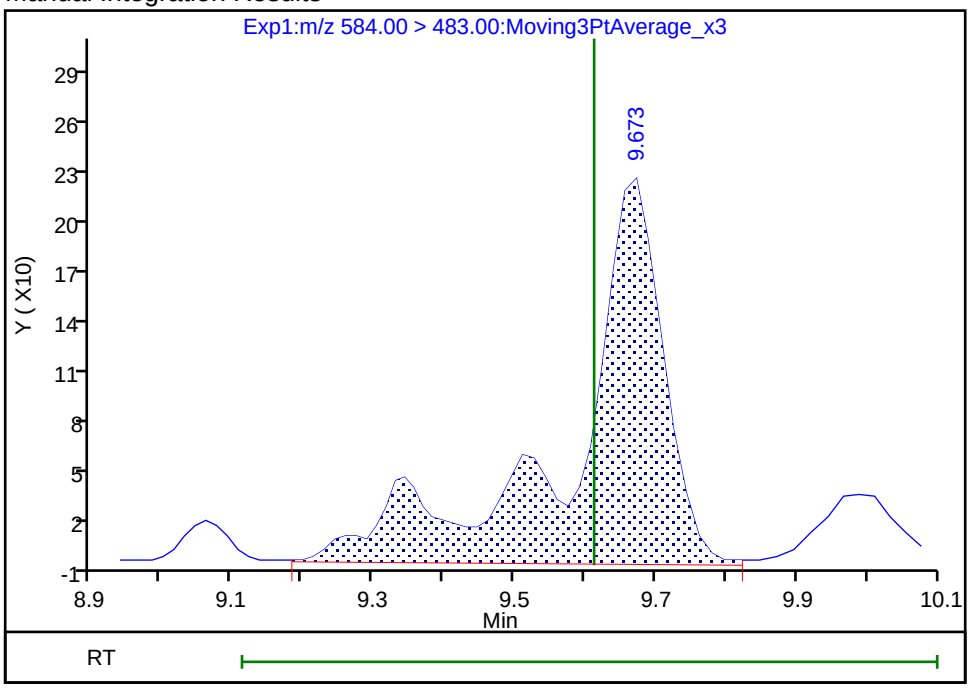
Not Detected
Expected RT: 9.61

Processing Integration Results



Manual Integration Results

RT: 9.67
Area: 2012
Amount: 0.000934
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:19:28
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

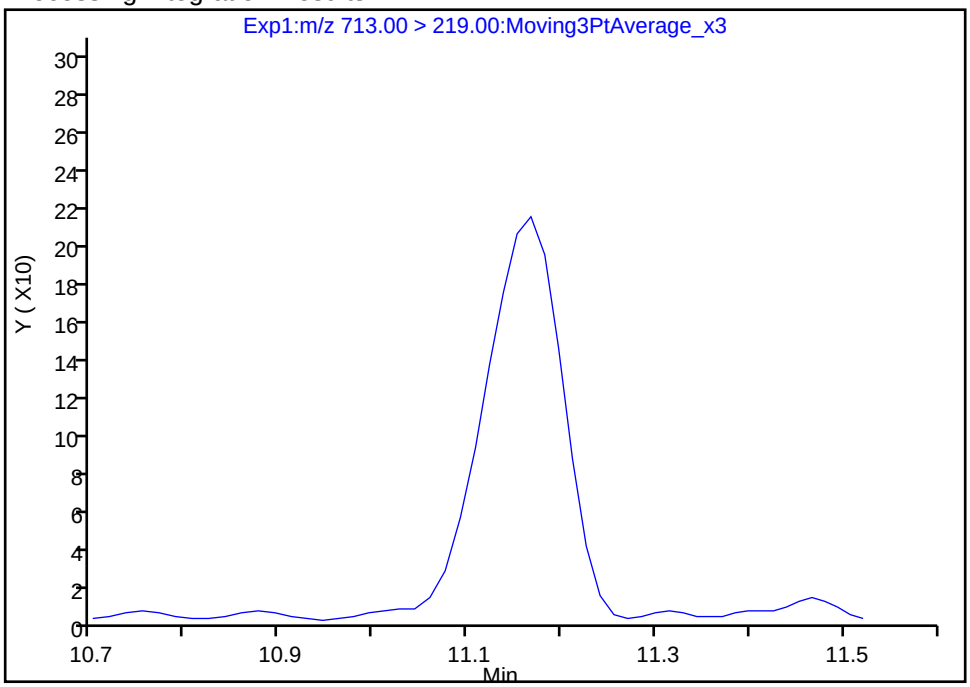
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

50 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

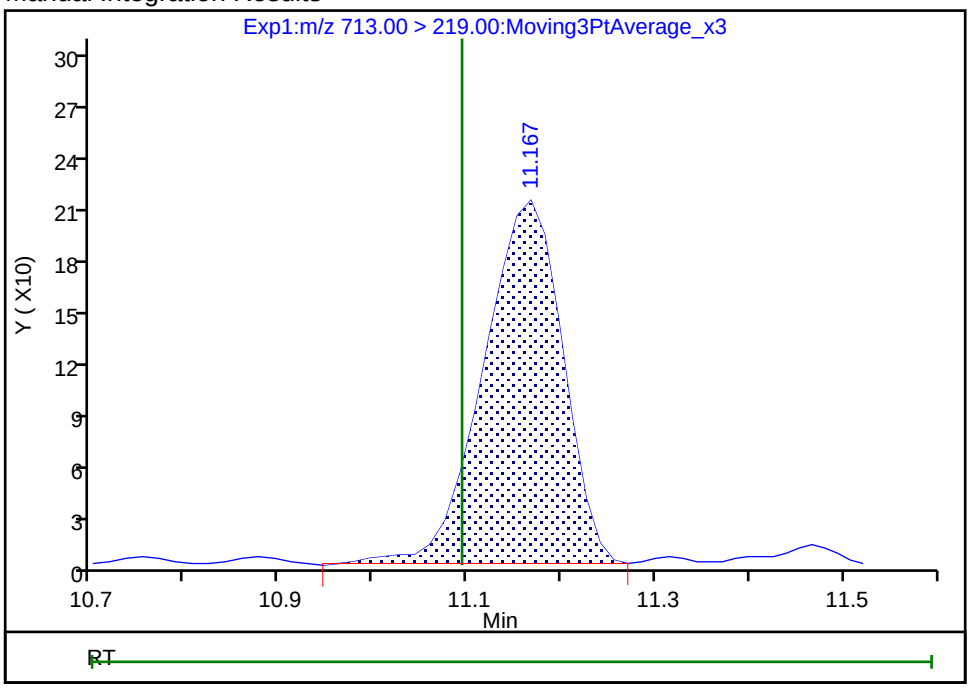
Not Detected
Expected RT: 11.09

Processing Integration Results



Manual Integration Results

RT: 11.17
Area: 1235
Amount: 0.001372
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:19:43
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

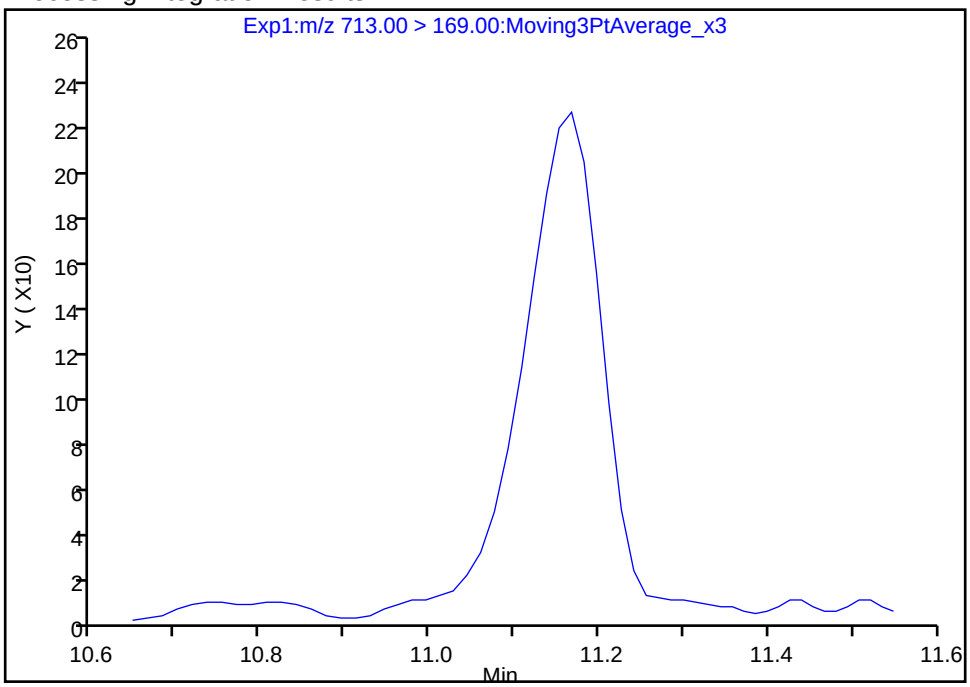
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d				
Injection Date:	12-Oct-2020 11:30:36	Instrument ID:	A10		
Lims ID:	IC STD 1				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	4	Worklist Smp#:	2
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

50 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

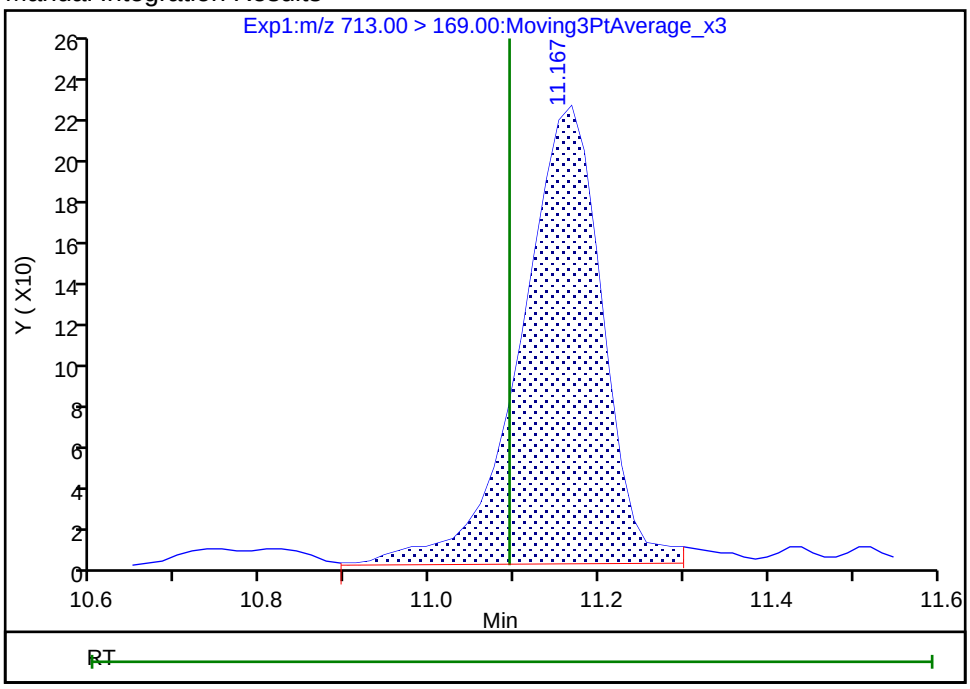
Processing Integration Results

Not Detected
Expected RT: 11.09



Manual Integration Results

RT: 11.17
Area: 1503
Amount: 0.001372
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:19:47
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

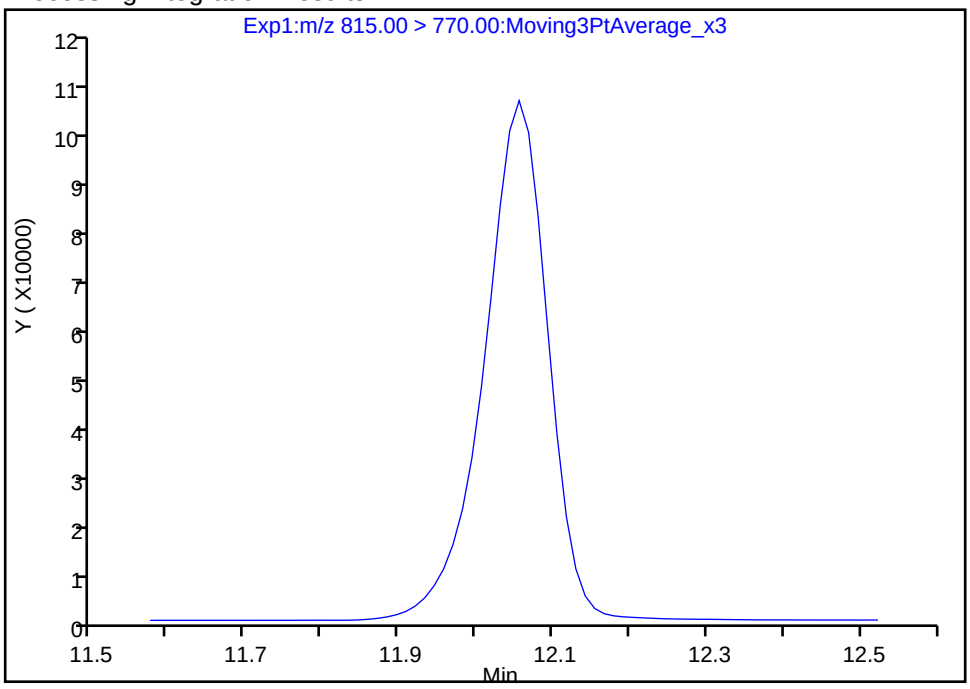
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d				
Injection Date:	12-Oct-2020 11:30:36	Instrument ID:	A10		
Lims ID:	IC STD 1				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	4	Worklist Smp#:	2
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm ID)	Detector	EXP1		

D 52 13C2 PFHxDA, CAS: STL02115

Signal: 1

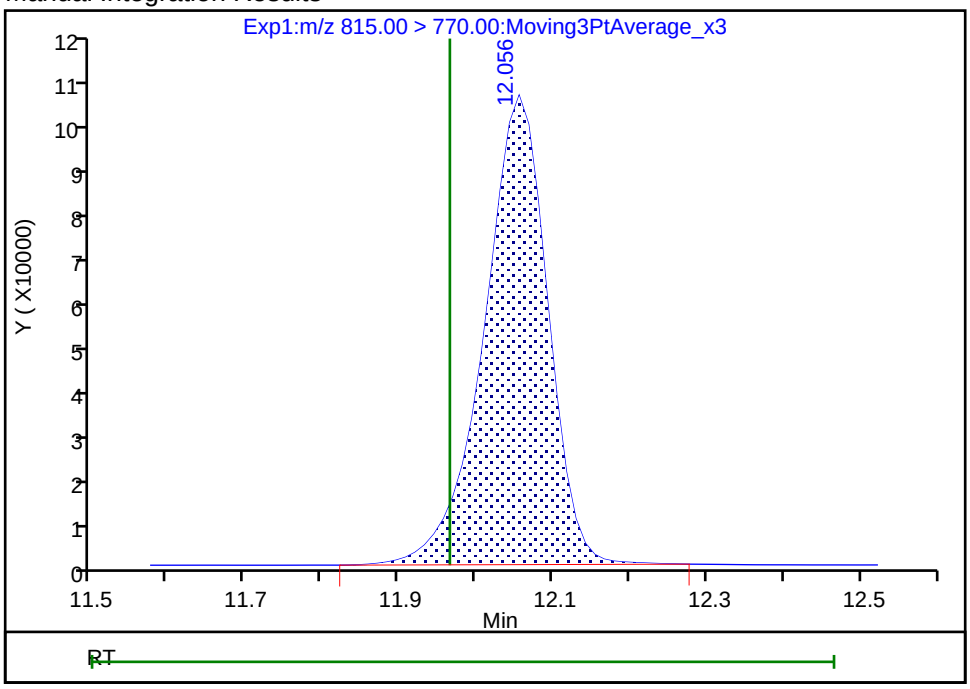
Not Detected
Expected RT: 11.97

Processing Integration Results



Manual Integration Results

RT: 12.06
Area: 600608
Amount: 0.039979
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:17:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

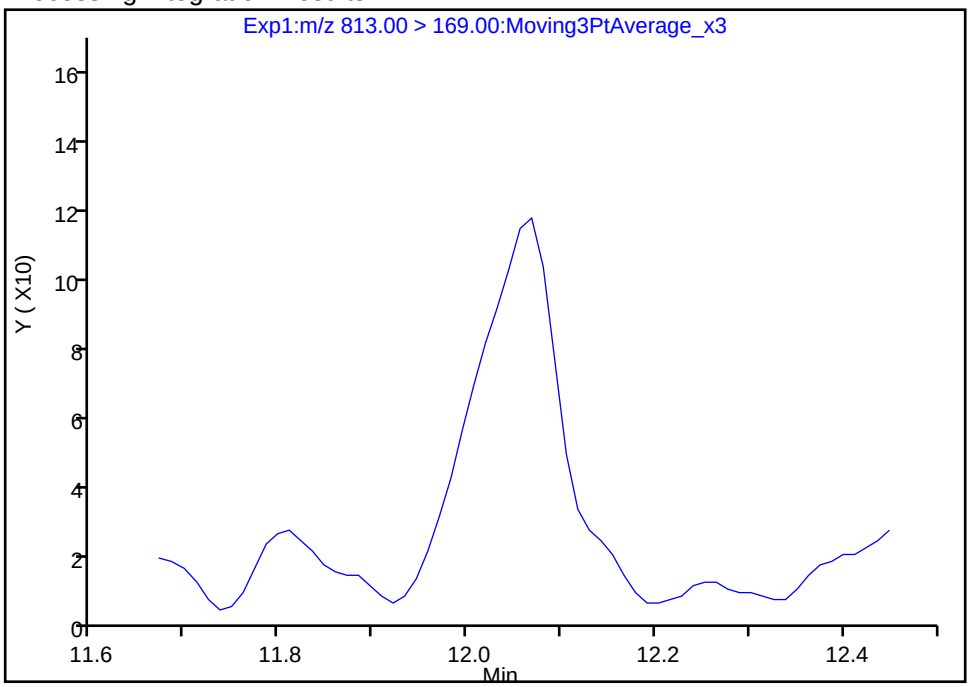
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d				
Injection Date:	12-Oct-2020 11:30:36	Instrument ID:	A10		
Lims ID:	IC STD 1				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	4	Worklist Smp#:	2
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm ID)	Detector	EXP1		

54 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 2

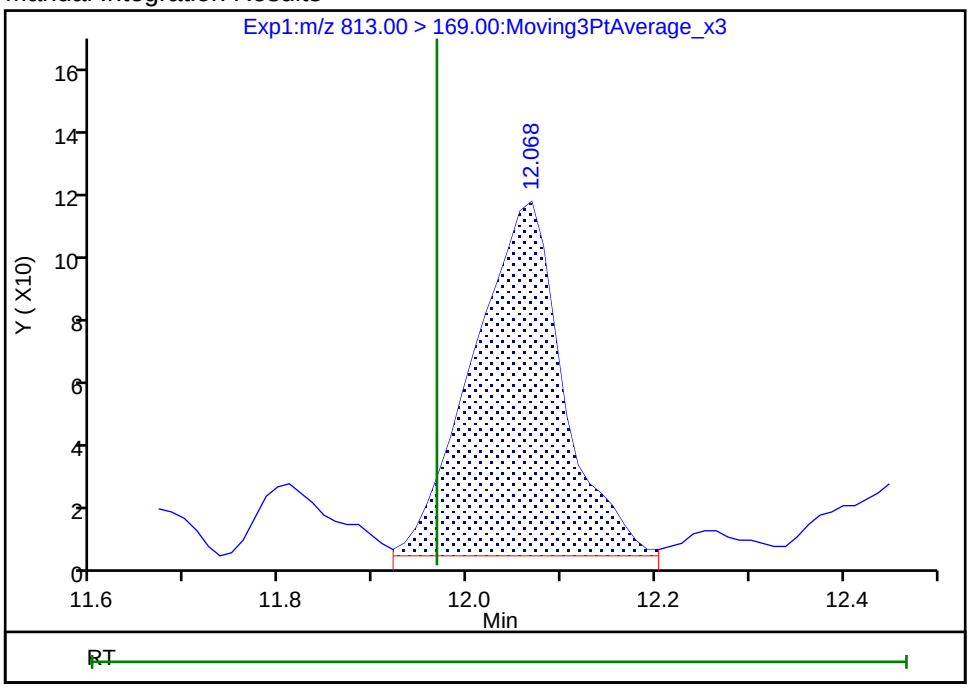
Not Detected
Expected RT: 11.97

Processing Integration Results



Manual Integration Results

RT: 12.07
Area: 752
Amount: 0.001042
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:19:52
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

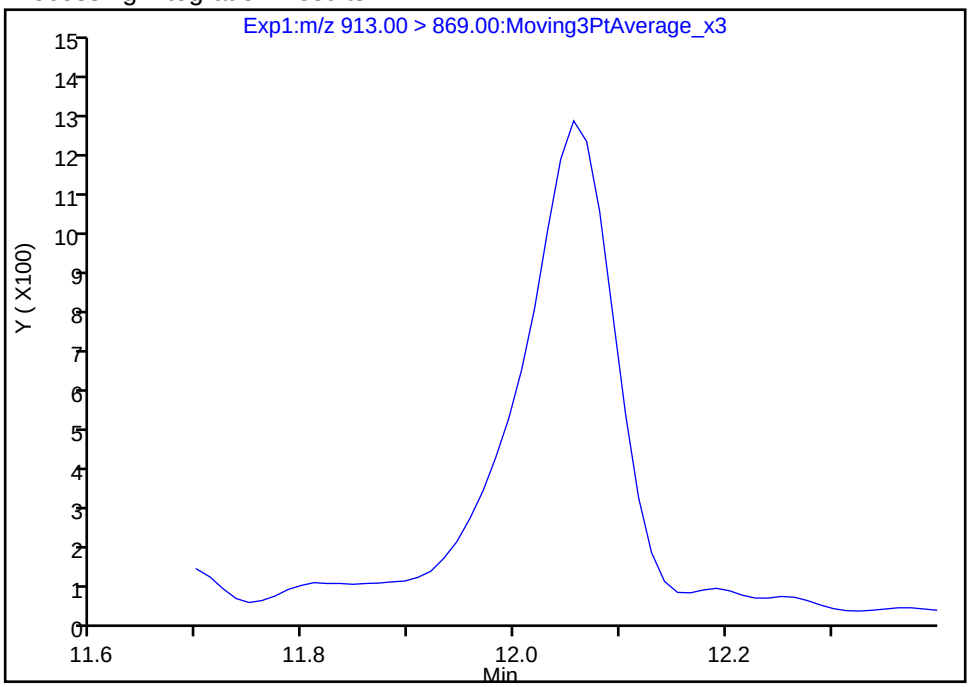
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d				
Injection Date:	12-Oct-2020 11:30:36	Instrument ID:	A10		
Lims ID:	IC STD 1				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	4	Worklist Smp#:	2
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 1

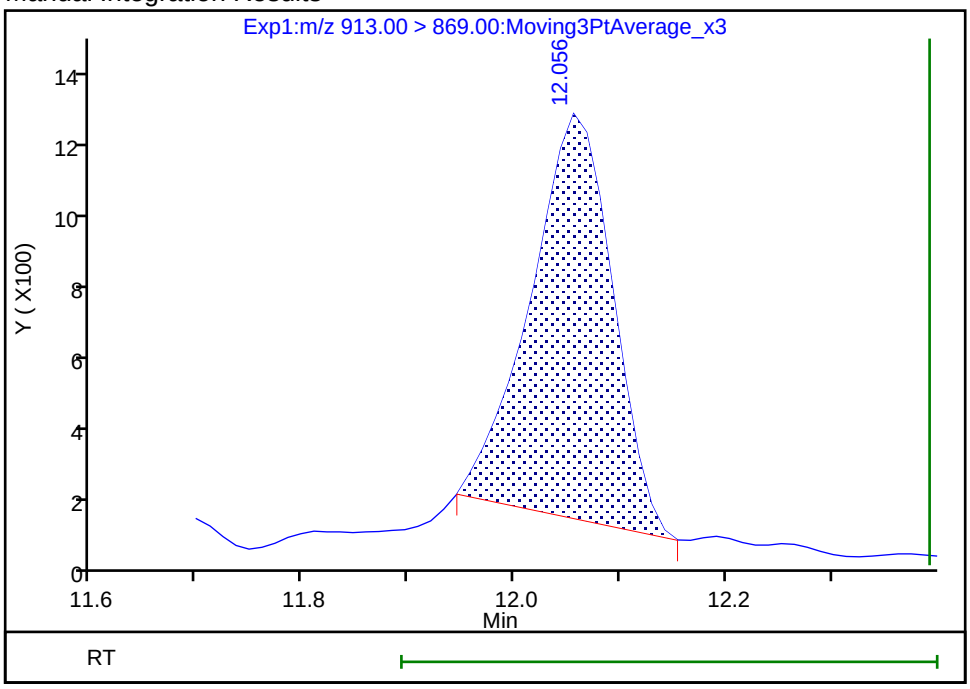
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 12.06
Area: 5985
Amount: 0.002270
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:19:58
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

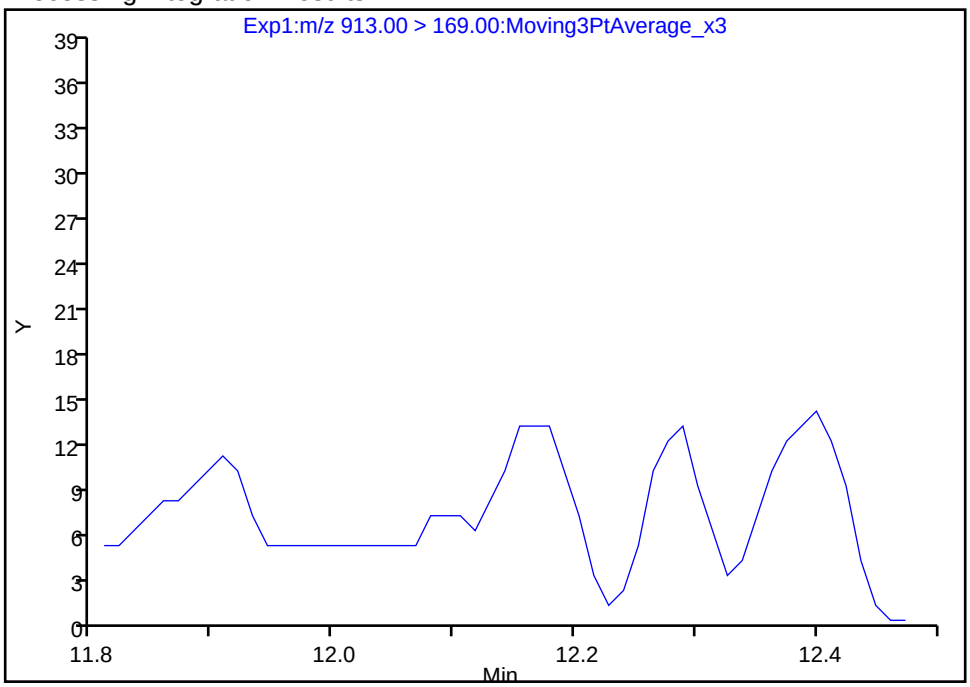
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_004.d
Injection Date: 12-Oct-2020 11:30:36 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

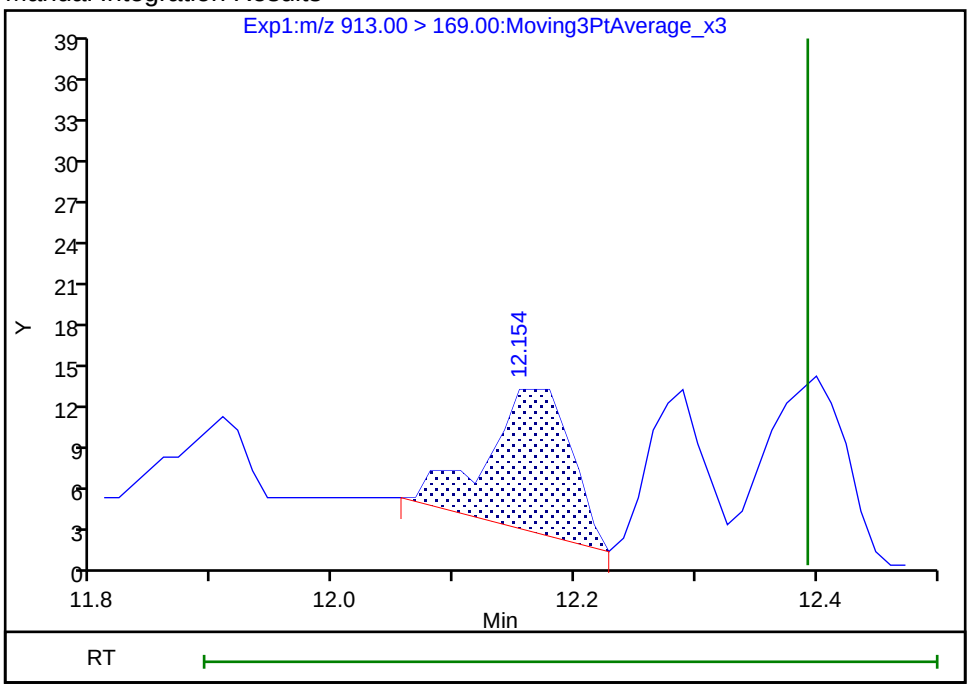
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 12.15
Area: 51
Amount: 0.002270
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:19:58
Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Lims ID: IC STD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-Oct-2020 11:49:02 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 2
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:23:17 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: vangmy Date: 12-Oct-2020 12:23:51
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.678	5.644	0.034		1843595	0.0465		93.0	8792	
1 Perfluorobutanoic acid										M
169	5.678	5.647	0.031	1.000	62047	0.001913		95.7	9.6	M
D 4 13C5 PFPeA										
223	6.271	6.253	0.018		1611423	0.0475		94.9	16461	
5 Perfluoropentanoic acid										
219	6.271	6.253	0.018	1.000	65741	0.001893		94.7	12.6	
D 3 13C3 PFBS										
80	6.316	6.305	0.011		1837400	0.0437		94.0	4226	
6 Perfluorobutanesulfonic acid										
80	6.316	6.308	0.008	1.000	64035	0.001637	Target=1.50	92.6	66.3	
99	6.316	6.308	0.008	1.000	42856		1.49(0.75-2.26)	92.6	37.3	
D 7 M2-4:2 FTS										
81	6.711	6.688	0.023		536906	NC			668	
8 4:2 FTS										
307	6.711	6.688	0.023	1.000	52406	NC	Target=2.45		673	
81	6.711	6.688	0.023	1.000	24545		2.14(1.22-3.67)		30.4	
D 9 13C2 PFHxA										
270	6.758	6.741	0.017		1784447	0.0493		98.7	19702	
10 Perfluorohexanoic acid										
269	6.758	6.744	0.014	1.000	58195	0.001757	Target=17.92	87.8	26.3	
119	6.758	6.744	0.014	1.000	3958		14.70(8.96-26.88)	87.8	30.0	
11 Perfluoropentanesulfonic acid										
80	6.781	6.755	0.026	0.931	49328	NC	Target=1.47		39.2	
99	6.781	6.755	0.026	0.931	35768		1.38(0.74-2.21)		47.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.900	6.888	0.012		117383	NC			542	
13 HPFO-DA										
285	6.900	6.891	0.009	1.000	10258	NC			10.9	
D 15 18O2 PFHxS										
84	7.281	7.260	0.021		1197396	0.0463		97.8	11472	
16 Perfluorohexanesulfonic acid										M
80	7.281	7.260	0.021	1.000	50130	0.001745	Target=5.60	95.9	46.0	M
99	7.281	7.260	0.021	1.000	8807		5.69(2.80-8.40)	95.9	25.2	M
D 17 13C4 PFHpA										
322	7.281	7.270	0.011		1707066	0.0466		93.2	9988	
18 Perfluoroheptanoic acid										
319	7.281	7.272	0.009	1.000	82365	0.002359	Target=8.55	118	28.0	
169	7.281	7.272	0.009	1.000	9323		8.83(4.27-12.82)	118	125	
19 DONA										
251	7.356	7.328	0.028	0.871	246645	NC	Target=2.62		846	
85	7.337	7.328	0.009	0.869	91982		2.68(1.31-3.93)		246	
14 9ClFOS										
351	7.138	7.212	-0.074	0.845	3031	NC			5.3	
D 22 M2-6:2 FTS										
81	7.836	7.813	0.023		634259	0.0489		103	1066	
23 6:2 FTS										
407	7.836	7.813	0.023	1.000	63375	0.001912	Target=2.55	101	566	
81	7.836	7.813	0.023	1.000	22073		2.87(1.27-3.82)	101	34.1	
21 Perfluoroheptanesulfonic acid										
80	7.853	7.821	0.032	0.930	37394	0.001736	Target=6.95	91.2	79.4	
99	7.853	7.821	0.032	0.930	5606		6.67(3.48-10.43)	91.2	28.4	
D 25 13C4 PFOA										
372	7.869	7.842	0.027		2054327	0.0482		96.5	14667	
24 Perfluorooctanoic acid										M
369	7.869	7.846	0.023	1.000	74252	0.001862	Target=1.41	93.1	16.9	M
169	7.869	7.846	0.023	1.000	50264		1.48(0.71-2.12)	93.1	188	M
D 26 13C4 PFOS										
80	8.444	8.413	0.031		852993	0.0463		96.8	2321	
27 Perfluorooctanesulfonic acid										M
80	8.444	8.413	0.031	1.000	30749	0.001683	Target=3.36	90.7	88.0	M
99	8.444	8.413	0.031	1.000	10628		2.89(1.68-5.04)	90.7	35.1	M
D 28 13C5 PFNA										
423	8.478	8.443	0.035		1672114	0.0467		93.3	9128	
29 Perfluorononanoic acid										
419	8.478	8.448	0.030	1.000	59356	0.002006	Target=6.88	100	27.2	
169	8.478	8.448	0.030	1.000	8545		6.95(3.44-10.32)	100	80.1	
D 30 13C8 FOSA										
78	8.972	8.968	0.004		1061368	0.0484		96.8	8182	
31 Perfluorooctanesulfonamide										
78	8.987	8.969	0.018	1.002	40241	0.001892		94.6	547	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
32 Perfluorononanesulfonic acid										
80	9.018	8.994	0.024	1.068	29101	NC	Target=6.23		189	
99	9.018	8.994	0.024	1.068	3933		7.40(3.11-9.34)		16.7	
D 33 13C2 PFDA										
470	9.063	9.035	0.028		1739380	0.0492		98.5	9164	
35 Perfluorodecanoic acid										
469	9.063	9.037	0.026	1.000	53835	0.001926	Target=14.44	96.3	40.9	
169	9.063	9.037	0.026	1.000	3181		16.92(7.22-21.66)	96.3	38.3	
D 34 M2-8:2 FTS										
81	9.063	9.037	0.026		694983	0.0509		106	2966	
36 8:2 FTS										
507	9.063	9.037	0.026	1.000	63192	0.001963	Target=2.16	102	862	
81	9.063	9.037	0.026	1.000	28321		2.23(1.08-3.24)	102	115	
D 37 d3-NMeFOSAA										
419	9.345	9.317	0.028		1240641	0.0503		101	5636	
38 NMeFOSAA										M
419	9.358	9.327	0.031	1.001	37296	0.001808	Target=13.31	90.4	131	
483	9.358	9.327	0.031	1.001	3354		11.12(6.65-19.96)	90.4	40.5	M
39 Perfluorodecanesulfonic acid										
80	9.578	9.546	0.032	1.134	21929	0.001646	Target=2.51	85.4	176	
99	9.578	9.546	0.032	1.134	10543		2.08(1.26-3.77)	85.4	156	
D 42 13C2 PFUnA										
520	9.626	9.595	0.031		1707681	0.0469		93.8	16535	
41 Perfluoroundecanoic acid										
519	9.626	9.597	0.029	1.000	57149	0.001898	Target=19.91	94.9	41.3	
169	9.626	9.597	0.029	1.000	2659		21.49(9.95-29.86)	94.9	31.9	
D 40 d5-NEtFOSAA										
419	9.642	9.603	0.039		1409221	0.0510		102	5614	
43 NEtFOSA										M
419	9.642	9.613	0.029	1.000	39976	0.001796	Target=13.66	89.8	298	
483	9.642	9.613	0.029	1.000	3367		11.87(6.83-20.48)	89.8	27.3	M
44 11ClFOS										
451	9.874	9.828	0.046	1.169	138446	NC			248	
46 Perfluorododecanoic acid										
569	10.167	10.127	0.040	1.000	53570	0.001753	Target=12.99	87.6	22.1	
169	10.167	10.127	0.040	1.000	5019		10.67(6.50-19.49)	87.6	74.8	
D 45 13C2 PFDoA										
570	10.167	10.127	0.040		1862790	0.0508		102	19868	
47 10:2 FTS										
607	10.189	10.152	0.037	1.124	68259	NC	Target=27.54		791	
81	10.167	10.152	0.015	1.122	3122		21.86(13.77-41.31)		42.9	
48 PFDoS										
80	10.596	10.555	0.041	1.255	6190	NC	Target=0.45		33.5	
99	10.596	10.555	0.041	1.255	13846		0.45(0.22-0.67)		88.5	
49 Perfluorotridecanoic acid										
619	10.666	10.622	0.044	1.049	48763	0.001500	Target=16.38	75.0	16.5	
169	10.666	10.622	0.044	1.049	3103		15.71(8.19-24.57)	75.0	52.9	

Report Date: 12-Oct-2020 15:23:17 Chrom Revision: 2.3 08-Oct-2020 16:36:14
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 51 13C2 PFTeDA										
670	11.139	11.092	0.047		1063588	0.0440		88.0	7797	
50 Perfluorotetradecanoic acid										M
169	11.139	11.094	0.045	1.000	1989	0.001825	Target=1.23	91.3	43.0	M
219	11.139	11.094	0.045	1.000	1866		1.07(0.62-1.85)	91.3	41.7	M
D 52 13C2 PFHxDA										
770	12.020	11.966	0.054		664007	0.0442		88.4	2957	
54 Perfluorohexadecanoic acid										M
769	12.032	11.967	0.065	1.001	26706	0.001823	Target=23.79	91.2	21.2	
169	12.020	11.967	0.053	1.000	1297		20.59(11.89-35.68)	91.2	20.6	M
53 Perfluorooctadecanoic acid										RM
869	12.020	12.393	-0.373	1.000	5998	0.002058	Target=92.79	103	7.3	RM
169	11.983	12.393	-0.410	0.997	29		206.83(46.39-139.18)	103	0.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Reagents:

LCPFC-LL-L2_00028 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:23:17 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d

Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10

Lims ID: IC STD 2

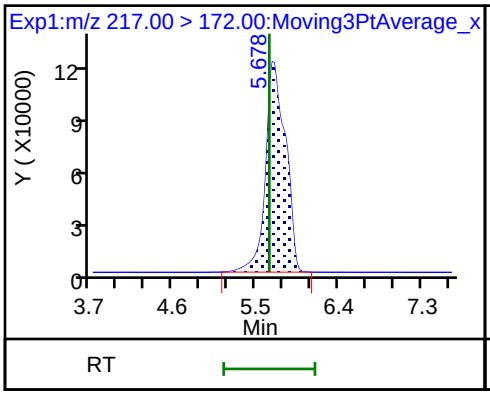
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3

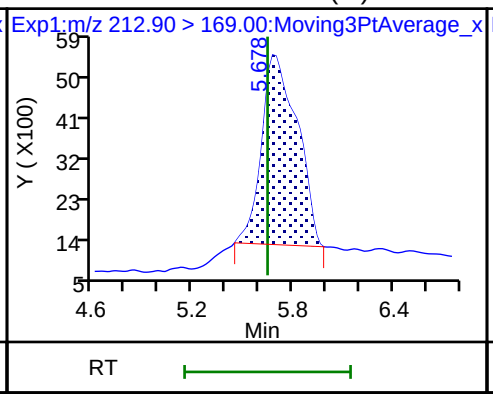
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

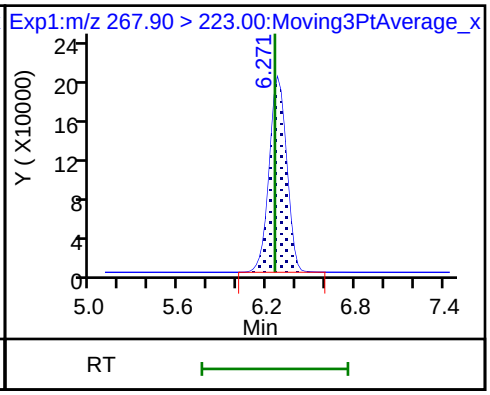
D 2 13C4 PFBA



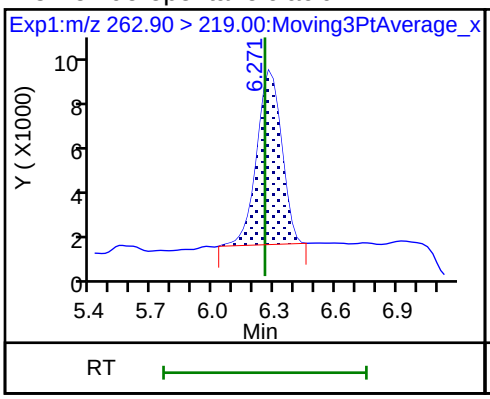
1 Perfluorobutanoic acid (M)



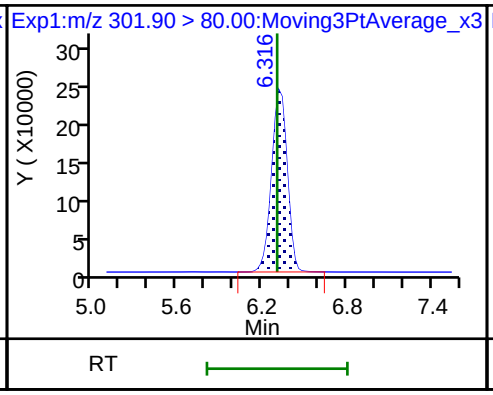
D 4 13C5 PFPeA



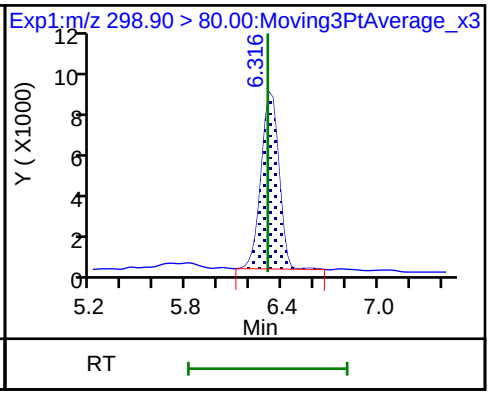
5 Perfluoropentanoic acid



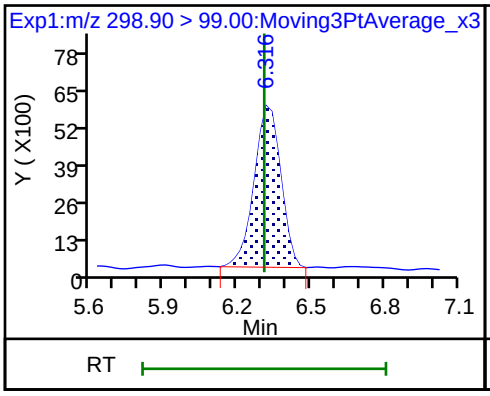
D 3 13C3 PFBS



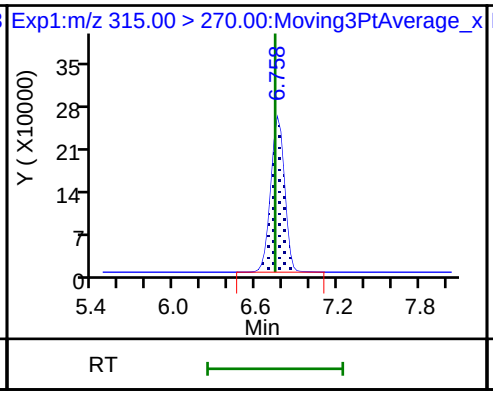
6 Perfluorobutanesulfonic acid



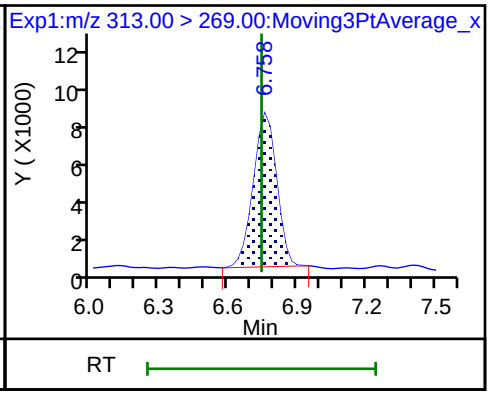
6 Perfluorobutanesulfonic acid



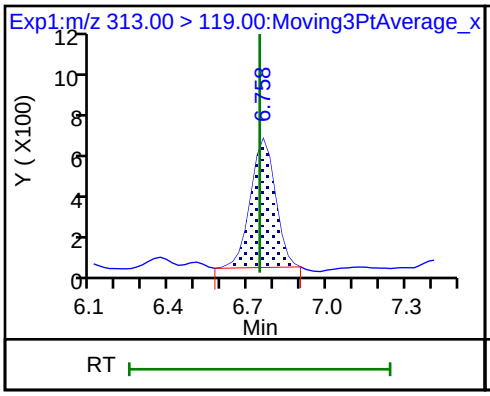
D 9 13C2 PFHxA



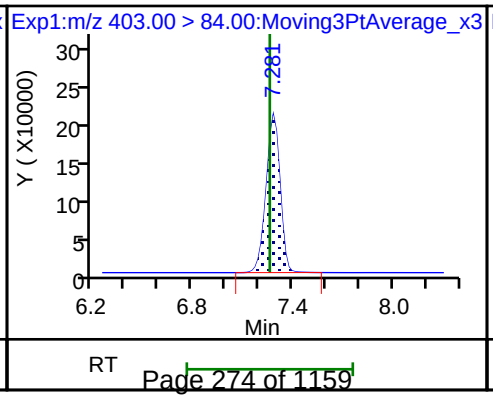
10 Perfluorohexanoic acid



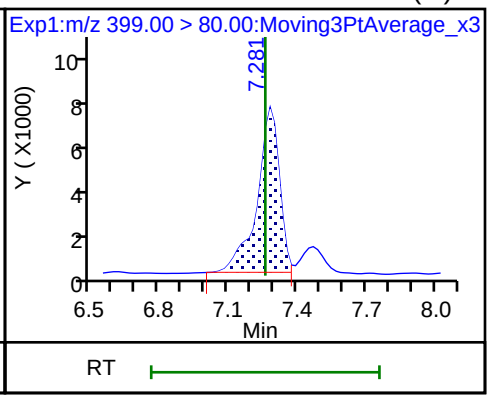
10 Perfluorohexanoic acid



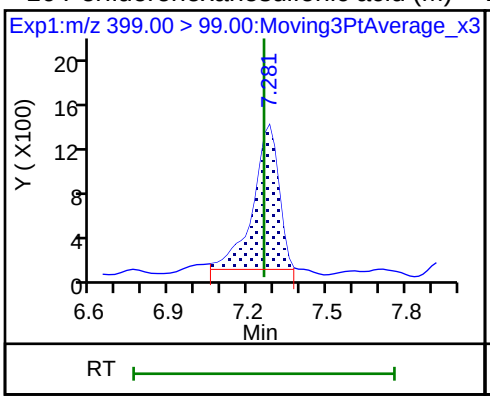
D 15 18O2 PFHxS



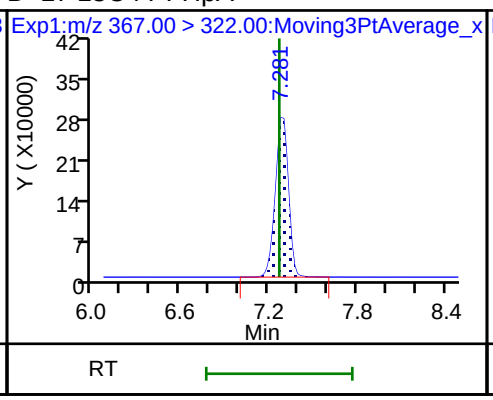
16 Perfluorohexanesulfonic acid (M)



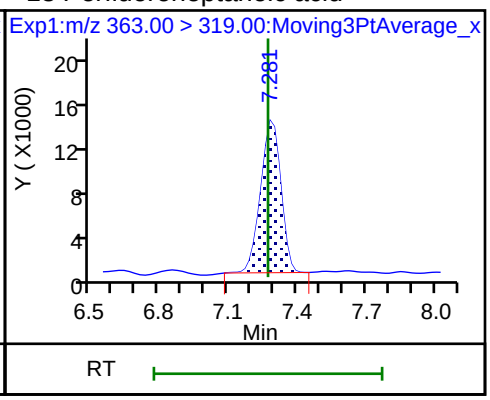
16 Perfluorohexanesulfonic acid (M)



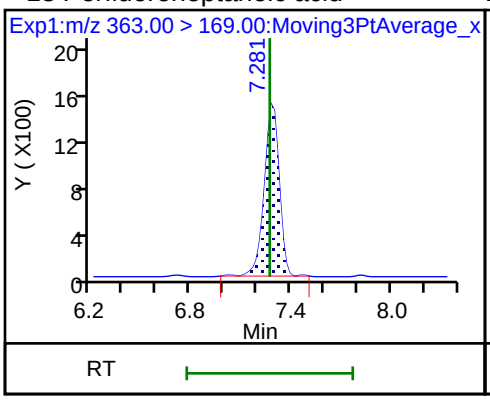
D 17 13C4 PFHpA



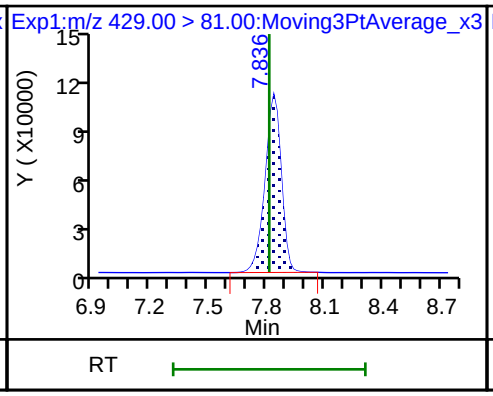
18 Perfluoroheptanoic acid



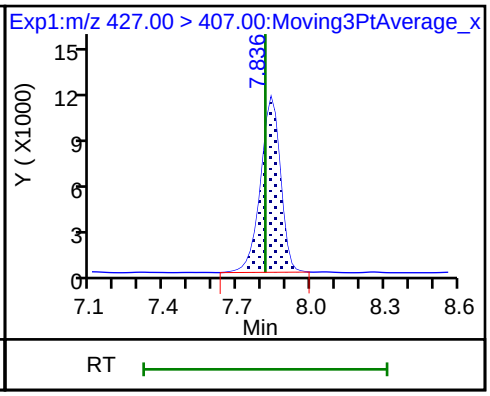
18 Perfluoroheptanoic acid



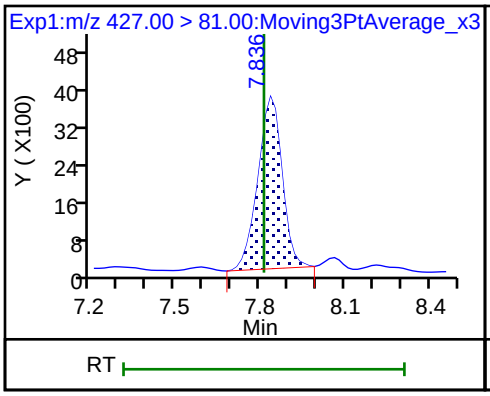
D 22 M2-6:2 FTS



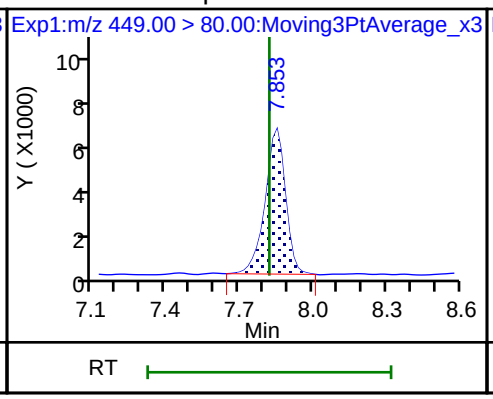
23 6:2 FTS



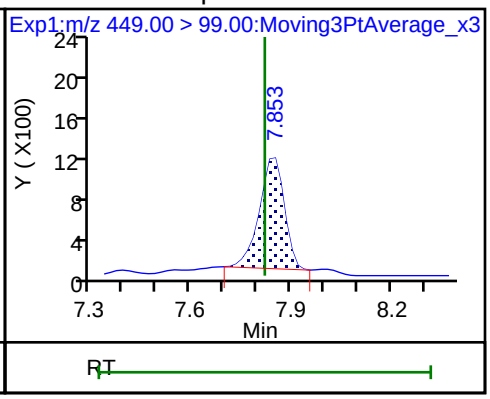
23 6:2 FTS



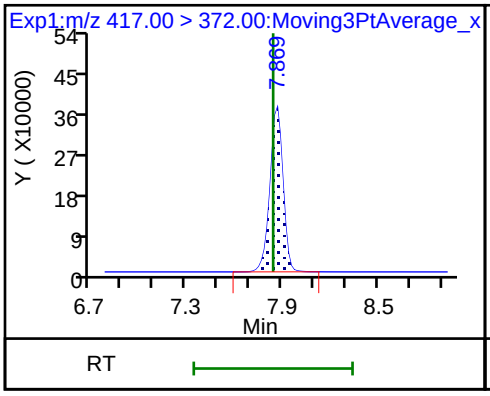
21 Perfluoroheptanesulfonic acid



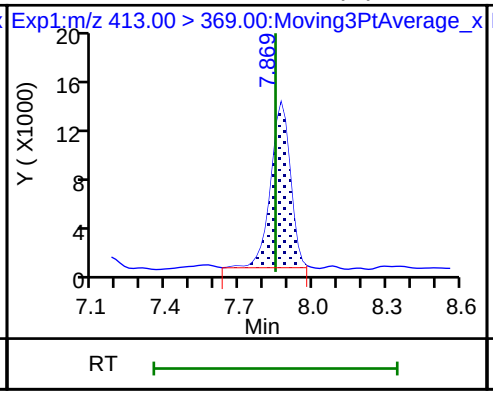
21 Perfluoroheptanesulfonic acid



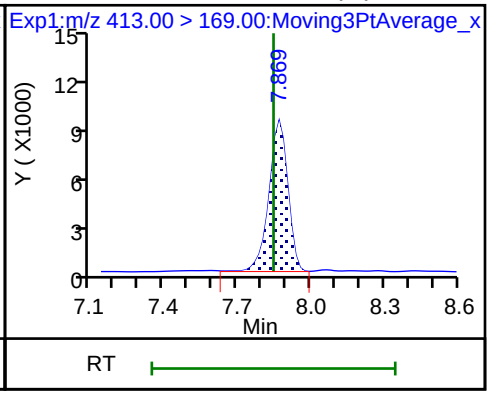
D 25 13C4 PFOA



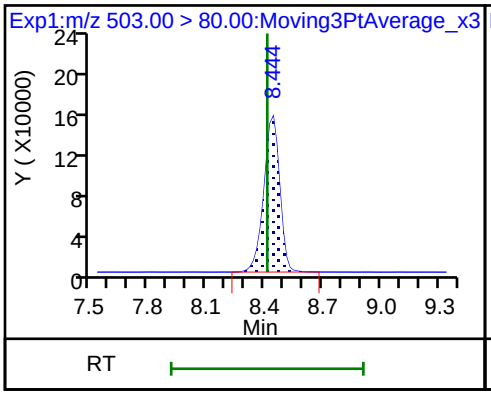
24 Perfluorooctanoic acid (M)



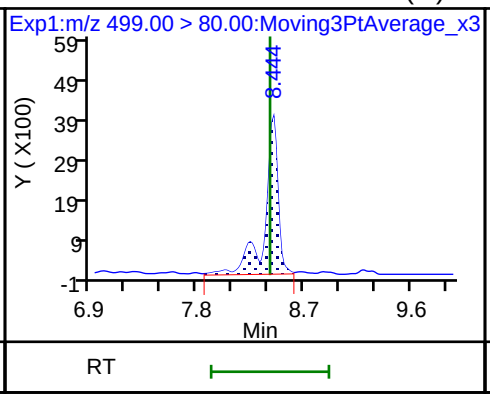
24 Perfluorooctanoic acid (M)



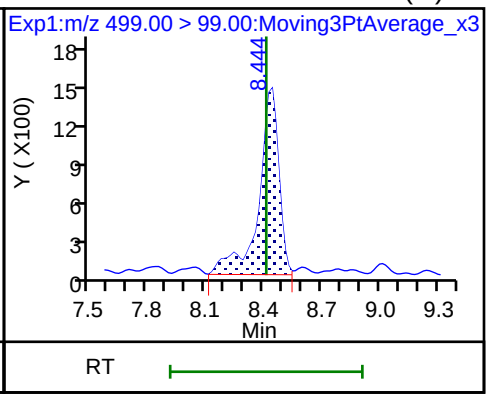
D 26 13C4 PFOS



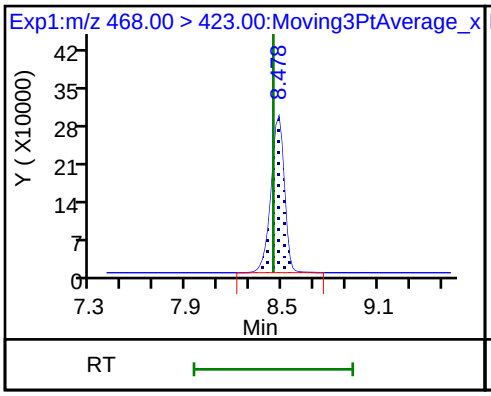
27 Perfluorooctanesulfonic acid (M)



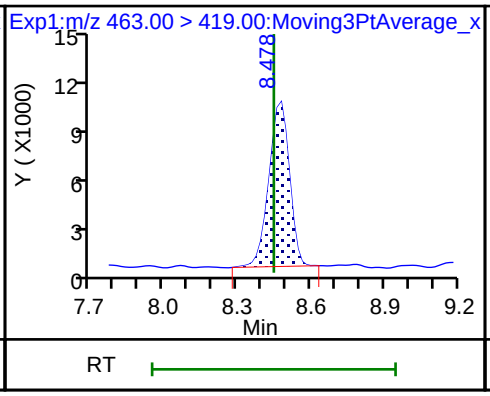
27 Perfluorooctanesulfonic acid (M)



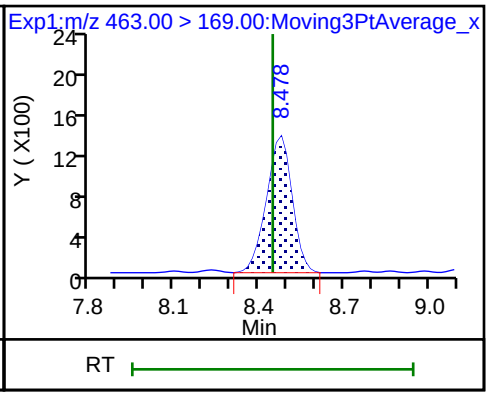
D 28 13C5 PFNA



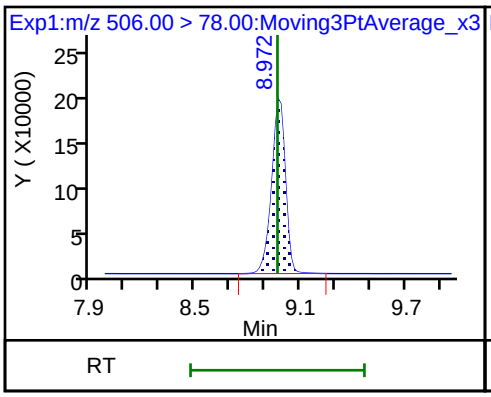
29 Perfluorononanoic acid



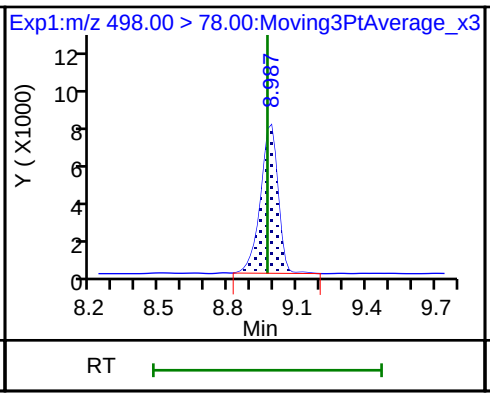
29 Perfluorononanoic acid



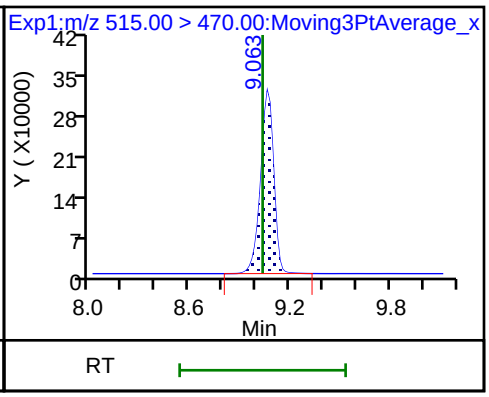
D 30 13C8 FOSA



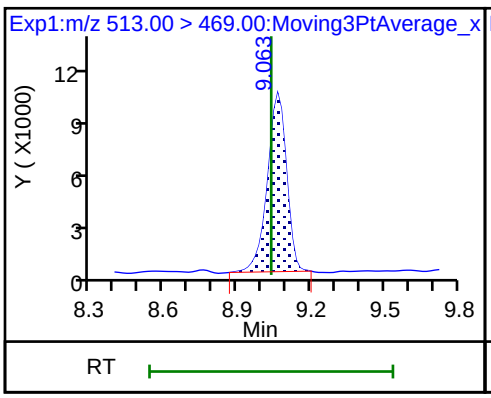
31 Perfluorooctanesulfonamide



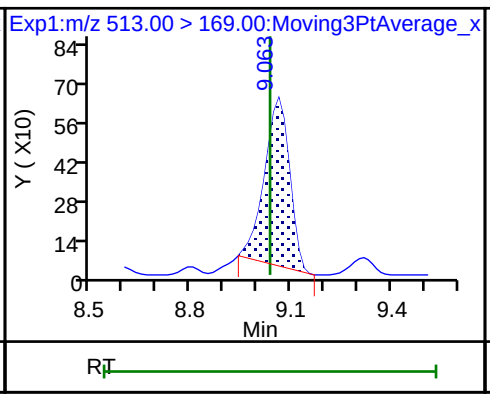
D 33 13C2 PFDA



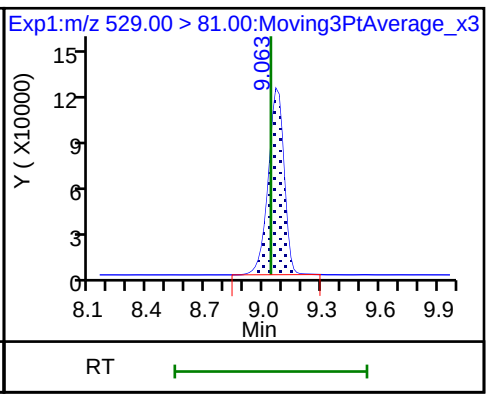
35 Perfluorodecanoic acid



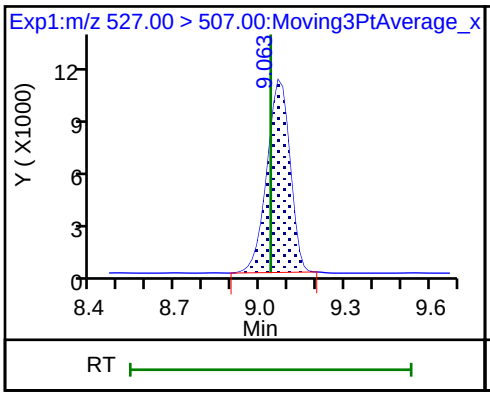
35 Perfluorodecanoic acid



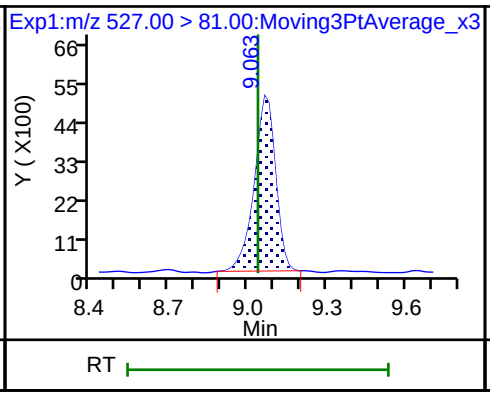
D 34 M2-8:2 FTS



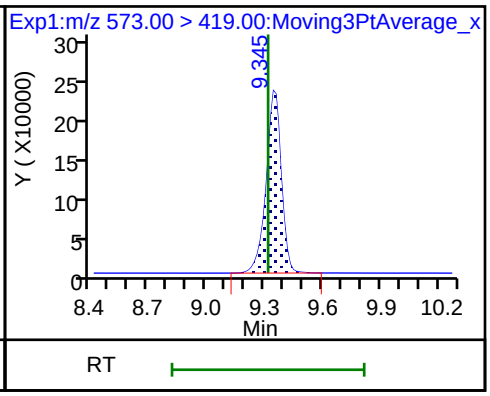
36 8:2 FTS



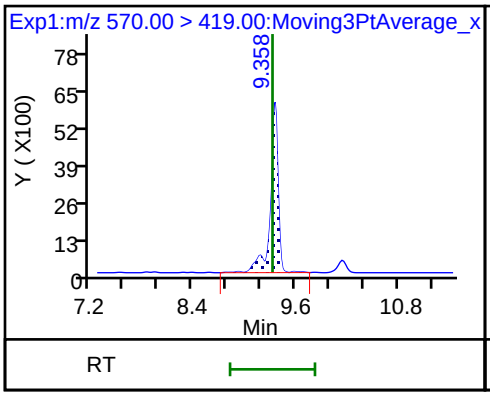
36 8:2 FTS



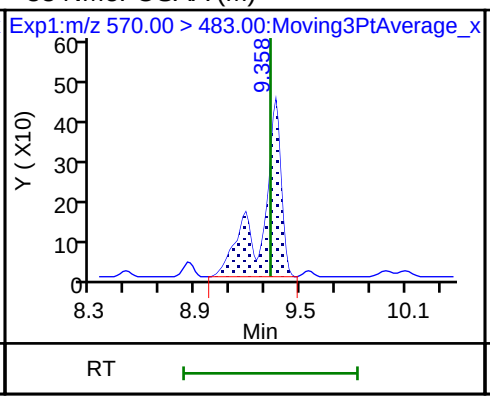
D 37 d3-NMeFOSAA



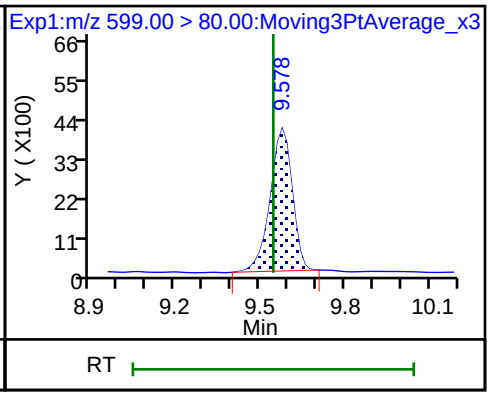
38 NMeFOSAA



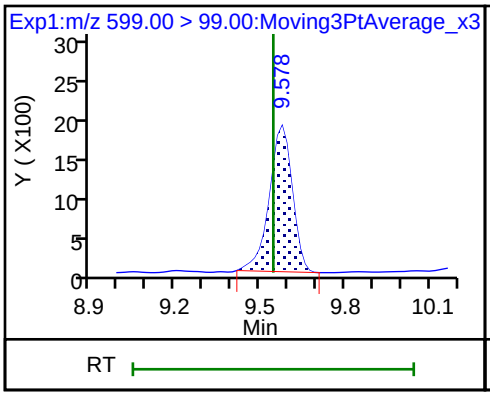
38 NMeFOSAA (M)



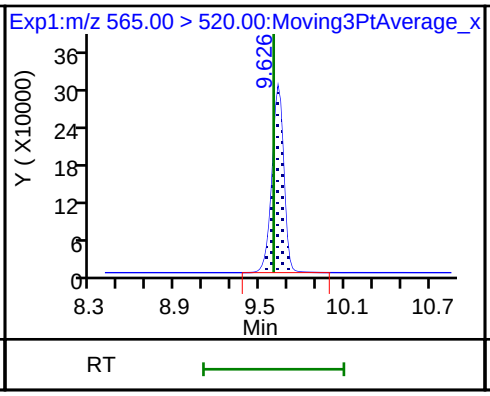
39 Perfluorodecanesulfonic acid



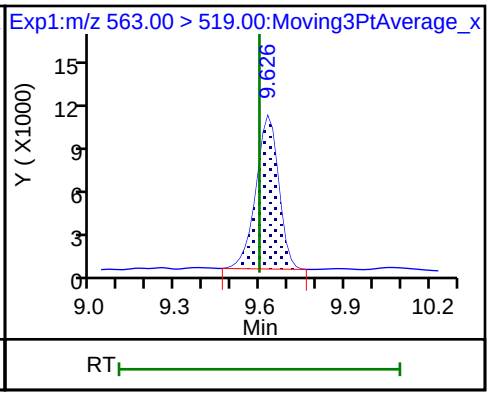
39 Perfluorodecanesulfonic acid



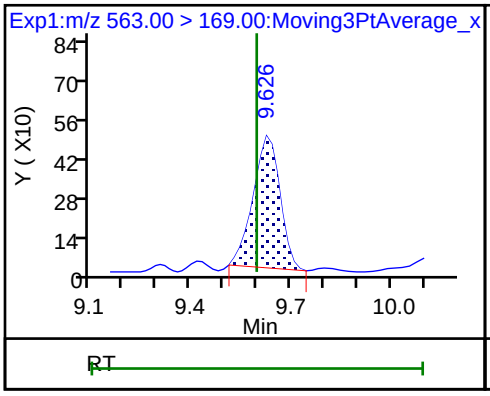
D 42 13C2 PFUnA



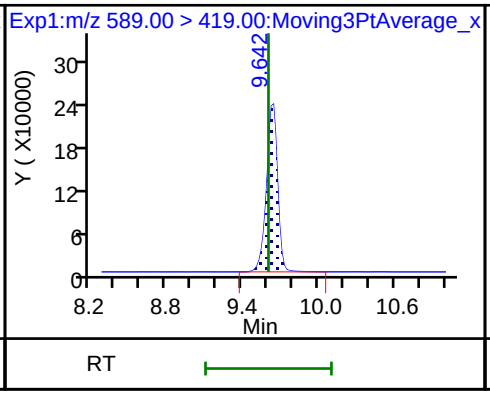
41 Perfluoroundecanoic acid



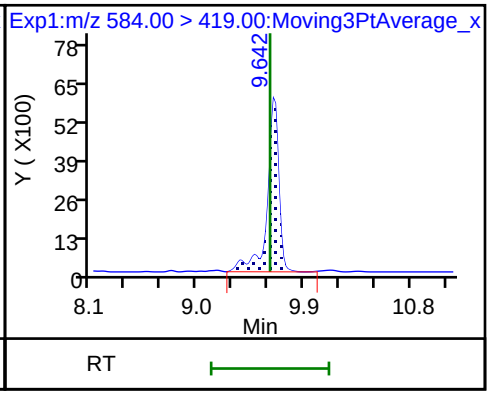
41 Perfluoroundecanoic acid



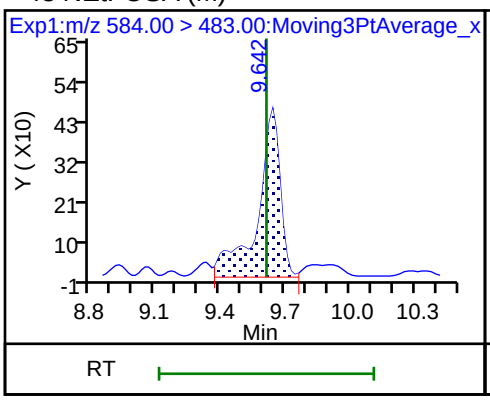
D 40 d5-NEtFOSAA



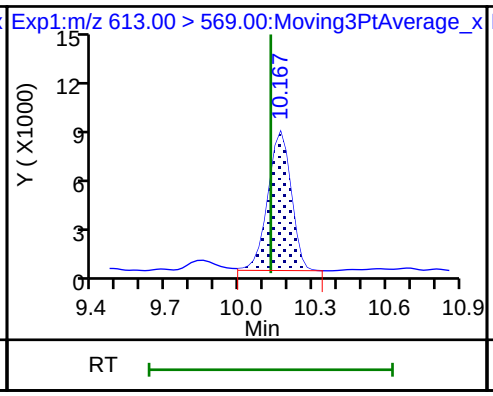
43 NEtFOSA



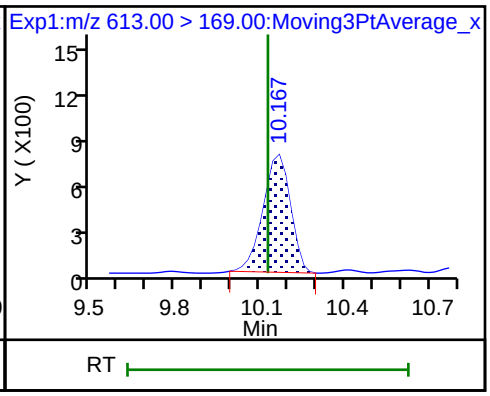
43 NEtFOSA (M)



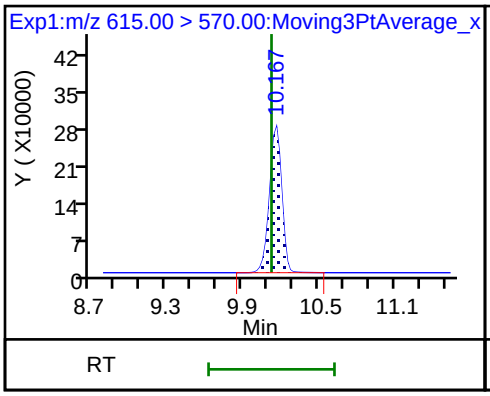
46 Perfluorododecanoic acid



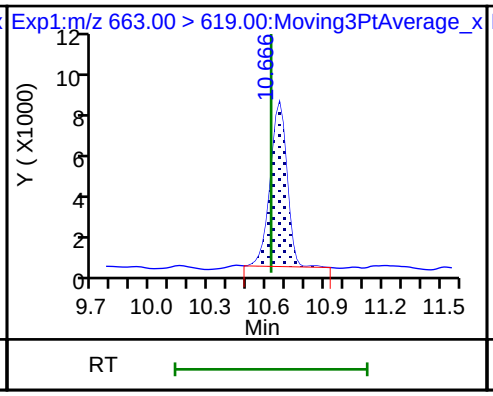
46 Perfluorododecanoic acid



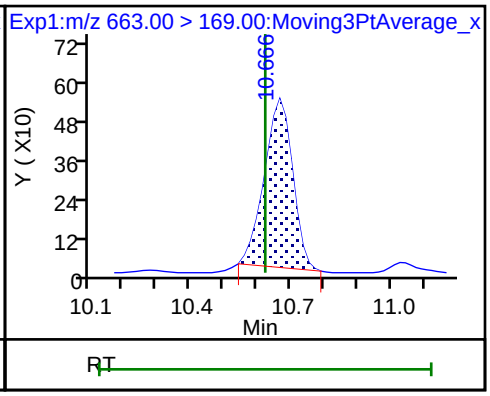
D 45 13C2 PFDoA



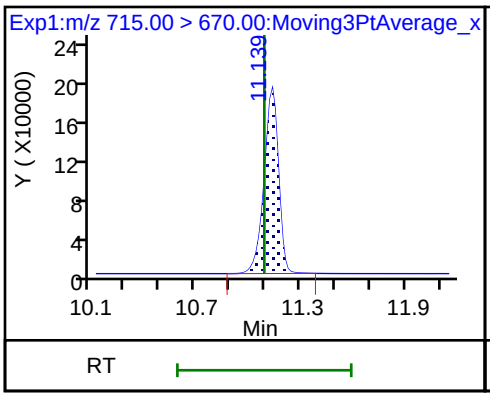
49 Perfluorotridecanoic acid



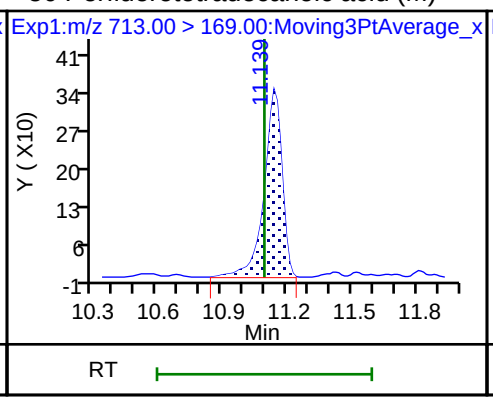
49 Perfluorotridecanoic acid



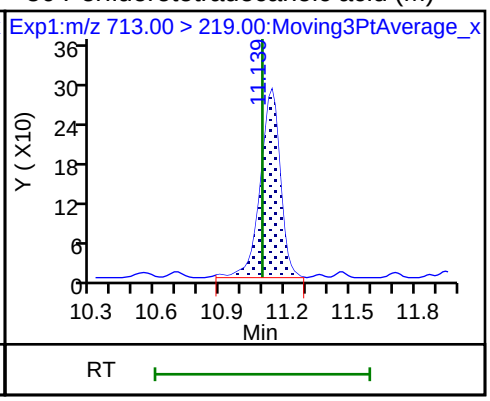
D 51 13C2 PFTeDA



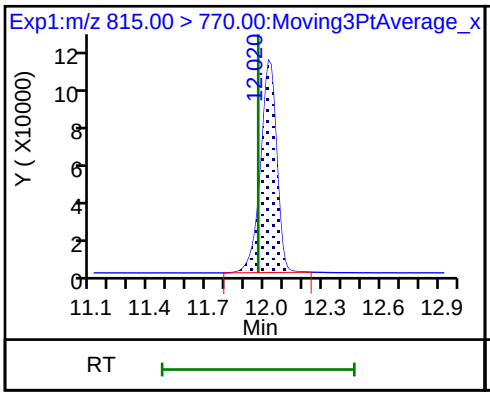
50 Perfluorotetradecanoic acid (M)



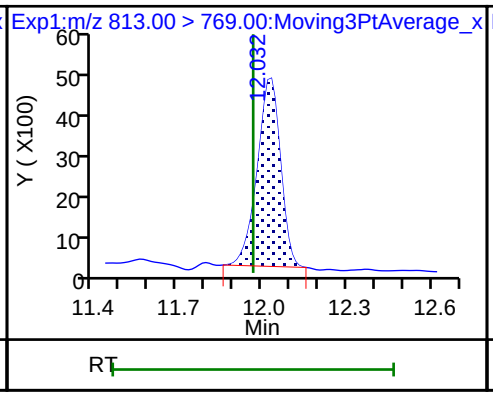
50 Perfluorotetradecanoic acid (M)



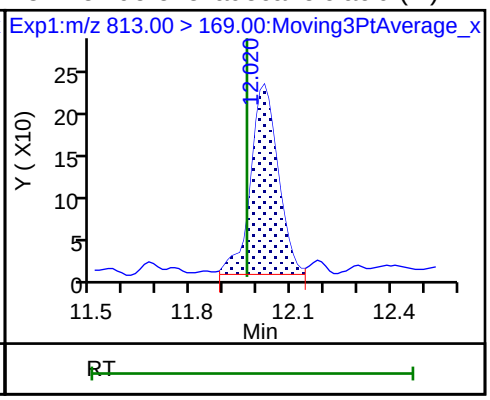
D 52 13C2 PFHxDA



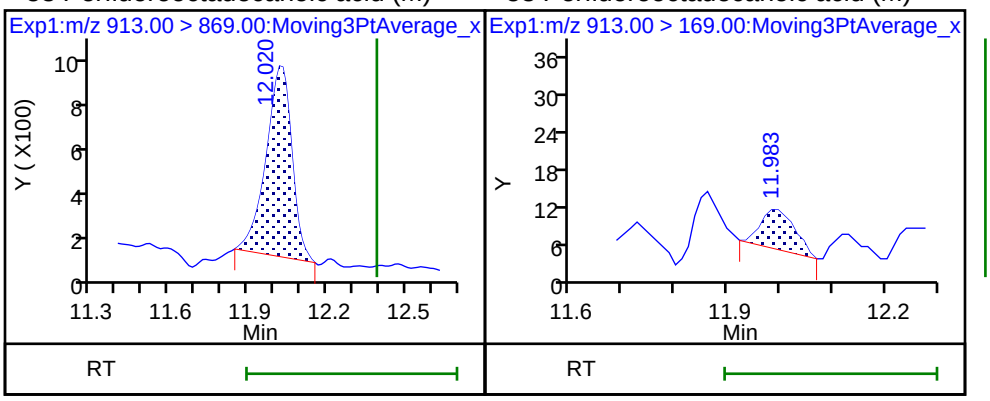
54 Perfluorohexadecanoic acid



54 Perfluorohexadecanoic acid (M)



53 Perfluorooctadecanoic acid (M) 53 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

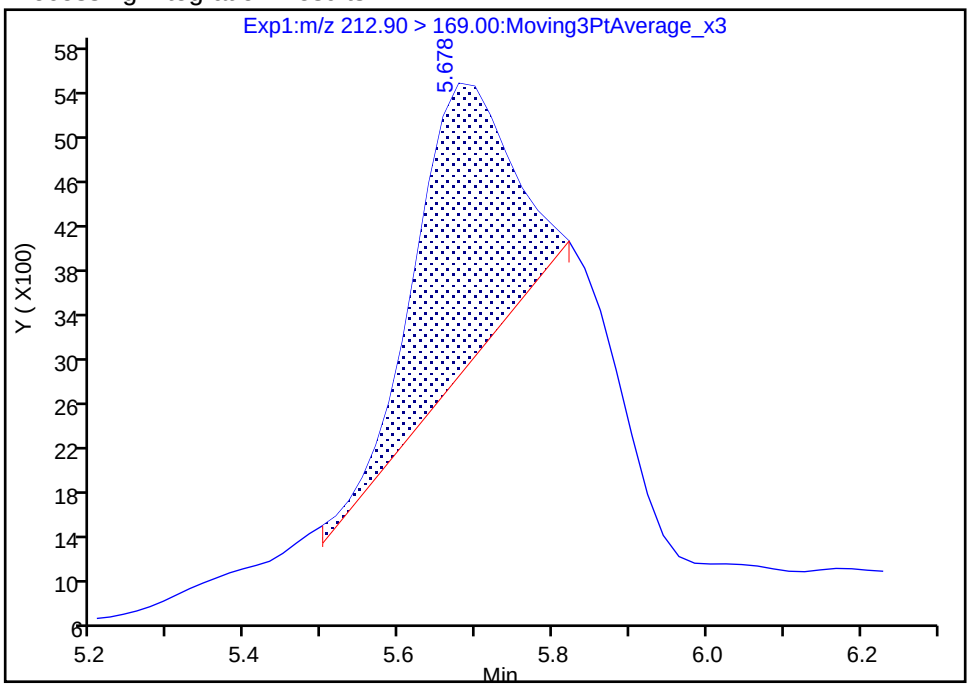
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

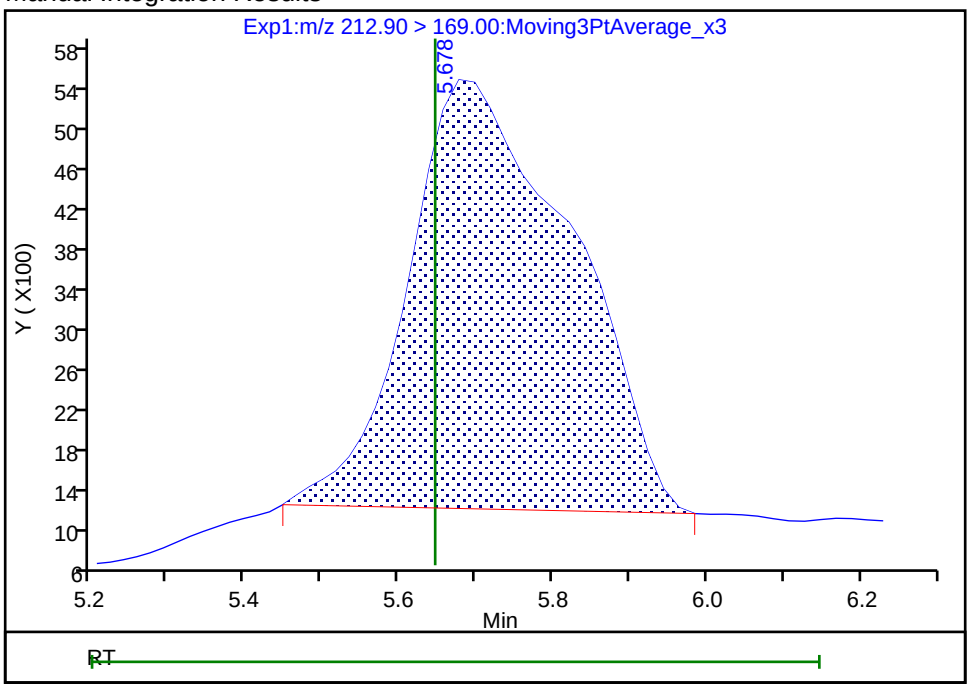
Processing Integration Results

RT: 5.68
Area: 21433
Amount: 0.000765
Amount Units: ng/ml



Manual Integration Results

RT: 5.68
Area: 62047
Amount: 0.001913
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 12:53:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

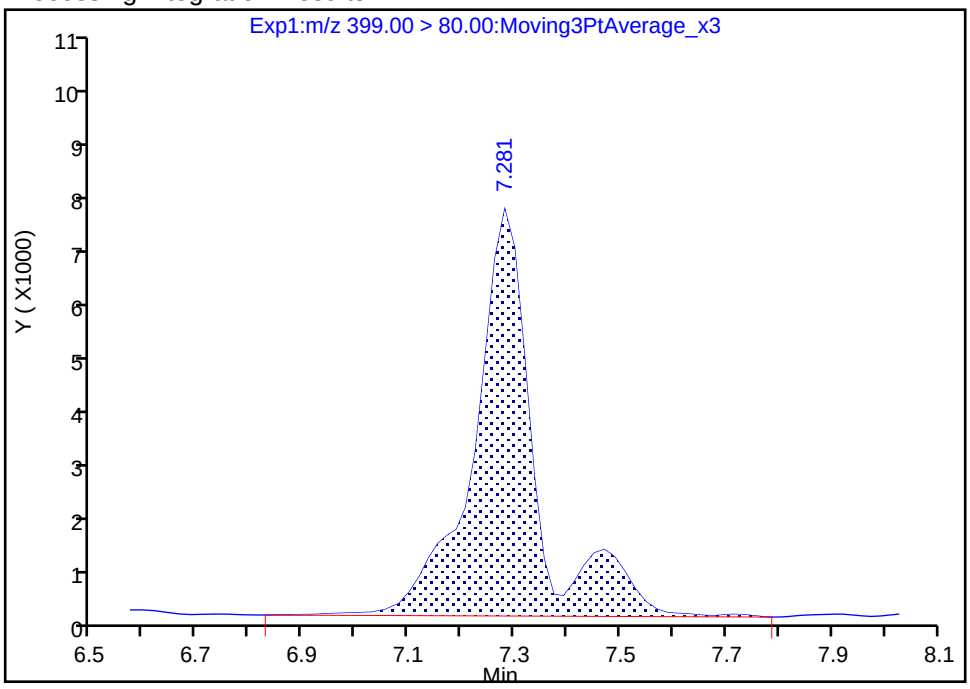
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

16 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

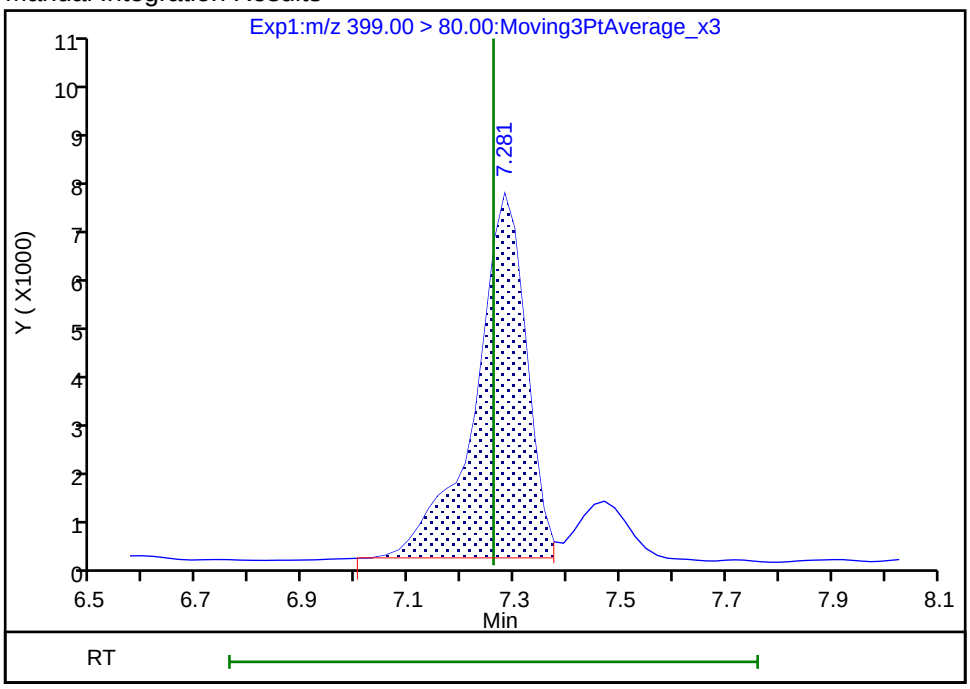
Processing Integration Results

RT: 7.28
Area: 60920
Amount: 0.001820
Amount Units: ng/ml



Manual Integration Results

RT: 7.28
Area: 50130
Amount: 0.001745
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:21:49
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

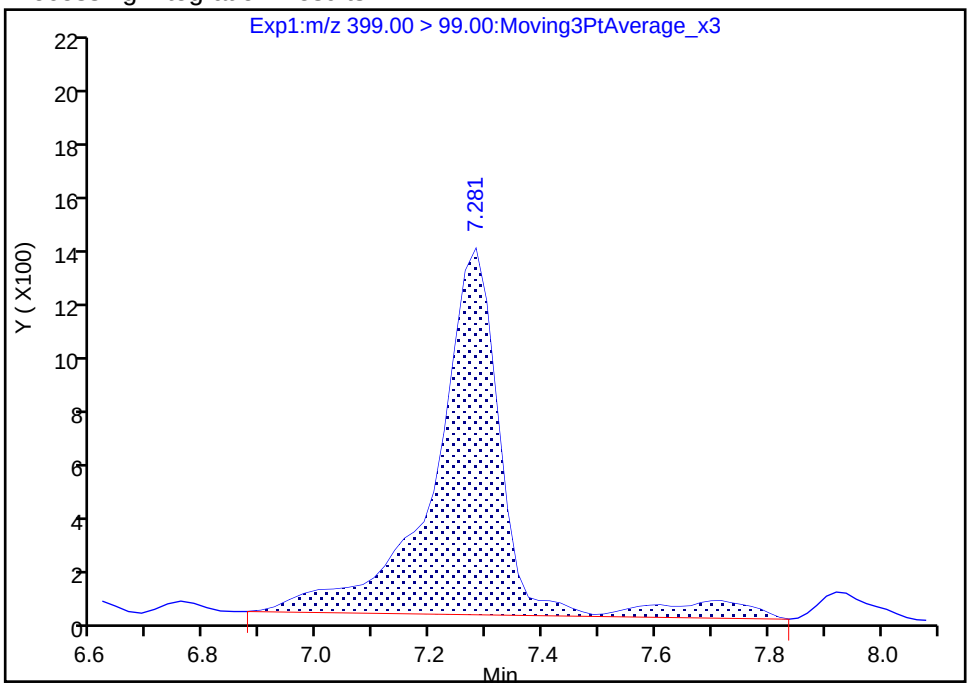
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

16 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

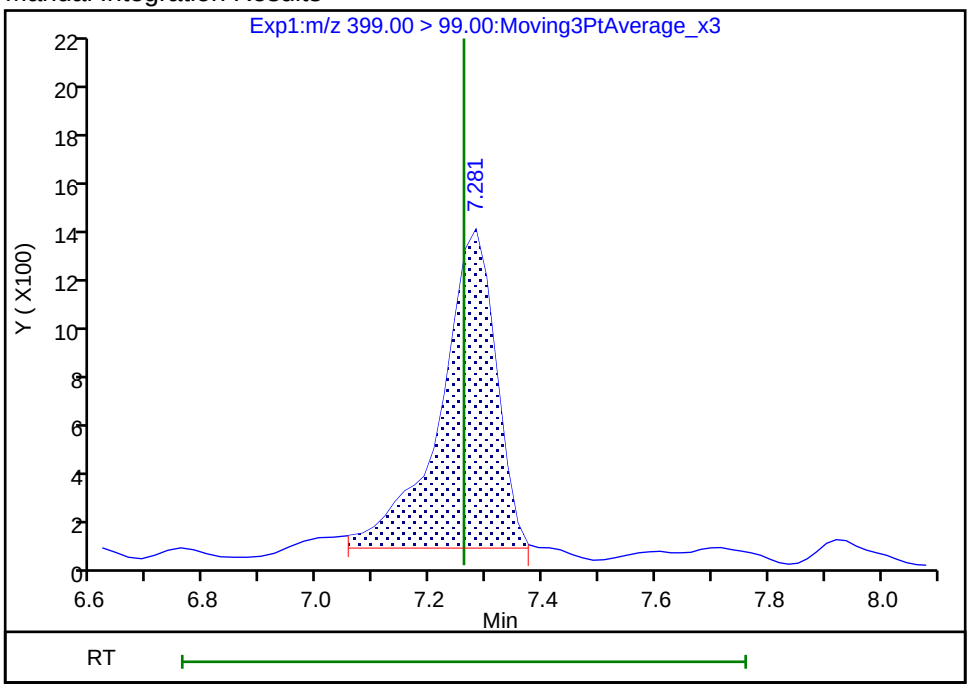
Processing Integration Results

RT: 7.28
Area: 11281
Amount: 0.001820
Amount Units: ng/ml



Manual Integration Results

RT: 7.28
Area: 8807
Amount: 0.001745
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:22:00
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

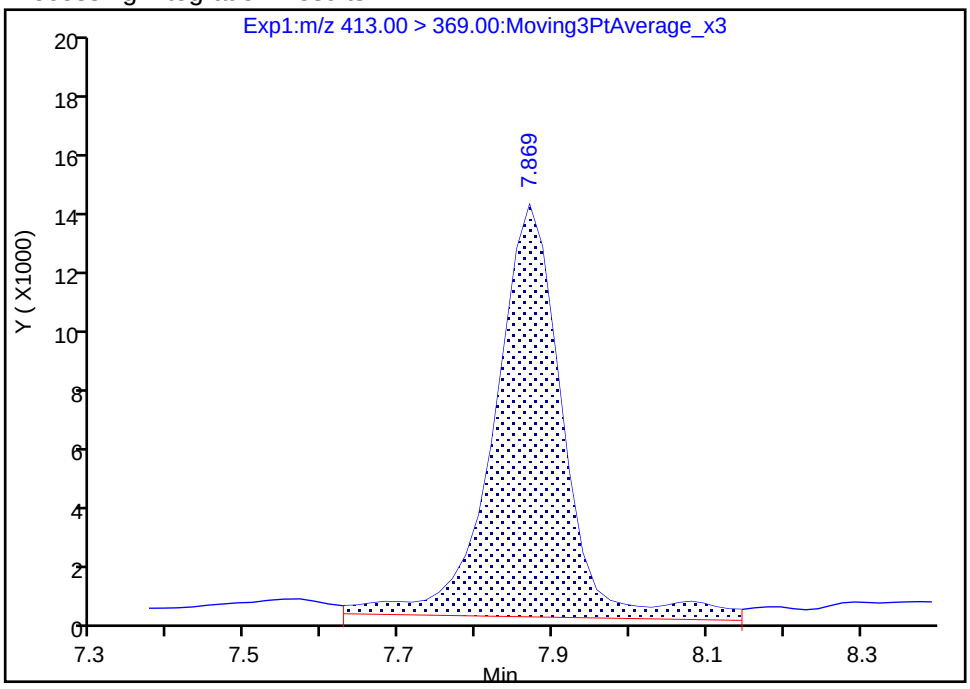
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

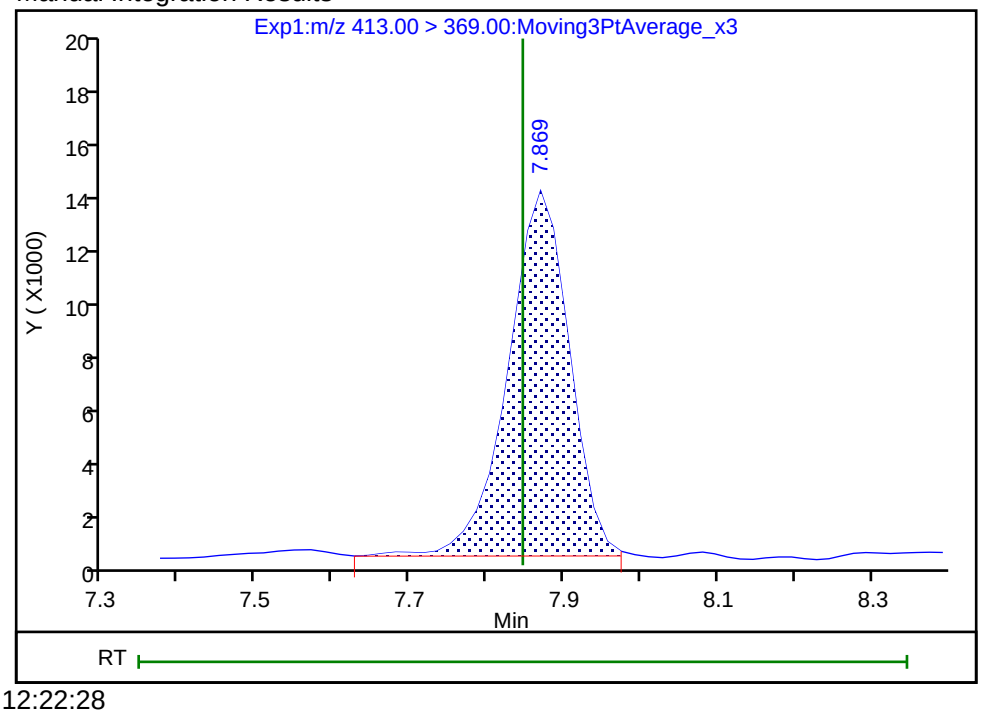
Processing Integration Results

RT: 7.87
Area: 86114
Amount: 0.001961
Amount Units: ng/ml



Manual Integration Results

RT: 7.87
Area: 74252
Amount: 0.001862
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:22:28
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

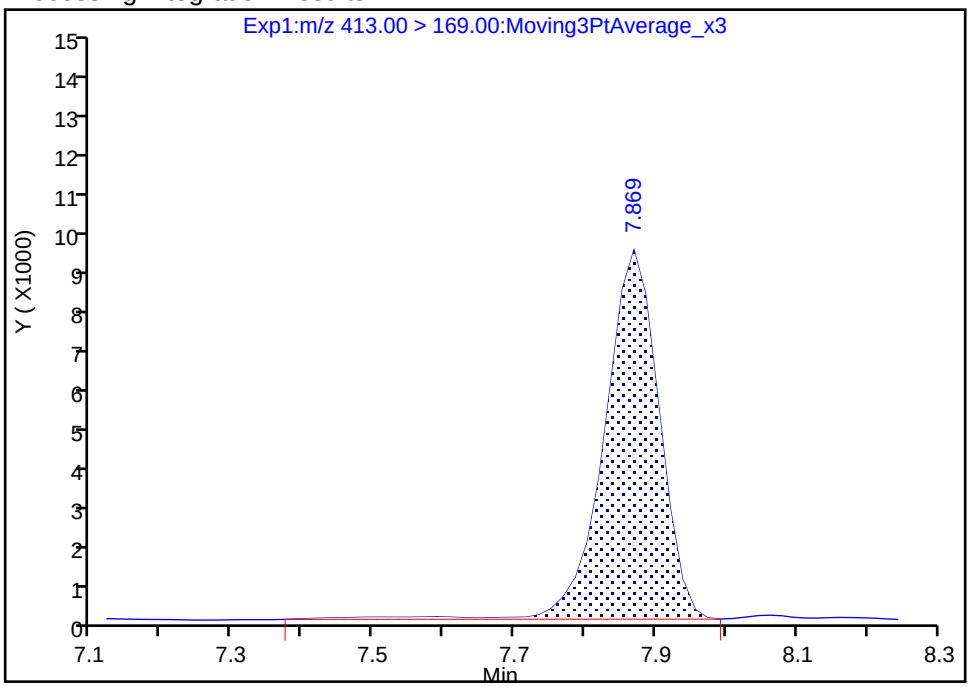
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

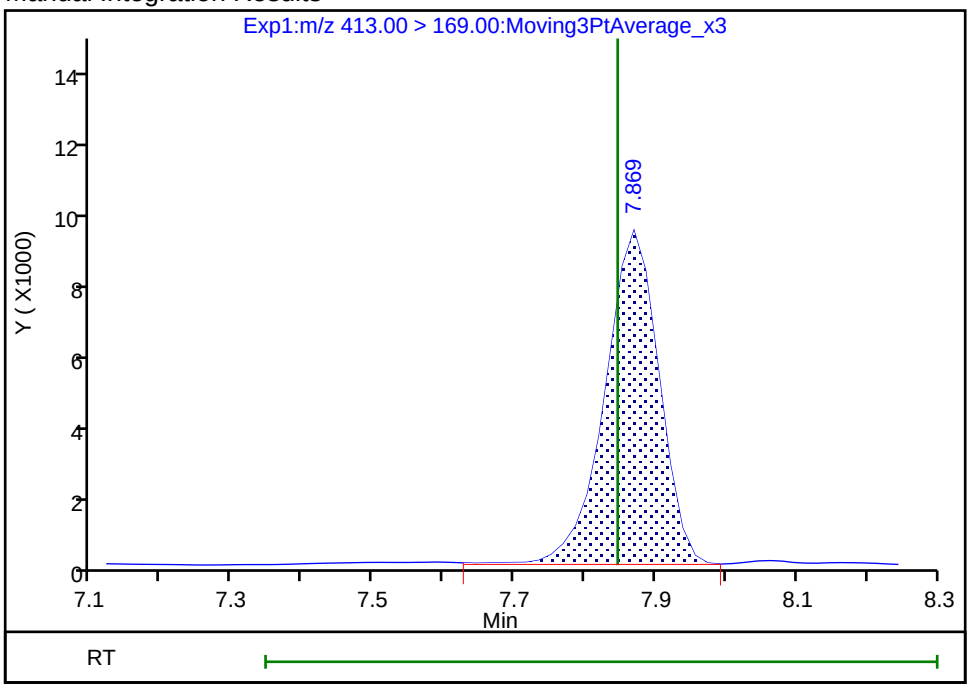
Processing Integration Results

RT: 7.87
Area: 50753
Amount: 0.001961
Amount Units: ng/ml



Manual Integration Results

RT: 7.87
Area: 50264
Amount: 0.001862
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:23:00
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

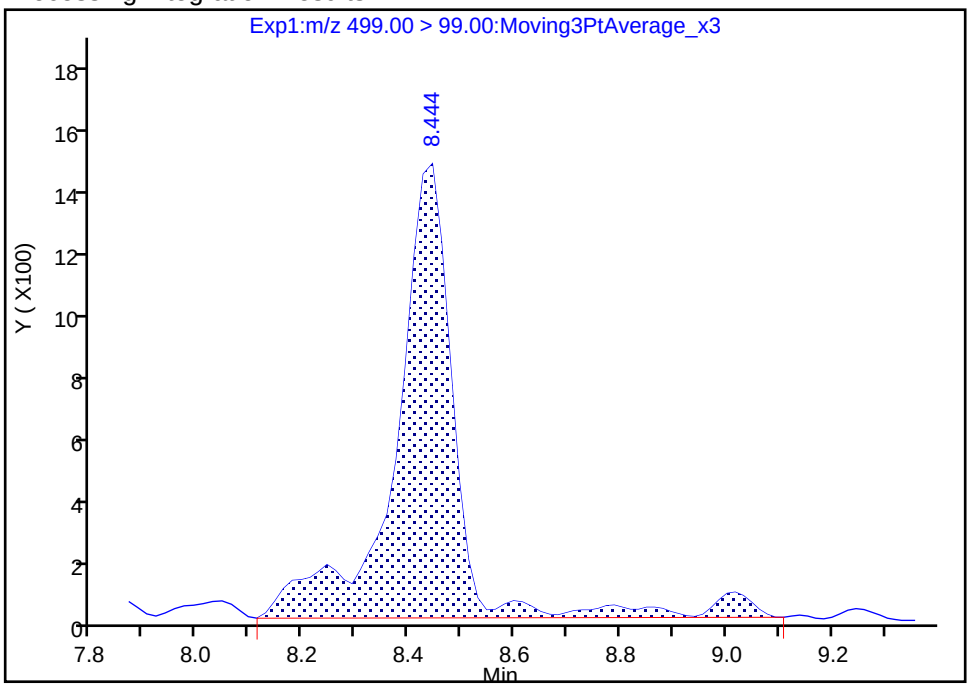
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

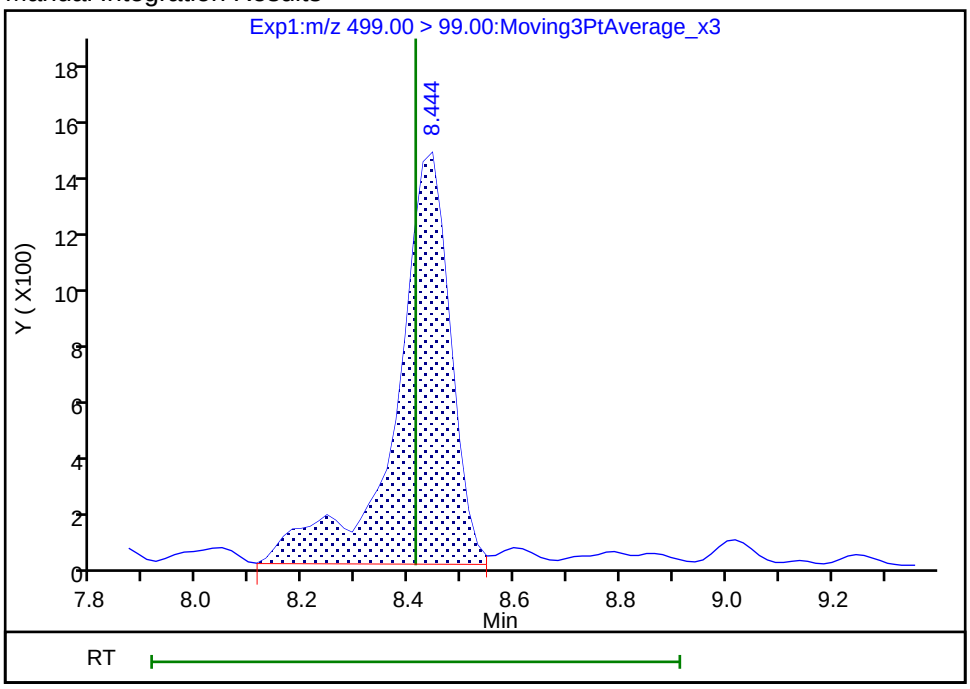
Processing Integration Results

RT: 8.44
Area: 11561
Amount: 0.001660
Amount Units: ng/ml



Manual Integration Results

RT: 8.44
Area: 10628
Amount: 0.001683
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:22:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

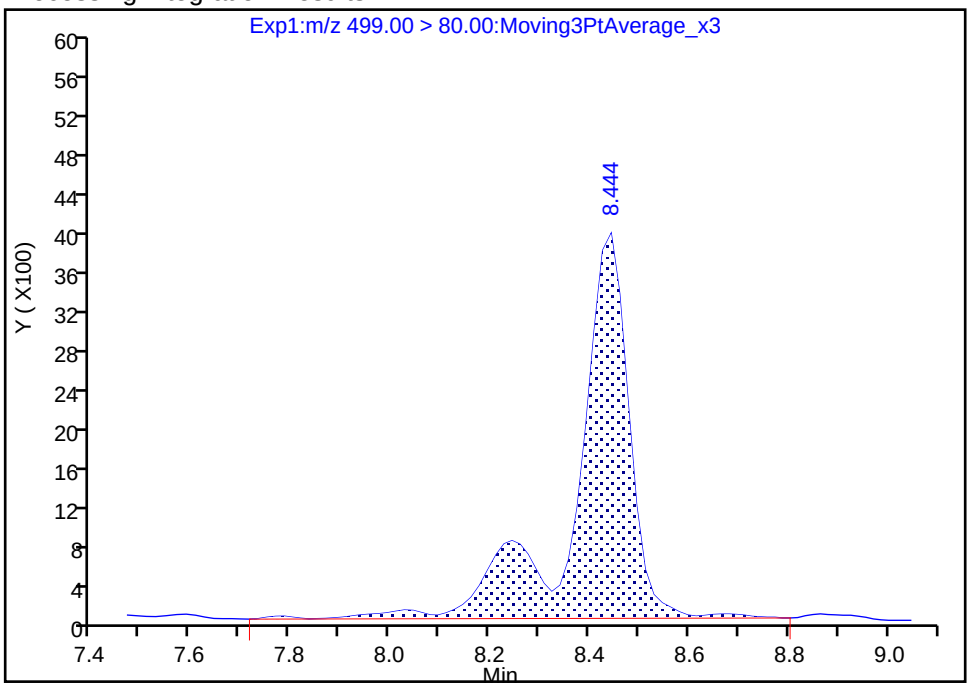
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

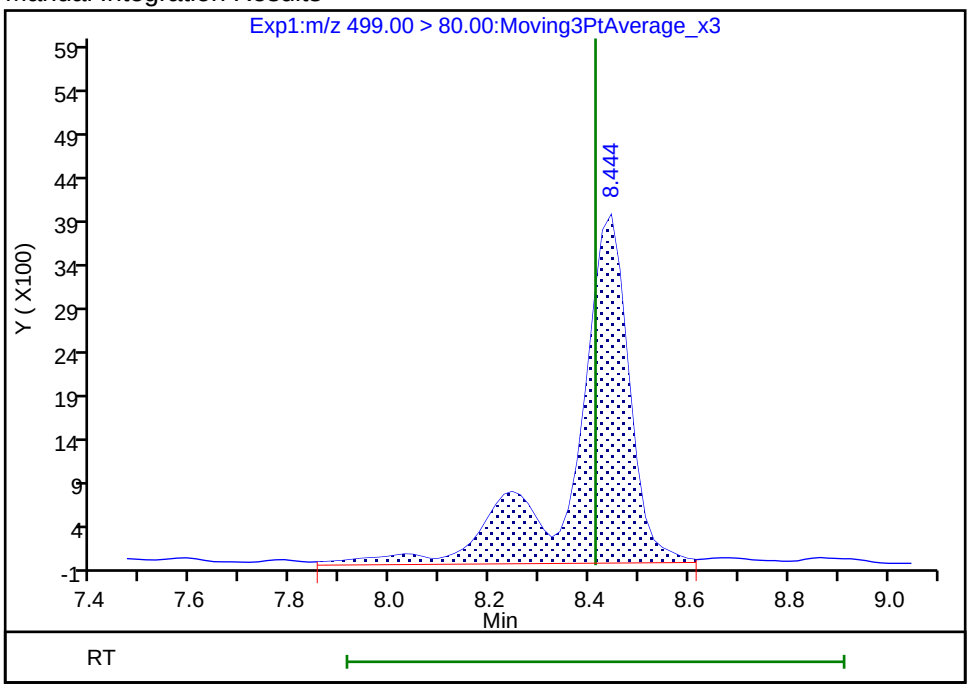
Processing Integration Results

RT: 8.44
Area: 30051
Amount: 0.001660
Amount Units: ng/ml



Manual Integration Results

RT: 8.44
Area: 30749
Amount: 0.001683
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:22:48
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

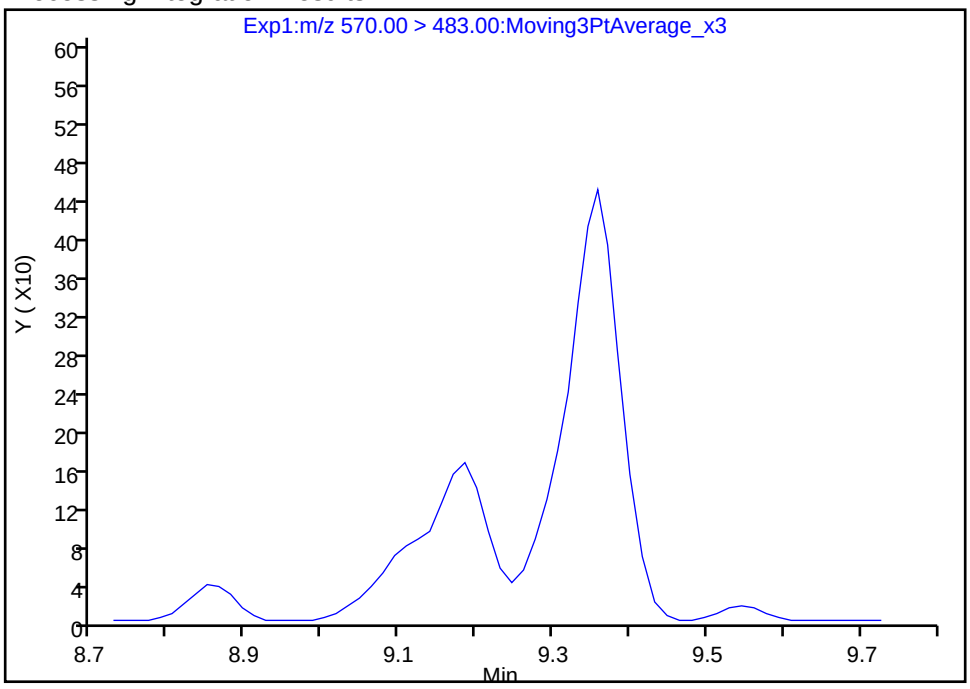
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

38 NMeFOSAA, CAS: 2355-31-9

Signal: 2

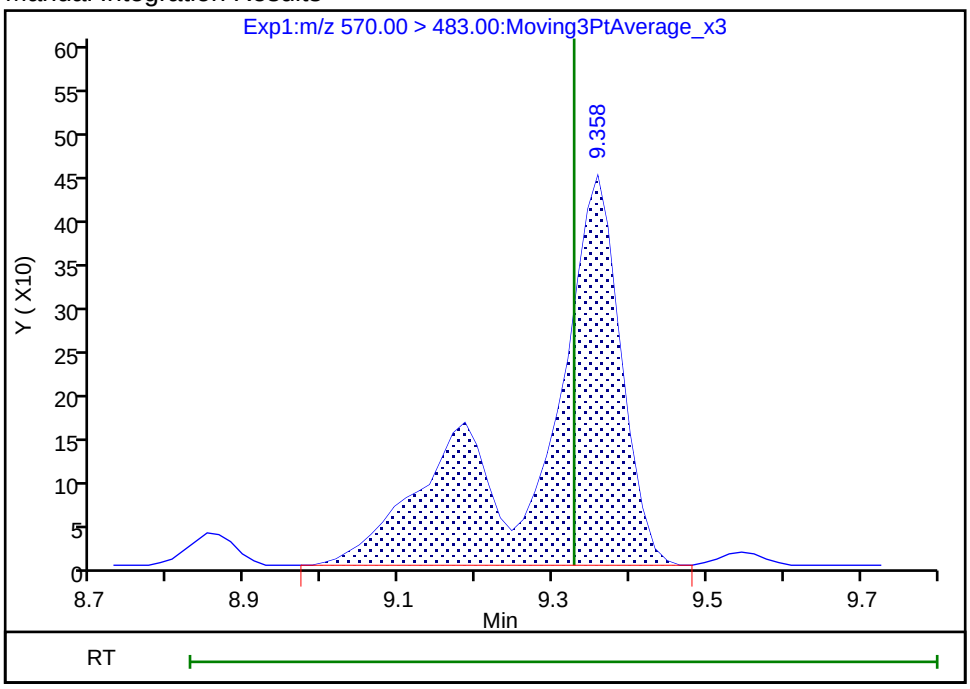
Not Detected
Expected RT: 9.33

Processing Integration Results



Manual Integration Results

RT: 9.36
Area: 3354
Amount: 0.001808
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:23:12
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d				
Injection Date:	12-Oct-2020 11:49:02	Instrument ID:	A10		
Lims ID:	IC STD 2				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	5	Worklist Smp#:	3
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm ID)	Detector	EXP1		

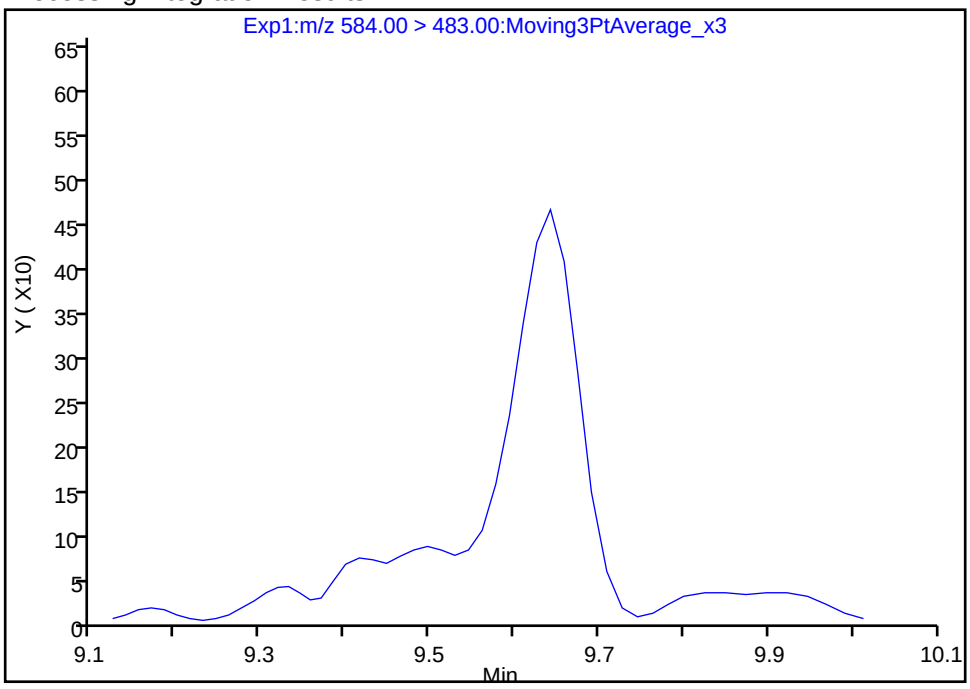
43 NEtFOSA, CAS: 2991-50-6

Signal: 2

Processing Integration Results

Not Detected

Expected RT: 9.61



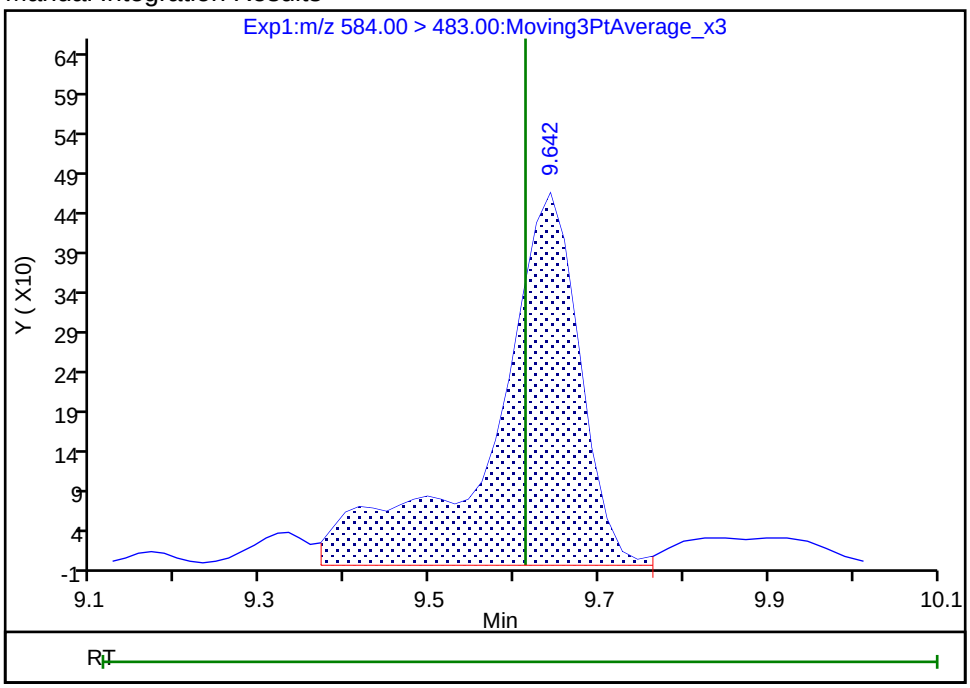
Manual Integration Results

RT: 9.64

Area: 3367

Amount: 0.001796

Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:23:19

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

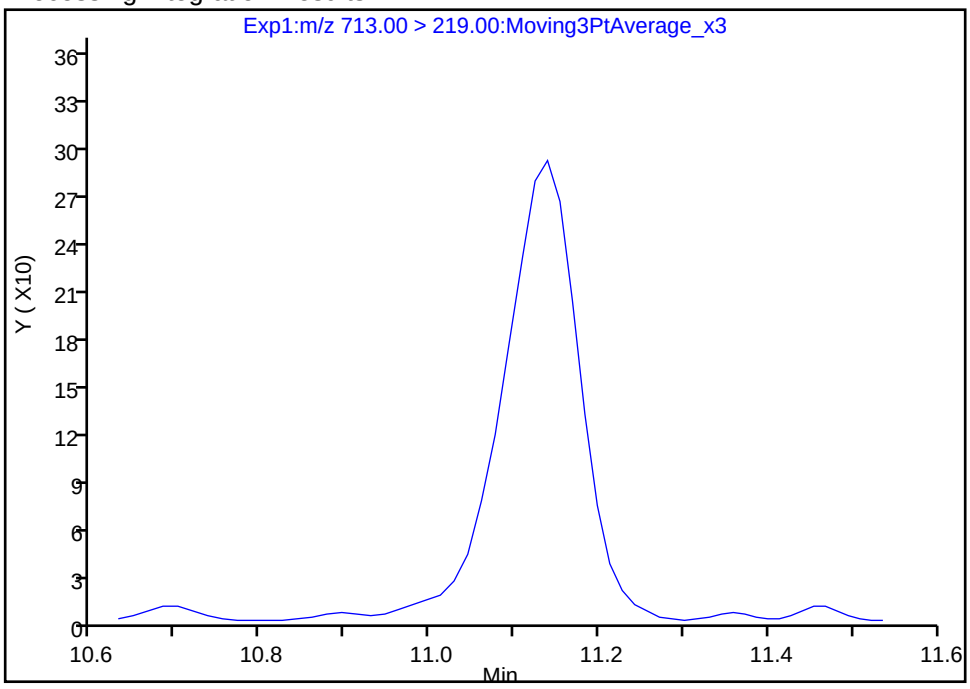
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

50 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

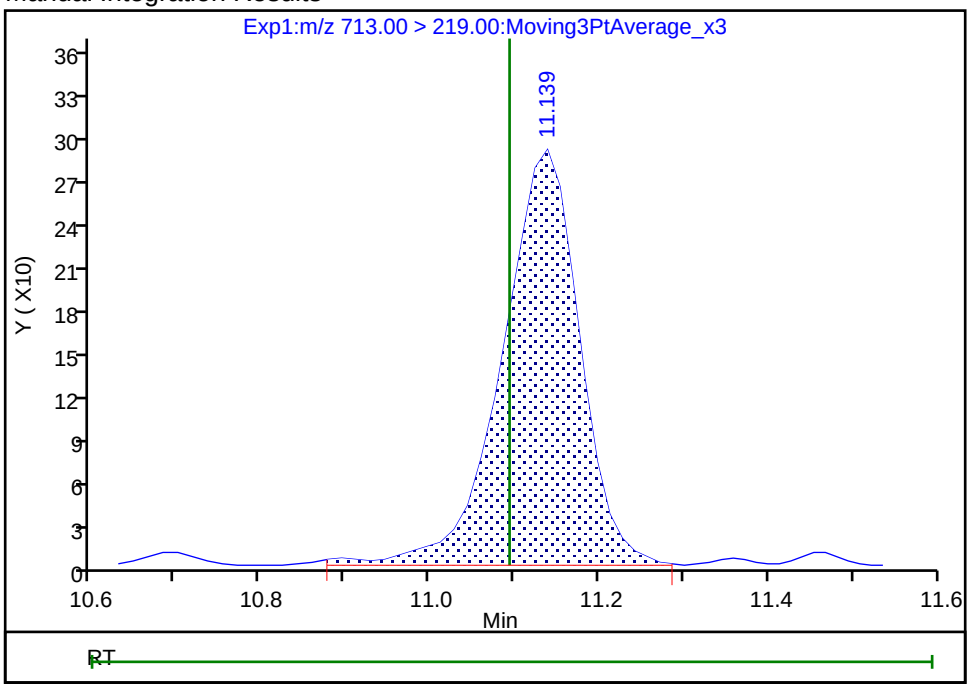
Not Detected
Expected RT: 11.09

Processing Integration Results



Manual Integration Results

RT: 11.14
Area: 1866
Amount: 0.001825
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:23:26
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

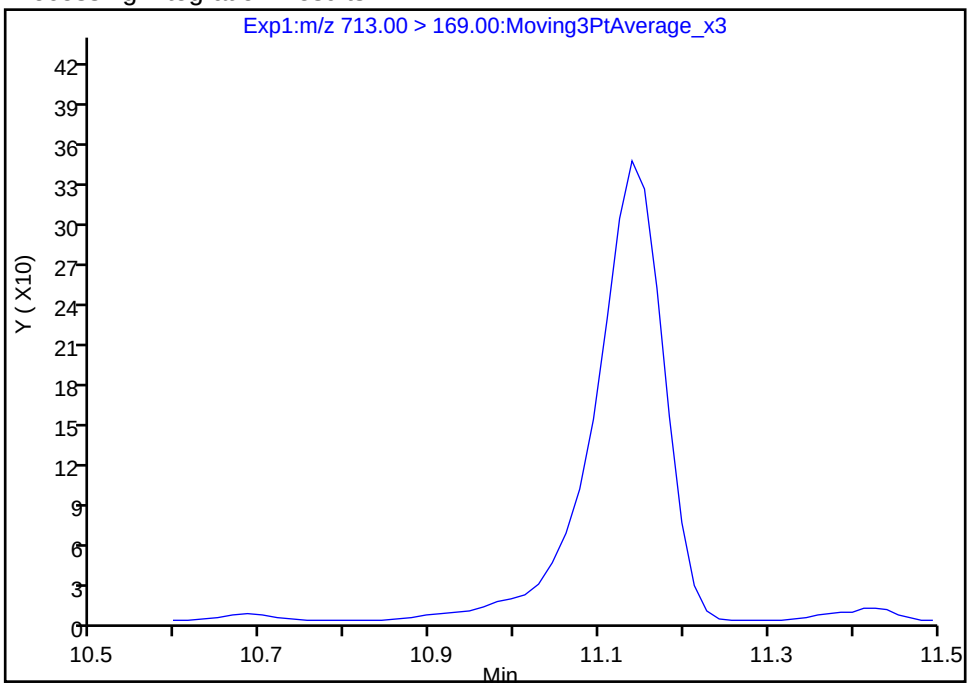
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d				
Injection Date:	12-Oct-2020 11:49:02	Instrument ID:	A10		
Lims ID:	IC STD 2				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	5	Worklist Smp#:	3
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm ID)	Detector	EXP1		

50 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

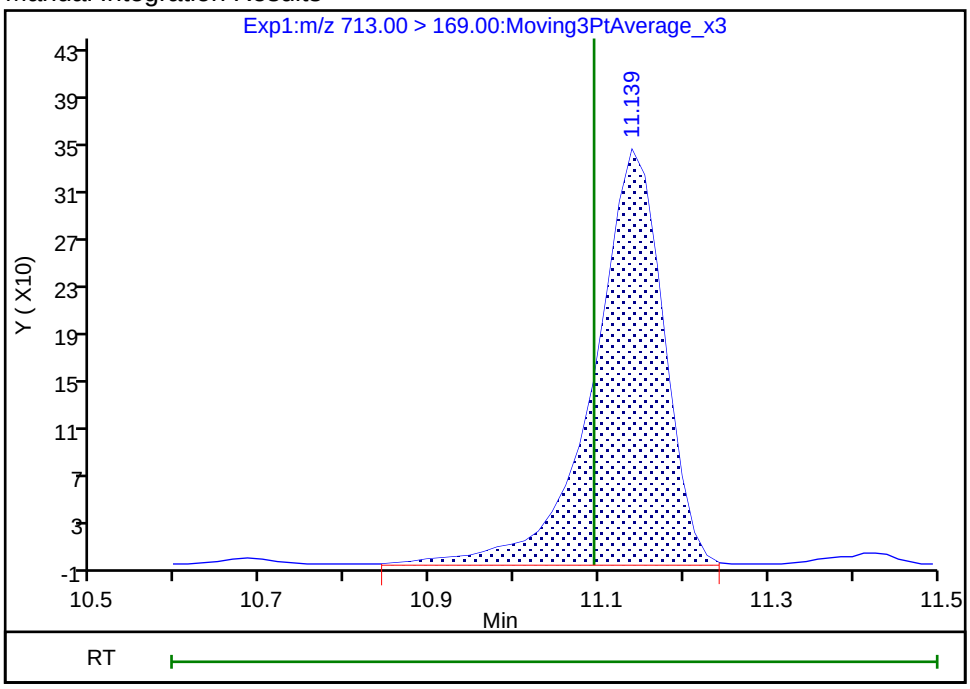
Processing Integration Results

Not Detected
Expected RT: 11.09



Manual Integration Results

RT: 11.14
Area: 1989
Amount: 0.001825
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:23:32
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

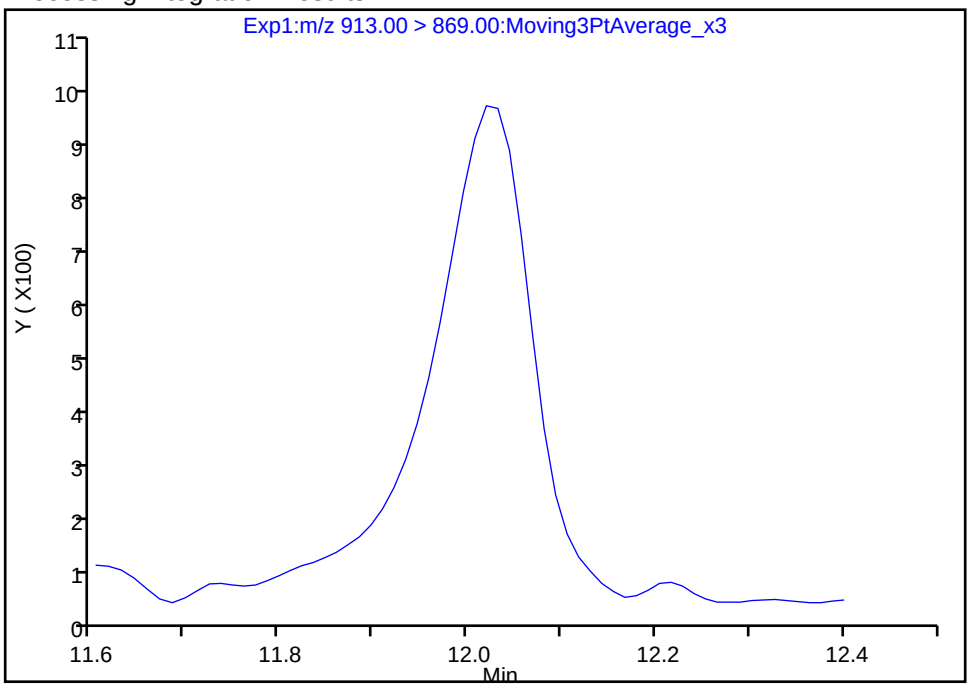
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d				
Injection Date:	12-Oct-2020 11:49:02	Instrument ID:	A10		
Lims ID:	IC STD 2				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	5	Worklist Smp#:	3
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 1

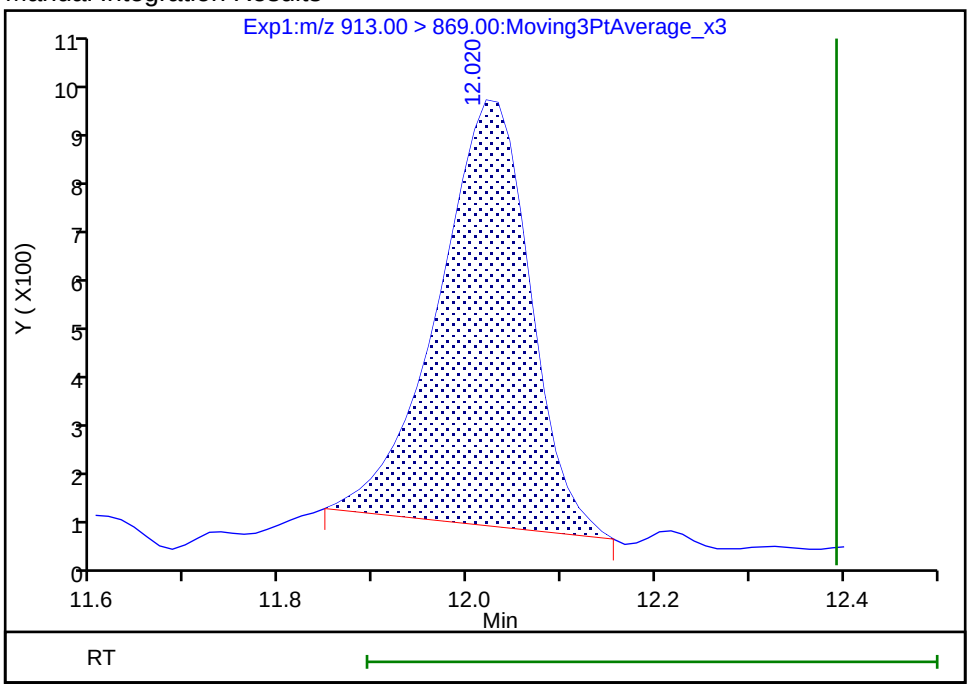
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 12.02
Area: 5998
Amount: 0.002058
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 12:54:15
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

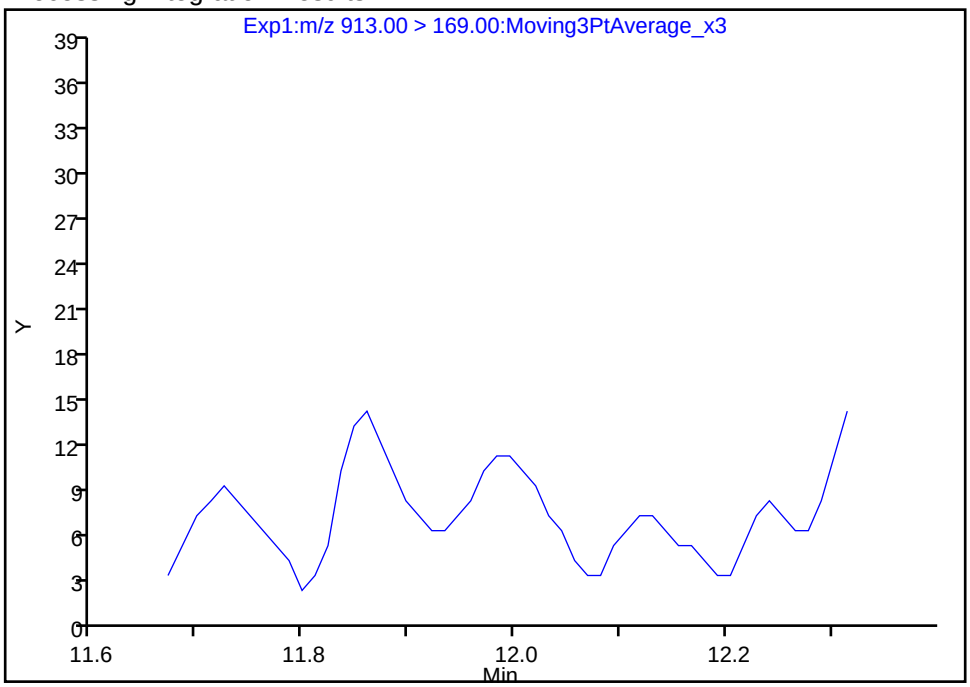
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

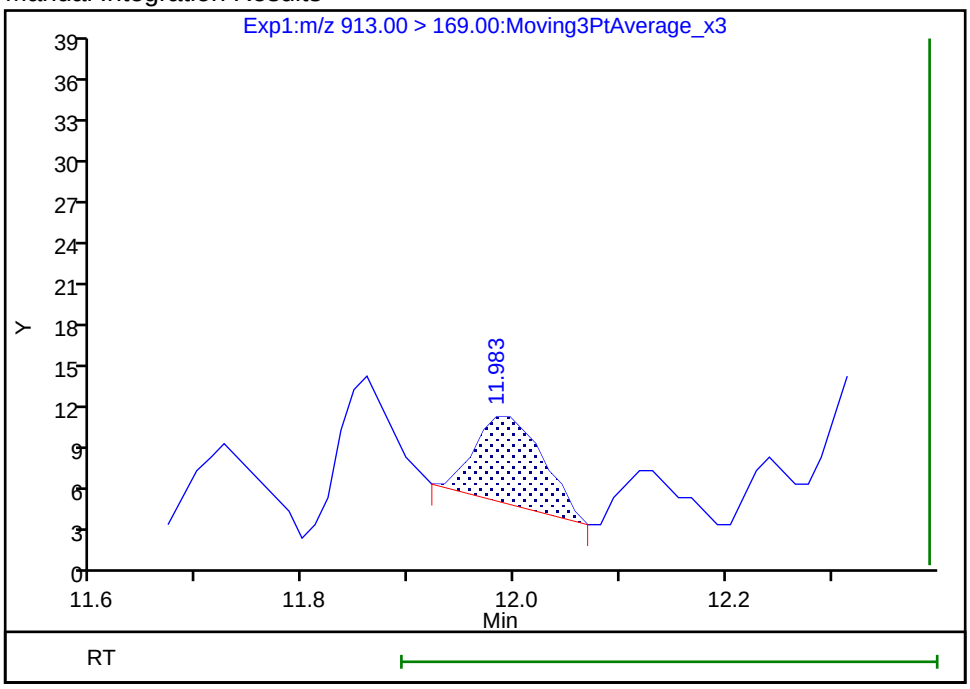
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 11.98
Area: 29
Amount: 0.002058
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 12:54:19
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

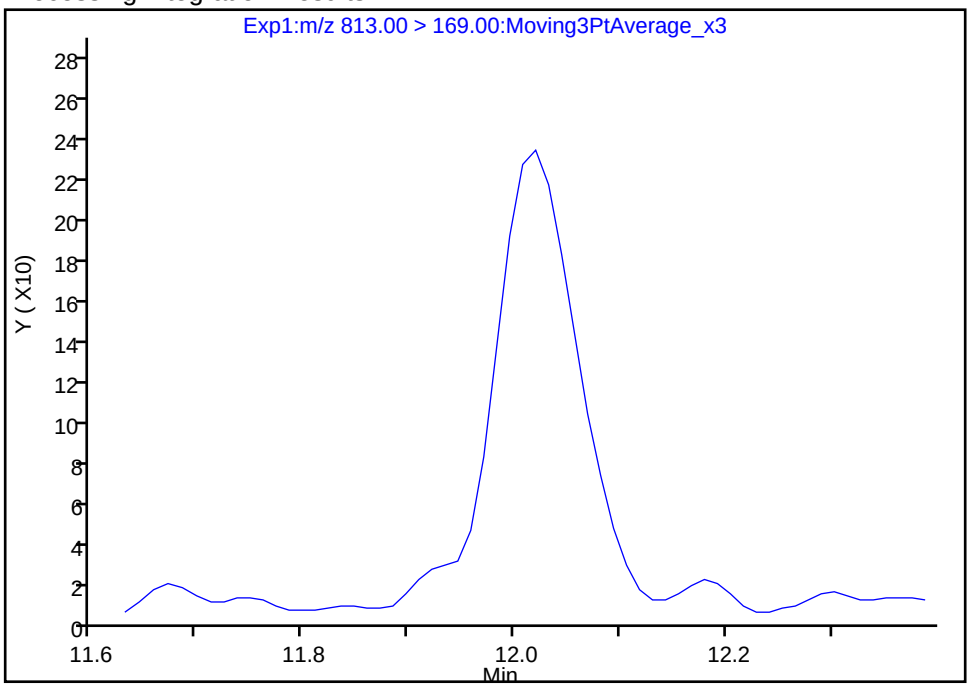
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_005.d
Injection Date: 12-Oct-2020 11:49:02 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

54 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 2

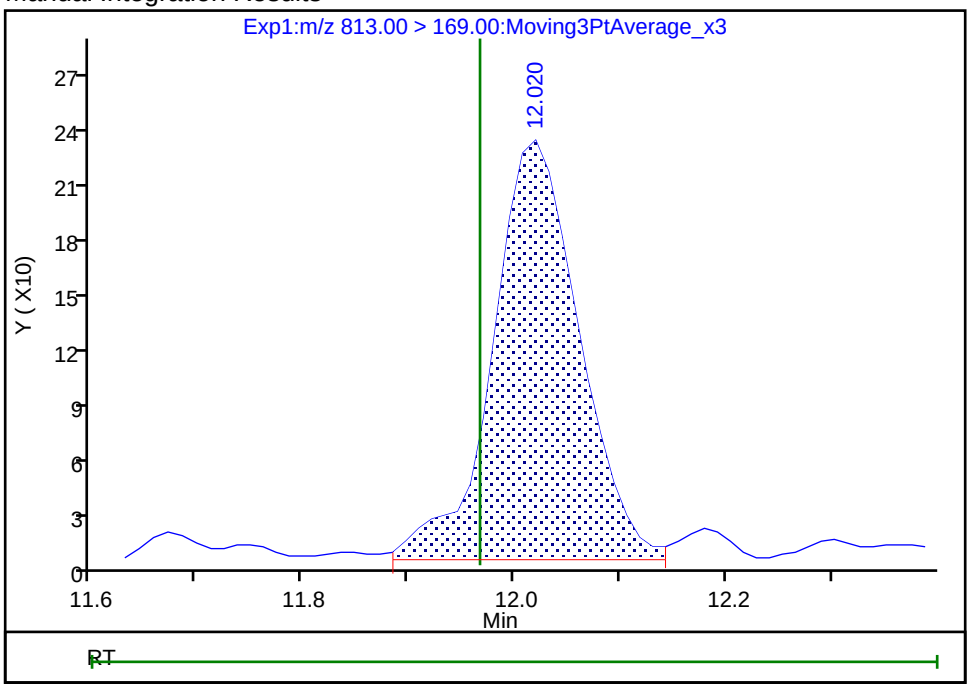
Not Detected
Expected RT: 11.97

Processing Integration Results



Manual Integration Results

RT: 12.02
Area: 1297
Amount: 0.001823
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:23:37
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Lims ID: IC STD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-Oct-2020 12:07:28 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 3
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:23:21 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: vangmy Date: 12-Oct-2020 12:37:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.639	5.644	-0.005		2031487	0.0512		102	16448	
1 Perfluorobutanoic acid										
169	5.639	5.647	-0.008	1.000	182003	0.005093		102	29.0	
D 4 13C5 PFPeA										
223	6.250	6.253	-0.003		1757092	0.0517		103	17559	
5 Perfluoropentanoic acid										
219	6.250	6.253	-0.003	1.000	197323	0.005212		104	42.5	
D 3 13C3 PFBS										
80	6.317	6.305	0.012		2001230	0.0476		102	4346	
6 Perfluorobutanesulfonic acid										
80	6.317	6.308	0.009	1.000	194017	0.004554	Target=1.50	103	265	
99	6.317	6.308	0.009	1.000	128162		1.51(0.75-2.26)	103	115	
D 7 M2-4:2 FTS										
81	6.688	6.688	0.0		540333	NC			956	
8 4:2 FTS										
307	6.688	6.688	0.0	1.000	144791	NC	Target=2.45		1637	
81	6.688	6.688	0.0	1.000	62752		2.31(1.22-3.67)		112	
D 9 13C2 PFHxA										
270	6.735	6.741	-0.006		1885459	0.0521		104	16011	
10 Perfluorohexanoic acid										
269	6.735	6.744	-0.009	1.000	176708	0.005049	Target=17.92	101	84.6	
119	6.735	6.744	-0.009	1.000	9767		18.09(8.96-26.88)	101	69.6	
11 Perfluoropentanesulfonic acid										
80	6.758	6.755	0.003	0.930	158639	NC	Target=1.47		183	
99	6.758	6.755	0.003	0.930	104744		1.51(0.74-2.21)		176	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.900	6.888	0.012		116531	NC			432	
13 HPFO-DA										
285	6.900	6.891	0.009	1.000	28281	NC			27.0	
14 9ClFOS										M
351	7.155	7.212	-0.057	0.849	5394	NC			4.4	M
D 15 18O2 PFHxS										
84	7.263	7.260	0.003		1259210	0.0487		103	11085	
16 Perfluorohexanesulfonic acid										M
80	7.263	7.260	0.003	1.000	129518	0.004288	Target=5.60	94.2	195	M
99	7.263	7.260	0.003	1.000	23073		5.61(2.80-8.40)	94.2	74.8	M
D 17 13C4 PFHpA										
322	7.282	7.270	0.012		1872725	0.0511		102	15394	
18 Perfluoroheptanoic acid										
319	7.282	7.272	0.010	1.000	190038	0.004962	Target=8.55	99.2	67.4	
169	7.282	7.272	0.010	1.000	22573		8.42(4.27-12.82)	99.2	280	
19 DONA										
251	7.337	7.328	0.009	0.871	755010	NC	Target=2.62		3949	
85	7.337	7.328	0.009	0.871	285373		2.65(1.31-3.93)		950	
D 22 M2-6:2 FTS										
81	7.820	7.813	0.007		663169	0.0512		108	1417	
23 6:2 FTS										
407	7.820	7.813	0.007	1.000	156661	0.004521	Target=2.55	95.4	1446	
81	7.820	7.813	0.007	1.000	60457		2.59(1.27-3.82)	95.4	117	
21 Perfluoroheptanesulfonic acid										M
80	7.820	7.821	-0.001	0.928	108437	0.004816	Target=6.95	101	272	M
99	7.820	7.821	-0.001	0.928	16922		6.41(3.48-10.43)	101	75.9	M
D 25 13C4 PFOA										
372	7.853	7.842	0.011		2152161	0.0505		101	14434	
24 Perfluorooctanoic acid										M
369	7.853	7.846	0.007	1.000	230153	0.005508	Target=1.41	110	46.4	M
169	7.853	7.846	0.007	1.000	146500		1.57(0.71-2.12)	110	591	M
27 Perfluorooctanesulfonic acid										M
80	8.427	8.413	0.014	1.000	91186	0.004775	Target=3.36	103	363	M
99	8.410	8.413	-0.003	0.998	26829		3.40(1.68-5.04)	103	75.6	M
D 26 13C4 PFOS										
80	8.427	8.413	0.014		891901	0.0484		101	3517	
D 28 13C5 PFNA										
423	8.444	8.443	0.001		1938994	0.0541		108	14773	
29 Perfluorononanoic acid										
419	8.462	8.448	0.014	1.002	167173	0.004873	Target=6.88	97.5	83.1	
169	8.462	8.448	0.014	1.002	23443		7.13(3.44-10.32)	97.5	221	
D 30 13C8 FOSA										
78	8.972	8.968	0.004		1083520	0.0494		98.8	7589	
31 Perfluorooctanesulfonamide										
78	8.972	8.969	0.003	1.000	115098	0.005302		106	1968	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
32 Perfluorononanesulfonic acid										
80	9.003	8.994	0.008	1.068	80085	NC	Target=6.23		536	
99	9.003	8.994	0.008	1.068	12830		6.24(3.11-9.34)		55.7	
D 33 13C2 PFDA										
470	9.048	9.035	0.013		1790725	0.0507		101	12452	
35 Perfluorodecanoic acid										
469	9.048	9.037	0.011	1.000	146331	0.005085	Target=14.44	102	104	
169	9.048	9.037	0.011	1.000	10220		14.32(7.22-21.66)	102	140	
D 34 M2-8:2 FTS										
81	9.048	9.037	0.011		676569	0.0495		103	2382	
36 8:2 FTS										
507	9.048	9.037	0.011	1.000	164803	0.005258	Target=2.16	110	1905	
81	9.048	9.037	0.011	1.000	72187		2.28(1.08-3.24)	110	309	
D 37 d3-NMeFOSAA										
419	9.333	9.317	0.016		1258205	0.0510		102	8328	
38 NMeFOSAA										
419	9.333	9.327	0.006	1.000	105839	0.005059	Target=13.31	101	442	
483	9.333	9.327	0.006	1.000	8340		12.69(6.65-19.96)	101	115	
39 Perfluorodecanesulfonic acid										
80	9.562	9.546	0.016	1.135	64705	0.004644	Target=2.51	96.3	569	
99	9.546	9.546	0.0	1.133	24471		2.64(1.26-3.77)	96.3	293	
D 42 13C2 PFUnA										
520	9.610	9.595	0.015		1832384	0.0503		101	15191	
41 Perfluoroundecanoic acid										
519	9.610	9.597	0.013	1.000	166778	0.005162	Target=19.91	103	124	
169	9.610	9.597	0.013	1.000	8367		19.93(9.95-29.86)	103	116	
D 40 d5-NEtFOSAA										
419	9.610	9.603	0.007		1421052	0.0515		103	5216	
43 NEtFOSA										
419	9.626	9.613	0.013	1.002	116829	0.005206	Target=13.66	104	1185	
483	9.626	9.613	0.013	1.002	8634		13.53(6.83-20.48)	104	66.4	
44 11ClFOS										
451	9.850	9.828	0.022	1.169	382227	NC			708	
46 Perfluorododecanoic acid										
569	10.145	10.127	0.018	1.000	135884	0.004656	Target=12.99	93.1	52.3	
169	10.145	10.127	0.018	1.000	11083		12.26(6.50-19.49)	93.1	147	
D 45 13C2 PFDoA										
570	10.145	10.127	0.018		1778478	0.0485		97.1	11933	
47 10:2 FTS										
607	10.168	10.152	0.016	1.124	181845	NC	Target=27.54		1677	
81	10.168	10.152	0.016	1.124	7136		25.48(13.77-41.31)		101	
48 PFDoS										
80	10.561	10.555	0.006	1.253	18172	NC	Target=0.45		120	
99	10.561	10.555	0.006	1.253	38155		0.48(0.22-0.67)		256	
49 Perfluorotridecanoic acid										
619	10.631	10.622	0.009	1.048	153990	0.004960	Target=16.38	99.2	50.2	
169	10.631	10.622	0.009	1.048	8762		17.57(8.19-24.57)	99.2	184	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 51 13C2 PFTeDA										
670	11.109	11.092	0.017		1032079	0.0427		85.4	8433	
50 Perfluorotetradecanoic acid										
169	11.109	11.094	0.015	1.000	4838	0.004575	Target=1.23	91.5	100	
219	11.109	11.094	0.015	1.000	3563		1.36(0.62-1.85)	91.5	93.6	
D 52 13C2 PFHxDA										
770	11.983	11.966	0.017		613952	0.0409		81.7	3670	
53 Perfluorooctadecanoic acid										M
869	11.983	12.393	-0.410	1.000	5309	0.001970	Target=92.79	39.4	8.2	
169	11.934	12.393	-0.459	0.996	39		136.13(46.39-139.18)	39.4	0.8	M
54 Perfluorohexadecanoic acid										M
769	11.983	11.967	0.016	1.000	58033	0.004911	Target=23.79	98.2	48.3	
169	11.983	11.967	0.016	1.000	2634		22.03(11.89-35.68)	98.2	55.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

LCPFC-LL-L3_00021 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:23:22 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d

Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10

Lims ID: IC STD 3

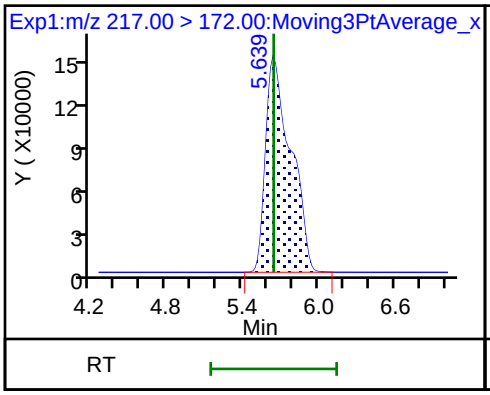
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4

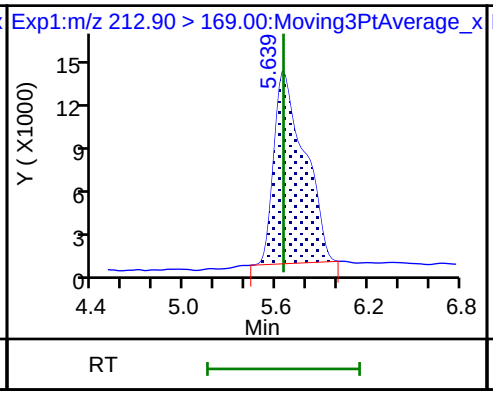
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

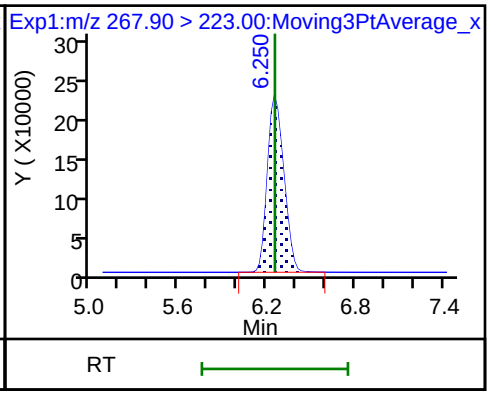
D 2 13C4 PFBA



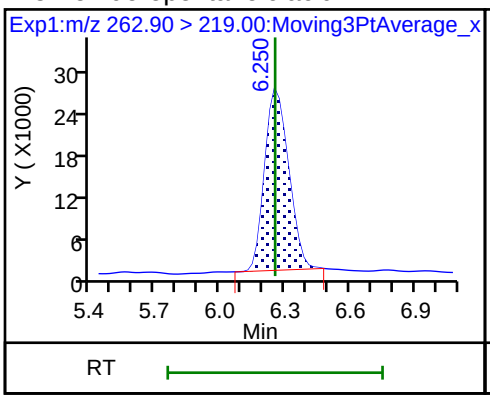
1 Perfluorobutanoic acid



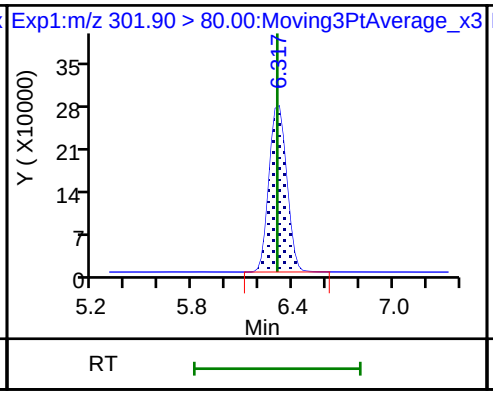
D 4 13C5 PFPeA



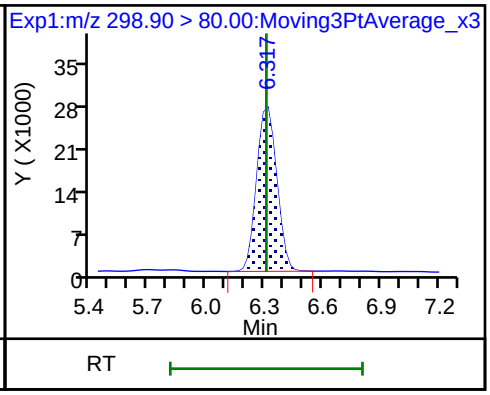
5 Perfluoropentanoic acid



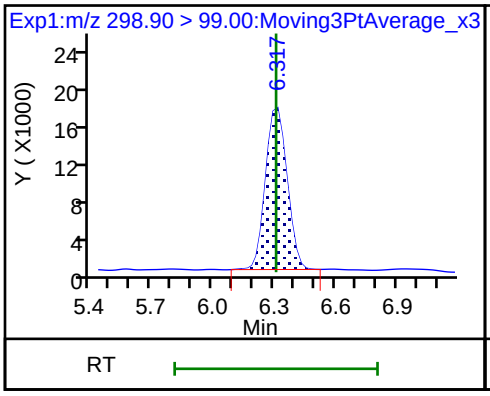
D 3 13C3 PFBS



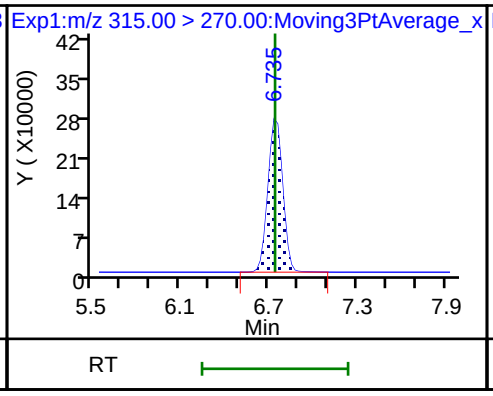
6 Perfluorobutanesulfonic acid



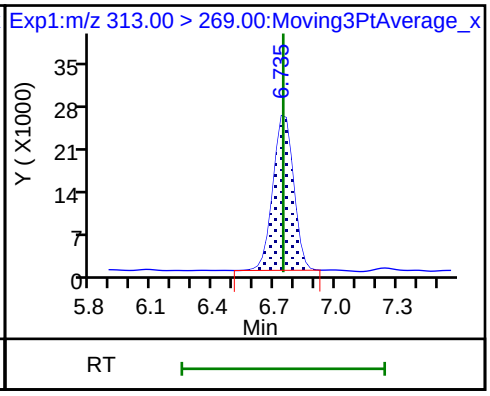
6 Perfluorobutanesulfonic acid



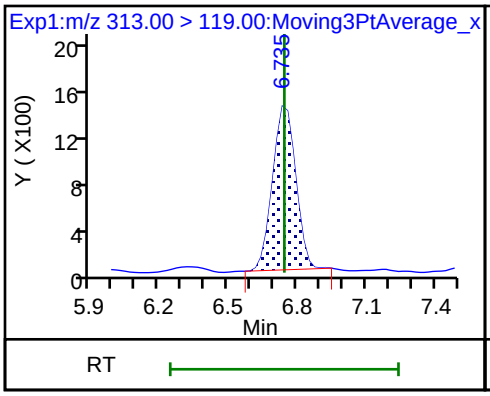
D 9 13C2 PFHxA



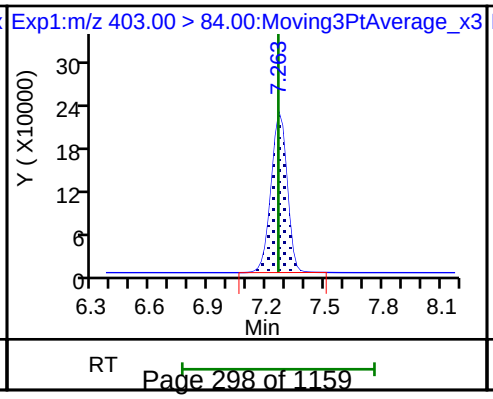
10 Perfluorohexanoic acid



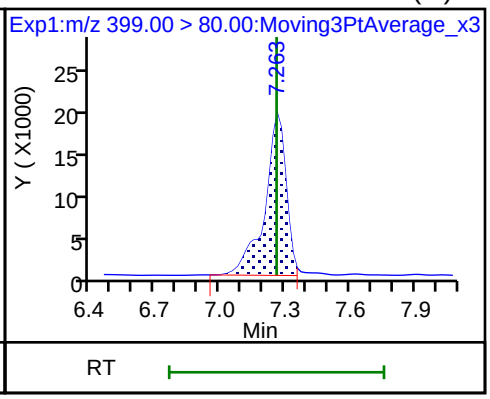
10 Perfluorohexanoic acid



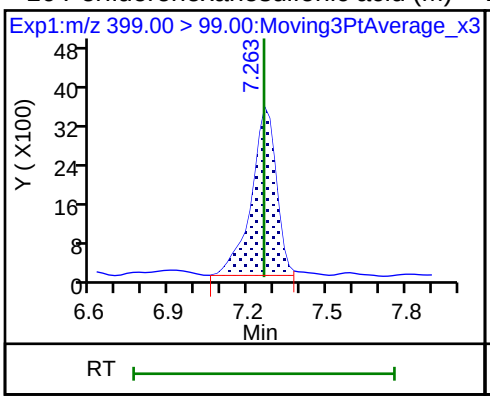
D 15 18O2 PFHxS



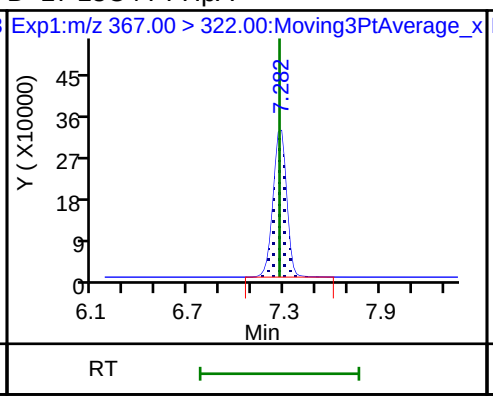
16 Perfluorohexanesulfonic acid (M)



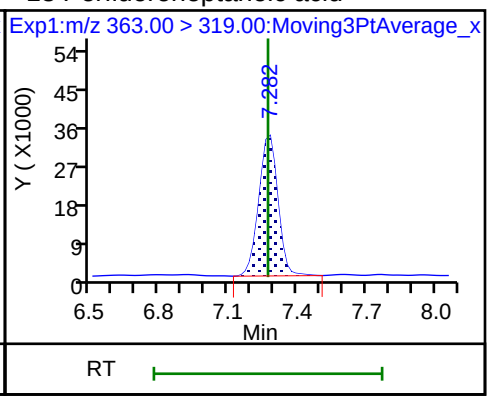
16 Perfluorohexanesulfonic acid (M)



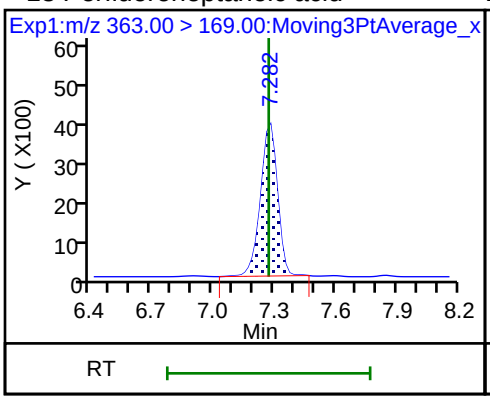
D 17 13C4 PFHpA



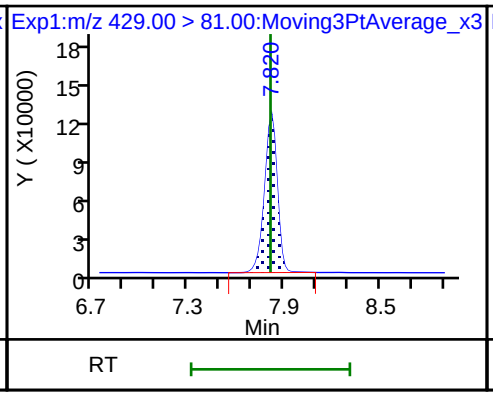
18 Perfluoroheptanoic acid



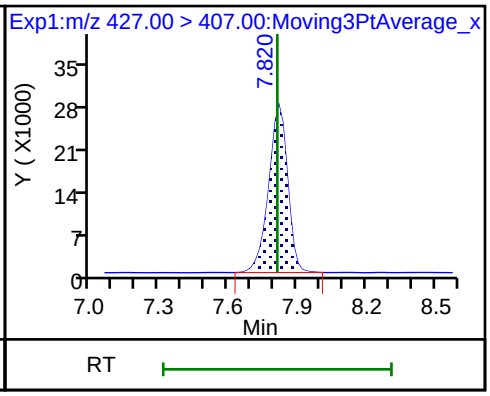
18 Perfluoroheptanoic acid



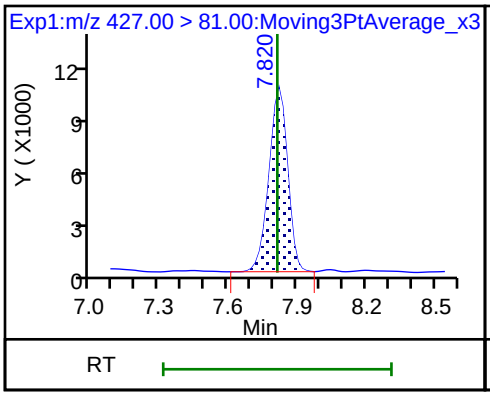
D 22 M2-6:2 FTS



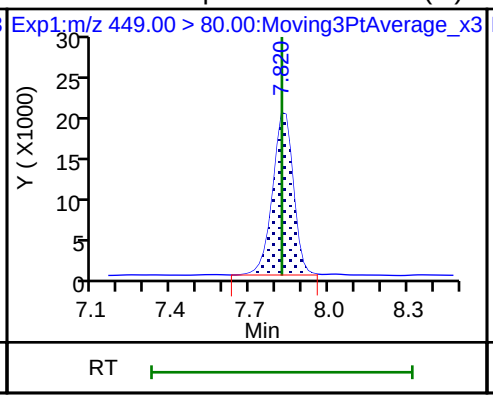
23 6:2 FTS



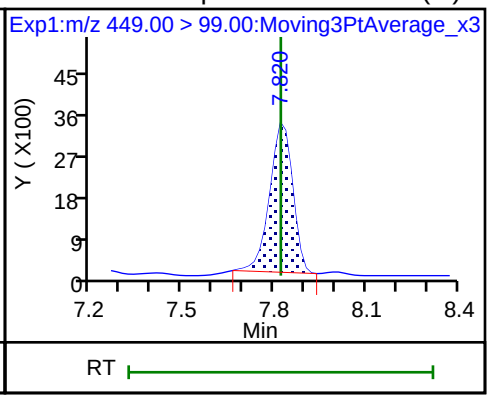
23 6:2 FTS



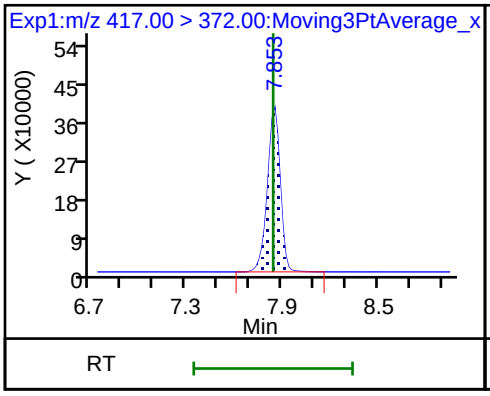
21 Perfluoroheptanesulfonic acid (M)



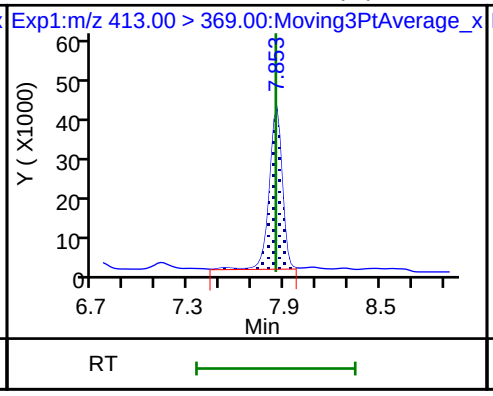
21 Perfluoroheptanesulfonic acid (M)



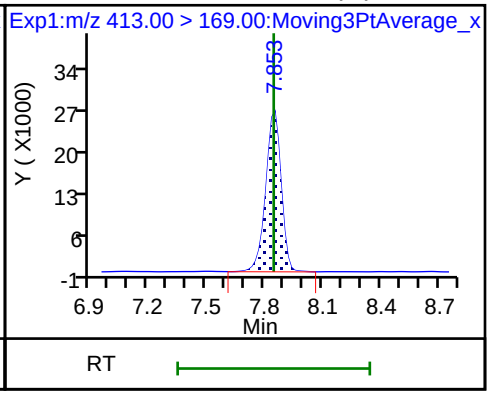
D 25 13C4 PFOA



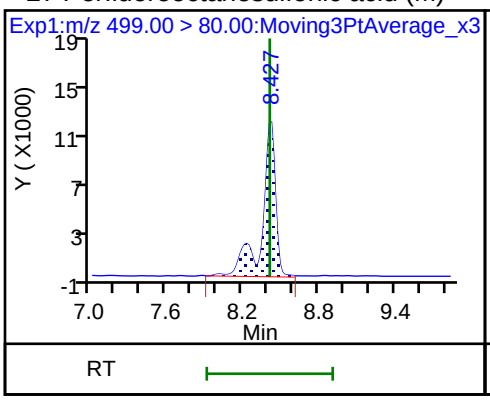
24 Perfluorooctanoic acid (M)



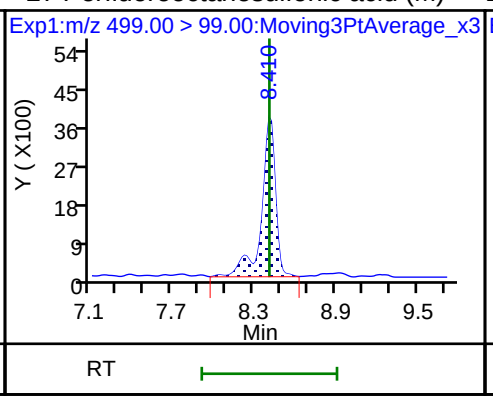
24 Perfluorooctanoic acid (M)



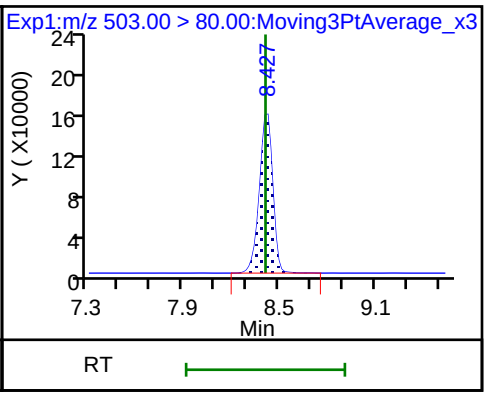
27 Perfluorooctanesulfonic acid (M)



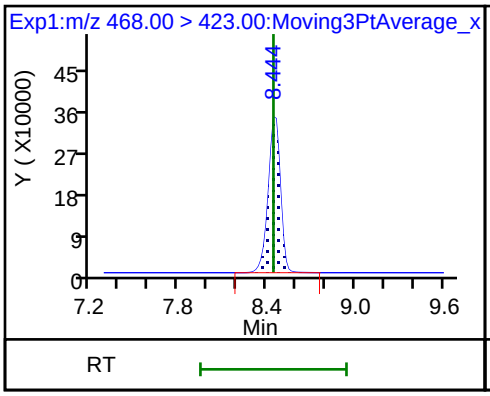
27 Perfluorooctanesulfonic acid (M)



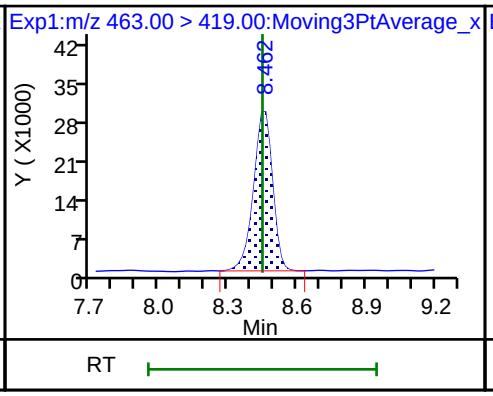
D 26 13C4 PFOS



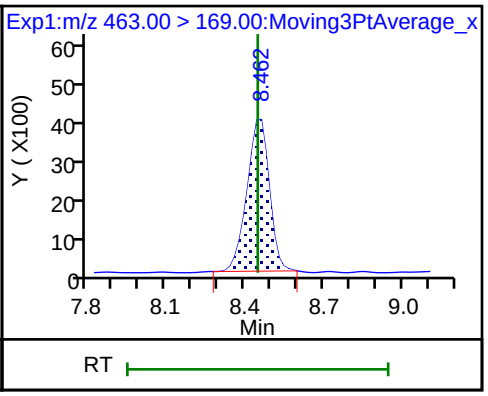
D 28 13C5 PFNA



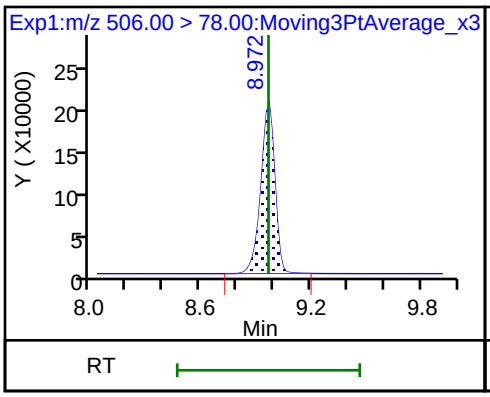
29 Perfluorononanoic acid



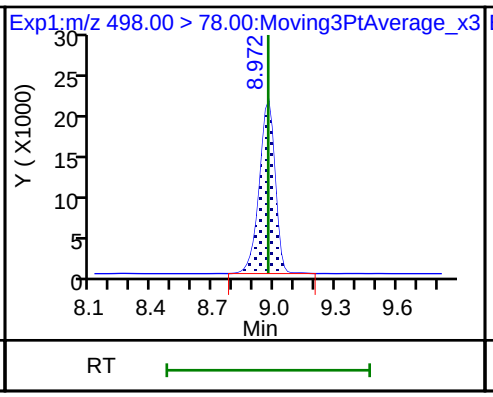
29 Perfluorononanoic acid



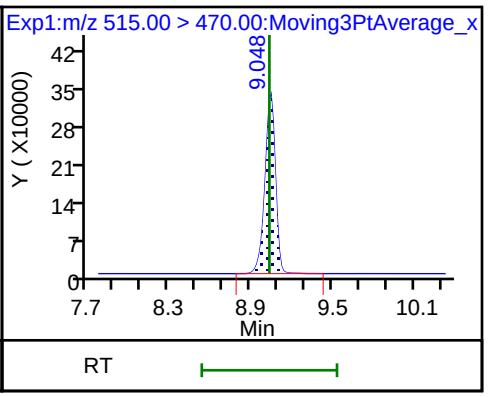
D 30 13C8 FOSA



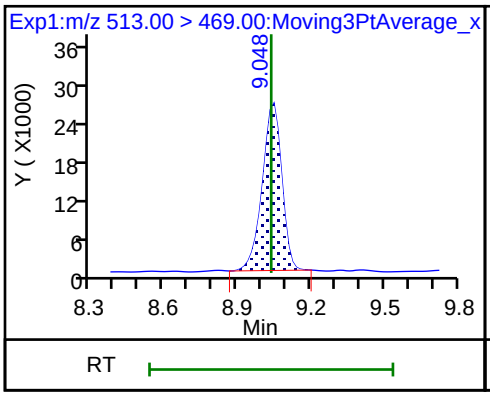
31 Perfluorooctanesulfonamide



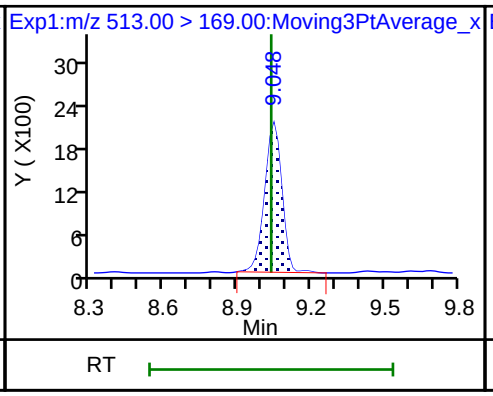
D 33 13C2 PFDA



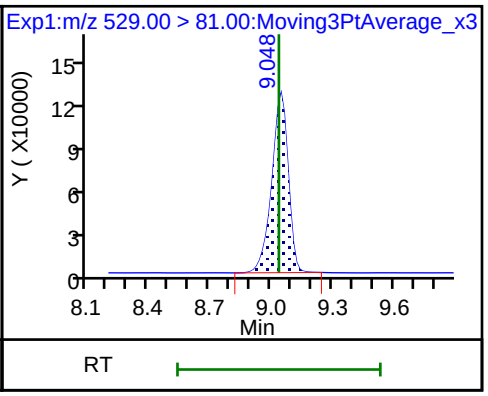
35 Perfluorodecanoic acid



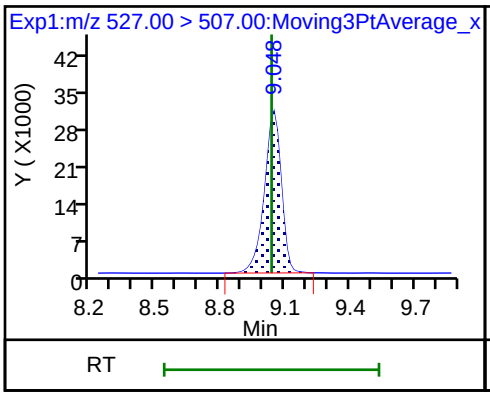
35 Perfluorodecanoic acid



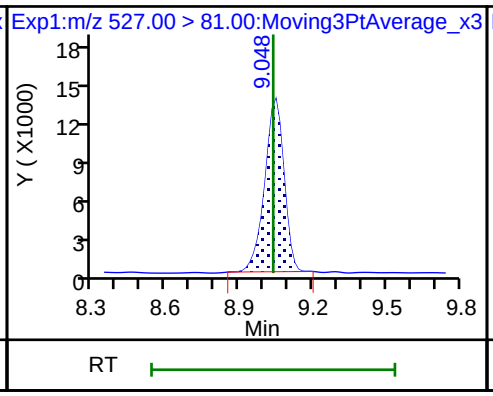
D 34 M2-8:2 FTS



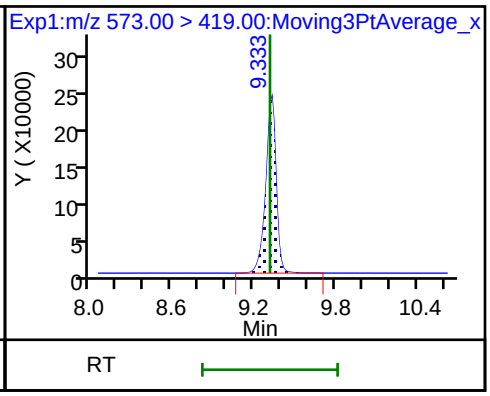
36 8:2 FTS



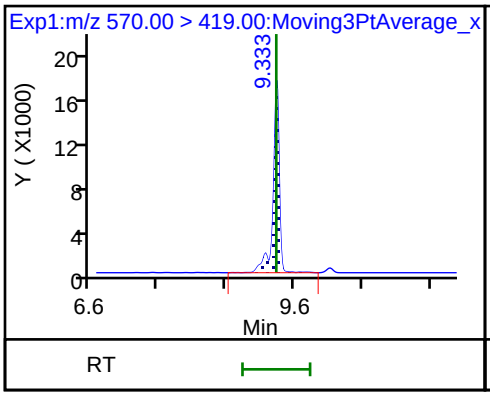
36 8:2 FTS



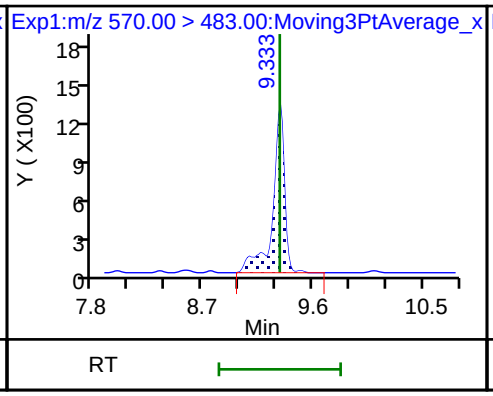
D 37 d3-NMeFOSAA



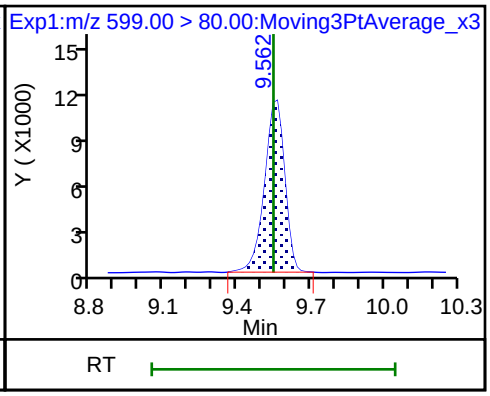
38 NMeFOSAA



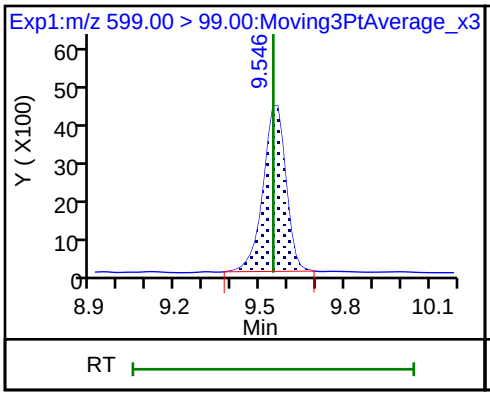
38 NMeFOSAA



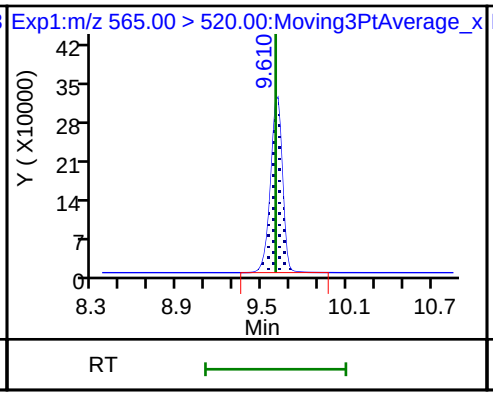
39 Perfluorodecanesulfonic acid



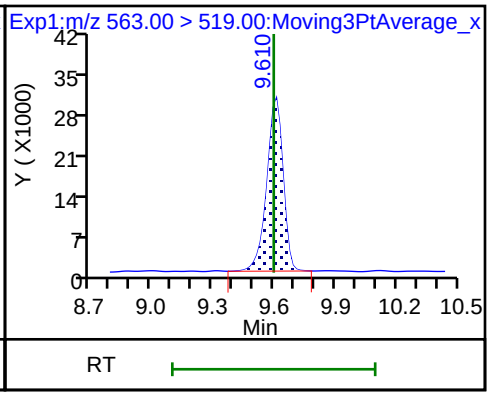
39 Perfluorodecanesulfonic acid



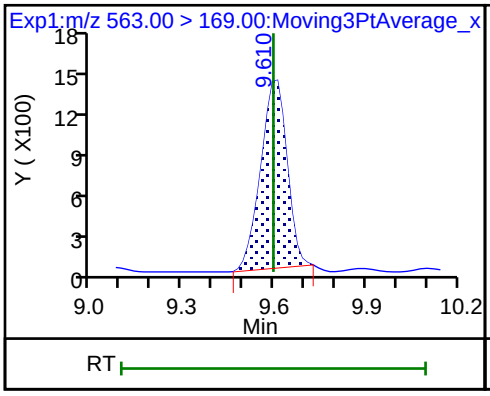
D 42 13C2 PFUnA



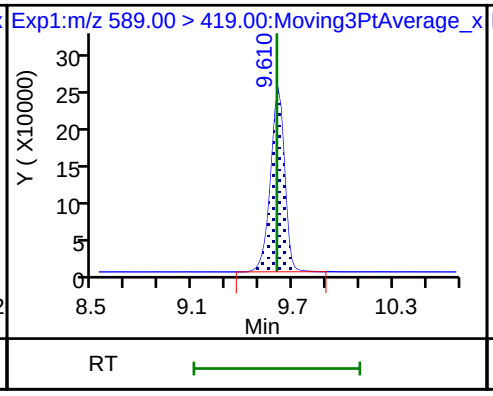
41 Perfluoroundecanoic acid



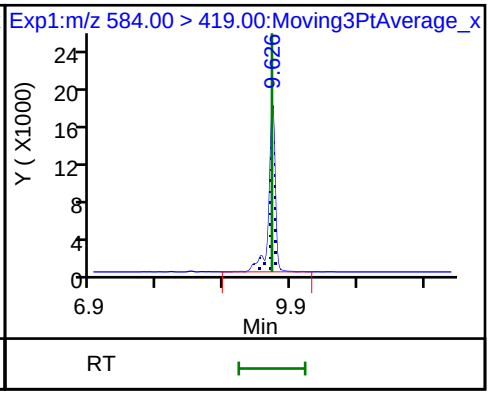
41 Perfluoroundecanoic acid



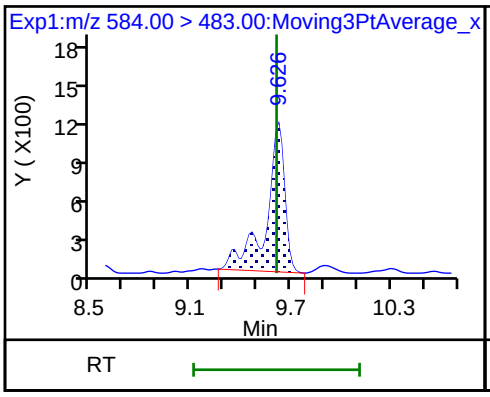
D 40 d5-NEtFOSAA



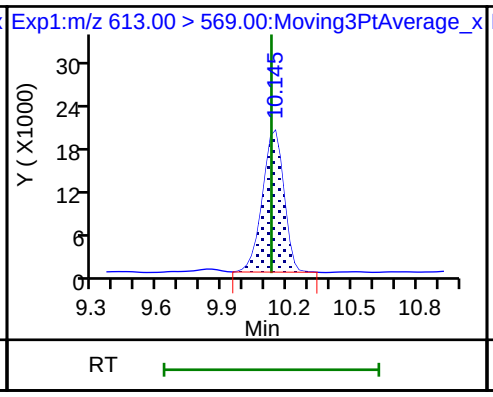
43 NEtFOSA



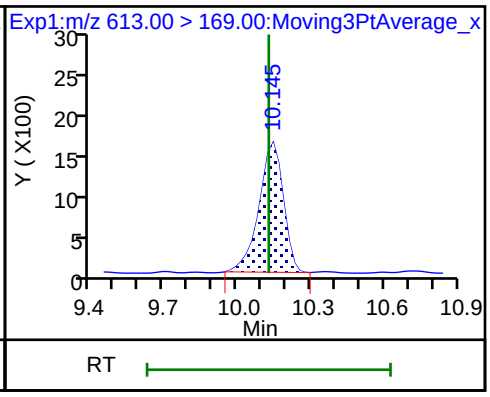
43 NEtFOSA



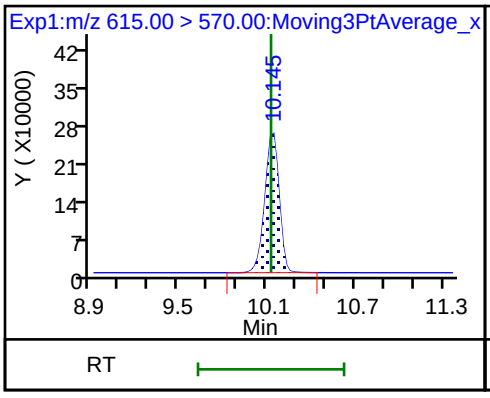
46 Perfluorododecanoic acid



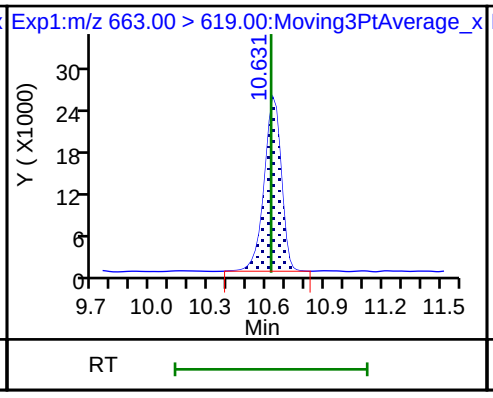
46 Perfluorododecanoic acid



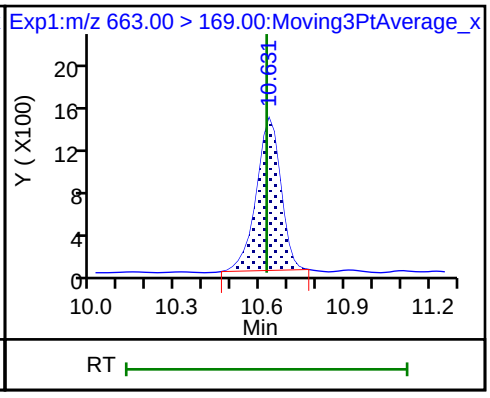
D 45 13C2 PFDoA



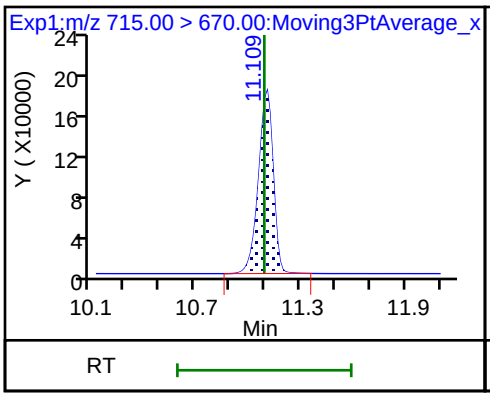
49 Perfluorotridecanoic acid



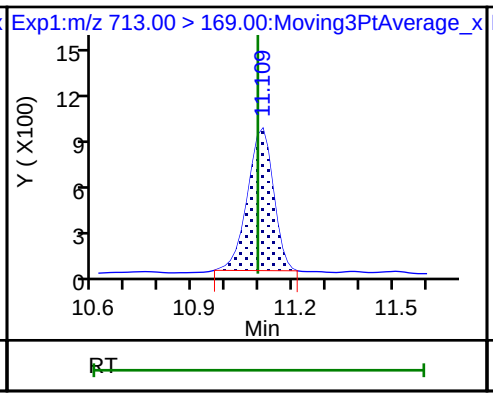
49 Perfluorotridecanoic acid



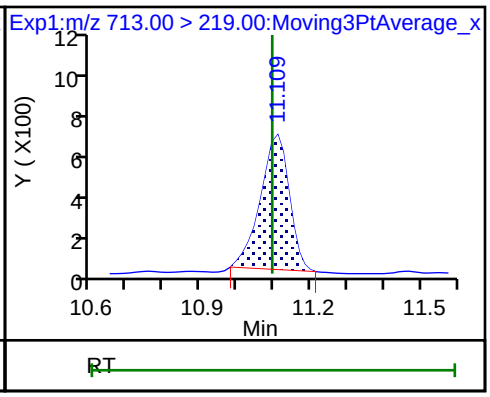
D 51 13C2 PFTeDA



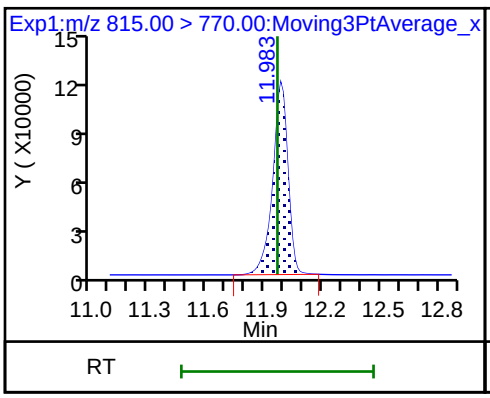
50 Perfluorotetradecanoic acid



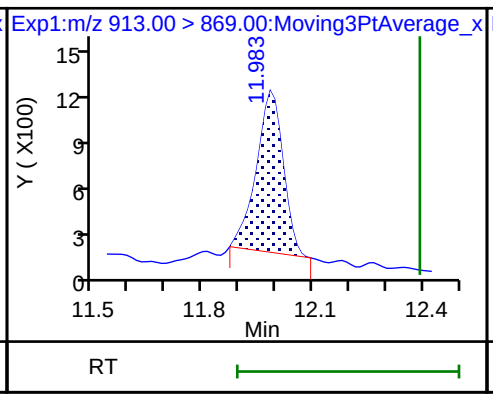
50 Perfluorotetradecanoic acid



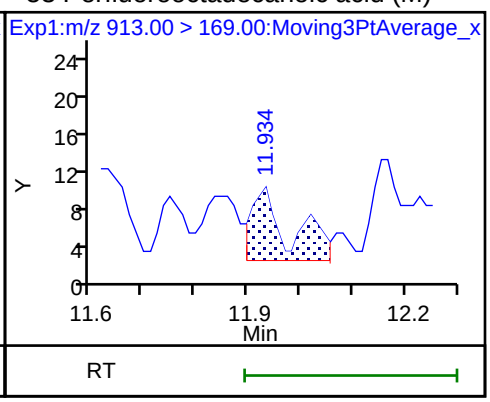
D 52 13C2 PFHxDA



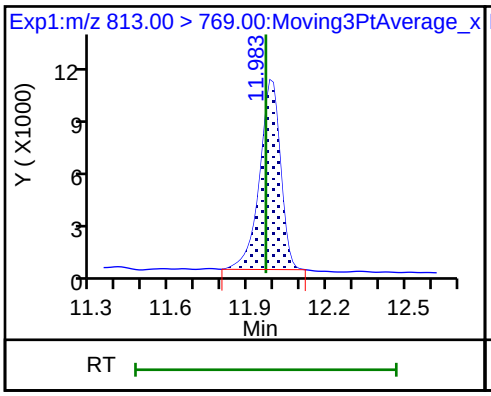
53 Perfluorooctadecanoic acid



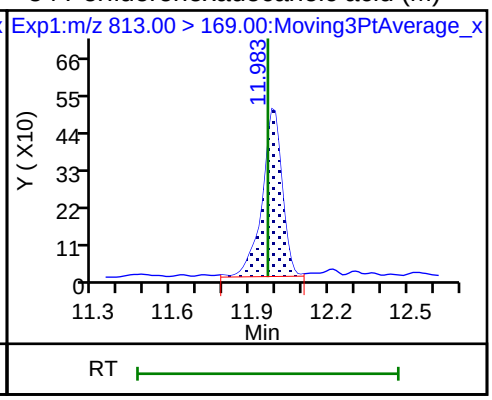
53 Perfluorooctadecanoic acid (M)



54 Perfluorohexadecanoic acid



54 Perfluorohexadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

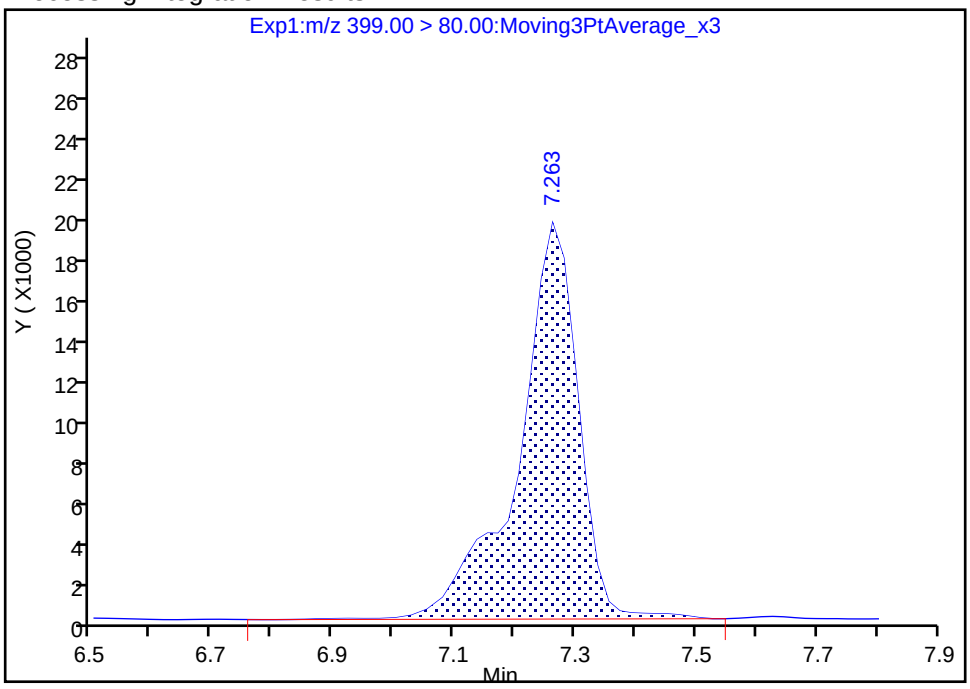
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

16 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

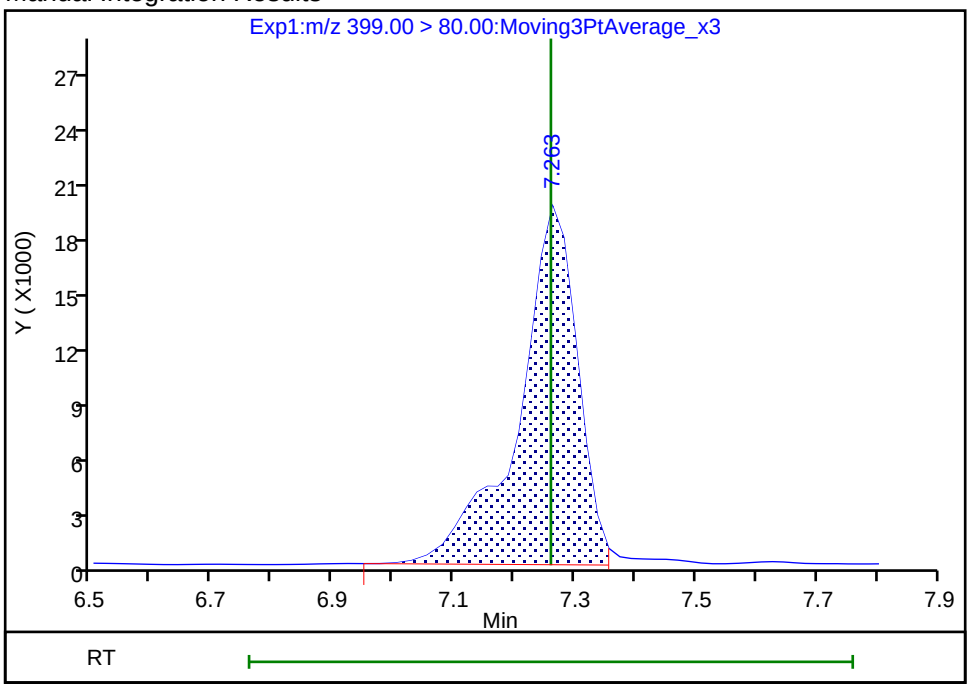
Processing Integration Results

RT: 7.26
Area: 132094
Amount: 0.004253
Amount Units: ng/ml



Manual Integration Results

RT: 7.26
Area: 129518
Amount: 0.004288
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:36:16
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

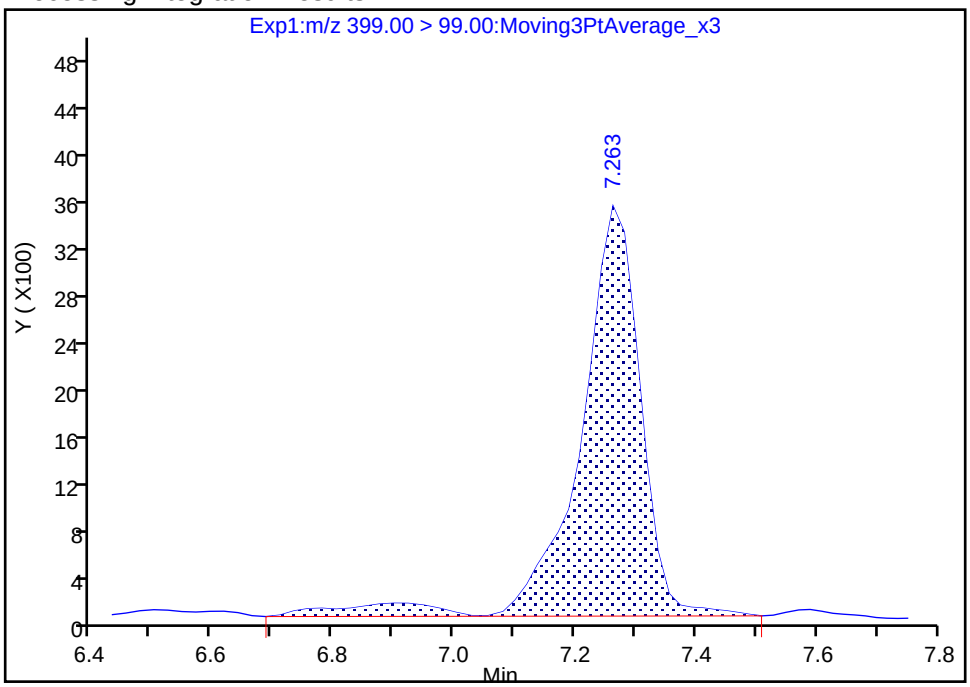
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

16 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

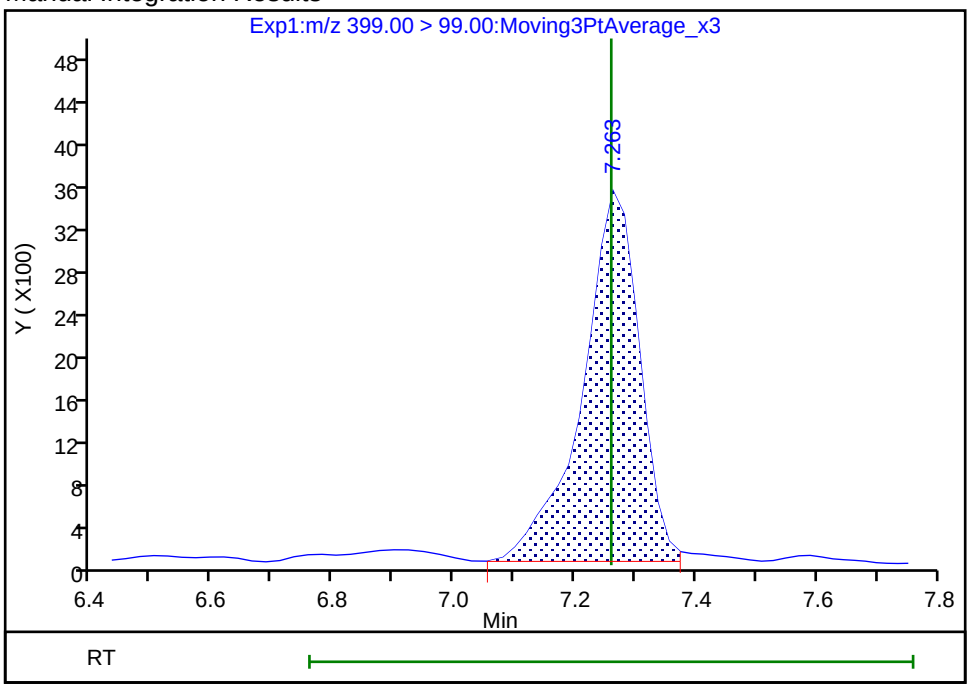
Processing Integration Results

RT: 7.26
Area: 24839
Amount: 0.004253
Amount Units: ng/ml



Manual Integration Results

RT: 7.26
Area: 23073
Amount: 0.004288
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:36:35
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

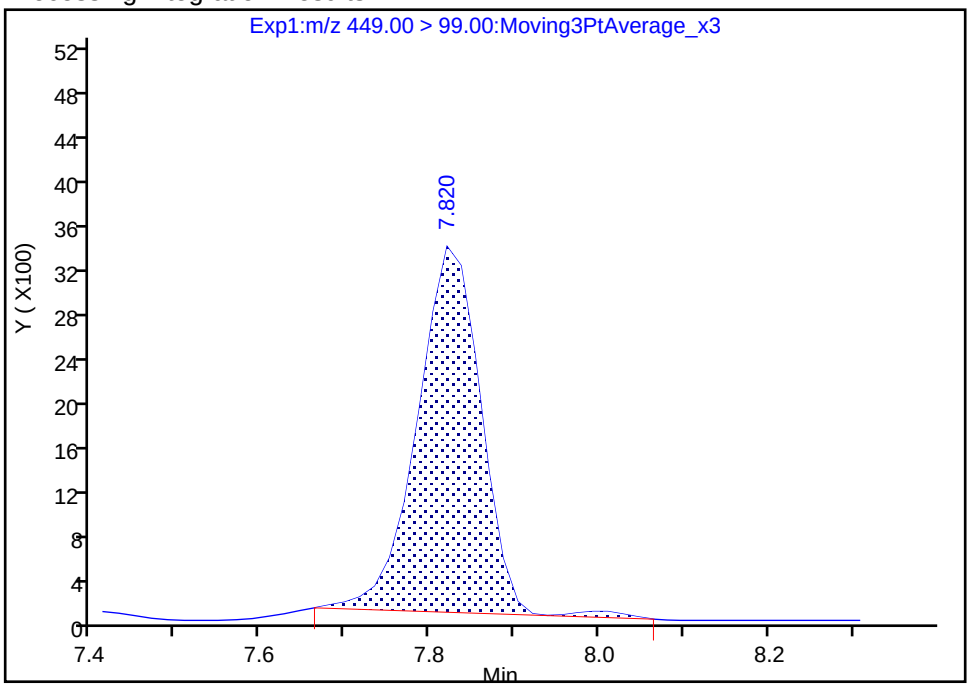
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

21 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

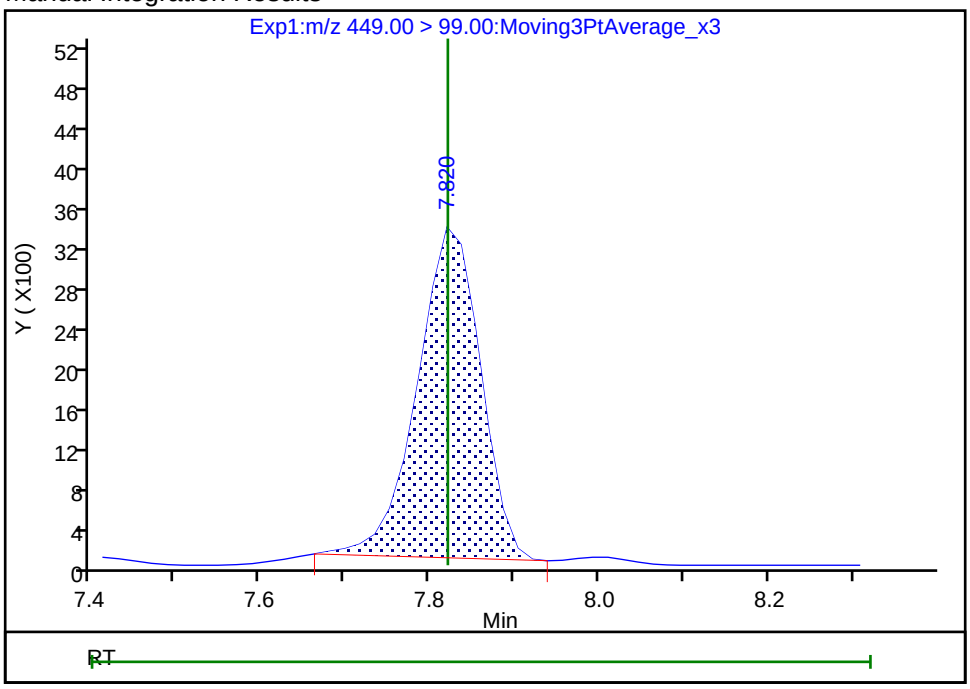
Processing Integration Results

RT: 7.82
Area: 17157
Amount: 0.004794
Amount Units: ng/ml



Manual Integration Results

RT: 7.82
Area: 16922
Amount: 0.004816
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:34:50
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

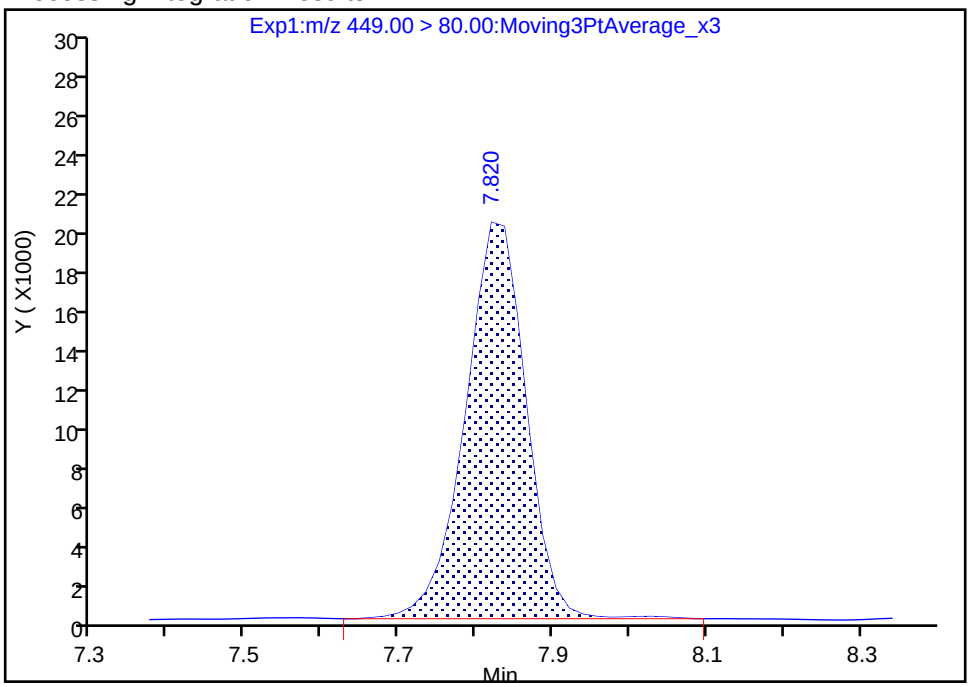
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

21 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

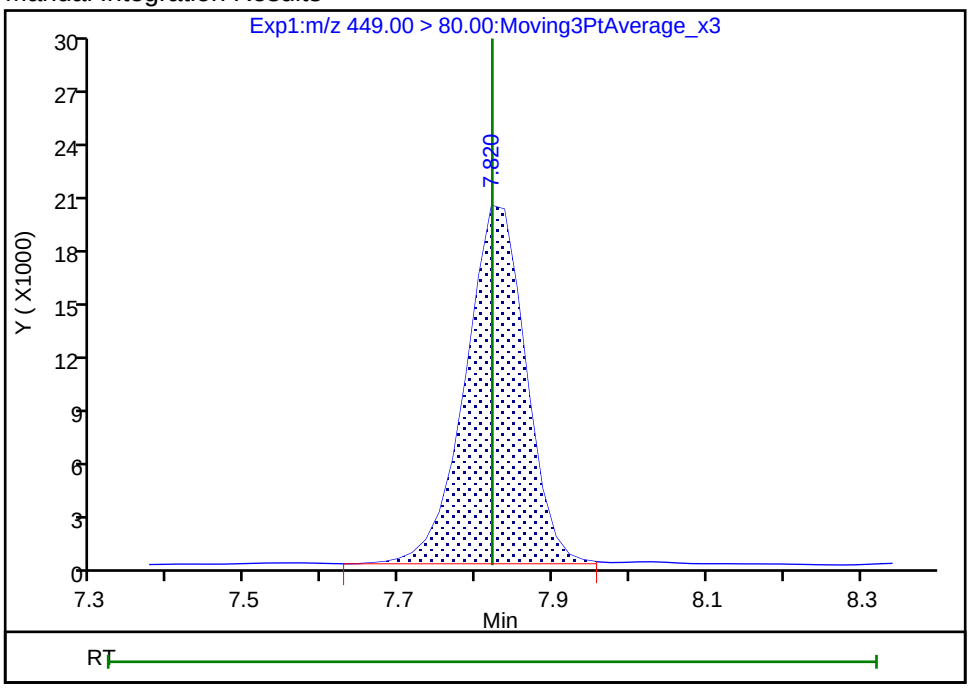
Processing Integration Results

RT: 7.82
Area: 109000
Amount: 0.004794
Amount Units: ng/ml



Manual Integration Results

RT: 7.82
Area: 108437
Amount: 0.004816
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:34:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

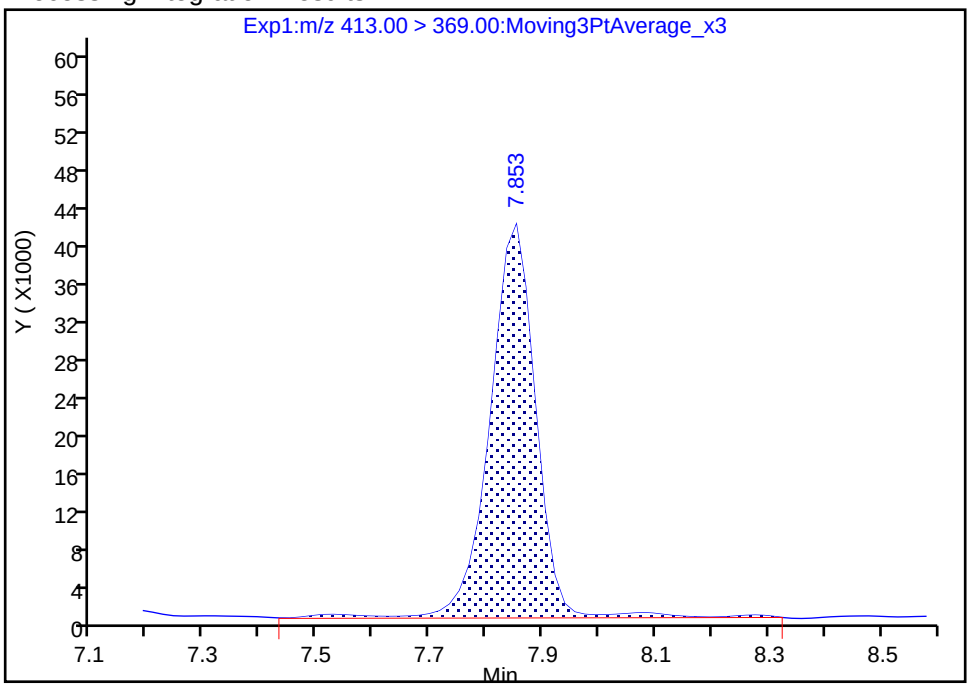
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

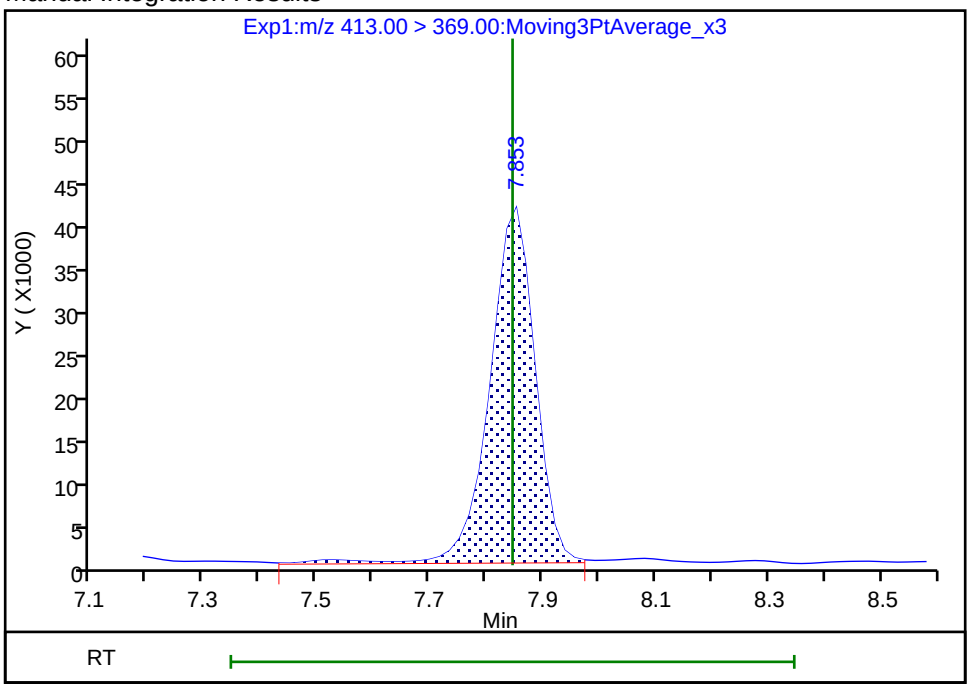
Processing Integration Results

RT: 7.85
Area: 234315
Amount: 0.005299
Amount Units: ng/ml



Manual Integration Results

RT: 7.85
Area: 230153
Amount: 0.005508
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:36:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

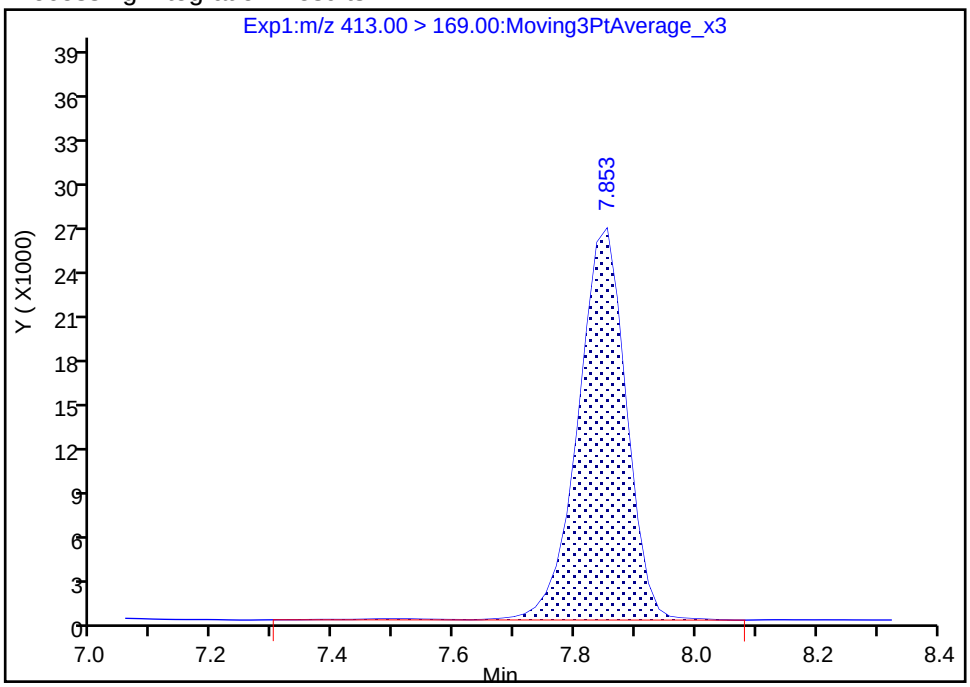
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

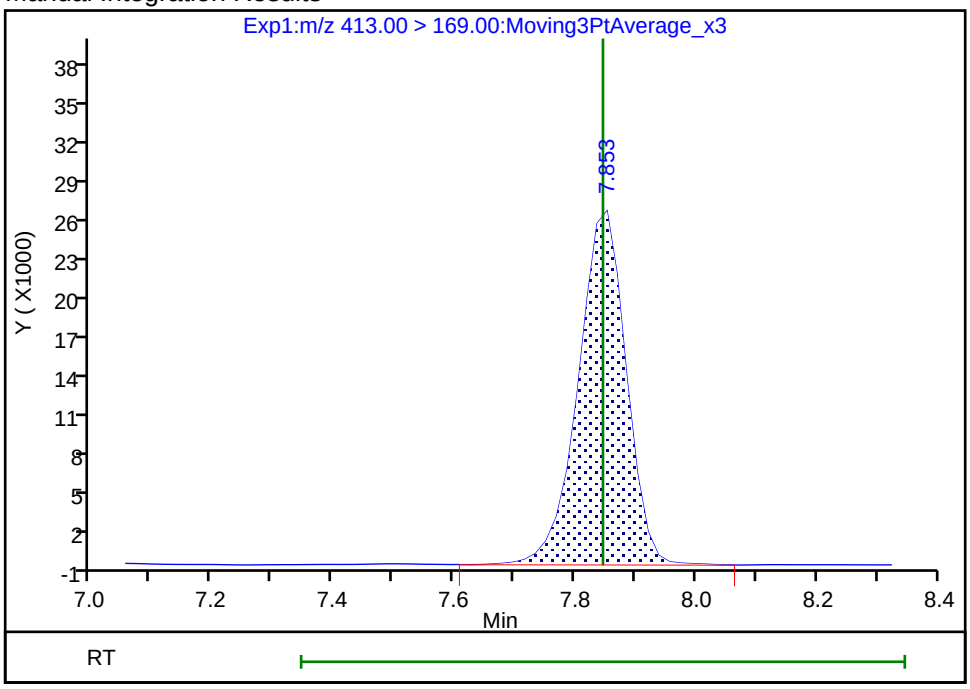
Processing Integration Results

RT: 7.85
Area: 146964
Amount: 0.005299
Amount Units: ng/ml



Manual Integration Results

RT: 7.85
Area: 146500
Amount: 0.005508
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:37:02
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

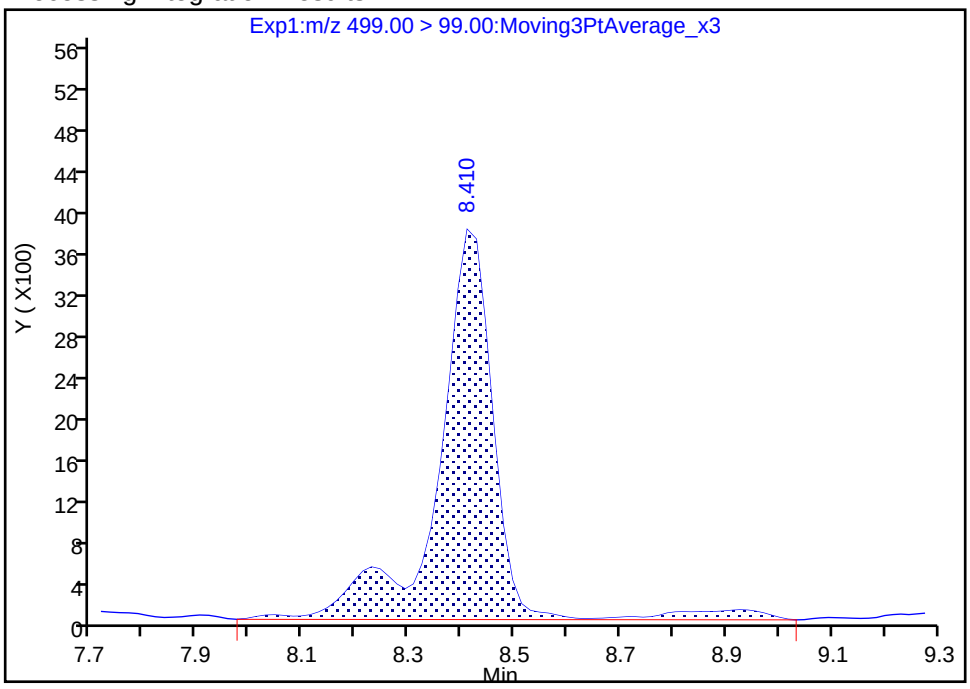
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

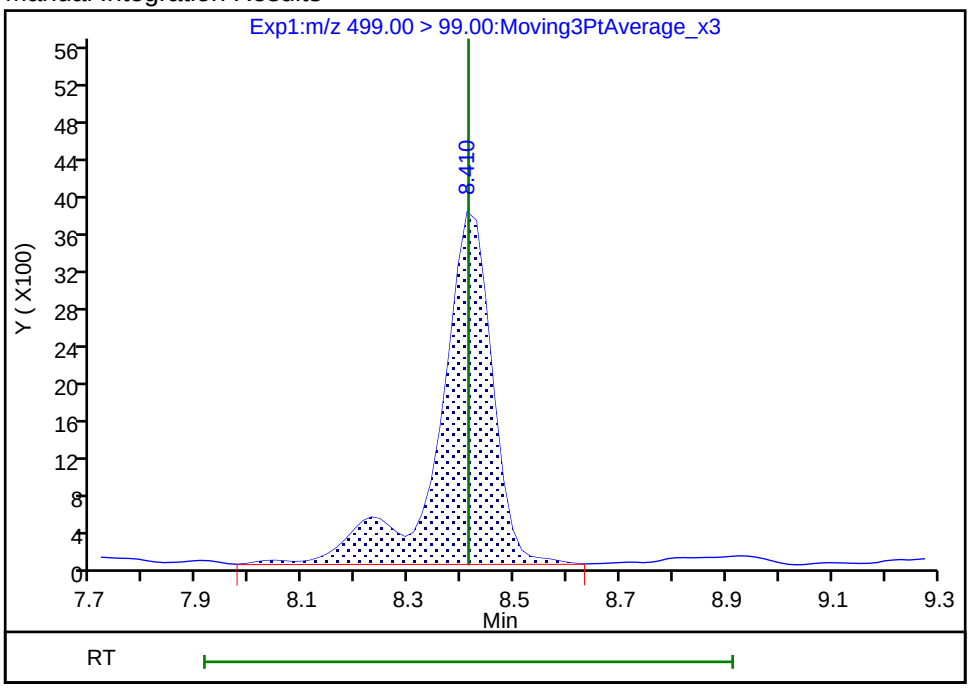
RT: 8.41
Area: 28026
Amount: 0.004678
Amount Units: ng/ml

Processing Integration Results



RT: 8.41
Area: 26829
Amount: 0.004775
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 12-Oct-2020 12:37:10
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

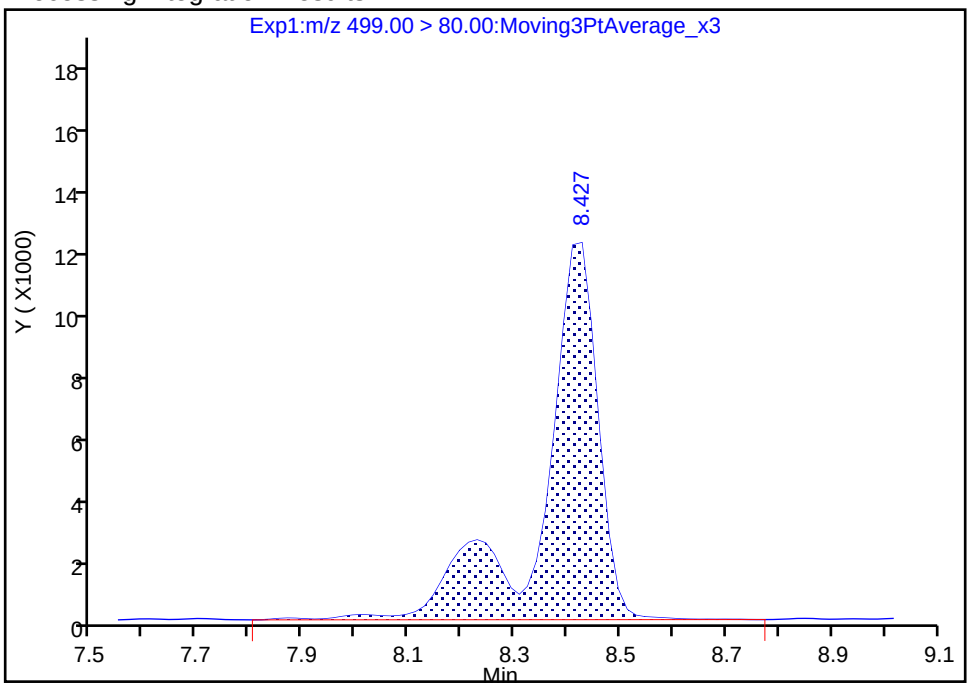
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

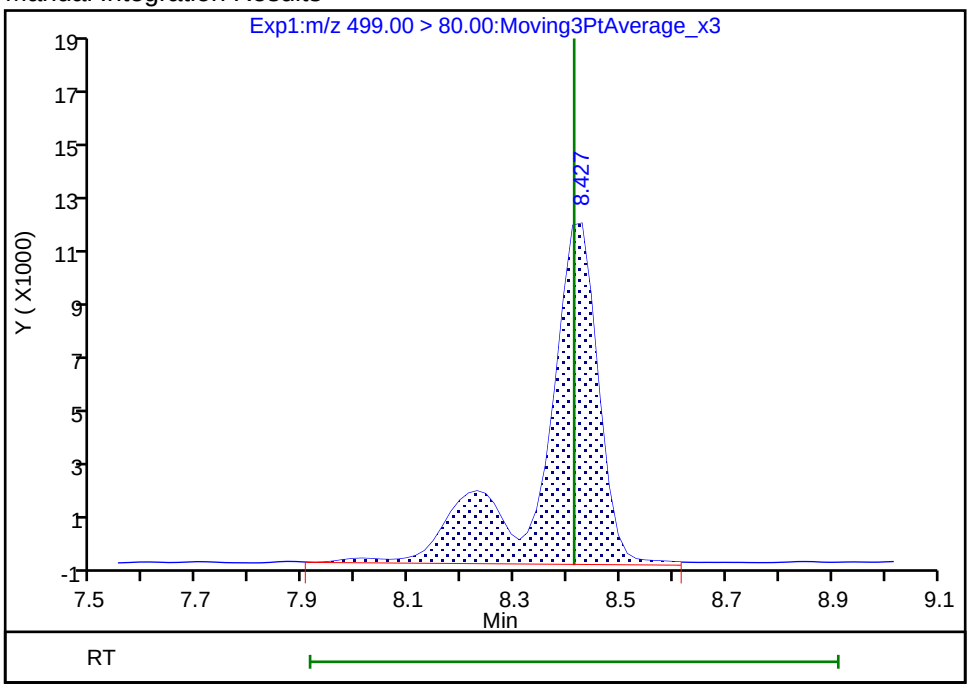
Processing Integration Results

RT: 8.43
Area: 89871
Amount: 0.004678
Amount Units: ng/ml



Manual Integration Results

RT: 8.43
Area: 91186
Amount: 0.004775
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:37:17
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

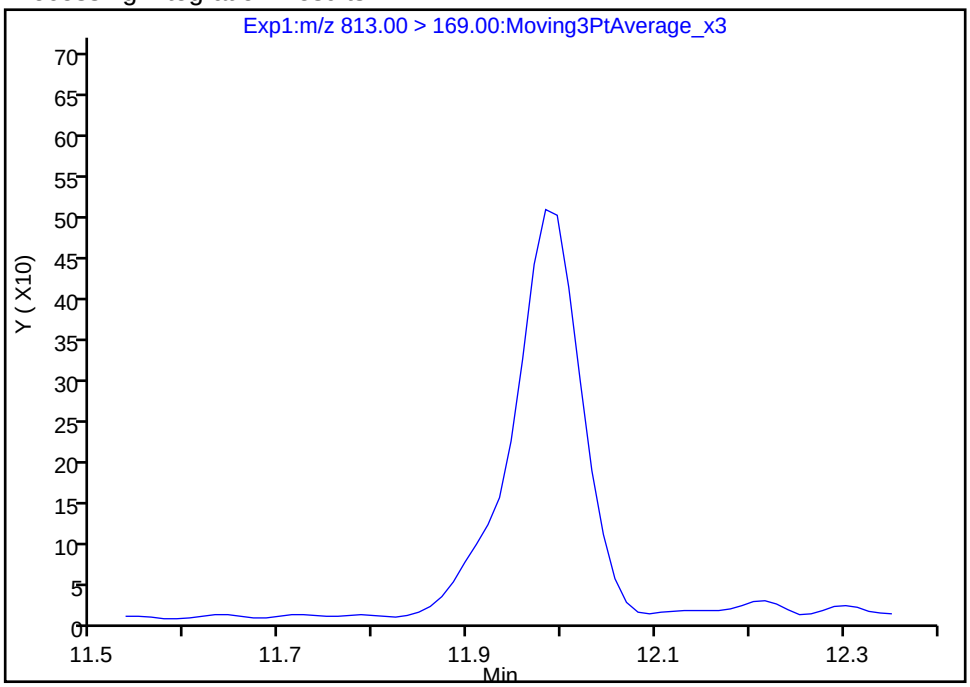
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

54 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 2

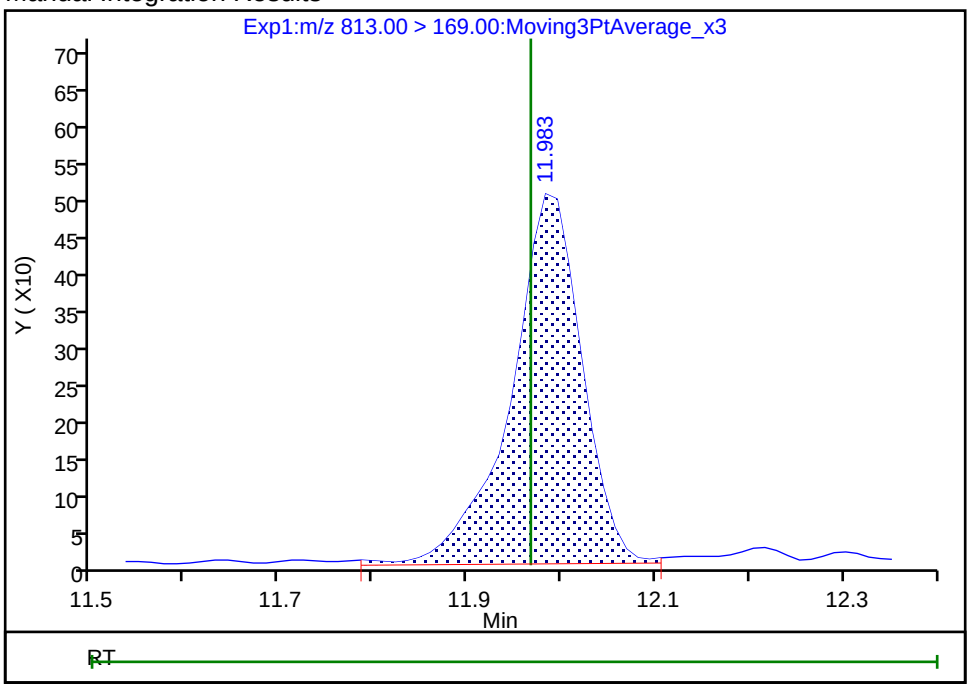
Not Detected
Expected RT: 11.97

Processing Integration Results



Manual Integration Results

RT: 11.98
Area: 2634
Amount: 0.004911
Amount Units: ng/ml



Reviewer: vangmy, 12-Oct-2020 12:37:32
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

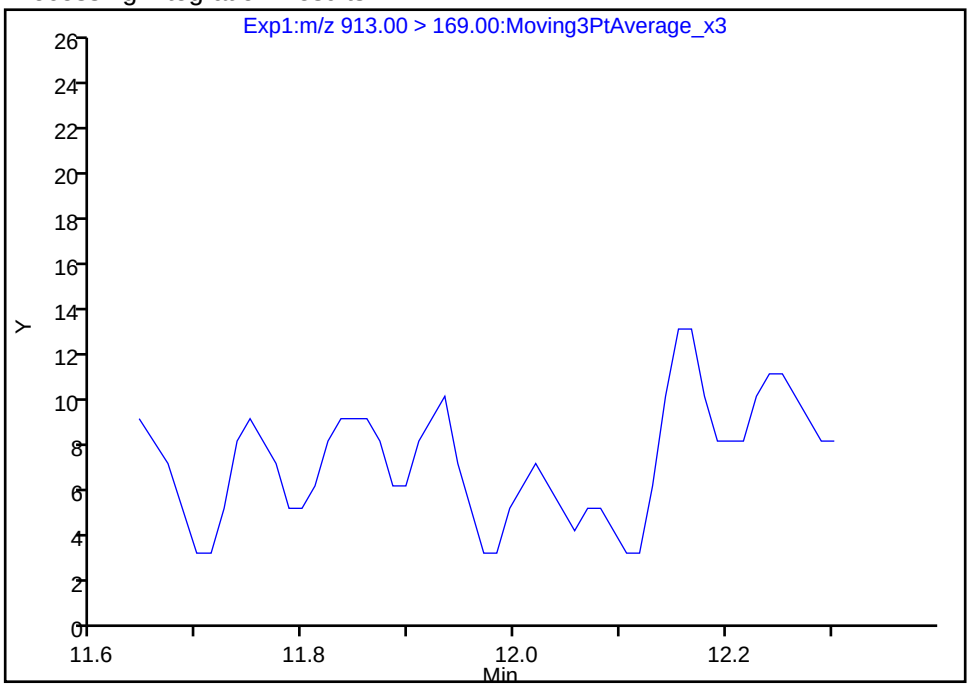
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_006.d
Injection Date: 12-Oct-2020 12:07:28 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

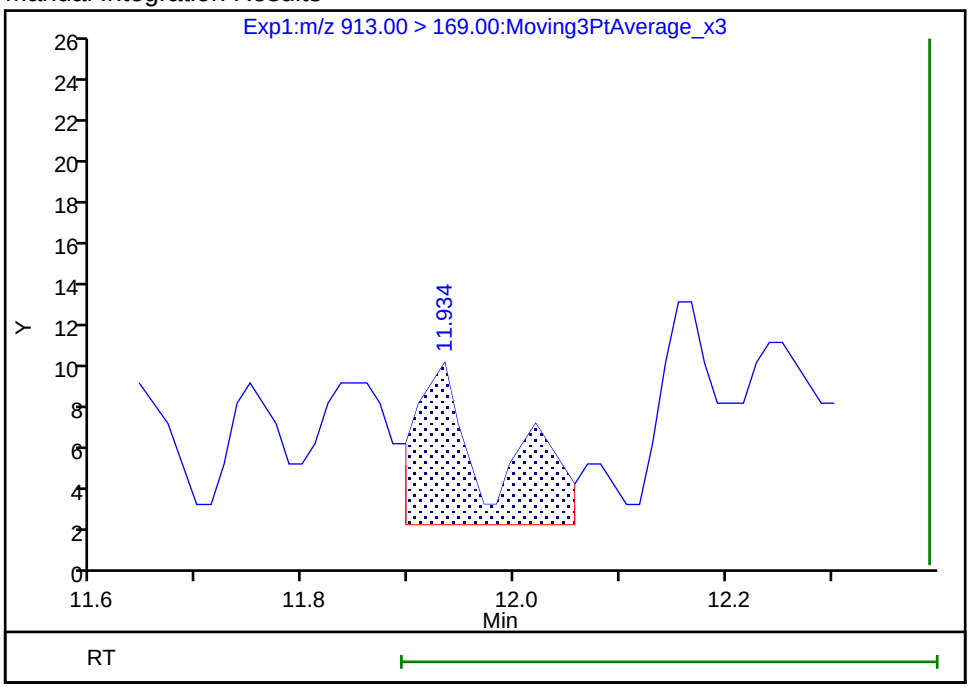
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 11.93
Area: 39
Amount: 0.001970
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 12:53:56
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_007.d
Lims ID: IC STD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-Oct-2020 12:25:54 ALS Bottle#: 7 Worklist Smp#: 5
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:23:25 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: koucharis Date: 12-Oct-2020 12:50:33
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.639	5.644	-0.005		2020195	0.0509		102	14526	
1 Perfluorobutanoic acid										M
169	5.639	5.647	-0.008	1.000	344263	0.009687		96.9	56.7	M
D 4 13C5 PFPeA										
223	6.250	6.253	-0.003		1716468	0.0505		101	18359	
5 Perfluoropentanoic acid										
219	6.250	6.253	-0.003	1.000	357743	0.009672		96.7	82.8	
D 3 13C3 PFBS										
80	6.317	6.305	0.012		1988184	0.0473		102	5533	
6 Perfluorobutanesulfonic acid										
80	6.317	6.308	0.009	1.000	381625	0.009016	Target=1.50	102	697	
99	6.317	6.308	0.009	1.000	248048		1.54(0.75-2.26)	102	276	
D 7 M2-4:2 FTS										
81	6.688	6.688	0.0		582908	NC			1225	
8 4:2 FTS										
307	6.688	6.688	0.0	1.000	297991	NC	Target=2.45		3621	
81	6.688	6.688	0.0	1.000	114651		2.60(1.22-3.67)		227	
D 9 13C2 PFHxA										
270	6.734	6.741	-0.007		1827332	0.0505		101	23819	
10 Perfluorohexanoic acid										
269	6.758	6.744	0.014	1.003	349501	0.0103	Target=17.92	103	199	
119	6.758	6.744	0.014	1.003	17954		19.47(8.96-26.88)	103	132	
11 Perfluoropentanesulfonic acid										
80	6.758	6.755	0.003	0.930	306511	NC	Target=1.47		504	
99	6.758	6.755	0.003	0.930	205728		1.49(0.74-2.21)		387	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.900	6.888	0.012		135602	NC			634	
13 HPFO-DA										
285	6.900	6.891	0.009	1.000	53593	NC			55.9	
14 9ClFOS										M
351	7.138	7.212	-0.074	0.849	2825	NC			3.6	M
D 15 18O2 PFHxS										
84	7.263	7.260	0.003		1260440	0.0487		103	11125	
16 Perfluorohexanesulfonic acid										
80	7.263	7.260	0.003	1.000	271592	0.008982	Target=5.60	98.7	584	
99	7.263	7.260	0.003	1.000	51932		5.23(2.80-8.40)	98.7	192	
D 17 13C4 PFHpA										
322	7.282	7.270	0.012		1867243	0.0510		102	17104	
18 Perfluoroheptanoic acid										
319	7.282	7.272	0.010	1.000	358908	0.009399	Target=8.55	94.0	146	
169	7.282	7.272	0.010	1.000	41958		8.55(4.27-12.82)	94.0	512	
19 DONA										
251	7.337	7.328	0.009	0.872	1439301	NC	Target=2.62		5297	
85	7.337	7.328	0.009	0.872	574198		2.51(1.31-3.93)		1834	
D 22 M2-6:2 FTS										
81	7.820	7.813	0.007		663211	0.0512		108	1642	
23 6:2 FTS										
407	7.820	7.813	0.007	1.000	333878	0.009634	Target=2.55	102	2406	
81	7.820	7.813	0.007	1.000	133481		2.50(1.27-3.82)	102	354	
21 Perfluoroheptanesulfonic acid										
80	7.820	7.821	-0.001	0.930	219246	0.009647	Target=6.95	101	658	
99	7.820	7.821	-0.001	0.930	34574		6.34(3.48-10.43)	101	160	
D 25 13C4 PFOA										
372	7.853	7.842	0.011		2288291	0.0537		107	15008	
24 Perfluorooctanoic acid										
369	7.853	7.846	0.007	1.000	434661	0.009784	Target=1.41	97.8	94.0	
169	7.853	7.846	0.007	1.000	313309		1.39(0.71-2.12)	97.8	1365	
D 26 13C4 PFOS										
80	8.410	8.413	-0.003		900211	0.0489		102	2948	
27 Perfluorooctanesulfonic acid										
80	8.410	8.413	-0.003	1.000	180747	0.009377	Target=3.36	101	730	
99	8.410	8.413	-0.003	1.000	52722		3.43(1.68-5.04)	101	171	
D 28 13C5 PFNA										
423	8.444	8.443	0.001		1767112	0.0493		98.6	10724	
29 Perfluorononanoic acid										
419	8.444	8.448	-0.004	1.000	324429	0.0104	Target=6.88	104	173	
169	8.444	8.448	-0.004	1.000	46770		6.94(3.44-10.32)	104	597	
D 30 13C8 FOSA										
78	8.972	8.968	0.004		1356081	0.0618		124	9950	
31 Perfluorooctanesulfonamide										
78	8.972	8.969	0.003	1.000	276156	0.0102		102	2051	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
32 Perfluorononanesulfonic acid										
80	9.002	8.994	0.008	1.070	168882	NC	Target=6.23		1202	
99	9.002	8.994	0.008	1.070	30110		5.61(3.11-9.34)		140	
D 33 13C2 PFDA										
470	9.033	9.035	-0.002		1781563	0.0504		101	12493	
35 Perfluorodecanoic acid										
469	9.048	9.037	0.011	1.002	305085	0.0107	Target=14.44	107	227	
169	9.048	9.037	0.011	1.002	20791		14.67(7.22-21.66)	107	157	
D 34 M2-8:2 FTS										
81	9.048	9.037	0.011		694351	0.0508		106	3163	
36 8:2 FTS										
507	9.048	9.037	0.011	1.000	312580	0.009717	Target=2.16	101	3521	
81	9.048	9.037	0.011	1.000	143335		2.18(1.08-3.24)	101	634	
D 37 d3-NMeFOSAA										
419	9.320	9.317	0.003		1292167	0.0523		105	5506	
38 NMeFOSAA										
419	9.333	9.327	0.006	1.001	224775	0.0105	Target=13.31	105	648	
483	9.333	9.327	0.006	1.001	16764		13.41(6.65-19.96)	105	247	
39 Perfluorodecanesulfonic acid										
80	9.546	9.546	0.0	1.135	145160	0.0103	Target=2.51	107	1304	
99	9.546	9.546	0.0	1.135	58184		2.49(1.26-3.77)	107	648	
41 Perfluoroundecanoic acid										
519	9.594	9.597	-0.003	1.000	343014	0.0101	Target=19.91	101	261	
169	9.594	9.597	-0.003	1.000	16747		20.48(9.95-29.86)	101	226	
D 40 d5-NEtFOSAA										
419	9.610	9.603	0.007		1466576	0.0531		106	5582	
D 42 13C2 PFUnA										
520	9.594	9.595	-0.001		1926429	0.0529		106	12770	
43 NEtFOSA										M
419	9.610	9.613	-0.003	1.000	239003	0.0103	Target=13.66	103	1639	M
483	9.610	9.613	-0.003	1.000	16811		14.22(6.83-20.48)	103	146	M
44 11ClFOS										
451	9.825	9.828	-0.003	1.168	833720	NC			1462	
46 Perfluorododecanoic acid										
569	10.123	10.127	-0.004	1.000	362982	0.0108	Target=12.99	108	135	
169	10.123	10.127	-0.004	1.000	27748		13.08(6.50-19.49)	108	341	
D 45 13C2 PFDoA										
570	10.123	10.127	-0.004		2042566	0.0557		111	15293	
47 10:2 FTS										
607	10.145	10.152	-0.007	1.121	397763	NC	Target=27.54		2806	
81	10.145	10.152	-0.007	1.121	12402		32.07(13.77-41.31)		212	
48 PFDoS										
80	10.561	10.555	0.006	1.256	54216	NC	Target=0.45		449	
99	10.561	10.555	0.006	1.256	116298		0.47(0.22-0.67)		714	
49 Perfluorotridecanoic acid										
619	10.631	10.622	0.009	1.050	451763	0.0127	Target=16.38	127	142	
169	10.631	10.622	0.009	1.050	27397		16.49(8.19-24.57)	127	490	

Report Date: 12-Oct-2020 15:23:26 Chrom Revision: 2.3 08-Oct-2020 16:36:14
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_007.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 51 13C2 PFTeDA										
670	11.093	11.092	0.001		1756627	0.0726		145	11196	
50 Perfluorotetradecanoic acid										
169	11.093	11.094	-0.001	1.000	17040	0.009468	Target=1.23	94.7	372	
219	11.093	11.094	-0.001	1.000	14167		1.20(0.62-1.85)	94.7	358	
D 52 13C2 PFHxDA										
770	11.971	11.966	0.005		842479	0.0561		112	4303	
54 Perfluorohexadecanoic acid										
769	11.971	11.967	0.004	1.000	166423	0.0108	Target=23.79	108	105	
169	11.971	11.967	0.004	1.000	5856		28.42(11.89-35.68)	108	104	
53 Perfluorooctadecanoic acid										RM
869	11.971	12.393	-0.422	1.000	9170	0.002480	Target=92.79	24.8	8.0	Ra
169	11.971	12.393	-0.422	1.000	58		158.10(46.39-139.18)	24.8	0.8	M

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- R - Failed Signal Ratio Test

Review Flags
- M - Manually Integrated

Reagents:

LCPFC-LL-L4_00023 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:23:26 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_007.d

Injection Date: 12-Oct-2020 12:25:54 Instrument ID: A10

Lims ID: IC STD 4

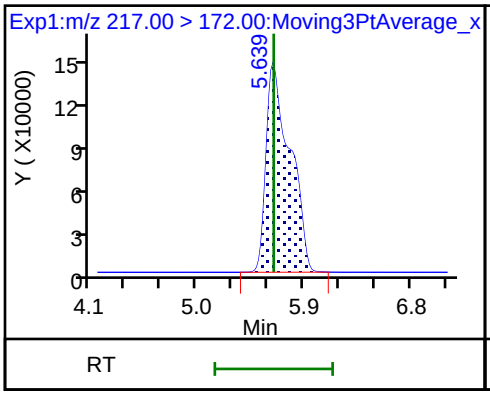
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 5

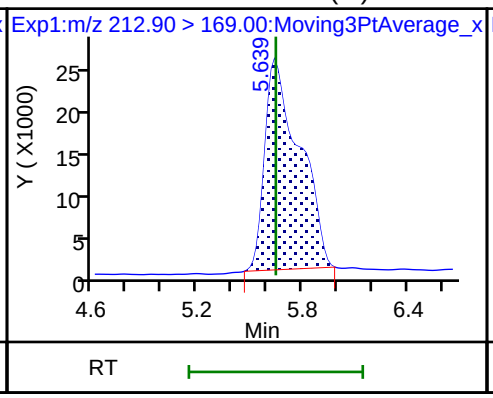
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

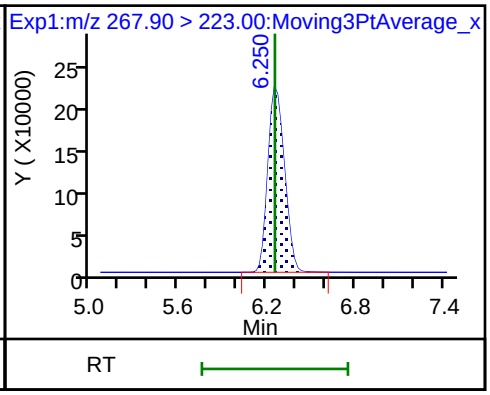
D 2 13C4 PFBA



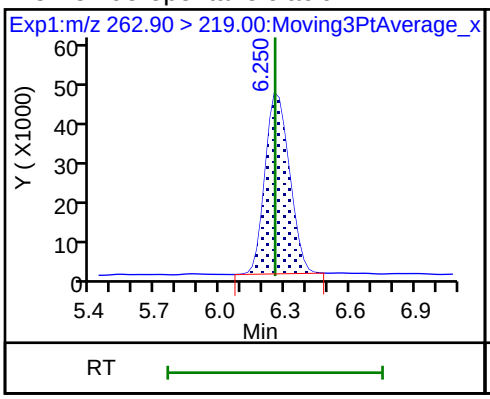
1 Perfluorobutanoic acid (M)



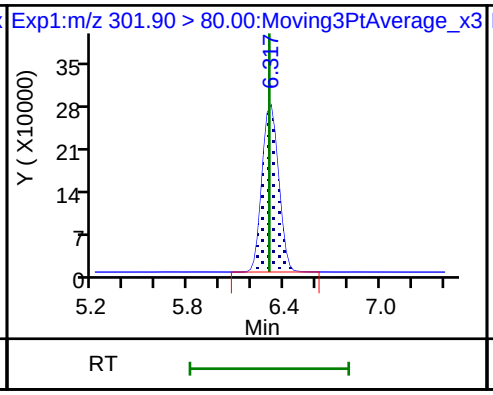
D 4 13C5 PFPeA



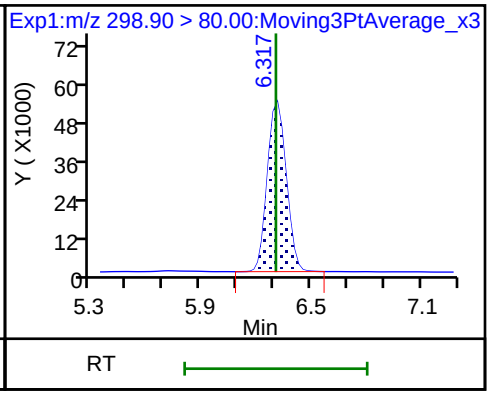
5 Perfluoropentanoic acid



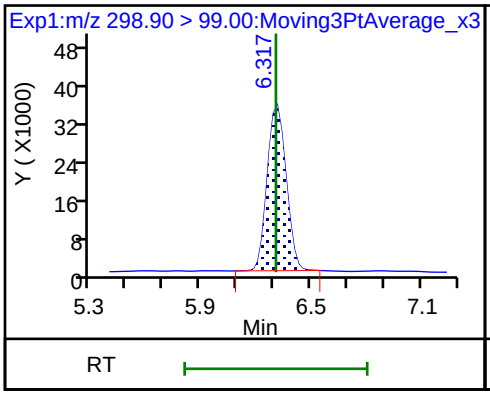
D 3 13C3 PFBS



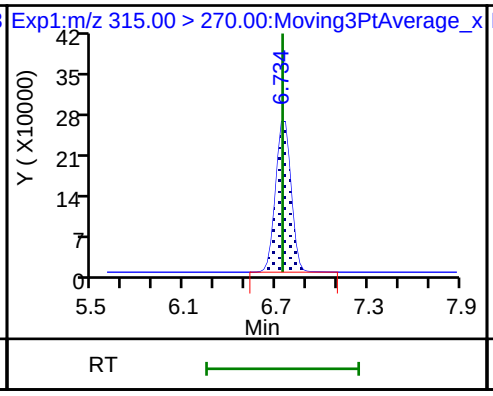
6 Perfluorobutanesulfonic acid



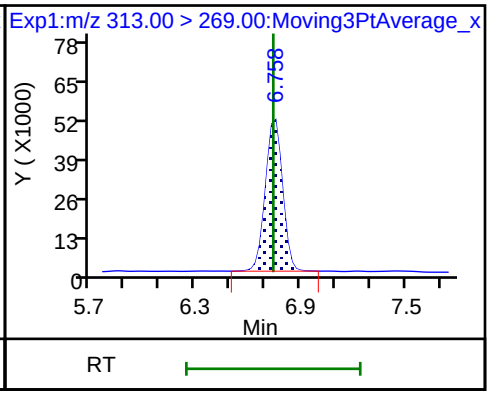
6 Perfluorobutanesulfonic acid



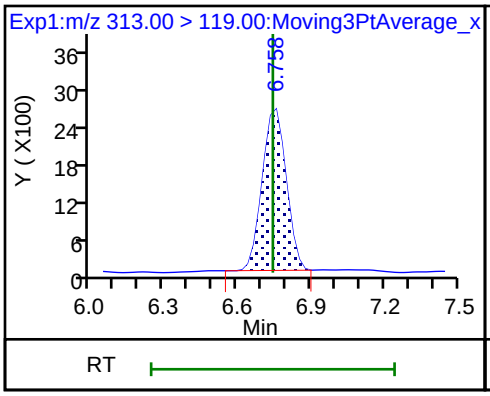
D 9 13C2 PFHxA



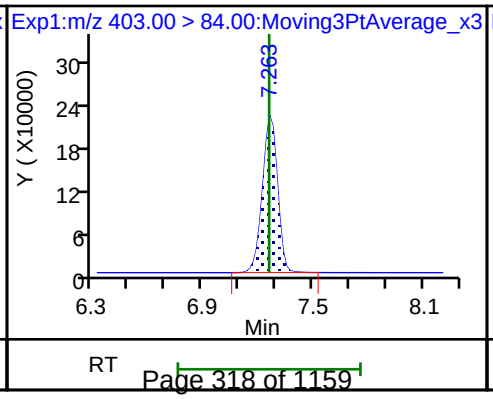
10 Perfluorohexanoic acid



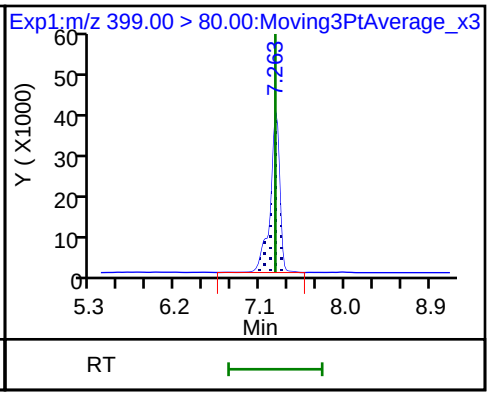
10 Perfluorohexanoic acid



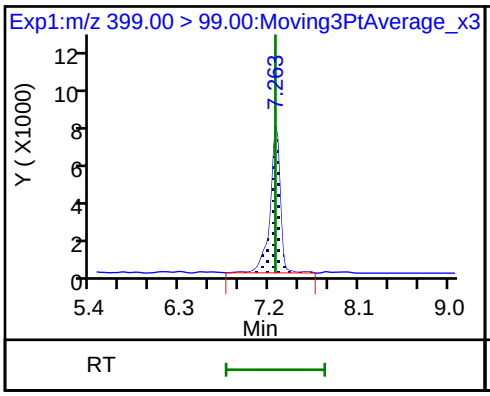
D 15 18O2 PFHxS



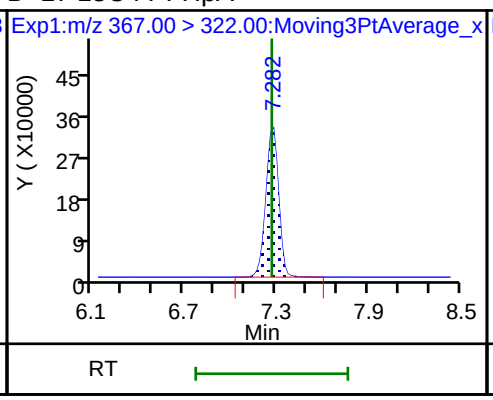
16 Perfluorohexanesulfonic acid



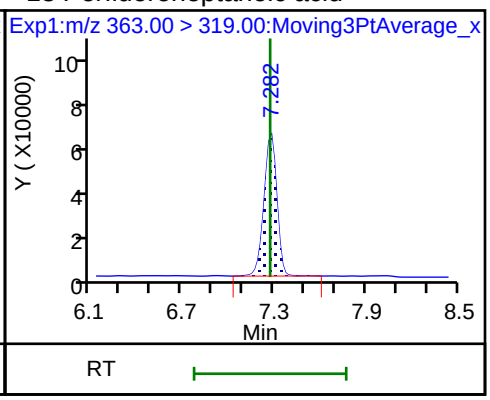
16 Perfluorohexanesulfonic acid



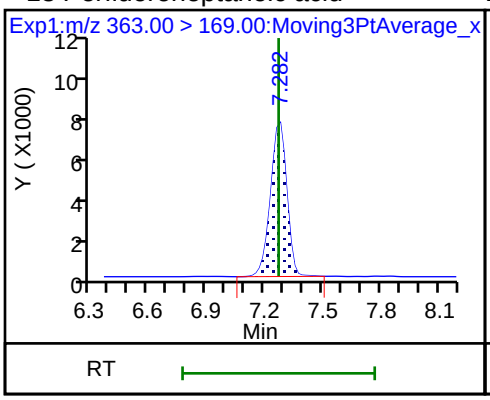
D 17 13C4 PFHpA



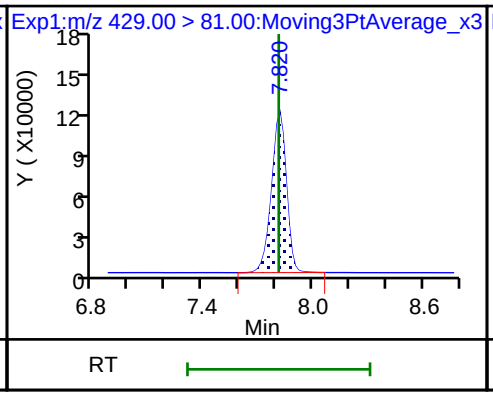
18 Perfluoroheptanoic acid



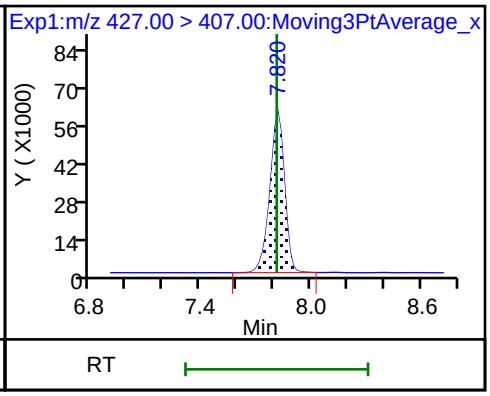
18 Perfluoroheptanoic acid



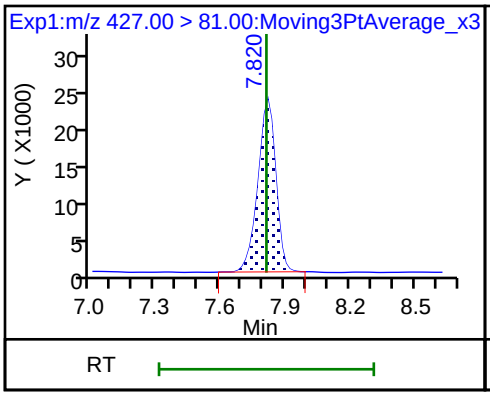
D 22 M2-6:2 FTS



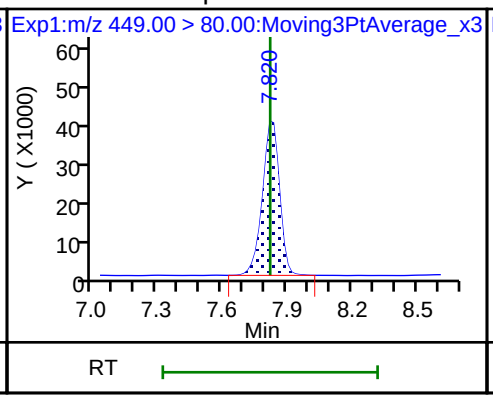
23 6:2 FTS



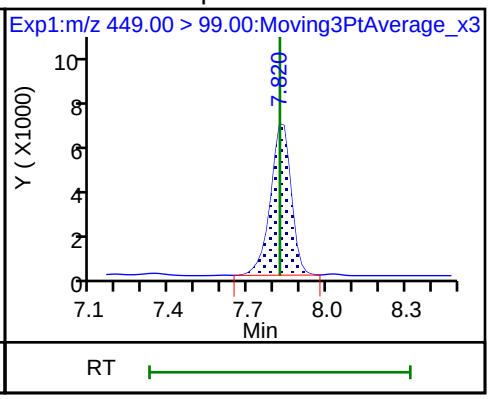
23 6:2 FTS



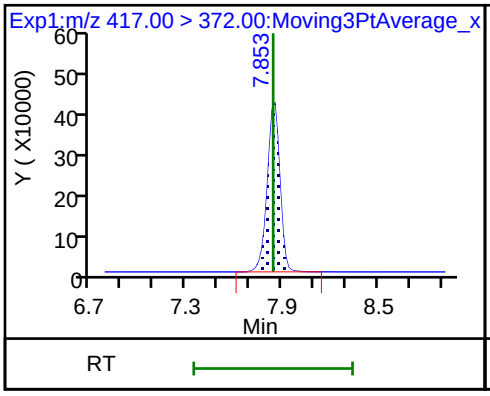
21 Perfluoroheptanesulfonic acid



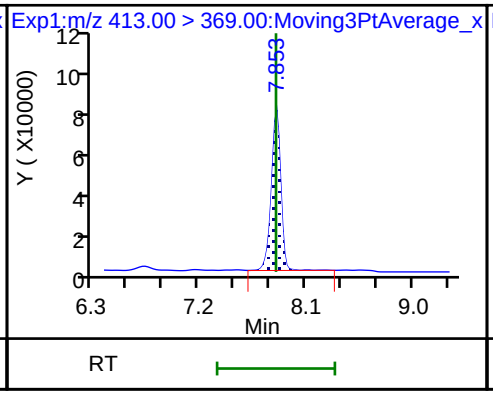
21 Perfluoroheptanesulfonic acid



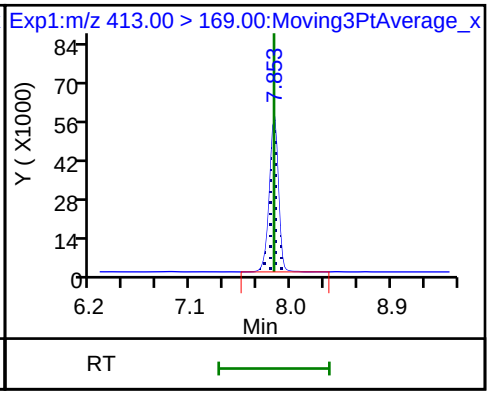
D 25 13C4 PFOA



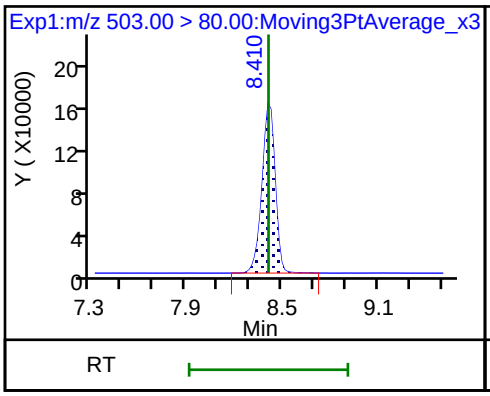
24 Perfluorooctanoic acid



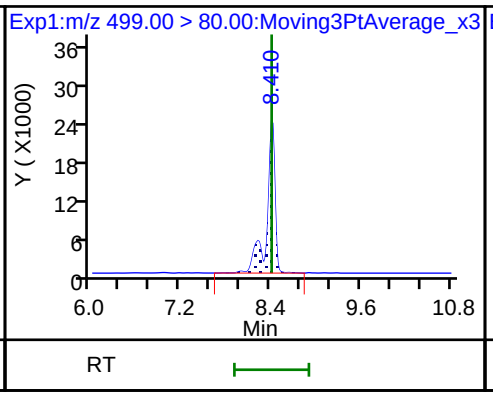
24 Perfluorooctanoic acid



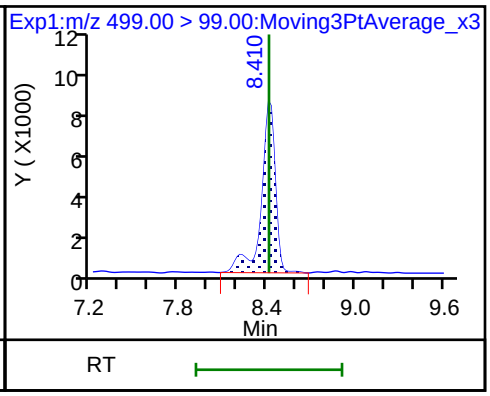
D 26 13C4 PFOS



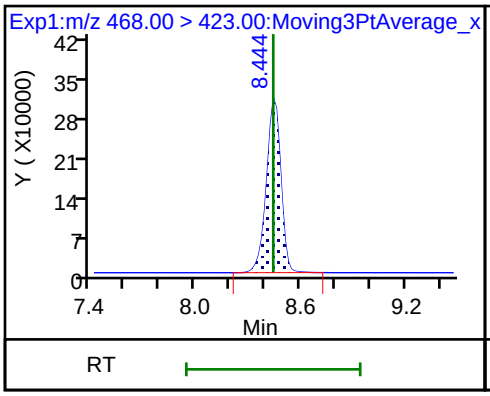
27 Perfluorooctanesulfonic acid



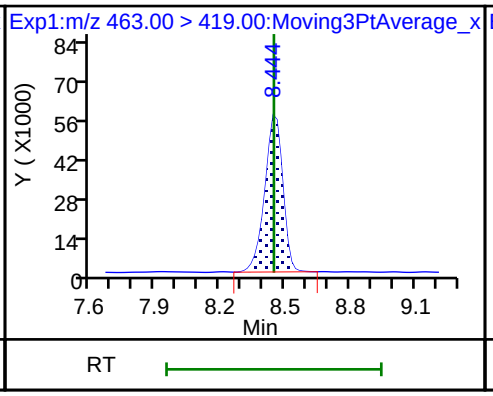
27 Perfluorooctanesulfonic acid



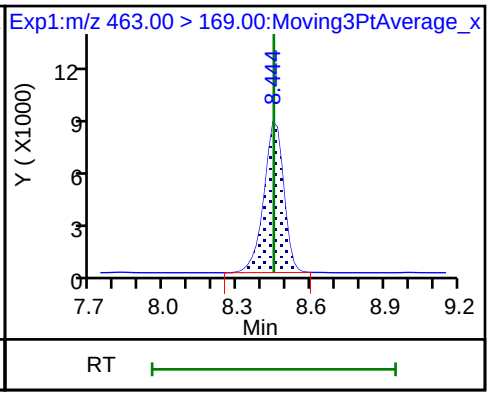
D 28 13C5 PFNA



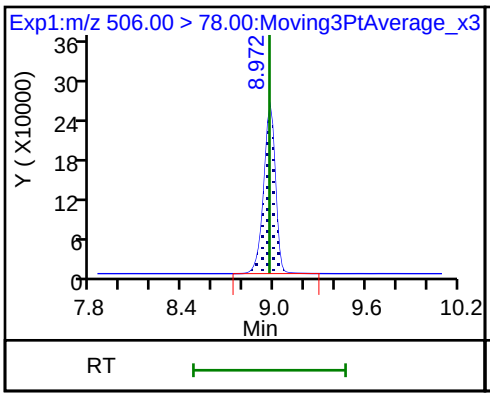
29 Perfluorononanoic acid



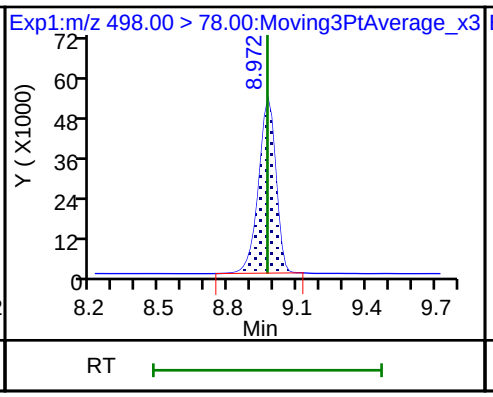
29 Perfluorononanoic acid



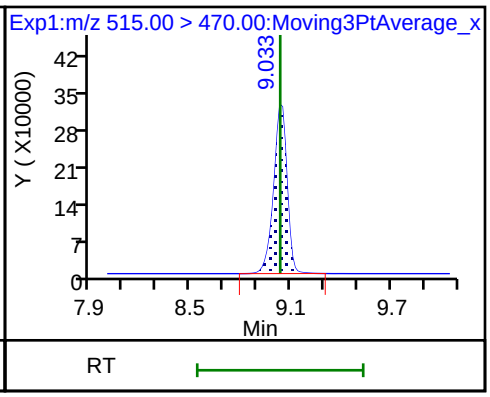
D 30 13C8 FOSA



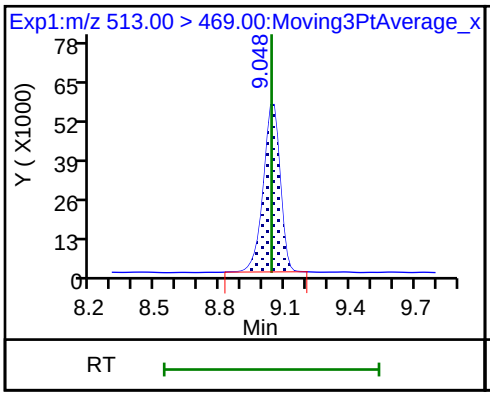
31 Perfluorooctanesulfonamide



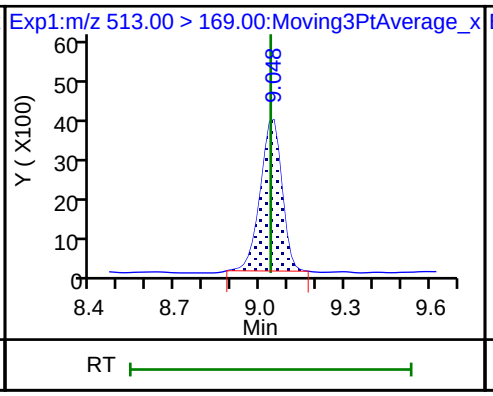
D 33 13C2 PFDA



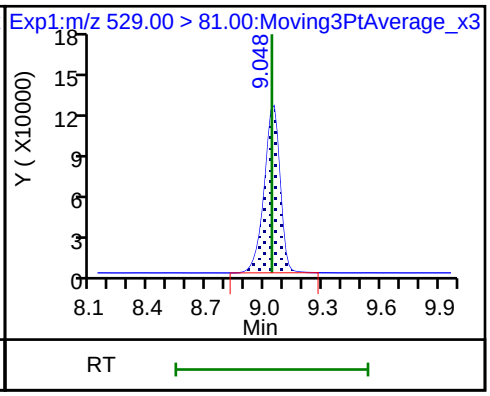
35 Perfluorodecanoic acid



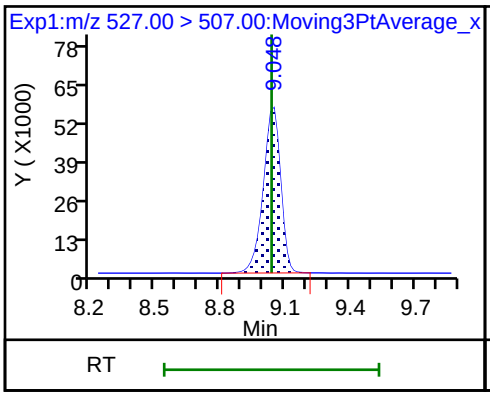
35 Perfluorodecanoic acid



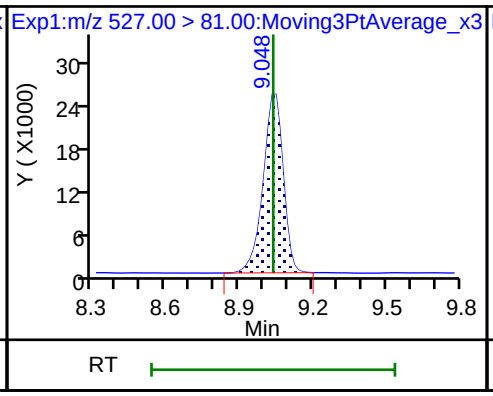
D 34 M2-8:2 FTS



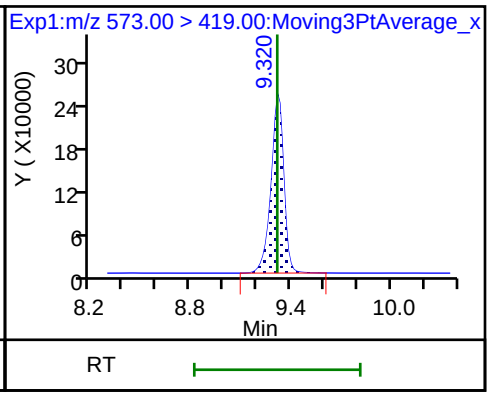
36 8:2 FTS



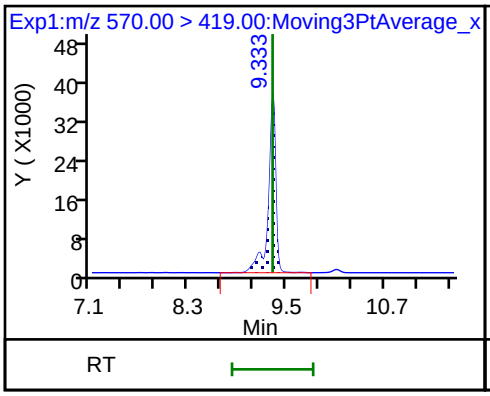
36 8:2 FTS



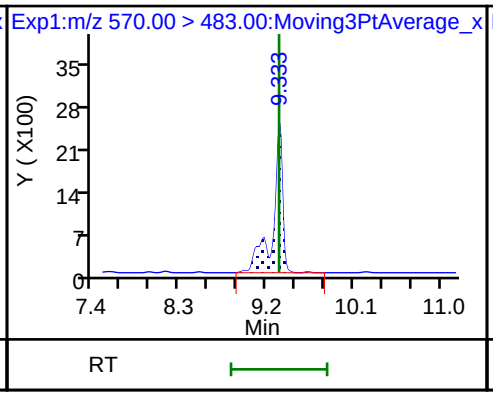
D 37 d3-NMeFOSAA



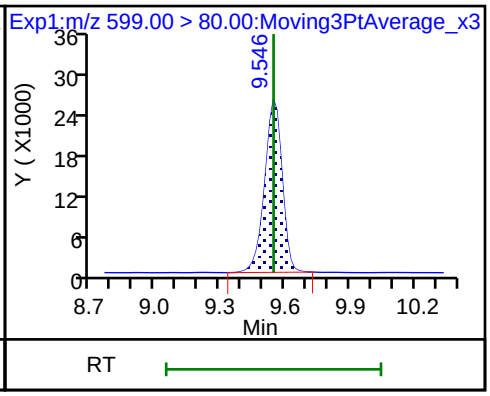
38 NMeFOSAA



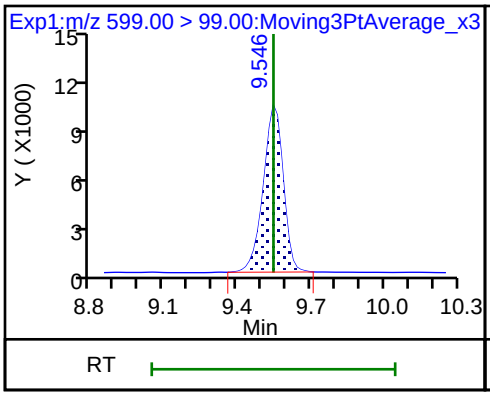
38 NMeFOSAA



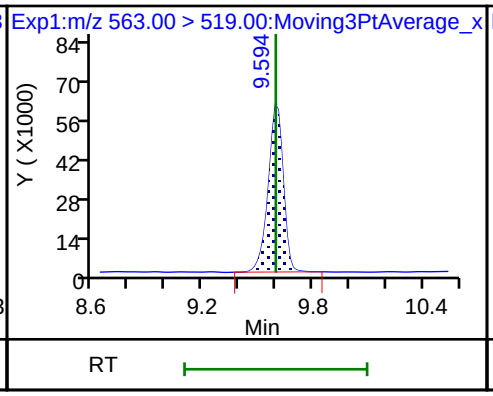
39 Perfluorodecanesulfonic acid



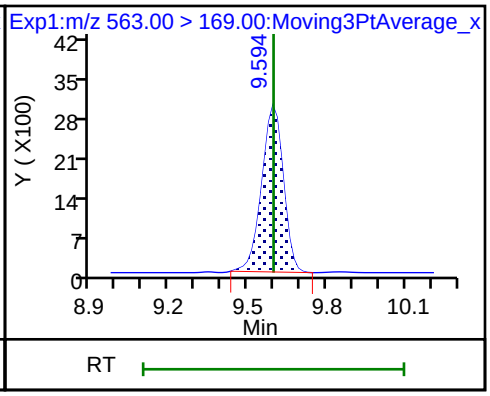
39 Perfluorodecanesulfonic acid



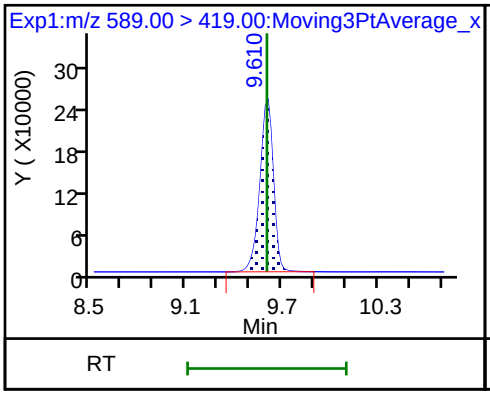
41 Perfluoroundecanoic acid



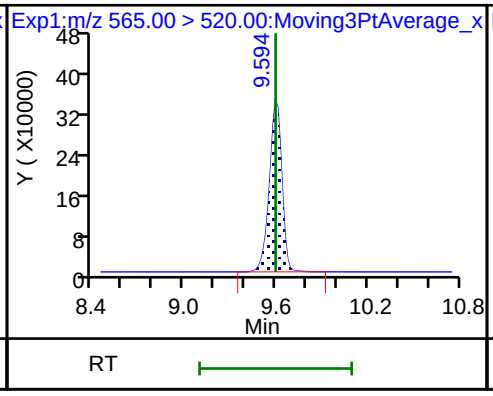
41 Perfluoroundecanoic acid



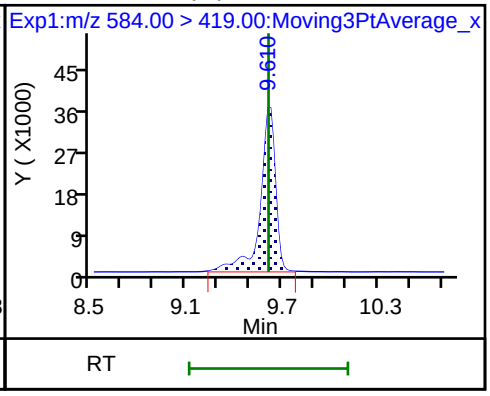
D 40 d5-NEtFOSAA



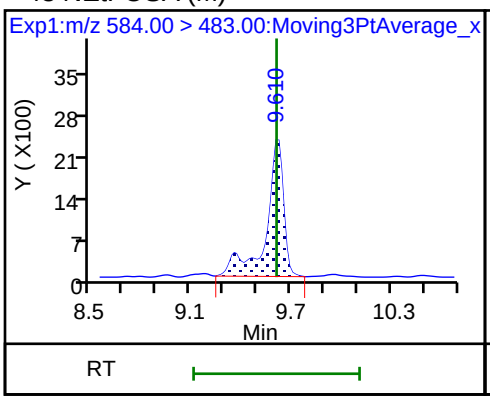
D 42 13C2 PFUnA



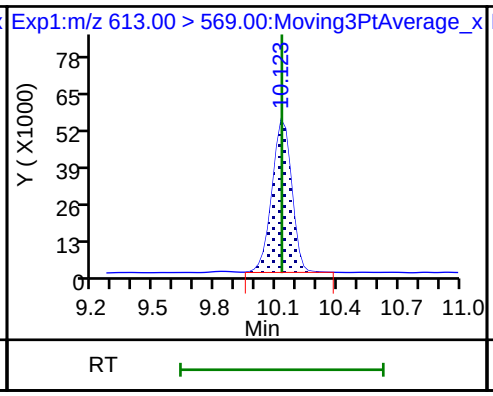
43 NEtFOSA (M)



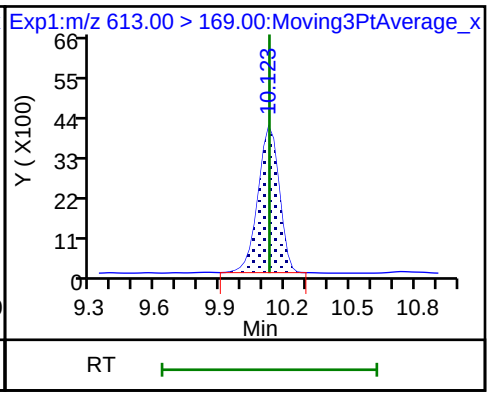
43 NEtFOSA (M)



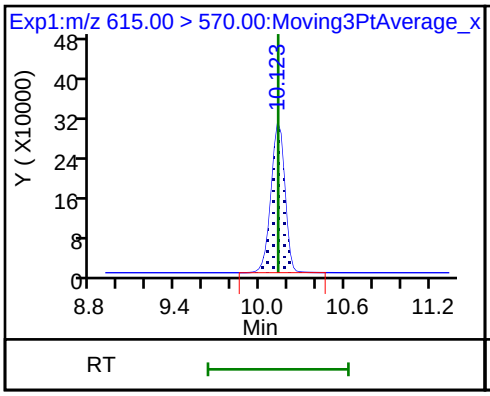
46 Perfluorododecanoic acid



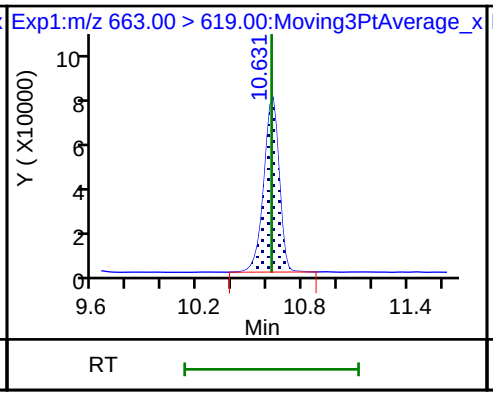
46 Perfluorododecanoic acid



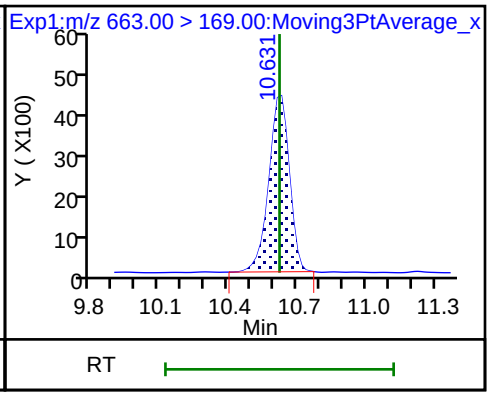
D 45 13C2 PFDoA



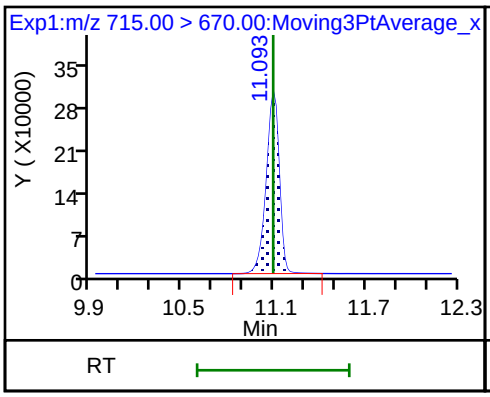
49 Perfluorotridecanoic acid



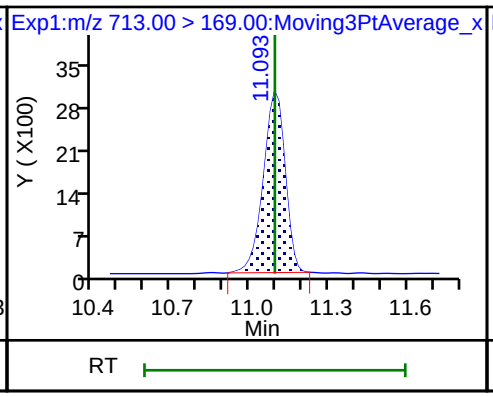
49 Perfluorotridecanoic acid



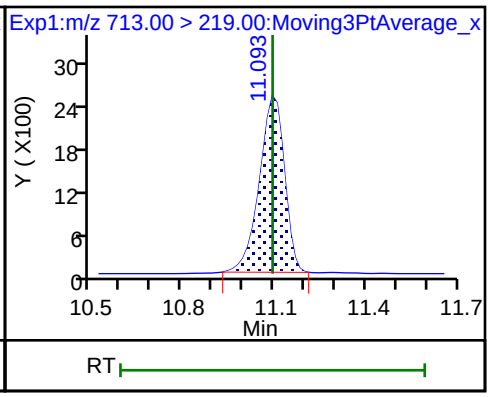
D 51 13C2 PFTeDA



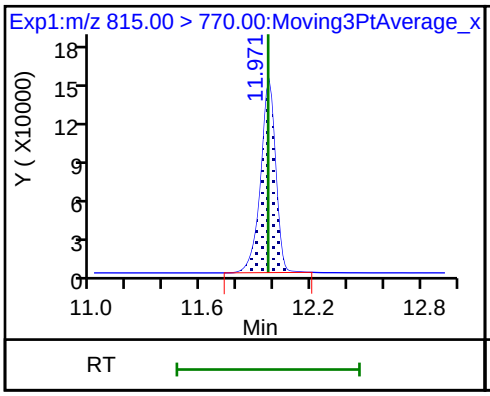
50 Perfluorotetradecanoic acid



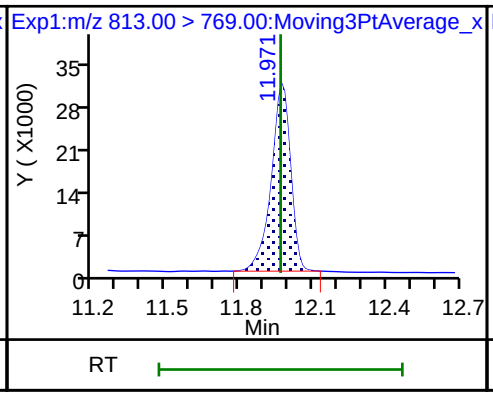
50 Perfluorotetradecanoic acid



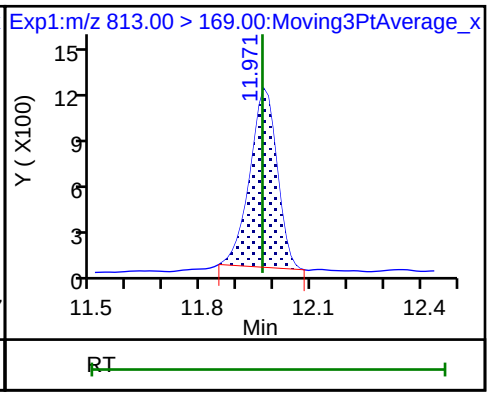
D 52 13C2 PFHxDA



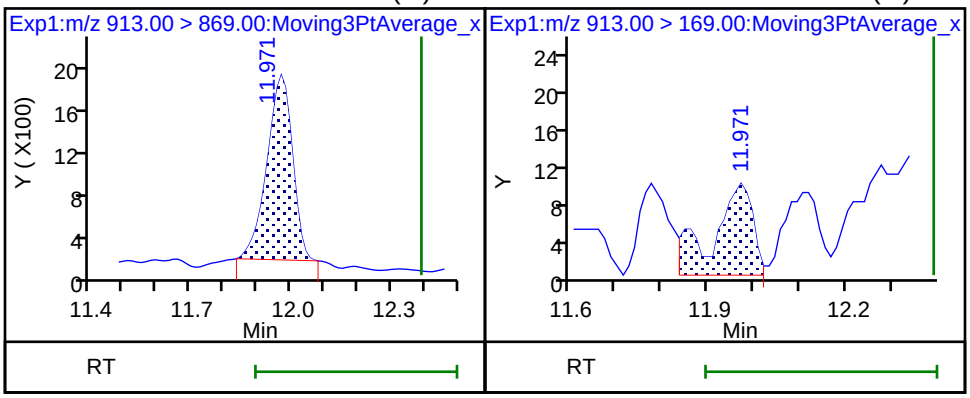
54 Perfluorohexadecanoic acid



54 Perfluorohexadecanoic acid



53 Perfluorooctadecanoic acid (M) 53 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

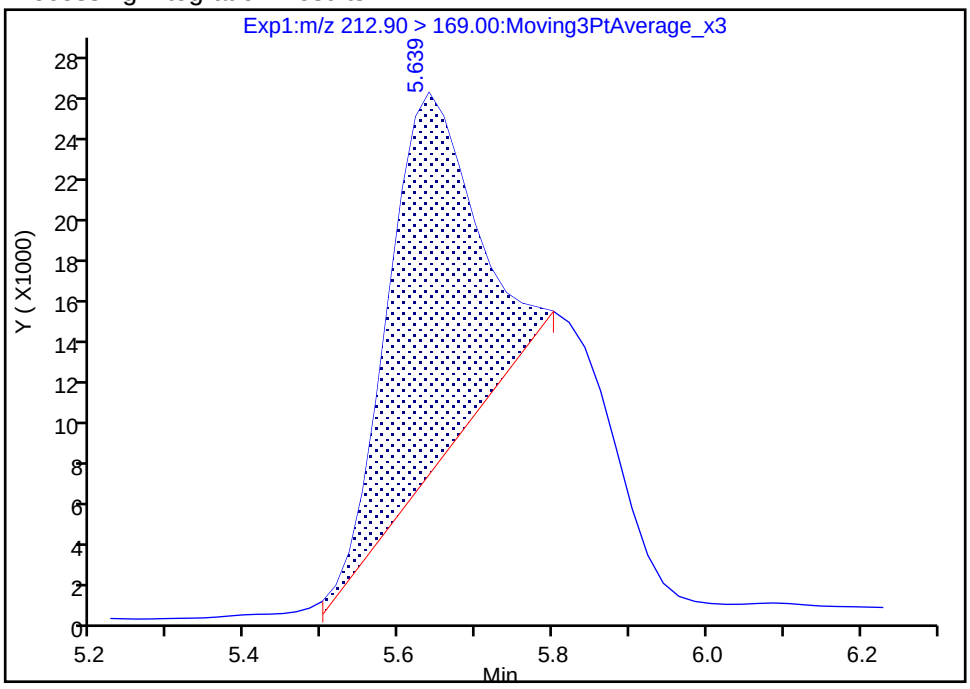
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_007.d
Injection Date: 12-Oct-2020 12:25:54 Instrument ID: A10
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 5
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

1 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

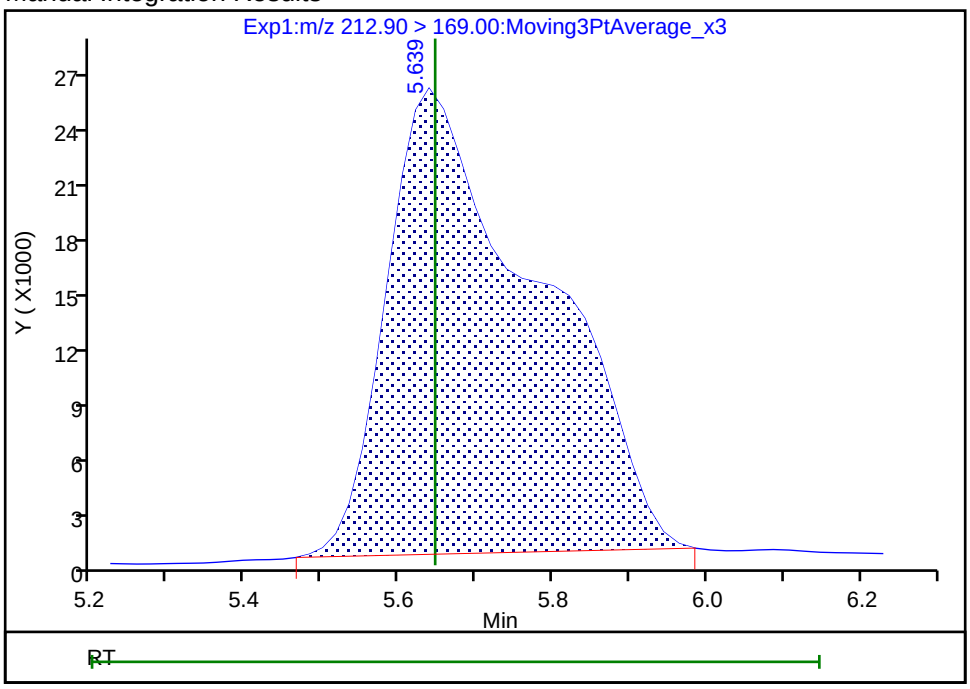
Processing Integration Results

RT: 5.64
Area: 143702
Amount: 0.006774
Amount Units: ng/ml



Manual Integration Results

RT: 5.64
Area: 344263
Amount: 0.009687
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 12:52:20
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

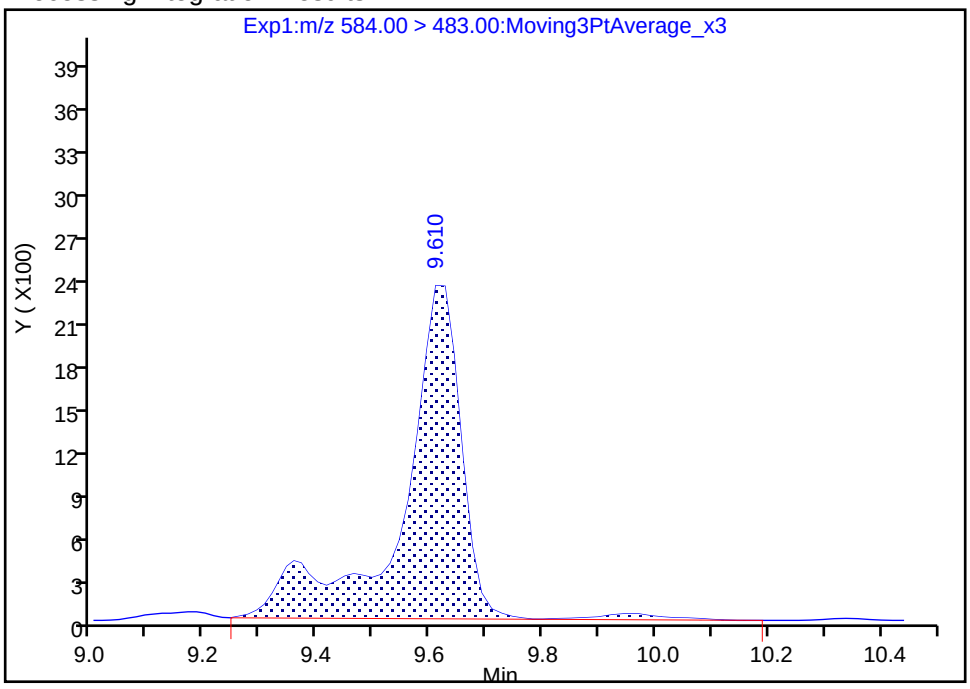
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_007.d				
Injection Date:	12-Oct-2020 12:25:54	Instrument ID:	A10		
Lims ID:	IC STD 4				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	7	Worklist Smp#:	5
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm ID)	Detector	EXP1		

43 NEtFOSA, CAS: 2991-50-6

Signal: 2

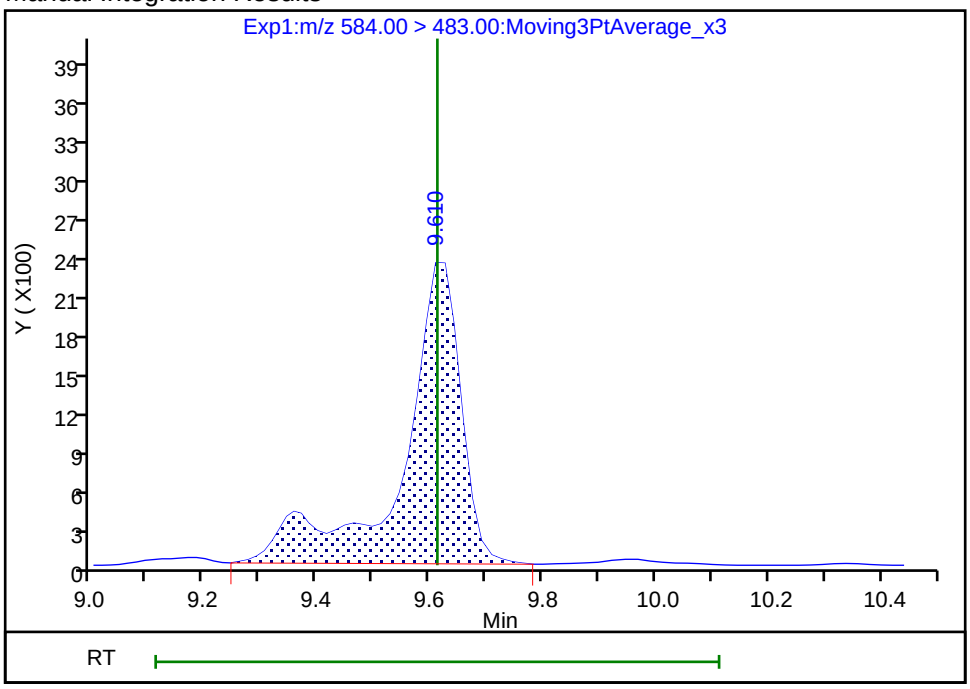
Processing Integration Results

RT: 9.61
Area: 17156
Amount: 0.010540
Amount Units: ng/ml



Manual Integration Results

RT: 9.61
Area: 16811
Amount: 0.010319
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:35:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

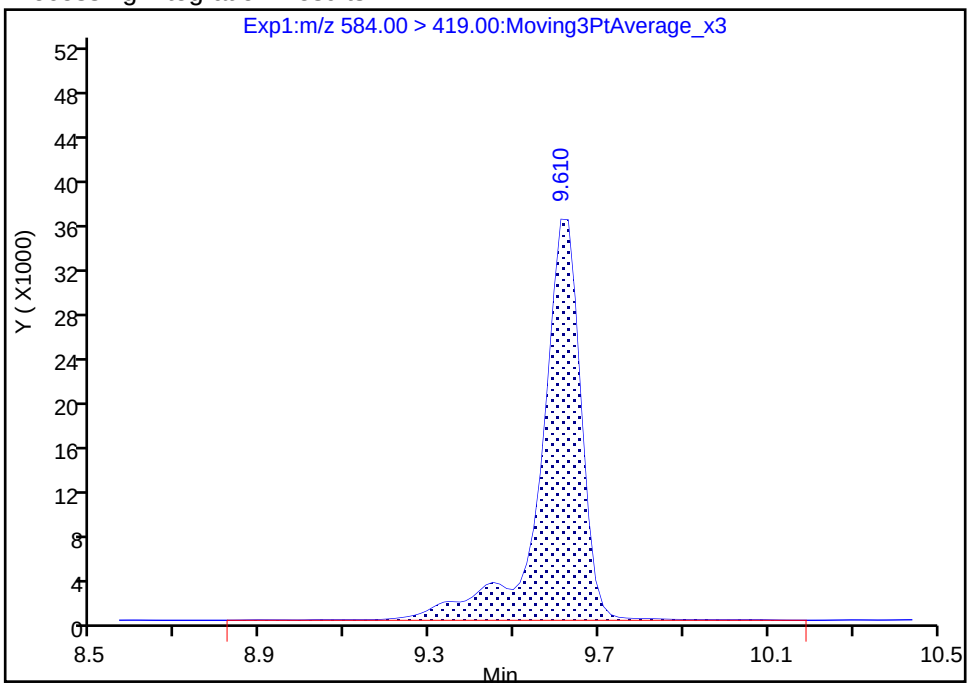
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_007.d
Injection Date: 12-Oct-2020 12:25:54 Instrument ID: A10
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 5
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

43 NEtFOSA, CAS: 2991-50-6

Signal: 1

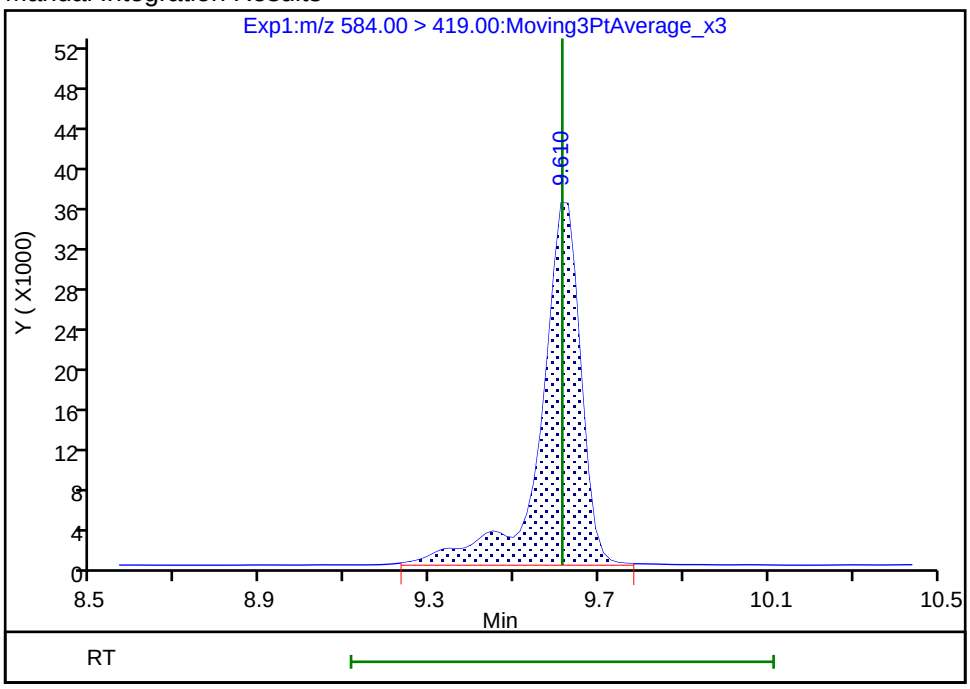
Processing Integration Results

RT: 9.61
Area: 241112
Amount: 0.010540
Amount Units: ng/ml



Manual Integration Results

RT: 9.61
Area: 239003
Amount: 0.010319
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:35:55
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

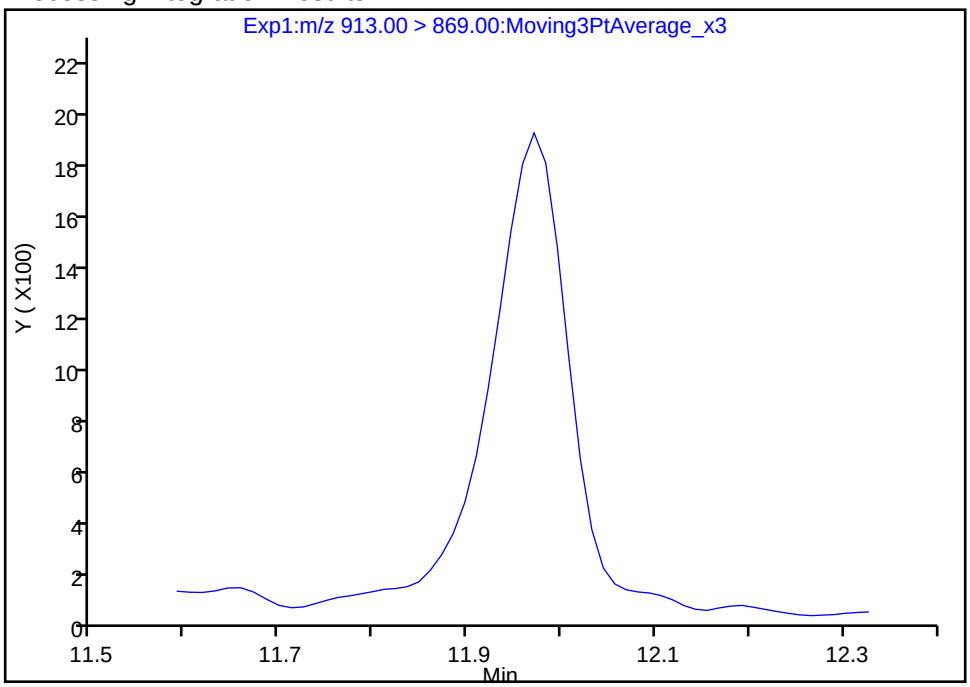
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_007.d				
Injection Date:	12-Oct-2020 12:25:54	Instrument ID:	A10		
Lims ID:	IC STD 4				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	7	Worklist Smp#:	5
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 1

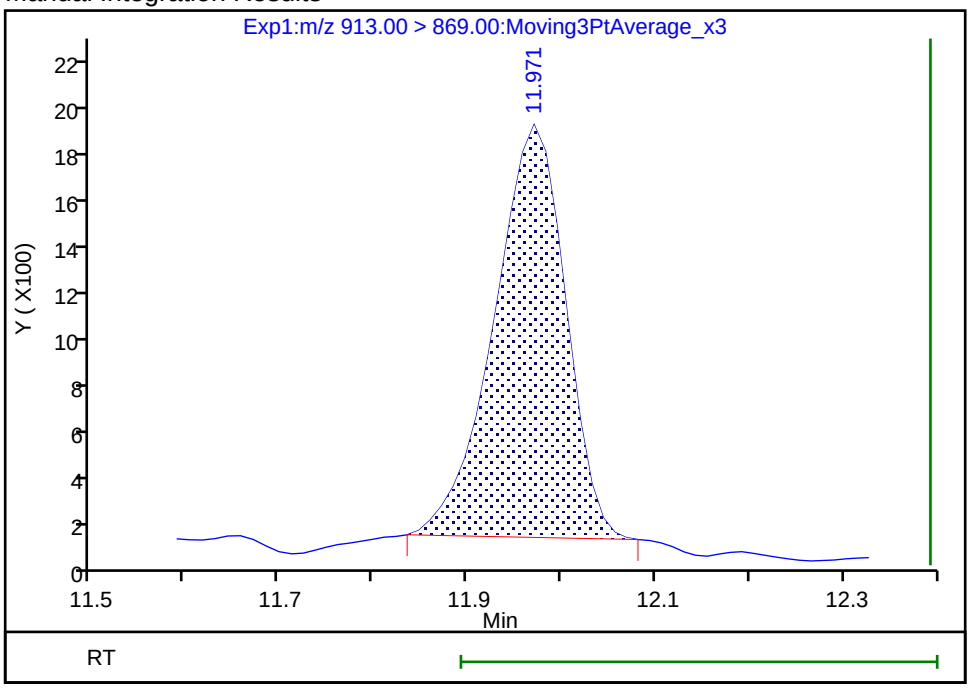
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 11.97
Area: 9170
Amount: 0.002480
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 12:54:52
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

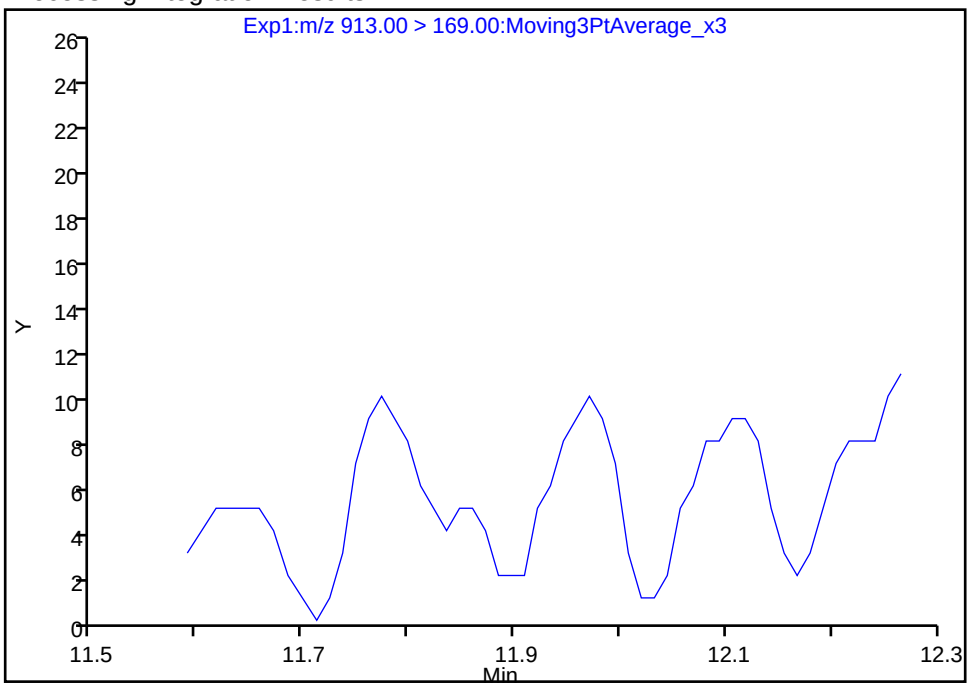
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_007.d
Injection Date: 12-Oct-2020 12:25:54 Instrument ID: A10
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 5
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

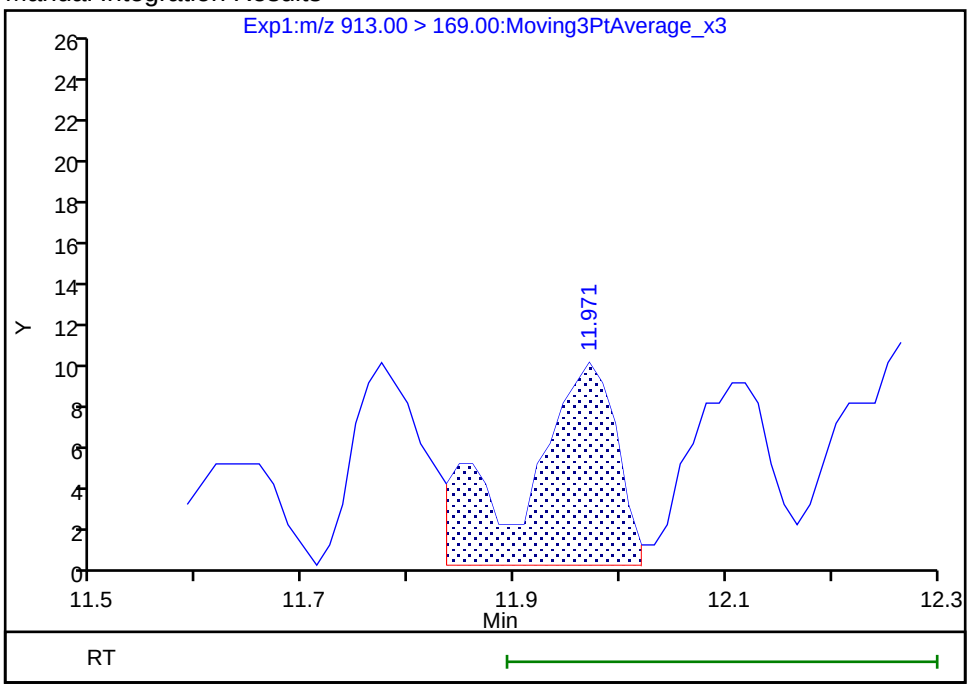
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 11.97
Area: 58
Amount: 0.002480
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:01:54
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_008.d
Lims ID: IC STD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-Oct-2020 12:44:19 ALS Bottle#: 8 Worklist Smp#: 6
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:23:30 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: koucharis Date: 12-Oct-2020 13:08:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.639	5.644	-0.005		2166107	0.0546		109	13425	
1 Perfluorobutanoic acid										
169	5.639	5.647	-0.008	1.000	729492	0.0191		95.7	101	
D 4 13C5 PFPeA										
223	6.250	6.253	-0.003		1785064	0.0526		105	20961	
5 Perfluoropentanoic acid										
219	6.250	6.253	-0.003	1.000	726093	0.0189		94.4	146	
D 3 13C3 PFBS										
80	6.293	6.305	-0.012		2041724	0.0486		104	5390	
6 Perfluorobutanesulfonic acid										
80	6.316	6.308	0.008	1.004	746468	0.0172	Target=1.50	97.1	1096	
99	6.316	6.308	0.008	1.004	499339		1.49(0.75-2.26)	97.1	426	
D 7 M2-4:2 FTS										
81	6.688	6.688	0.0		560648	NC			882	
8 4:2 FTS										
307	6.688	6.688	0.0	1.000	552845	NC	Target=2.45		6788	
81	6.688	6.688	0.0	1.000	226920		2.44(1.22-3.67)		365	
D 9 13C2 PFHxA										
270	6.734	6.741	-0.007		1927353	0.0533		107	12485	
10 Perfluorohexanoic acid										
269	6.734	6.744	-0.010	1.000	677265	0.0189	Target=17.92	94.6	339	
119	6.734	6.744	-0.010	1.000	36576		18.52(8.96-26.88)	94.6	181	
11 Perfluoropentanesulfonic acid										
80	6.758	6.755	0.003	0.930	612827	NC	Target=1.47		861	
99	6.758	6.755	0.003	0.930	425786		1.44(0.74-2.21)		671	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.876	6.888	-0.012		135305	NC			598	
13 HPFO-DA										
285	6.900	6.891	0.009	1.003	96632	NC			81.6	
14 9ClFOS										M
351	7.138	7.212	-0.074	0.849	1686	NC			2.8	M
D 15 18O2 PFHxS										
84	7.263	7.260	0.003		1302712	0.0503		106	17737	
16 Perfluorohexanesulfonic acid										
80	7.263	7.260	0.003	1.000	551500	0.0176	Target=5.60	97.0	818	
99	7.263	7.260	0.003	1.000	100372		5.49(2.80-8.40)	97.0	325	
D 17 13C4 PFHpA										
322	7.263	7.270	-0.007		2013639	0.0550		110	17625	
18 Perfluoroheptanoic acid										
319	7.263	7.272	-0.009	1.000	734130	0.0178	Target=8.55	89.1	289	
169	7.263	7.272	-0.009	1.000	85817		8.55(4.27-12.82)	89.1	992	
19 DONA										
251	7.319	7.328	-0.009	0.870	2904537	NC	Target=2.62		9234	
85	7.319	7.328	-0.009	0.870	1137601		2.55(1.31-3.93)		3347	
D 22 M2-6:2 FTS										
81	7.803	7.813	-0.010		634018	0.0489		103	1373	
23 6:2 FTS										
407	7.803	7.813	-0.010	1.000	628888	0.0190	Target=2.55	100	7886	
81	7.803	7.813	-0.010	1.000	253354		2.48(1.27-3.82)	100	485	
21 Perfluoroheptanesulfonic acid										
80	7.820	7.821	-0.001	0.930	413359	0.0177	Target=6.95	93.2	1262	
99	7.820	7.821	-0.001	0.930	64053		6.45(3.48-10.43)	93.2	259	
D 25 13C4 PFOA										
372	7.837	7.842	-0.005		2279185	0.0535		107	18132	
24 Perfluorooctanoic acid										
369	7.837	7.846	-0.009	1.000	832136	0.0188	Target=1.41	94.0	166	
169	7.837	7.846	-0.009	1.000	623968		1.33(0.71-2.12)	94.0	2296	
27 Perfluorooctanesulfonic acid										
80	8.410	8.413	-0.003	1.000	359393	0.0182	Target=3.36	98.0	1376	
99	8.410	8.413	-0.003	1.000	99615		3.61(1.68-5.04)	98.0	359	
D 26 13C4 PFOS										
80	8.410	8.413	-0.003		922827	0.0501		105	3046	
D 28 13C5 PFNA										
423	8.444	8.443	0.001		1903825	0.0531		106	12262	
29 Perfluorononanoic acid										
419	8.444	8.448	-0.004	1.000	654287	0.0194	Target=6.88	97.1	325	
169	8.444	8.448	-0.004	1.000	98060		6.67(3.44-10.32)	97.1	1179	
D 30 13C8 FOSA										
78	8.972	8.968	0.004		1023963	0.0467		93.4	5889	
31 Perfluorooctanesulfonamide										
78	8.972	8.969	0.003	1.000	403379	0.0197		98.3	3812	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
32 Perfluorononanesulfonic acid										
80	8.987	8.994	-0.007	1.069	327935	NC	Target=6.23		1940	
99	8.987	8.994	-0.007	1.069	54200		6.05(3.11-9.34)		256	
D 33 13C2 PFDA										
470	9.033	9.035	-0.002		1821219	0.0516		103	14734	
35 Perfluorodecanoic acid										
469	9.033	9.037	-0.004	1.000	580791	0.0198	Target=14.44	99.2	416	
169	9.033	9.037	-0.004	1.000	40353		14.39(7.22-21.66)	99.2	384	
D 34 M2-8:2 FTS										
81	9.033	9.037	-0.004		689564	0.0505		105	3367	
36 8:2 FTS										
507	9.033	9.037	-0.004	1.000	562044	0.0176	Target=2.16	91.8	4174	
81	9.033	9.037	-0.004	1.000	274500		2.05(1.08-3.24)	91.8	955	
D 37 d3-NMeFOSAA										
419	9.306	9.317	-0.011		1284031	0.0520		104	5641	
38 NMeFOSAA										
419	9.320	9.327	-0.007	1.001	416265	0.0195	Target=13.31	97.5	1703	
483	9.320	9.327	-0.007	1.001	31191		13.35(6.65-19.96)	97.5	484	
39 Perfluorodecanesulfonic acid										
80	9.529	9.546	-0.017	1.133	271201	0.0188	Target=2.51	97.6	1955	
99	9.529	9.546	-0.017	1.133	99012		2.74(1.26-3.77)	97.6	1449	
D 42 13C2 PFUnA										
520	9.578	9.595	-0.017		1910141	0.0525		105	23814	
41 Perfluoroundecanoic acid										
519	9.594	9.597	-0.003	1.002	670565	0.0199	Target=19.91	99.5	445	
169	9.578	9.597	-0.019	1.000	35956		18.65(9.95-29.86)	99.5	823	
D 40 d5-NEtFOSAA										
419	9.594	9.603	-0.009		1448898	0.0525		105	5619	
43 NEtFOSA										
419	9.610	9.613	-0.003	1.002	450352	0.0197	Target=13.66	98.4	3551	
483	9.610	9.613	-0.003	1.002	33950		13.27(6.83-20.48)	98.4	446	
44 11ClFOS										
451	9.825	9.828	-0.003	1.168	1552437	NC			2660	
46 Perfluorododecanoic acid										
569	10.123	10.127	-0.004	1.000	556381	0.0189	Target=12.99	94.3	201	
169	10.123	10.127	-0.004	1.000	42181		13.19(6.50-19.49)	94.3	575	
D 45 13C2 PFDoA										
570	10.123	10.127	-0.004		1798090	0.0491		98.1	15495	
47 10:2 FTS										
607	10.145	10.152	-0.007	1.123	681838	NC	Target=27.54		5627	
81	10.145	10.152	-0.007	1.123	25201		27.06(13.77-41.31)		529	
48 PFDoS										
80	10.542	10.555	-0.013	1.253	63132	NC	Target=0.45		432	
99	10.542	10.555	-0.013	1.253	141865		0.45(0.22-0.67)		811	
49 Perfluorotridecanoic acid										
619	10.614	10.622	-0.008	1.048	563580	0.0180	Target=16.38	89.8	171	
169	10.614	10.622	-0.008	1.048	31444		17.92(8.19-24.57)	89.8	483	

Report Date: 12-Oct-2020 15:23:30 Chrom Revision: 2.3 08-Oct-2020 16:36:14
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_008.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 51 13C2 PFTeDA										
670	11.077	11.092	-0.015		1021401	0.0422		84.5	6454	
50 Perfluorotetradecanoic acid										
169	11.077	11.094	-0.017	1.000	18920	0.0181	Target=1.23	90.4	362	
219	11.077	11.094	-0.017	1.000	15540		1.22(0.62-1.85)	90.4	406	
D 52 13C2 PFHxDA										
770	11.946	11.966	-0.020		709956	0.0473		94.5	3195	
54 Perfluorohexadecanoic acid										
769	11.946	11.967	-0.021	1.000	247600	0.0194	Target=23.79	96.8	191	
169	11.946	11.967	-0.021	1.000	10086		24.55(11.89-35.68)	96.8	174	
53 Perfluorooctadecanoic acid										RM
869	12.811	12.393	0.418	1.072	71782	0.0230	Target=92.79	115	78.2	RM
169	12.801	12.393	0.408	1.072	2185		32.85(46.39-139.18)	115	44.5	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Reagents:

LCPFC-LL-L5_00034 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:23:30 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_008.d

Injection Date: 12-Oct-2020 12:44:19 Instrument ID: A10

Lims ID: IC STD 5

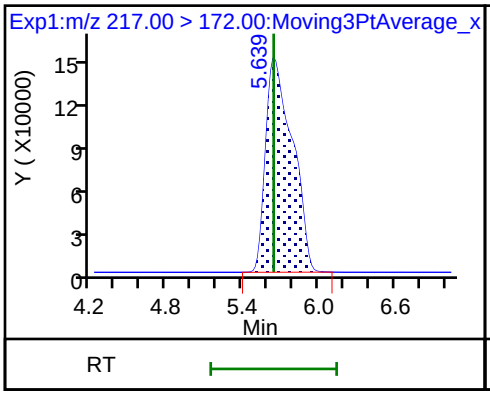
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 6

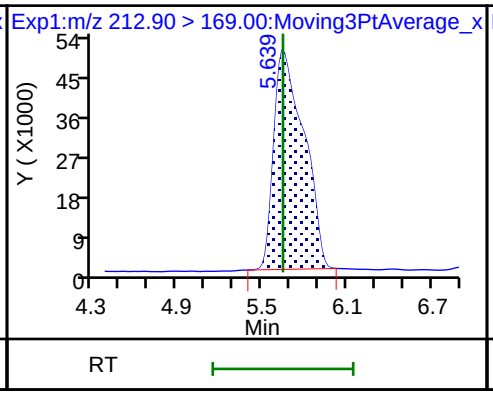
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

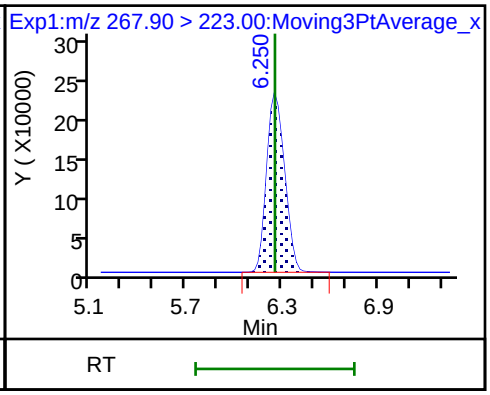
D 2 13C4 PFBA



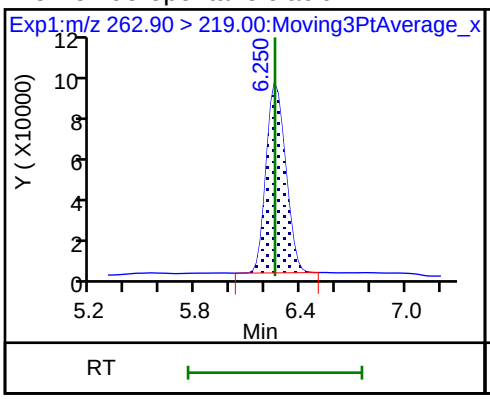
1 Perfluorobutanoic acid



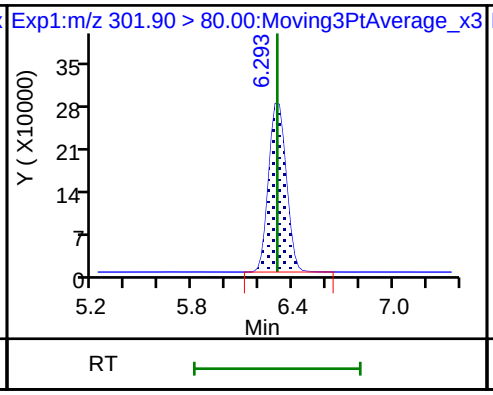
D 4 13C5 PFPeA



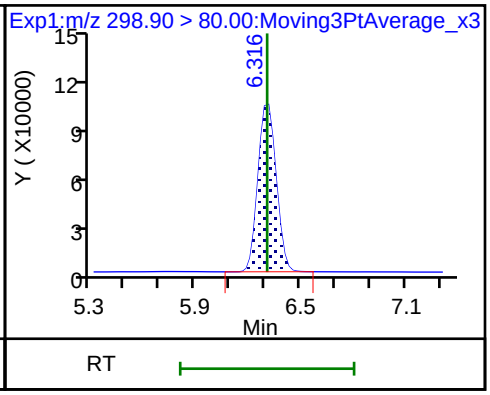
5 Perfluoropentanoic acid



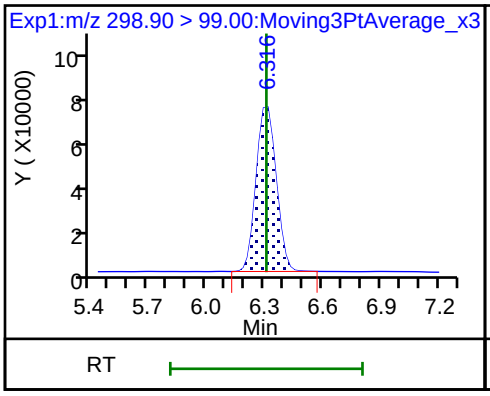
D 3 13C3 PFBS



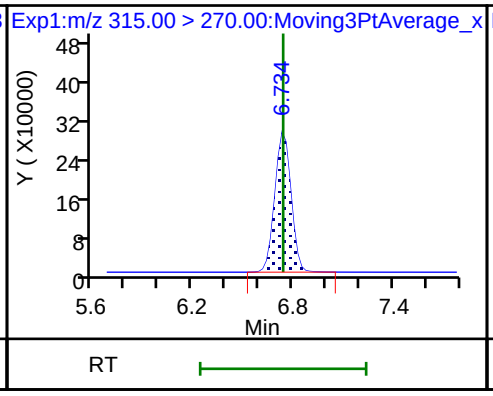
6 Perfluorobutanesulfonic acid



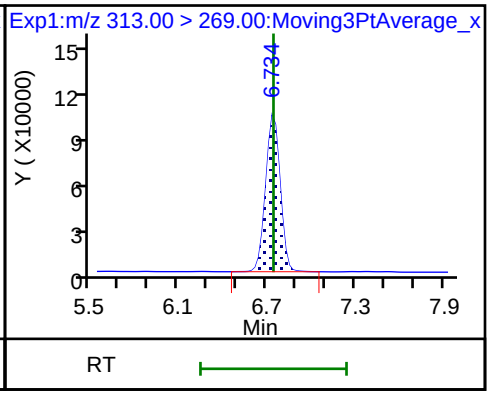
6 Perfluorobutanesulfonic acid



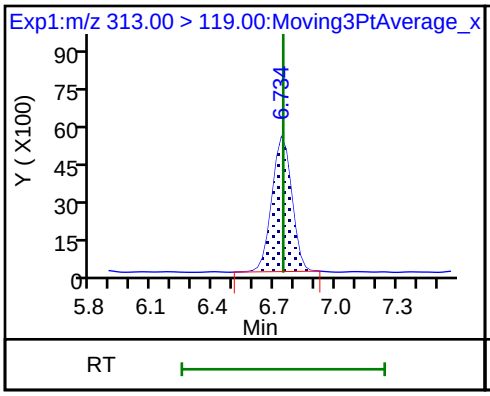
D 9 13C2 PFHxA



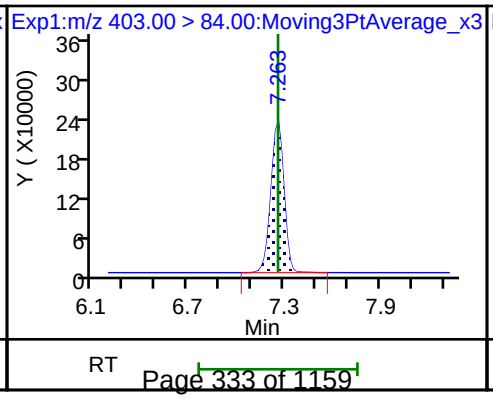
10 Perfluorohexanoic acid



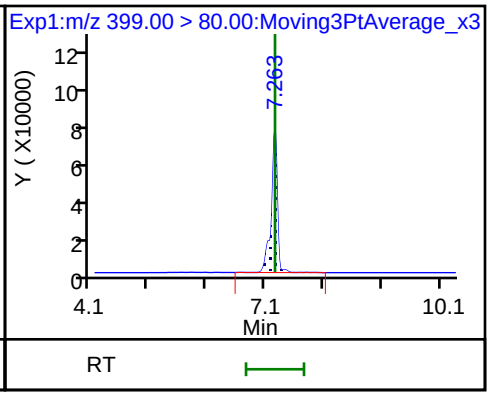
10 Perfluorohexanoic acid



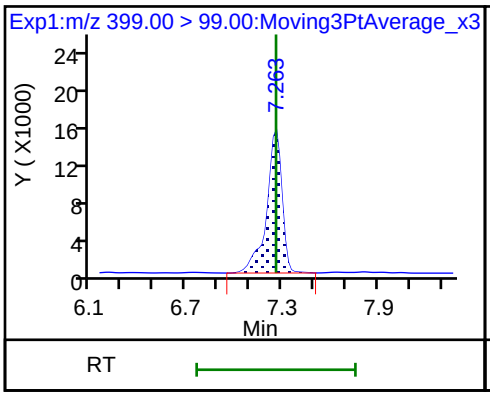
D 15 18O2 PFHxS



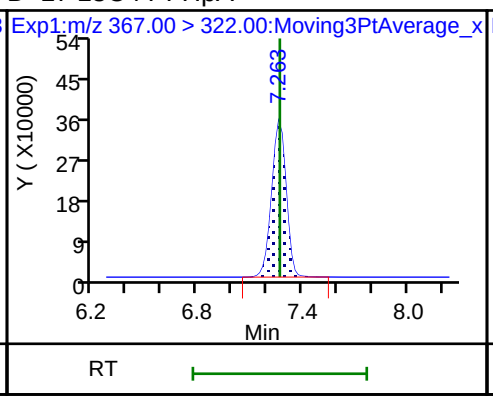
16 Perfluorohexanesulfonic acid



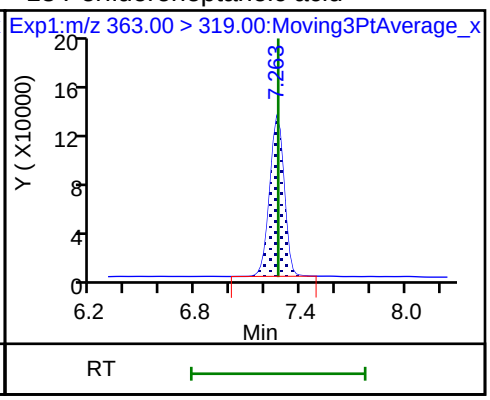
16 Perfluorohexanesulfonic acid



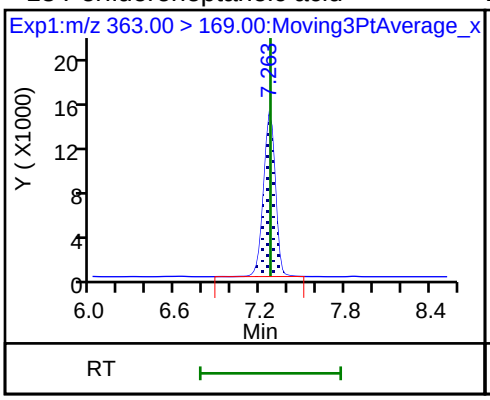
D 17 13C4 PFHpA



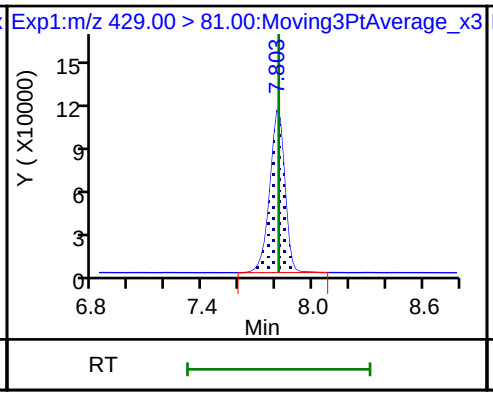
18 Perfluoroheptanoic acid



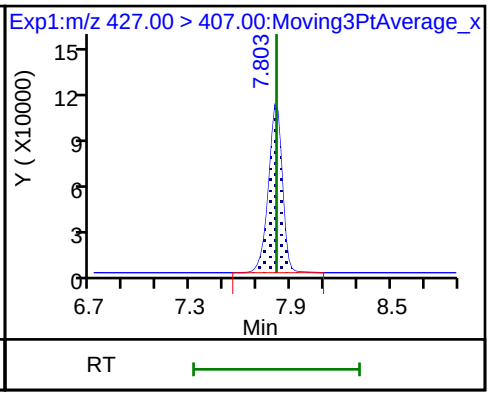
18 Perfluoroheptanoic acid



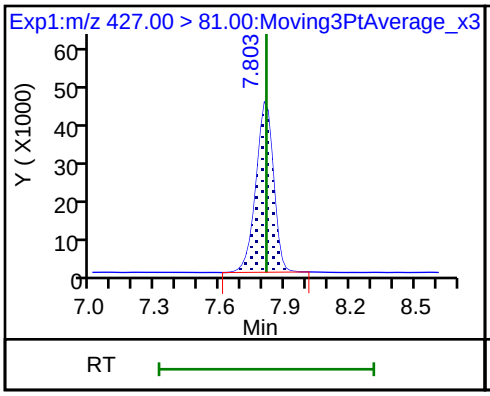
D 22 M2-6:2 FTS



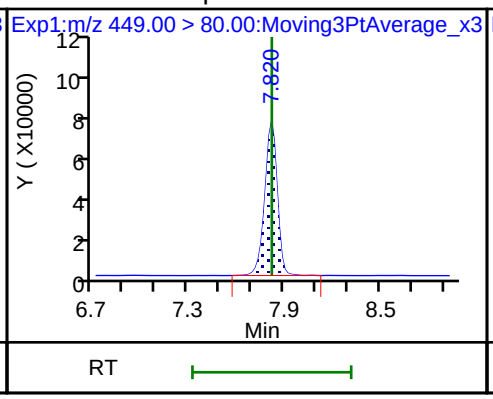
23 6:2 FTS



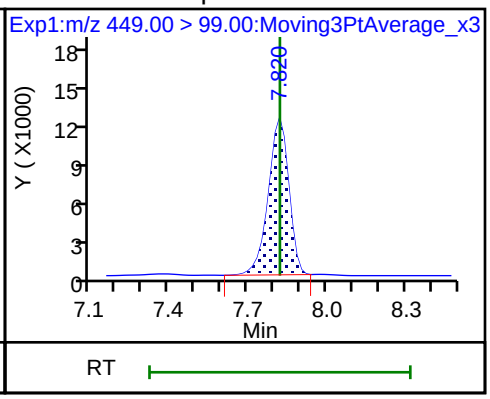
23 6:2 FTS



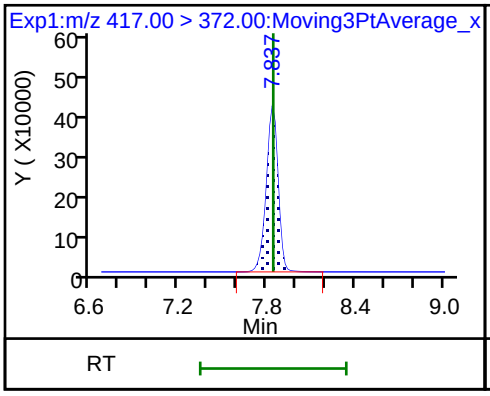
21 Perfluoroheptanesulfonic acid



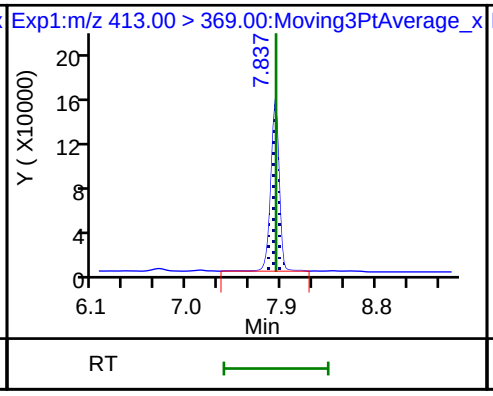
21 Perfluoroheptanesulfonic acid



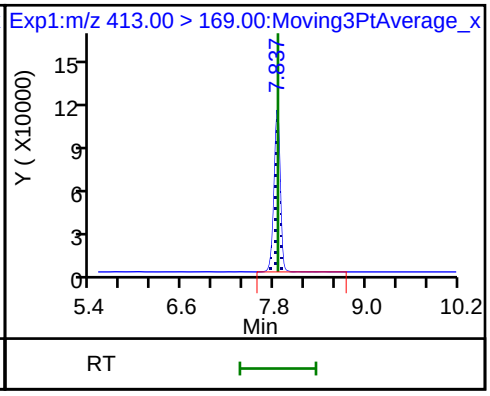
D 25 13C4 PFOA



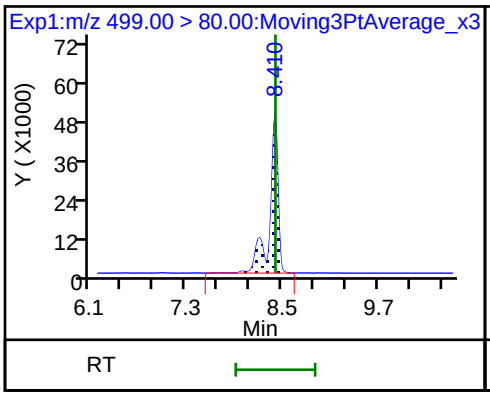
24 Perfluorooctanoic acid



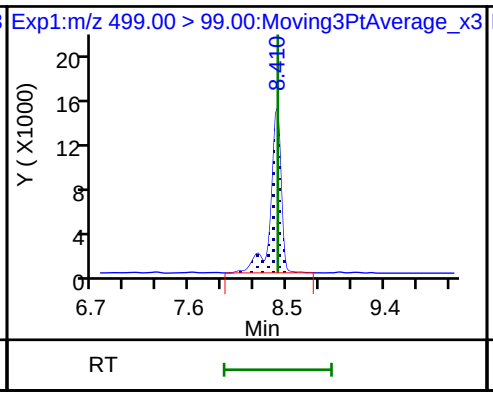
24 Perfluorooctanoic acid



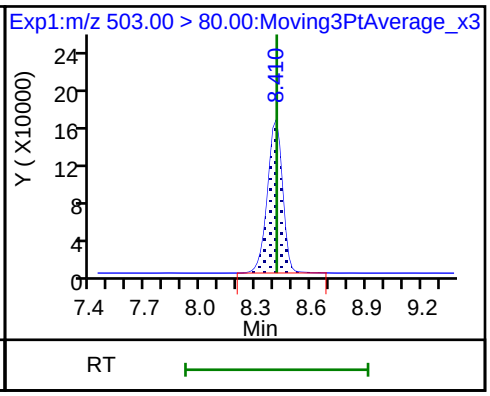
27 Perfluorooctanesulfonic acid



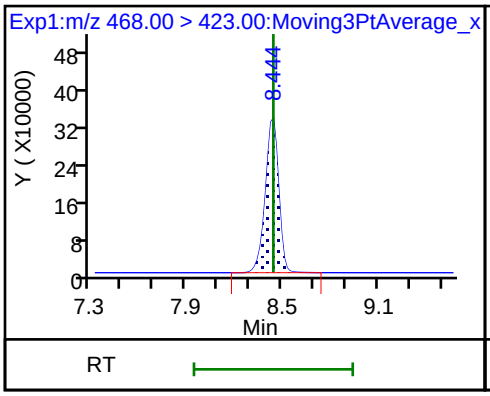
27 Perfluorooctanesulfonic acid



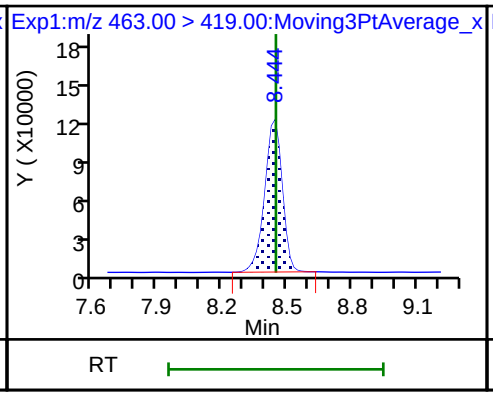
D 26 13C4 PFOS



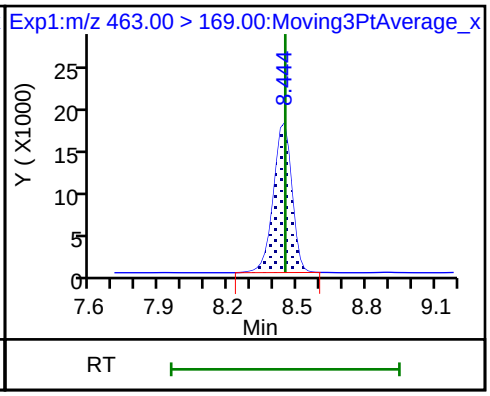
D 28 13C5 PFNA



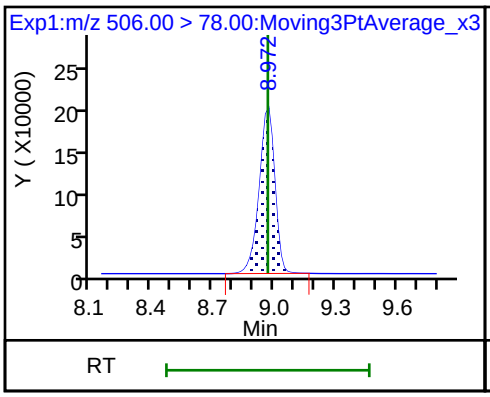
29 Perfluorononanoic acid



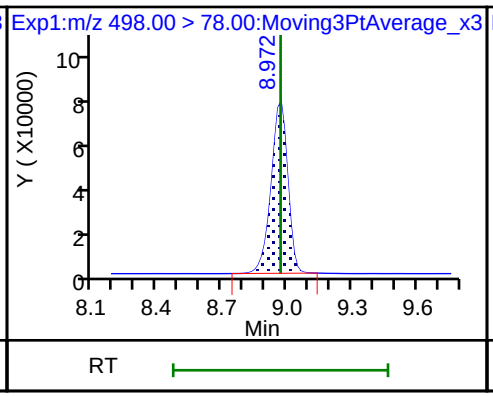
29 Perfluorononanoic acid



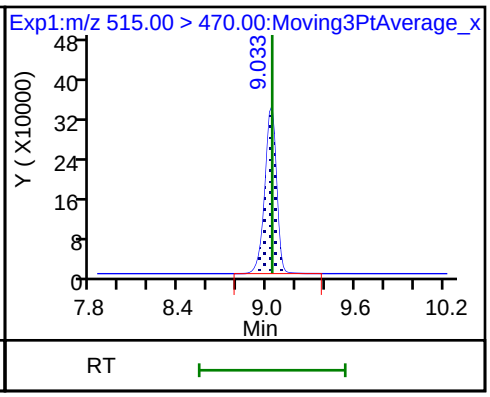
D 30 13C8 FOSA



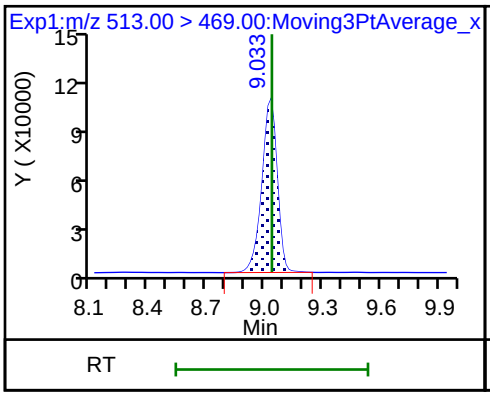
31 Perfluorooctanesulfonamide



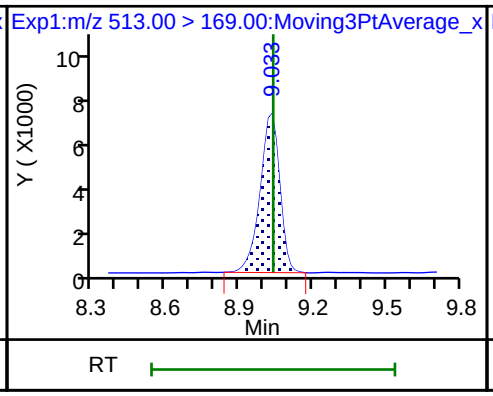
D 33 13C2 PFDA



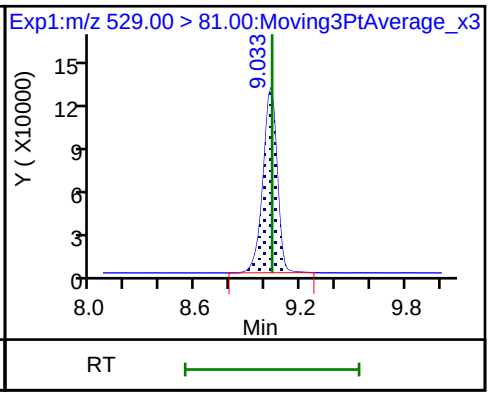
35 Perfluorodecanoic acid



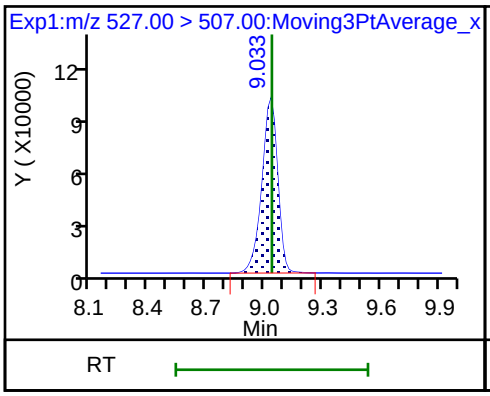
35 Perfluorodecanoic acid



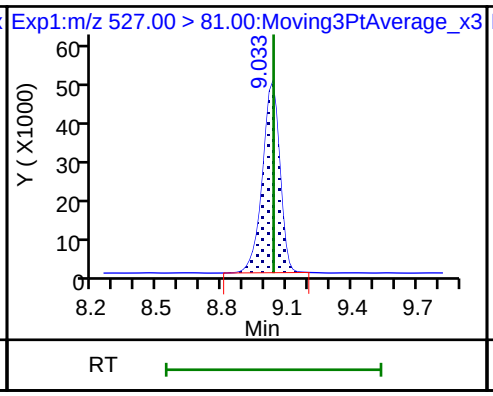
D 34 M2-8:2 FTS



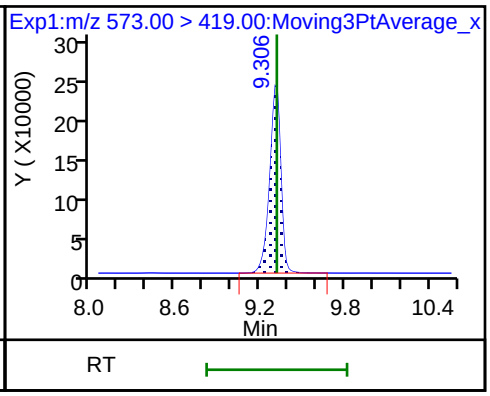
36 8:2 FTS



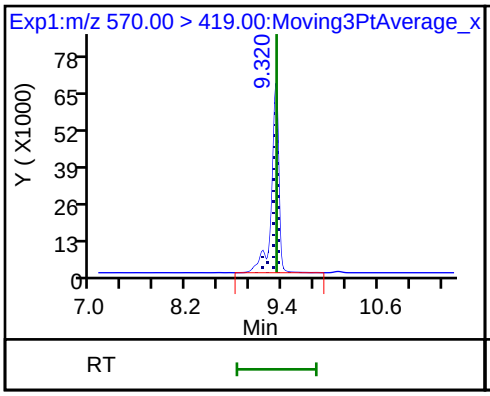
36 8:2 FTS



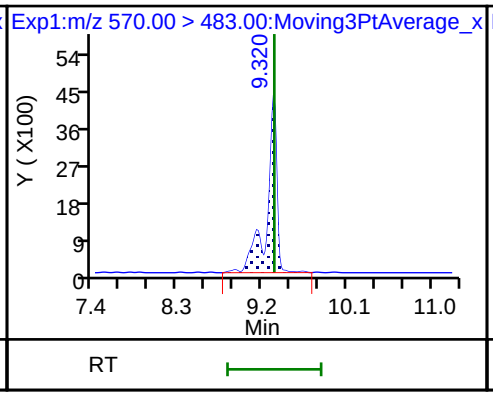
D 37 d3-NMeFOSAA



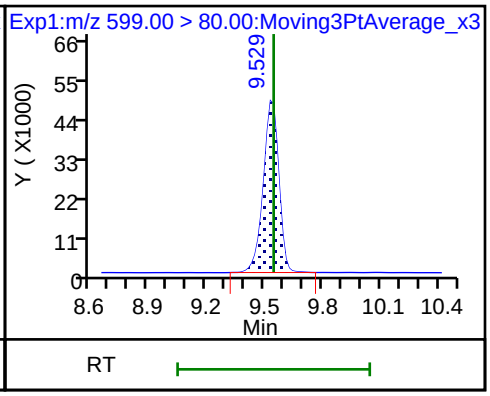
38 NMeFOSAA



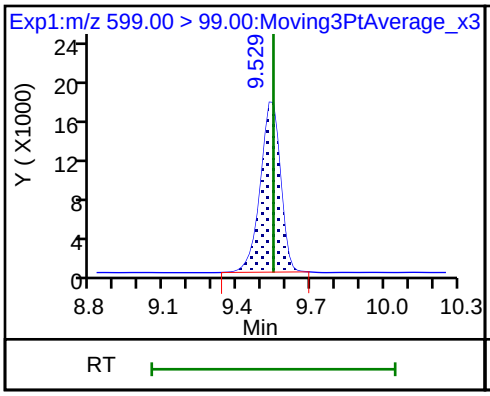
38 NMeFOSAA



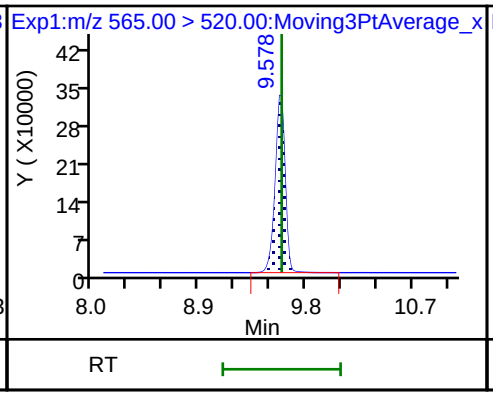
39 Perfluorodecanesulfonic acid



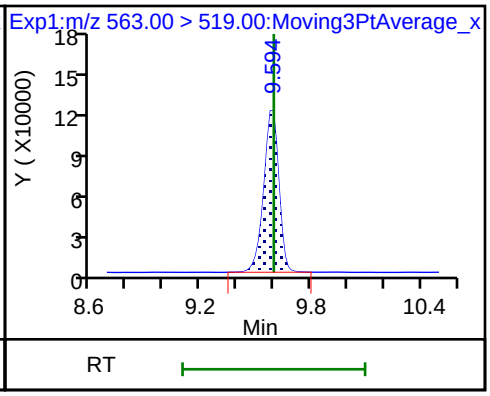
39 Perfluorodecanesulfonic acid



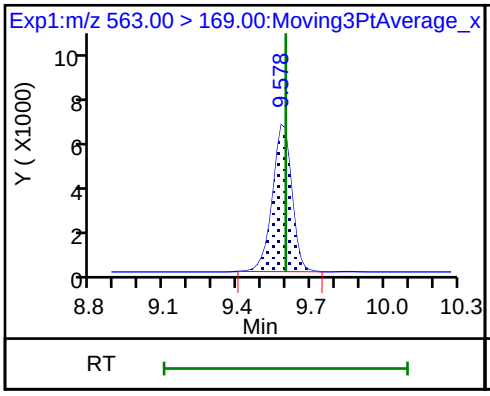
D 42 13C2 PFUnA



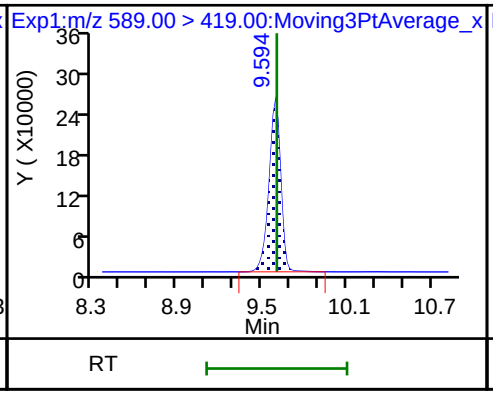
41 Perfluoroundecanoic acid



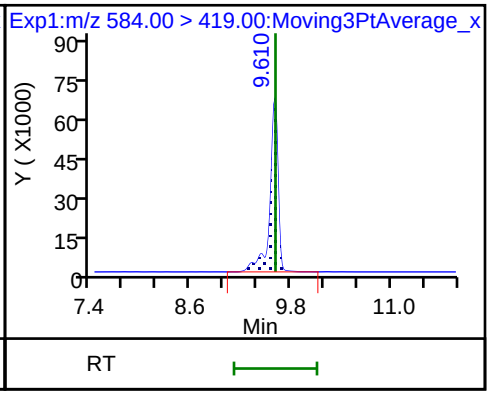
41 Perfluoroundecanoic acid



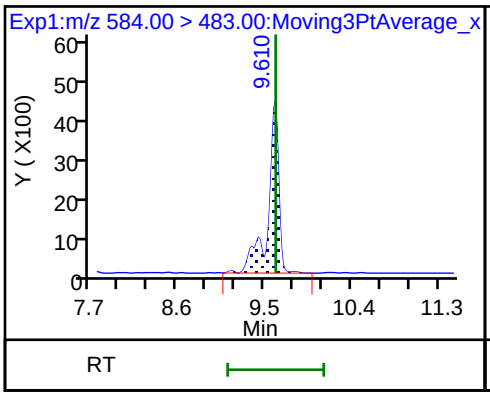
D 40 d5-NEtFOSAA



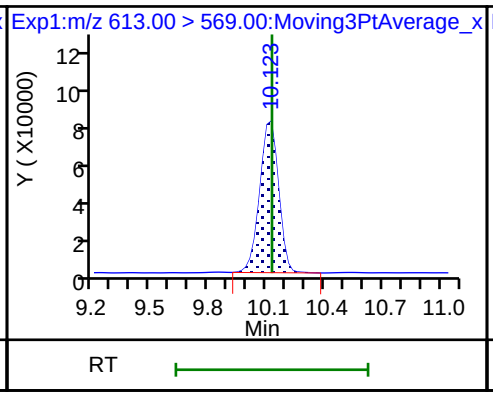
43 NEtFOSA



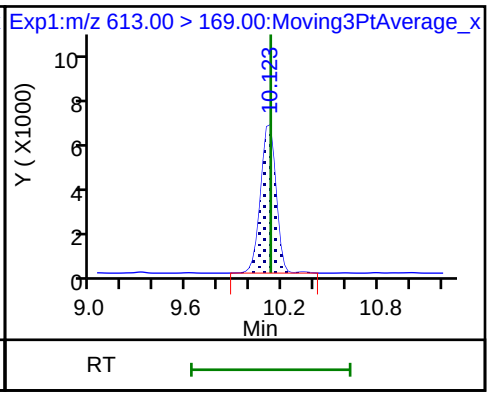
43 NEtFOSA



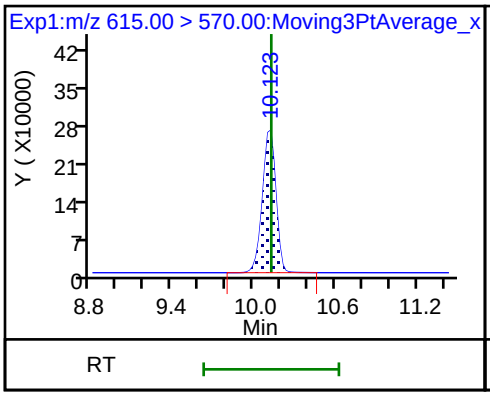
46 Perfluorododecanoic acid



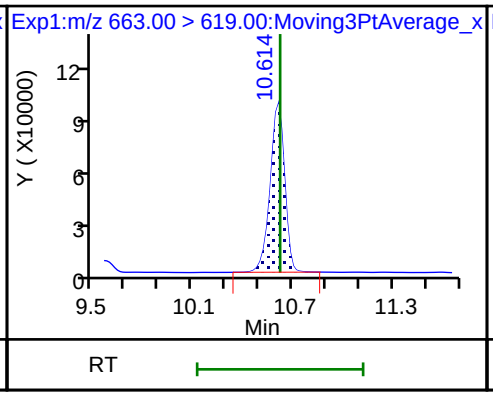
46 Perfluorododecanoic acid



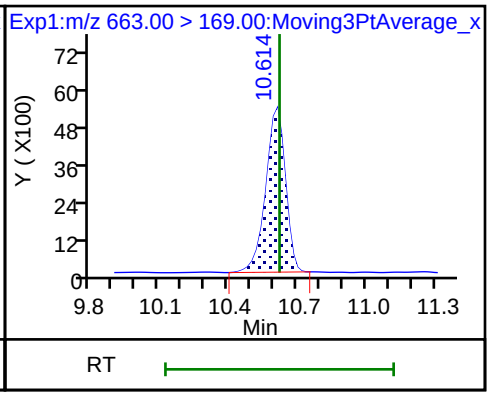
D 45 13C2 PFDoA



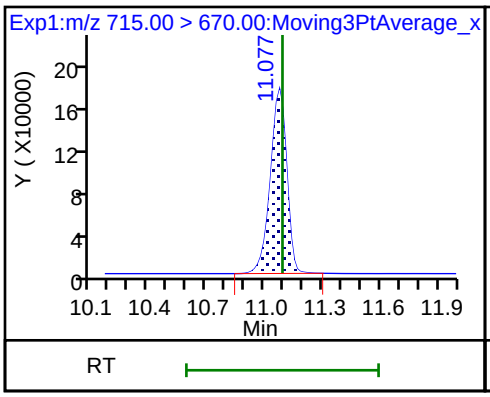
49 Perfluorotridecanoic acid



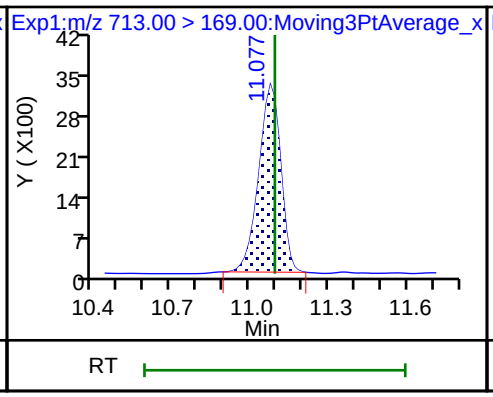
49 Perfluorotridecanoic acid



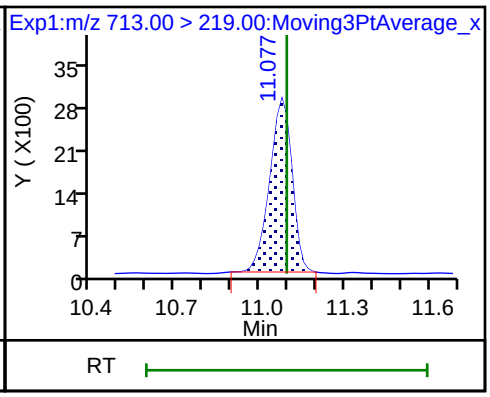
D 51 13C2 PFTeDA



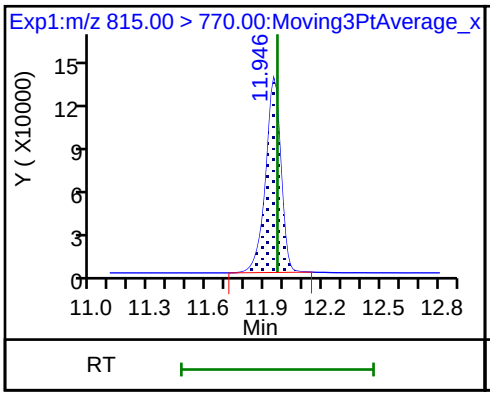
50 Perfluorotetradecanoic acid



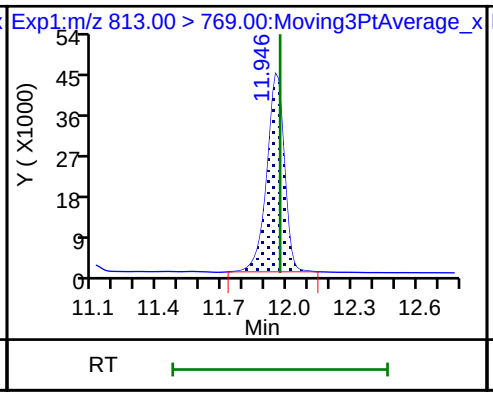
50 Perfluorotetradecanoic acid



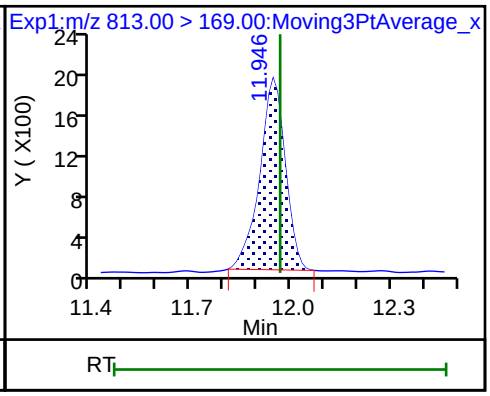
D 52 13C2 PFHxDA



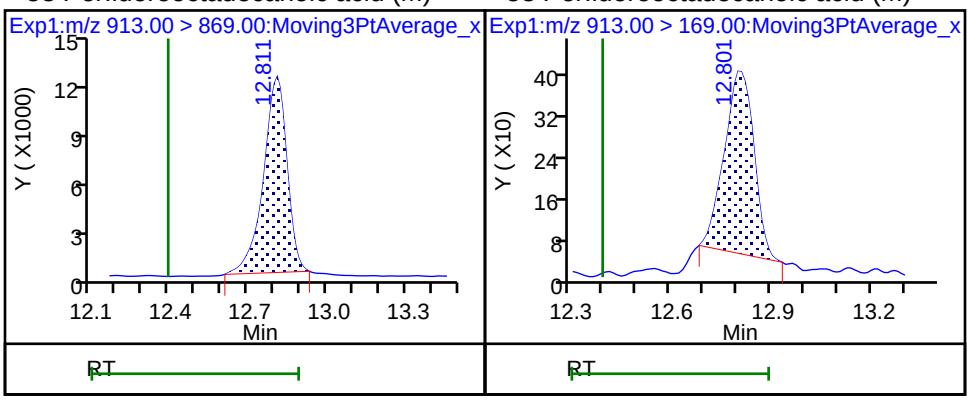
54 Perfluorohexadecanoic acid



54 Perfluorohexadecanoic acid



53 Perfluorooctadecanoic acid (M) 53 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

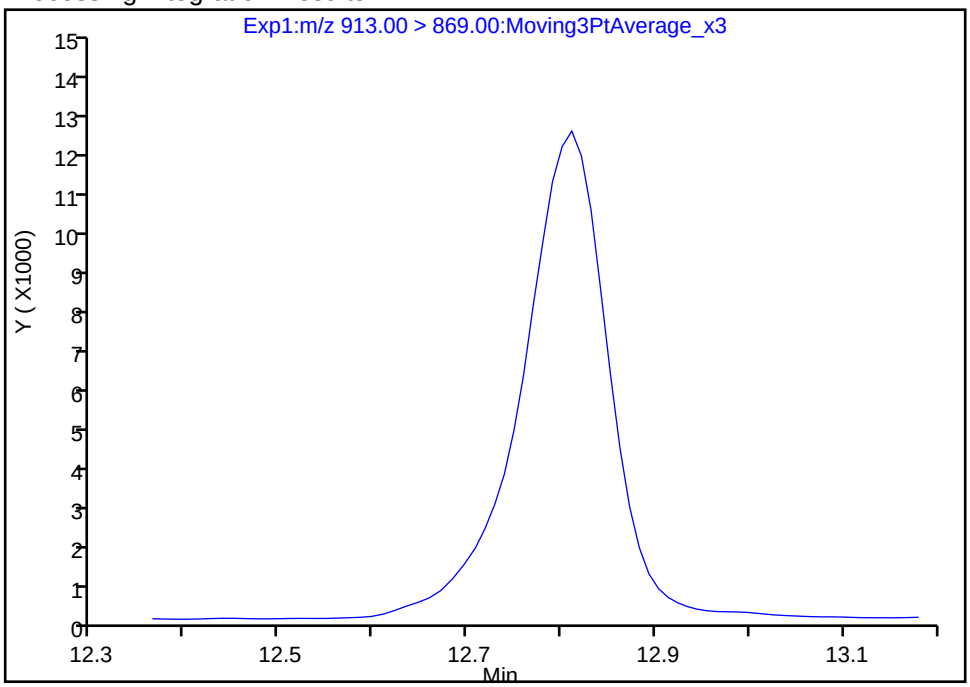
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_008.d
Injection Date: 12-Oct-2020 12:44:19 Instrument ID: A10
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 6
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 1

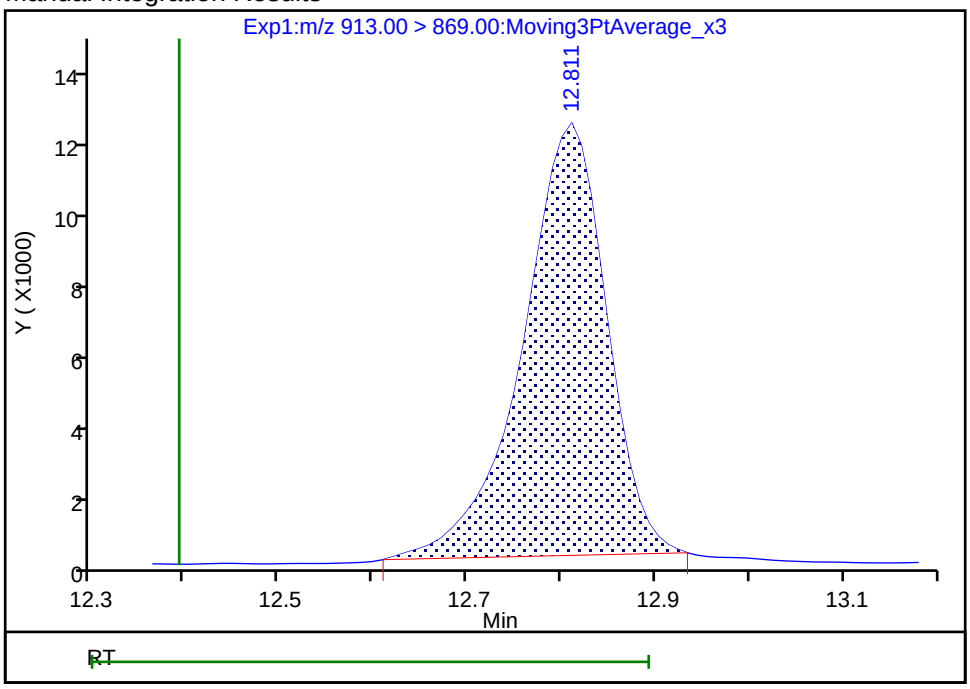
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 12.81
Area: 71782
Amount: 0.023036
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:36:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

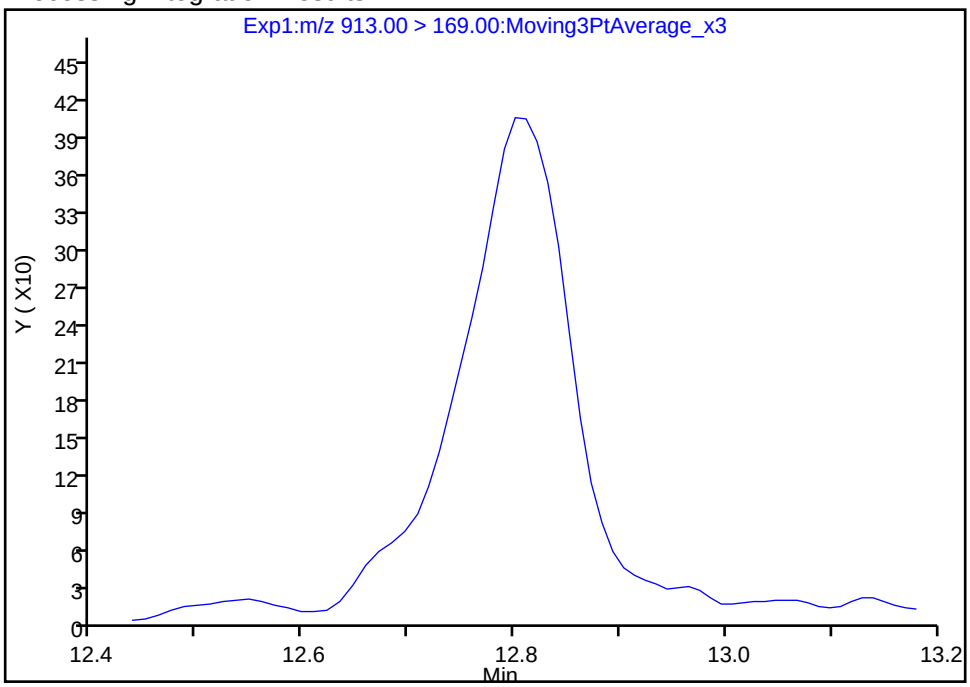
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_008.d
Injection Date: 12-Oct-2020 12:44:19 Instrument ID: A10
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 6
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

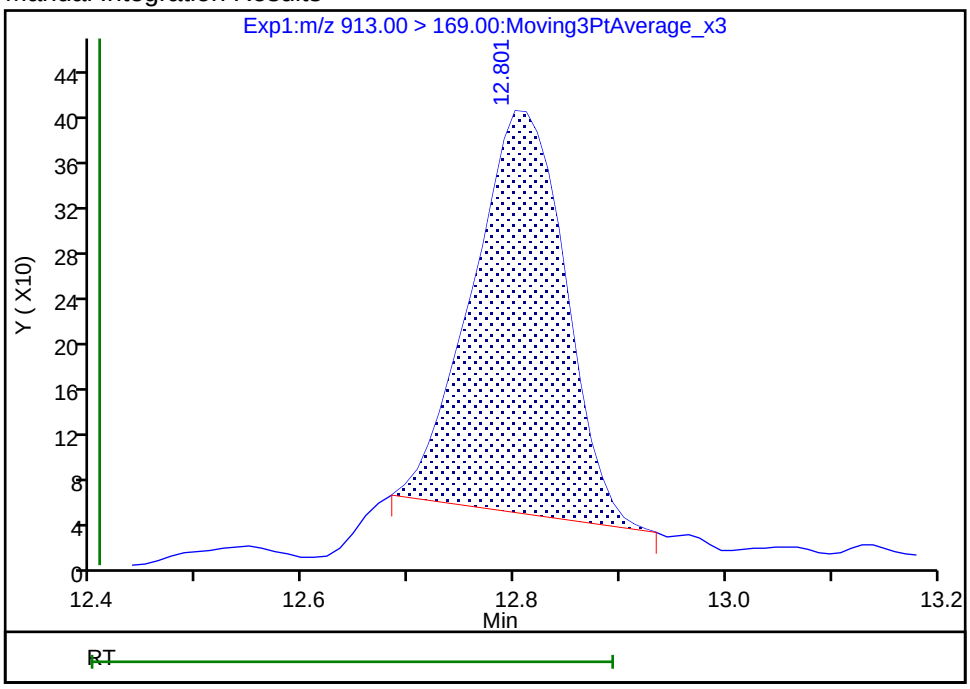
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 12.80
Area: 2185
Amount: 0.023036
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:38:49
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_009.d
Lims ID: IC STD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 12-Oct-2020 13:02:46 ALS Bottle#: 9 Worklist Smp#: 7
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 6
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:23:34 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: koucharis Date: 12-Oct-2020 13:26:54
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.638	5.644	-0.006		1903805	0.0480		96.0	2369	
1 Perfluorobutanoic acid										
169	5.638	5.647	-0.009	1.000	1673314	0.0500		99.9	198	
D 4 13C5 PFPeA										
223	6.250	6.253	-0.003		1648092	0.0485		97.1	15867	
5 Perfluoropentanoic acid										
219	6.250	6.253	-0.003	1.000	1781643	0.0502		100	345	
D 3 13C3 PFBS										
80	6.293	6.305	-0.012		1935314	0.0461		99.0	4682	
6 Perfluorobutanesulfonic acid										
80	6.293	6.308	-0.015	1.000	1863430	0.0452	Target=1.50	102	2892	
99	6.293	6.308	-0.015	1.000	1226157		1.52(0.75-2.26)	102	1056	
D 7 M2-4:2 FTS										
81	6.688	6.688	0.0		503492	NC			894	
8 4:2 FTS										
307	6.688	6.688	0.0	1.000	1376717	NC	Target=2.45		11798	
81	6.688	6.688	0.0	1.000	514459		2.68(1.22-3.67)		863	
D 9 13C2 PFHxA										
270	6.734	6.741	-0.007		1721488	0.0476		95.2	13423	
10 Perfluorohexanoic acid										
269	6.734	6.744	-0.010	1.000	1663500	0.0521	Target=17.92	104	756	
119	6.734	6.744	-0.010	1.000	89143		18.66(8.96-26.88)	104	390	
11 Perfluoropentanesulfonic acid										
80	6.734	6.755	-0.021	0.930	1416151	NC	Target=1.47		1513	
99	6.734	6.755	-0.021	0.930	977529		1.45(0.74-2.21)		1538	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.876	6.888	-0.012		127800	NC			603	
13 HPFO-DA										
285	6.876	6.891	-0.015	1.000	277746	NC			226	
14 9ClFOS										M
351	7.120	7.212	-0.092	0.848	3832	NC			4.9	M
D 15 18O2 PFHxS										
84	7.244	7.260	-0.016		1183953	0.0458		96.7	15578	
16 Perfluorohexanesulfonic acid										
80	7.244	7.260	-0.016	1.000	1261243	0.0444	Target=5.60	97.6	1961	
99	7.244	7.260	-0.016	1.000	215747		5.85(2.80-8.40)	97.6	792	
D 17 13C4 PFHpA										
322	7.244	7.270	-0.026		1828045	0.0499		99.8	13769	
18 Perfluoroheptanoic acid										
319	7.263	7.272	-0.009	1.003	1743823	0.0466	Target=8.55	93.3	607	
169	7.244	7.272	-0.028	1.000	211324		8.25(4.27-12.82)	93.3	2044	
19 DONA										
251	7.318	7.328	-0.010	0.871	7202325	NC	Target=2.62		19657	
85	7.318	7.328	-0.010	0.871	2665532		2.70(1.31-3.93)		8319	
D 22 M2-6:2 FTS										
81	7.787	7.813	-0.026		579620	0.0447		94.1	1162	
23 6:2 FTS										
407	7.787	7.813	-0.026	1.000	1430377	0.0472	Target=2.55	99.6	8603	
81	7.787	7.813	-0.026	1.000	576605		2.48(1.27-3.82)	99.6	1090	
21 Perfluoroheptanesulfonic acid										
80	7.803	7.821	-0.018	0.929	1045790	0.0476	Target=6.95	100	3068	
99	7.803	7.821	-0.018	0.929	143641		7.28(3.48-10.43)	100	861	
D 25 13C4 PFOA										
372	7.821	7.842	-0.021		2026692	0.0476		95.2	10982	
24 Perfluorooctanoic acid										
369	7.821	7.846	-0.025	1.000	1953409	0.0496	Target=1.41	99.3	347	
169	7.821	7.846	-0.025	1.000	1370115		1.43(0.71-2.12)	99.3	4497	
D 26 13C4 PFOS										
80	8.398	8.413	-0.015		870306	0.0472		98.8	2798	
27 Perfluorooctanesulfonic acid										M
80	8.398	8.413	-0.015	1.000	862656	0.0463	Target=3.36	99.8	2794	M
99	8.398	8.413	-0.015	1.000	235552		3.66(1.68-5.04)	99.8	643	M
D 28 13C5 PFNA										
423	8.415	8.443	-0.028		1792768	0.0500		100	12855	
29 Perfluorononanoic acid										
419	8.433	8.448	-0.015	1.002	1522814	0.0480	Target=6.88	96.0	778	
169	8.415	8.448	-0.033	1.000	224390		6.79(3.44-10.32)	96.0	1730	
D 30 13C8 FOSA										
78	8.953	8.968	-0.015		879600	0.0401		80.2	7907	
31 Perfluorooctanesulfonamide										
78	8.953	8.969	-0.016	1.000	902797	0.0512		102	7025	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
32 Perfluorononanesulfonic acid										
80	8.969	8.994	-0.025	1.068	783324	NC	Target=6.23		3116	
99	8.969	8.994	-0.025	1.068	137268		5.71(3.11-9.34)		513	
D 33 13C2 PFDA										
470	9.014	9.035	-0.021		1739494	0.0492		98.5	10199	
35 Perfluorodecanoic acid										
469	9.014	9.037	-0.023	1.000	1408573	0.0504	Target=14.44	101	988	
169	9.014	9.037	-0.023	1.000	94310		14.94(7.22-21.66)	101	474	
D 34 M2-8:2 FTS										
81	9.014	9.037	-0.023		588872	0.0431		90.0	3330	
36 8:2 FTS										
507	9.014	9.037	-0.023	1.000	1323761	0.0485	Target=2.16	101	9904	
81	9.014	9.037	-0.023	1.000	636927		2.08(1.08-3.24)	101	2581	
D 37 d3-NMeFOSAA										
419	9.289	9.317	-0.028		1169954	0.0474		94.8	5348	
38 NMeFOSAA										
419	9.303	9.327	-0.024	1.001	987696	0.0508	Target=13.31	102	2923	
483	9.303	9.327	-0.024	1.001	74939		13.18(6.65-19.96)	102	614	
39 Perfluorodecanesulfonic acid										
80	9.523	9.546	-0.023	1.134	639531	0.0470	Target=2.51	97.6	4150	
99	9.523	9.546	-0.023	1.134	242638		2.64(1.26-3.77)	97.6	2736	
D 42 13C2 PFUnA										
520	9.571	9.595	-0.024		1713828	0.0471		94.1	17116	
41 Perfluoroundecanoic acid										
519	9.571	9.597	-0.026	1.000	1541966	0.0510	Target=19.91	102	928	
169	9.571	9.597	-0.026	1.000	76776		20.08(9.95-29.86)	102	669	
D 40 d5-NEtFOSAA										
419	9.571	9.603	-0.032		1301193	0.0471		94.2	5541	
43 NEtFOSA										M
419	9.587	9.613	-0.026	1.002	1056253	0.0514	Target=13.66	103	8045	
483	9.587	9.613	-0.026	1.002	74870		14.11(6.83-20.48)	103	549	M
44 11ClFOS										
451	9.794	9.828	-0.034	1.166	3764685	NC			7044	
46 Perfluorododecanoic acid										
569	10.095	10.127	-0.032	1.000	1340410	0.0498	Target=12.99	99.5	494	
169	10.095	10.127	-0.032	1.000	93868		14.28(6.50-19.49)	99.5	1084	
D 45 13C2 PFDoA										
570	10.095	10.127	-0.032		1641572	0.0448		89.6	11252	
47 10:2 FTS										
607	10.118	10.152	-0.034	1.122	1526841	NC	Target=27.54		8979	
81	10.118	10.152	-0.034	1.122	54538		28.00(13.77-41.31)		745	
48 PFDoS										
80	10.537	10.555	-0.018	1.255	147641	NC	Target=0.45		871	
99	10.517	10.555	-0.038	1.252	333863		0.44(0.22-0.67)		2119	
49 Perfluorotridecanoic acid										
619	10.591	10.622	-0.031	1.049	1272457	0.0444	Target=16.38	88.8	408	
169	10.591	10.622	-0.031	1.049	75572		16.84(8.19-24.57)	88.8	1151	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 51 13C2 PFTeDA										
670	11.056	11.092	-0.036		701947	0.0290		58.1	6249	
50 Perfluorotetradecanoic acid										
169	11.056	11.094	-0.038	1.000	39221	0.0545	Target=1.23	109	844	
219	11.056	11.094	-0.038	1.000	29416		1.33(0.62-1.85)	109	632	
D 52 13C2 PFHxDA										
770	11.929	11.966	-0.037		611738	0.0407		81.4	3311	
54 Perfluorohexadecanoic acid										
769	11.929	11.967	-0.038	1.000	539056	0.0496	Target=23.79	99.3	466	
169	11.929	11.967	-0.038	1.000	22903		23.54(11.89-35.68)	99.3	432	
53 Perfluorooctadecanoic acid										Ra
869	12.785	12.393	0.392	1.072	200602	0.0747	Target=92.79	149	178	Ra
169	12.775	12.393	0.382	1.071	6740		29.76(46.39-139.18)	149	131	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- R - Failed Signal Ratio Test

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

LCPFC-LL-L6_00030 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:23:35 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_009.d

Injection Date: 12-Oct-2020 13:02:46 Instrument ID: A10

Lims ID: IC STD 6

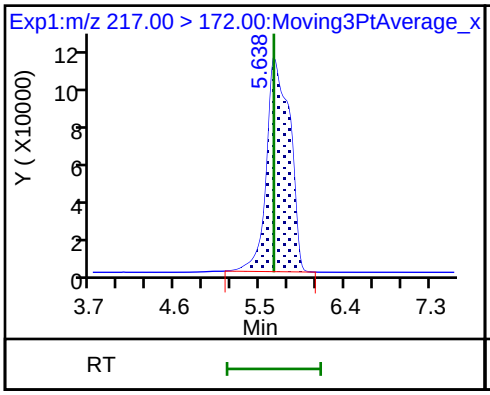
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 9 Worklist Smp#: 7

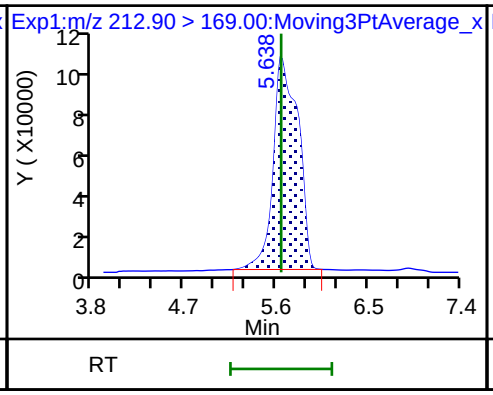
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

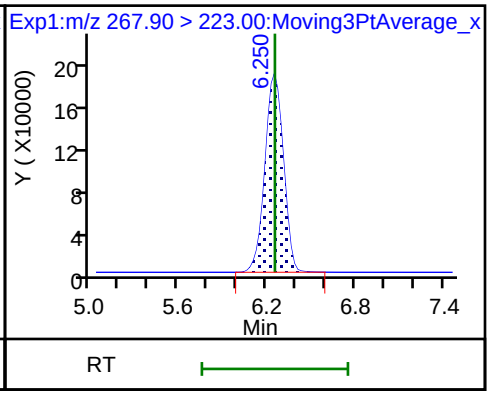
D 2 13C4 PFBA



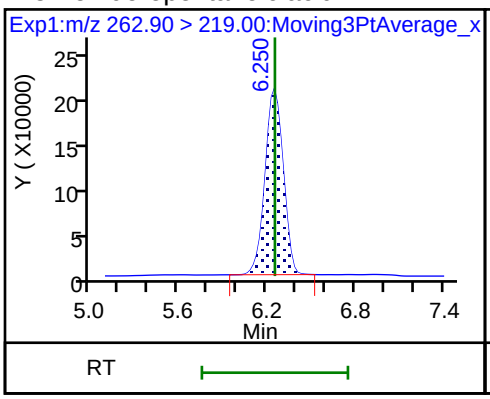
1 Perfluorobutanoic acid



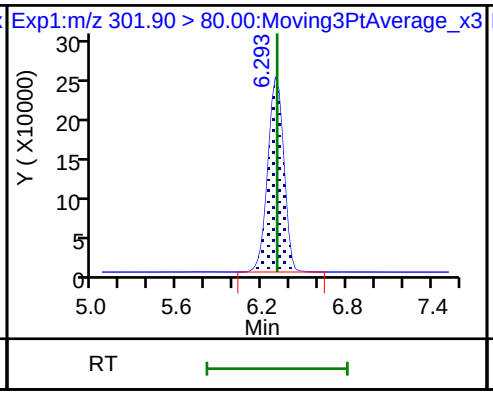
D 4 13C5 PFPeA



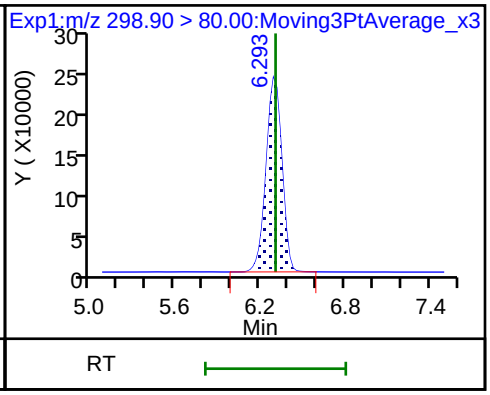
5 Perfluoropentanoic acid



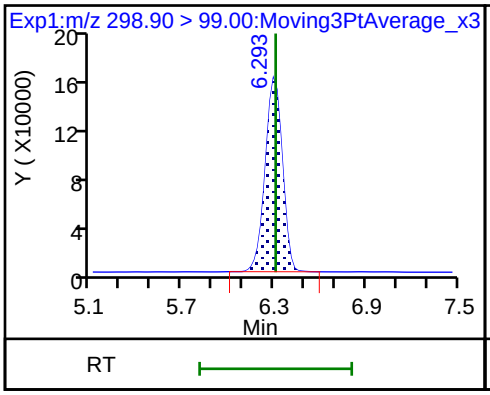
D 3 13C3 PFBS



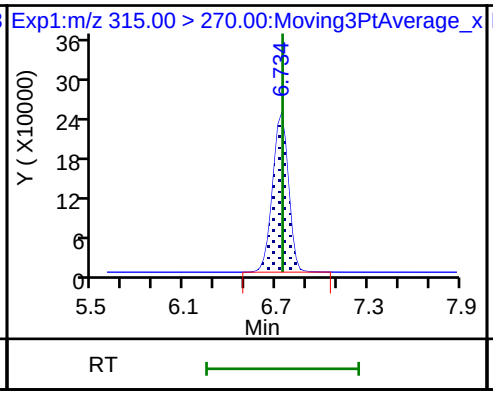
6 Perfluorobutanesulfonic acid



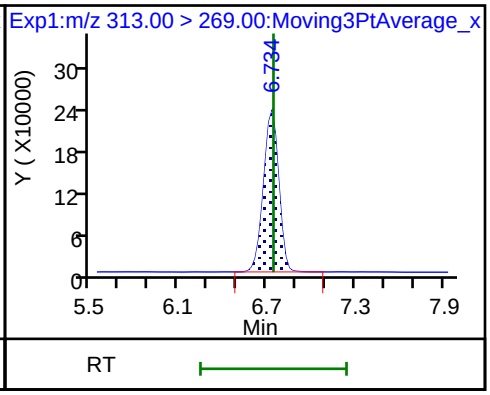
6 Perfluorobutanesulfonic acid



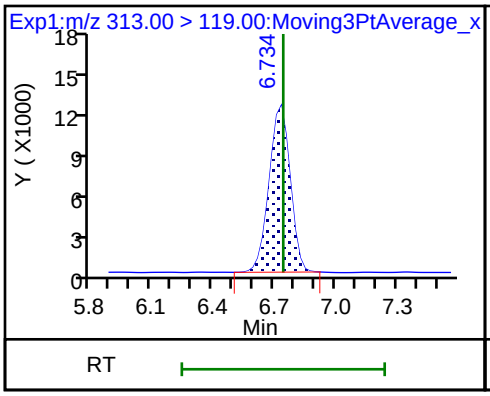
D 9 13C2 PFHxA



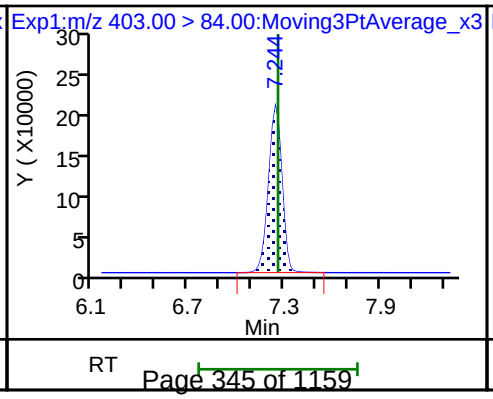
10 Perfluorohexanoic acid



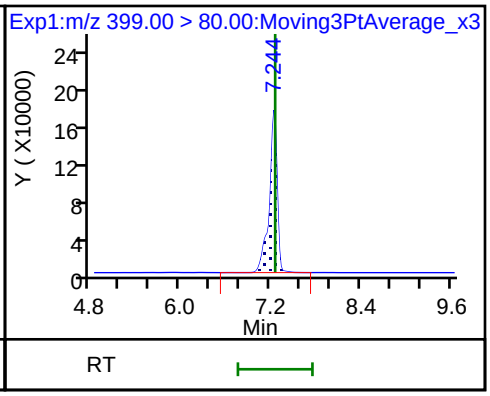
10 Perfluorohexanoic acid



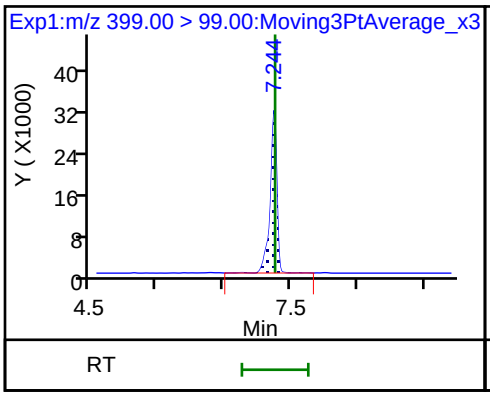
D 15 18O2 PFHxS



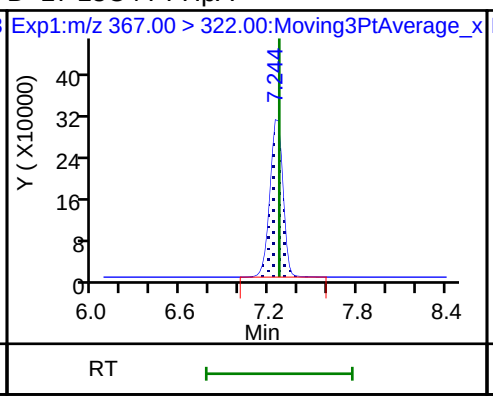
16 Perfluorohexanesulfonic acid



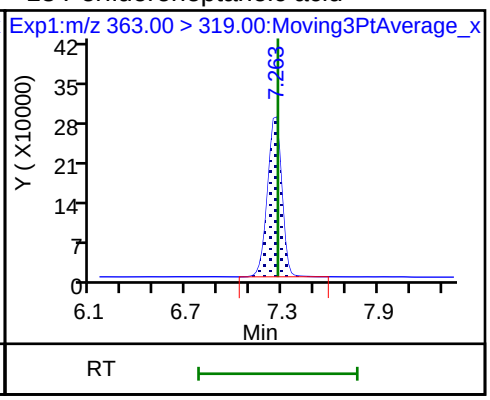
16 Perfluorohexanesulfonic acid



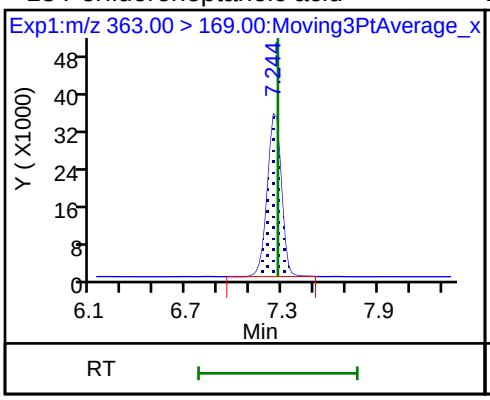
D 17 13C4 PFHpA



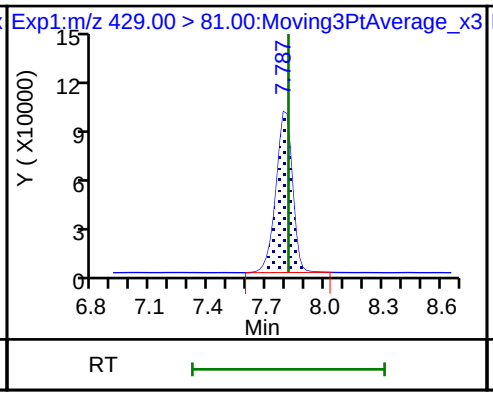
18 Perfluoroheptanoic acid



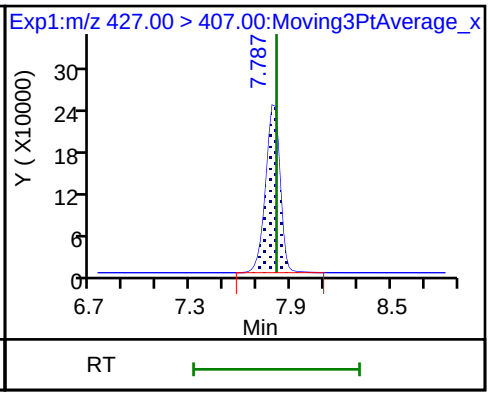
18 Perfluoroheptanoic acid



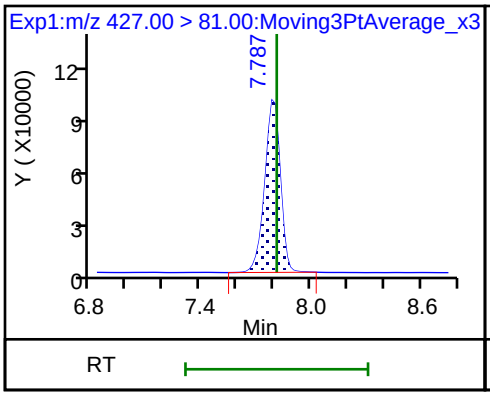
D 22 M2-6:2 FTS



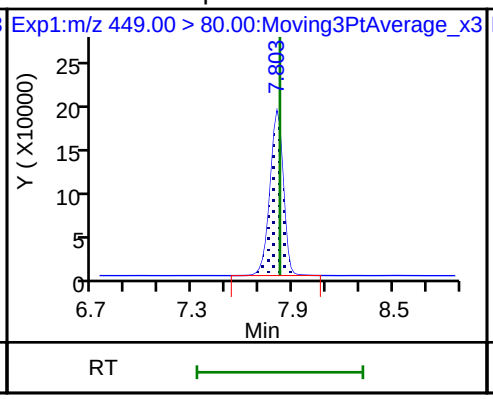
23 6:2 FTS



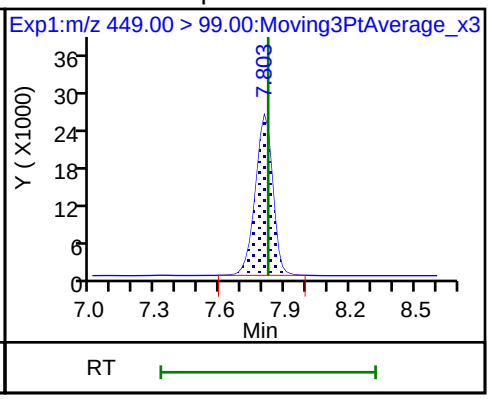
23 6:2 FTS



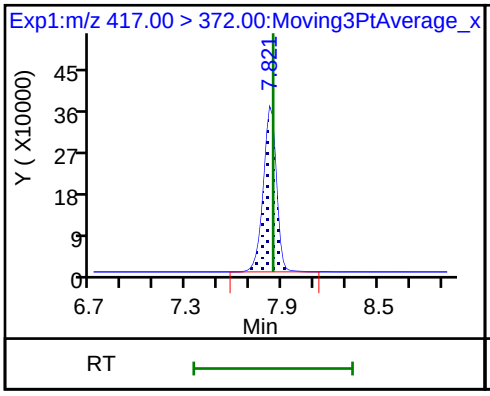
21 Perfluoroheptanesulfonic acid



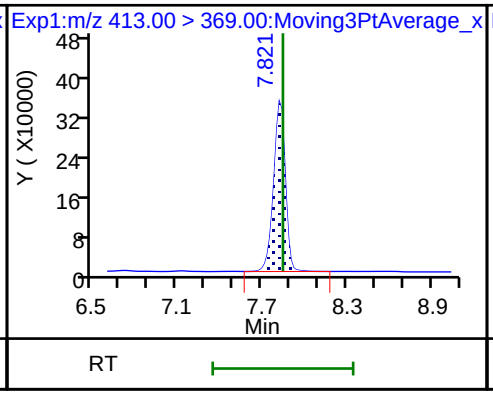
21 Perfluoroheptanesulfonic acid



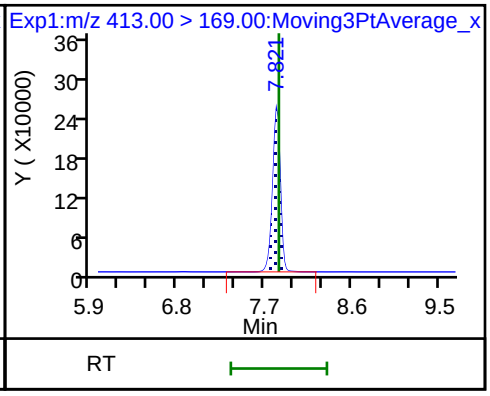
D 25 13C4 PFOA



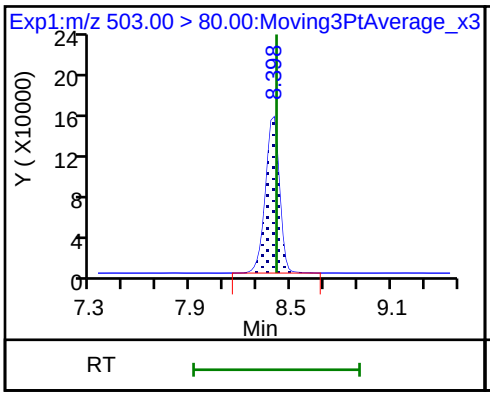
24 Perfluorooctanoic acid



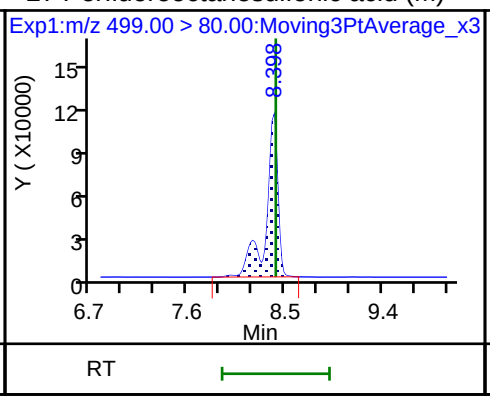
24 Perfluorooctanoic acid



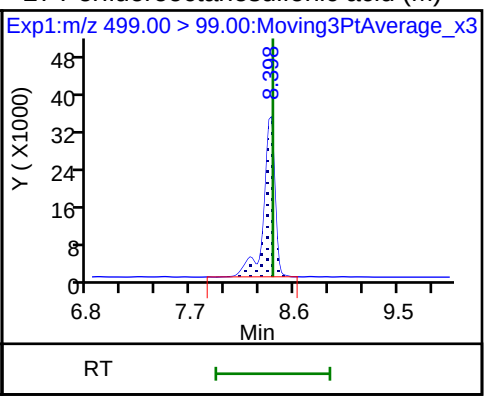
D 26 13C4 PFOS



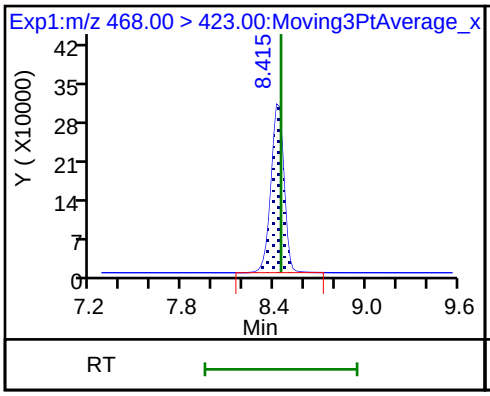
27 Perfluorooctanesulfonic acid (M)



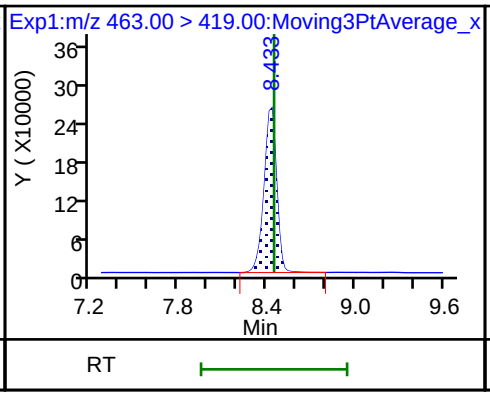
27 Perfluorooctanesulfonic acid (M)



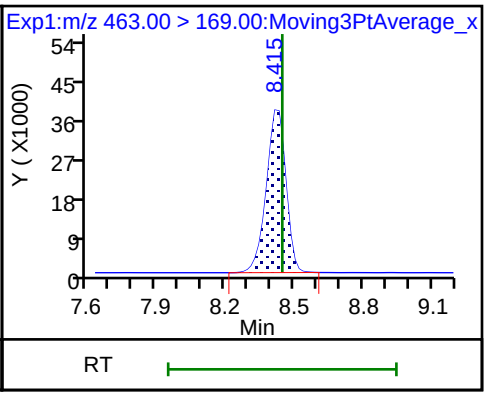
D 28 13C5 PFNA



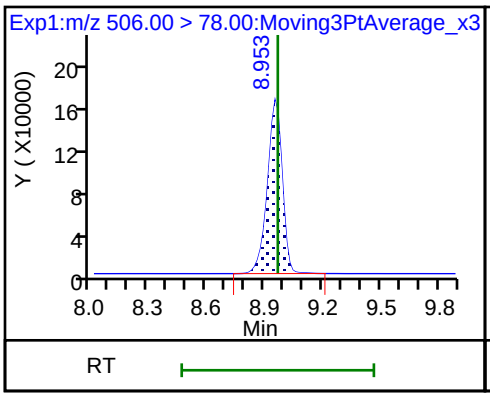
29 Perfluorononanoic acid



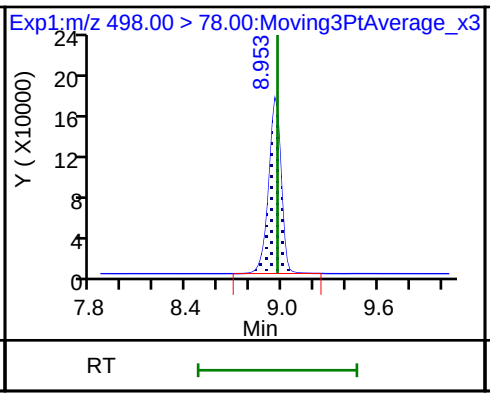
29 Perfluorononanoic acid



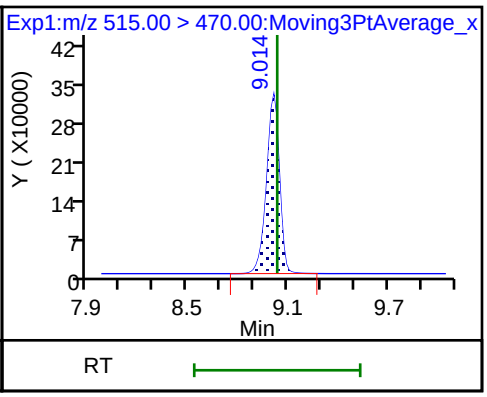
D 30 13C8 FOSA



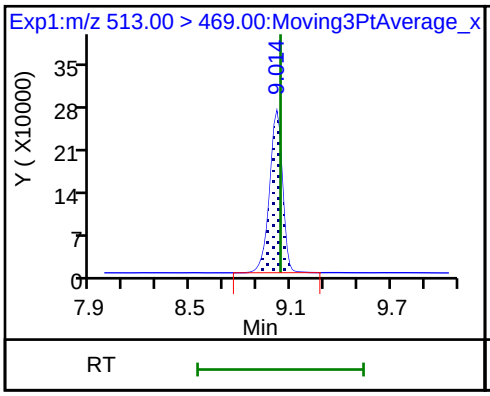
31 Perfluorooctanesulfonamide



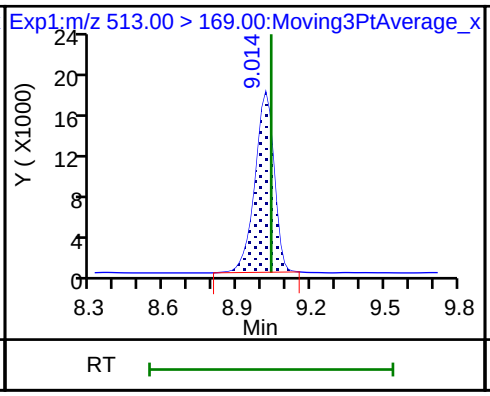
D 33 13C2 PFDA



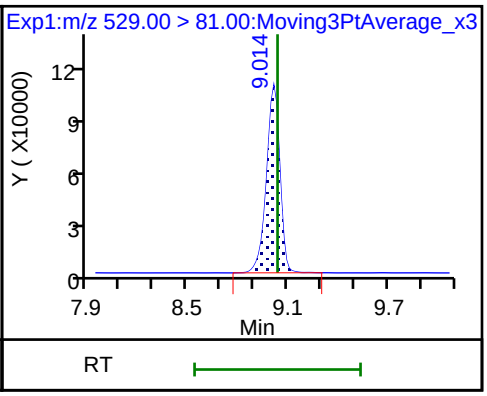
35 Perfluorodecanoic acid



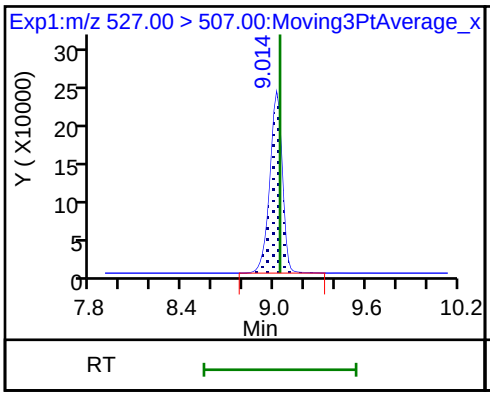
35 Perfluorodecanoic acid



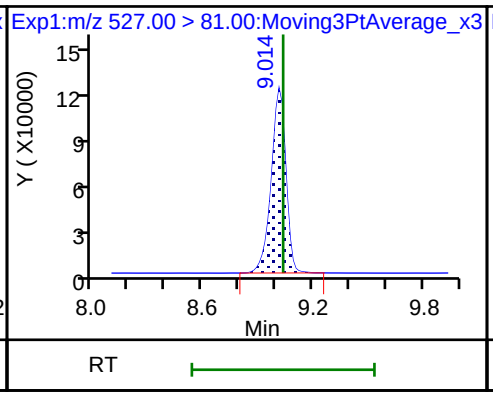
D 34 M2-8:2 FTS



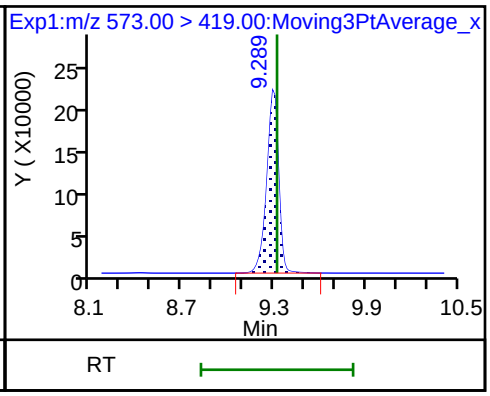
36 8:2 FTS



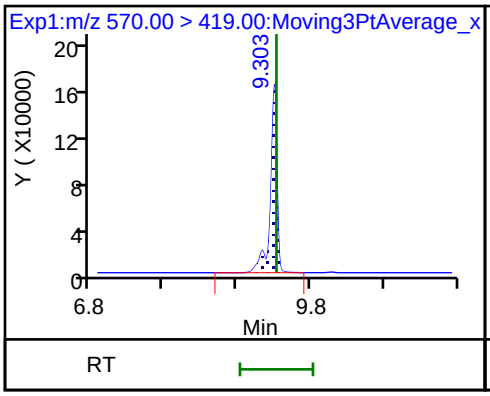
36 8:2 FTS



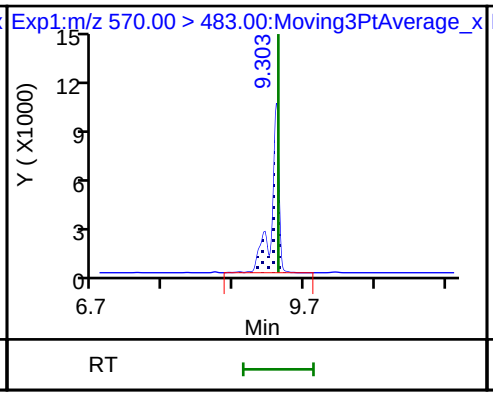
D 37 d3-NMeFOSAA



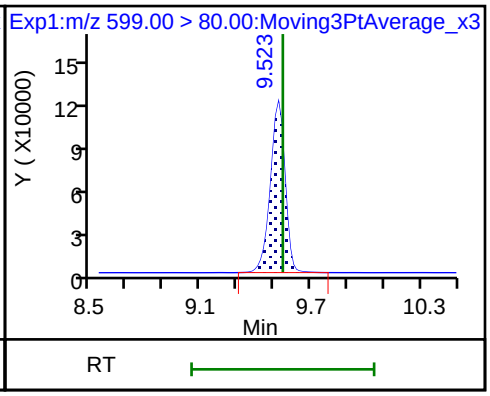
38 NMeFOSAA



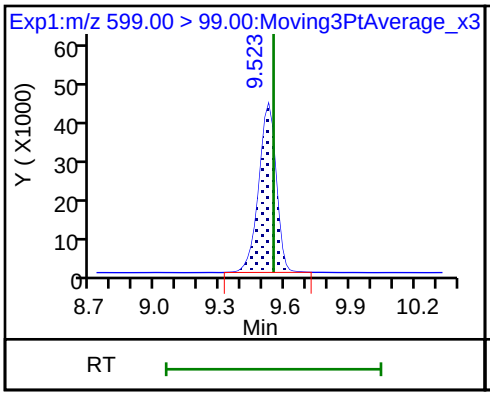
38 NMeFOSAA



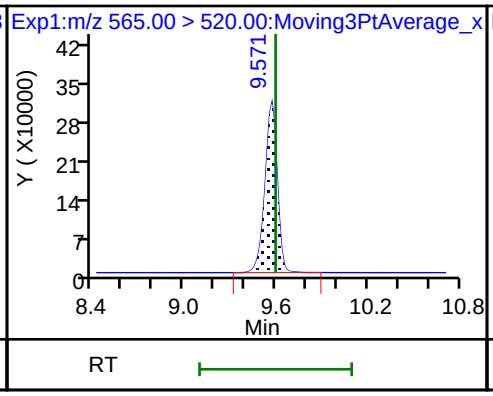
39 Perfluorodecanesulfonic acid



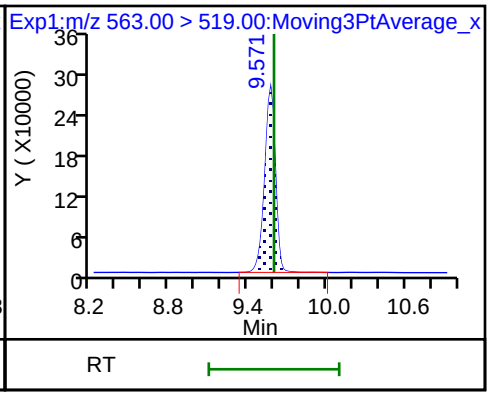
39 Perfluorodecanesulfonic acid



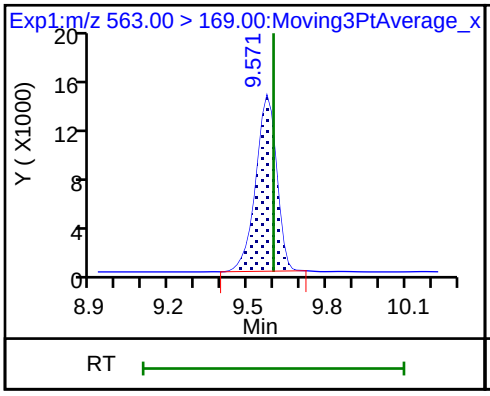
D 42 13C2 PFUnA



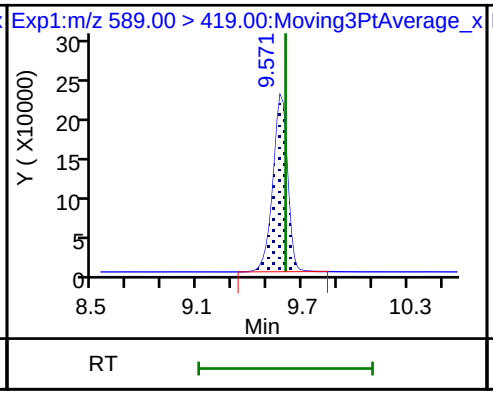
41 Perfluoroundecanoic acid



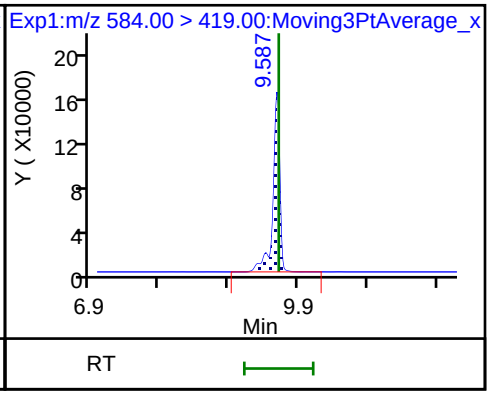
41 Perfluoroundecanoic acid



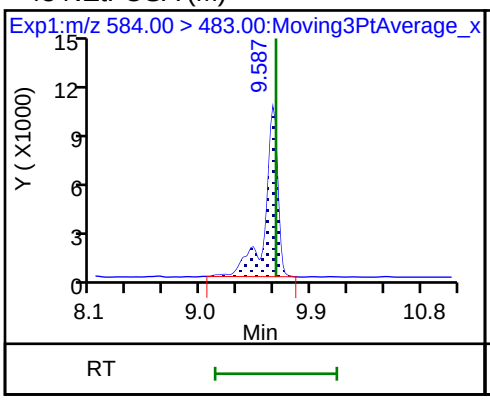
D 40 d5-NEtFOSAA



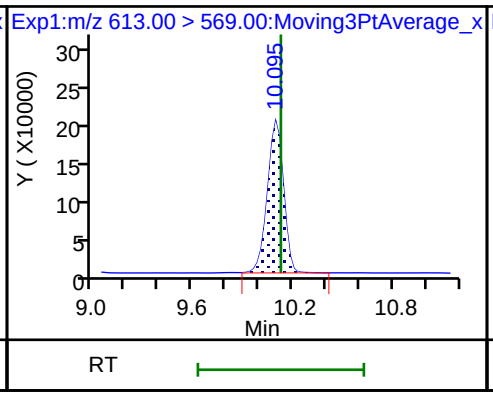
43 NEtFOSA



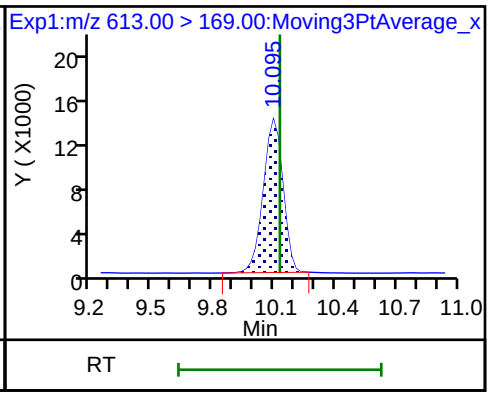
43 NEtFOSA (M)



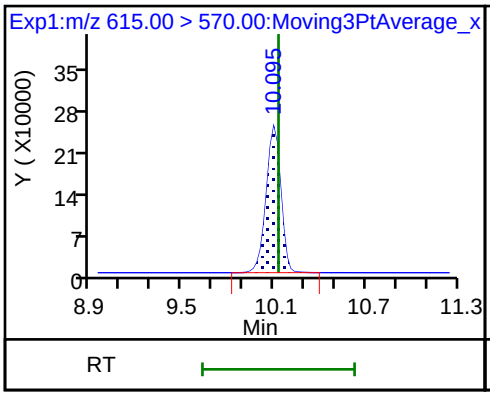
46 Perfluorododecanoic acid



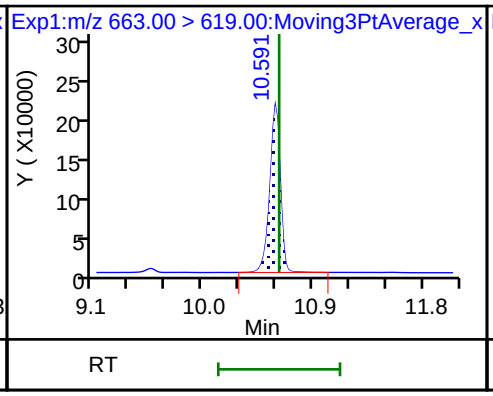
46 Perfluorododecanoic acid



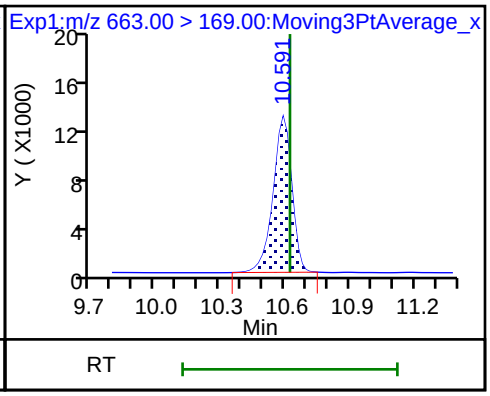
D 45 13C2 PFDoA



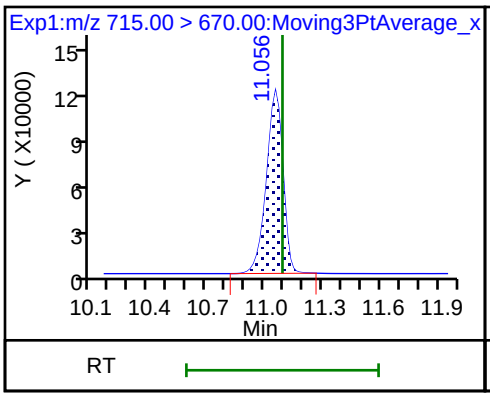
49 Perfluorotridecanoic acid



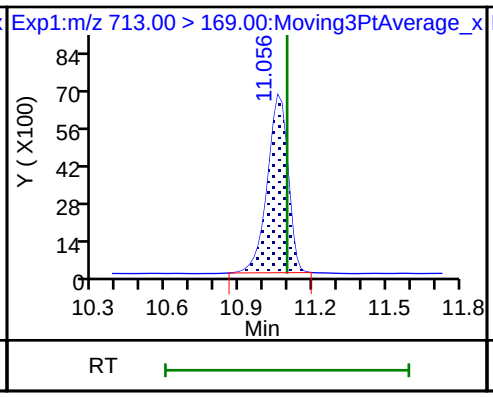
49 Perfluorotridecanoic acid



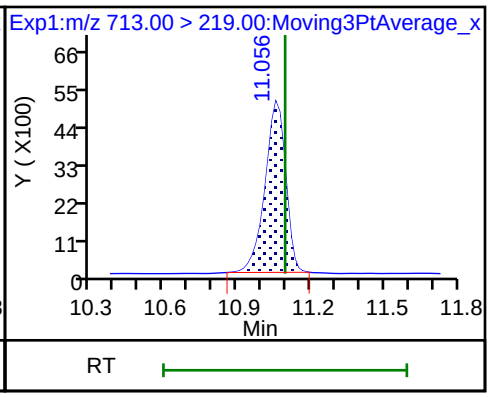
D 51 13C2 PFTeDA



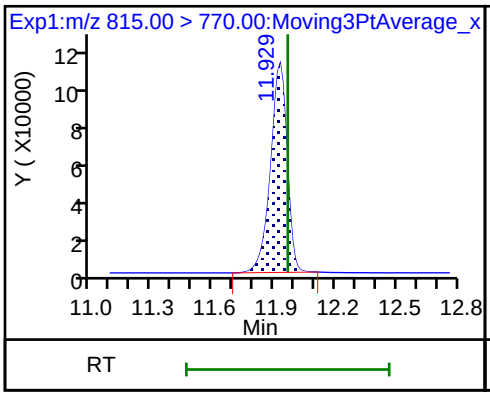
50 Perfluorotetradecanoic acid



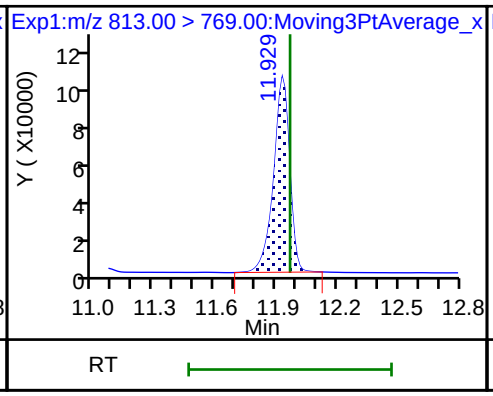
50 Perfluorotetradecanoic acid



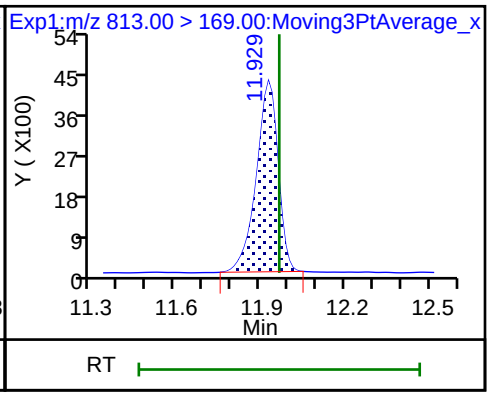
D 52 13C2 PFHxDA



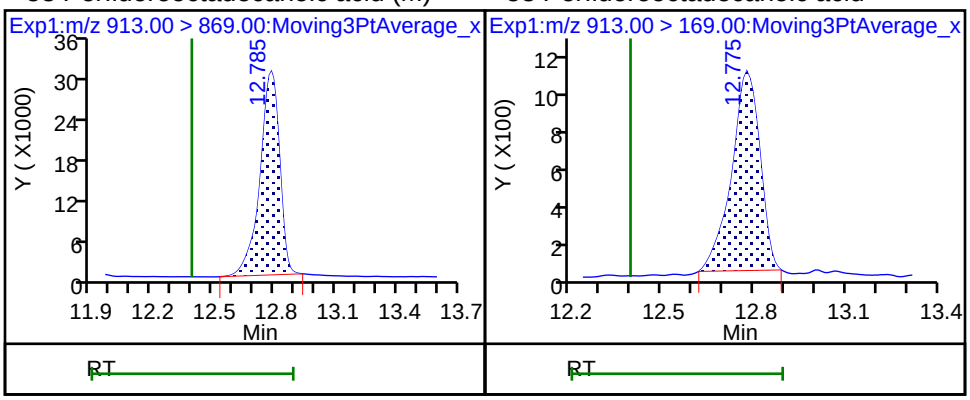
54 Perfluorohexadecanoic acid



54 Perfluorohexadecanoic acid



53 Perfluorooctadecanoic acid (M) 53 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

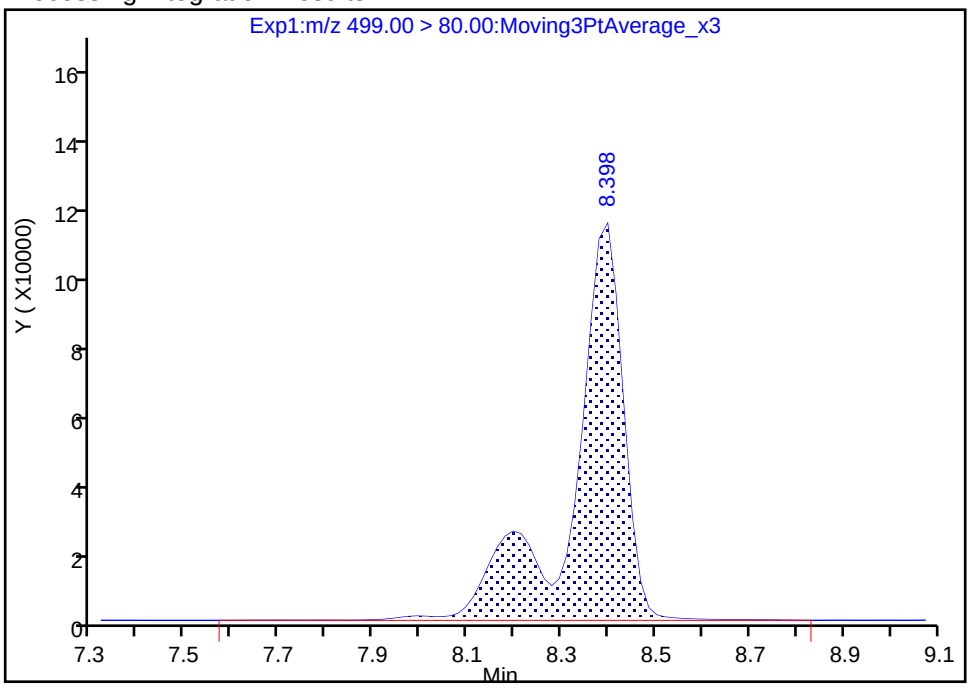
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_009.d
Injection Date: 12-Oct-2020 13:02:46 Instrument ID: A10
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 9 Worklist Smp#: 7
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

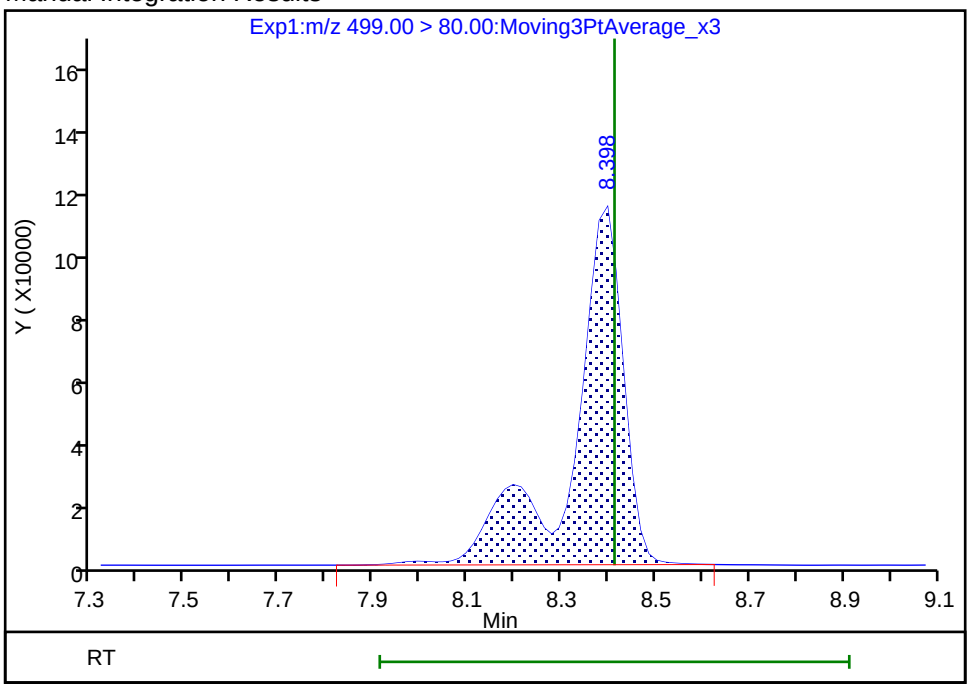
Processing Integration Results

RT: 8.40
Area: 870456
Amount: 0.046481
Amount Units: ng/ml



Manual Integration Results

RT: 8.40
Area: 862656
Amount: 0.046290
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:26:08
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

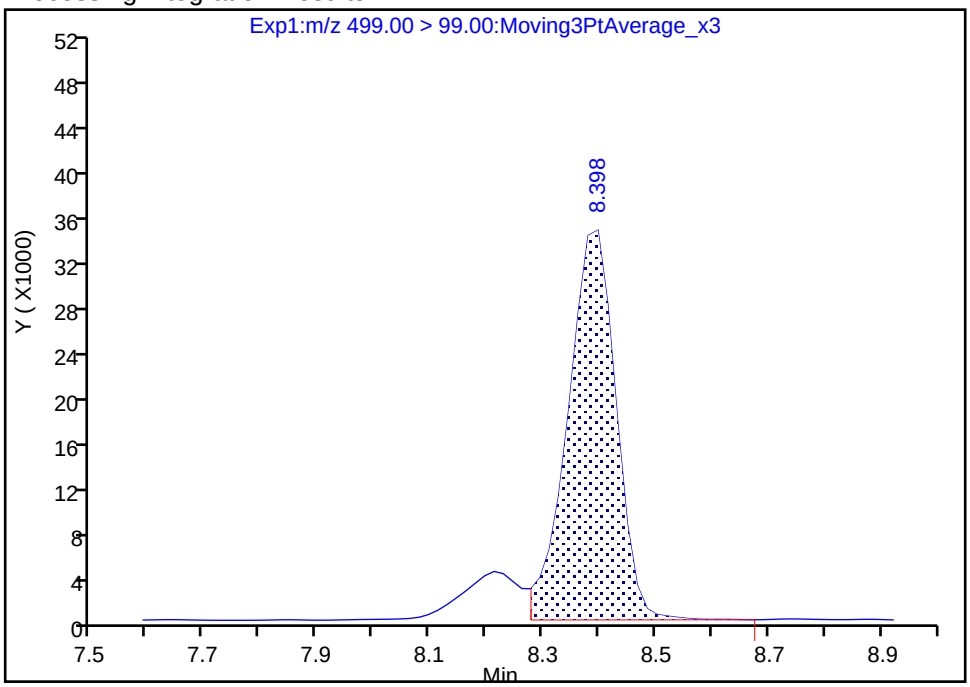
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_009.d
Injection Date: 12-Oct-2020 13:02:46 Instrument ID: A10
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 9 Worklist Smp#: 7
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

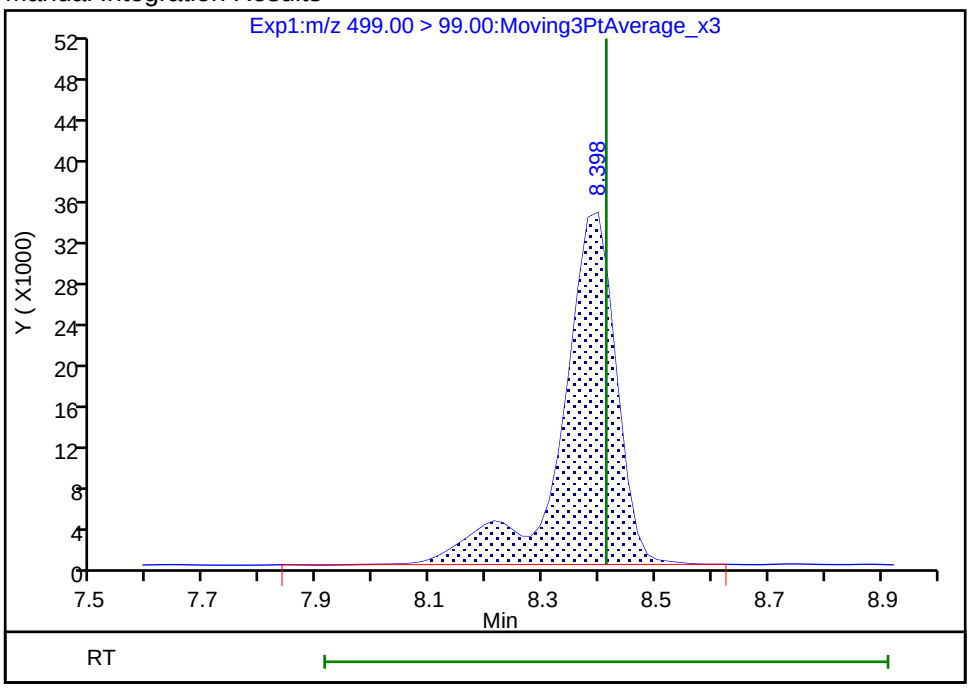
Processing Integration Results

RT: 8.40
Area: 205949
Amount: 0.046481
Amount Units: ng/ml



Manual Integration Results

RT: 8.40
Area: 235552
Amount: 0.046290
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:26:13
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

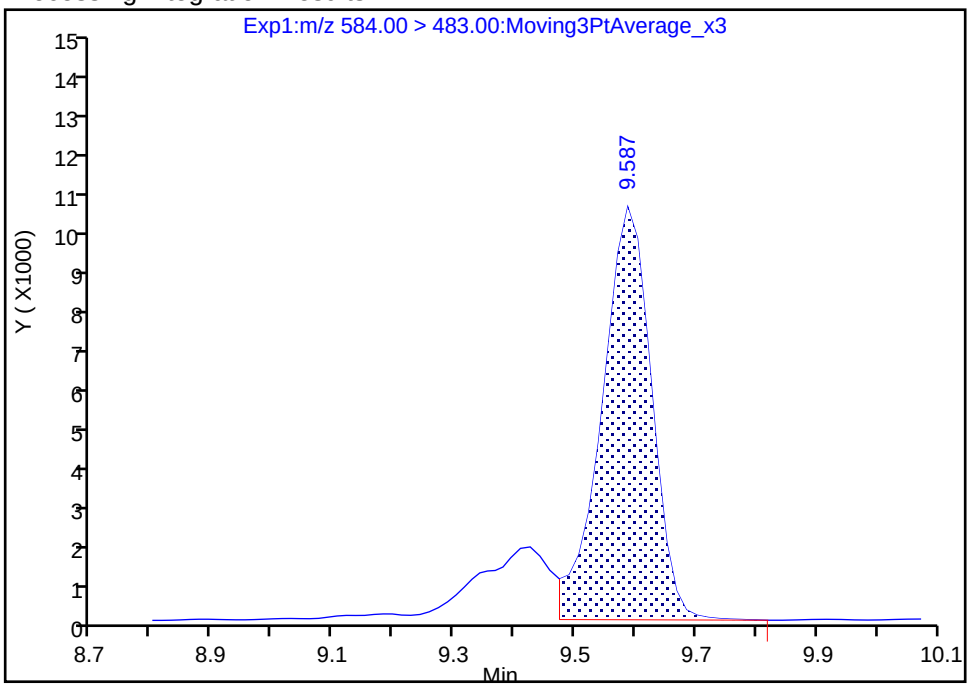
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_009.d
Injection Date: 12-Oct-2020 13:02:46 Instrument ID: A10
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 9 Worklist Smp#: 7
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

43 NEtFOSA, CAS: 2991-50-6

Signal: 2

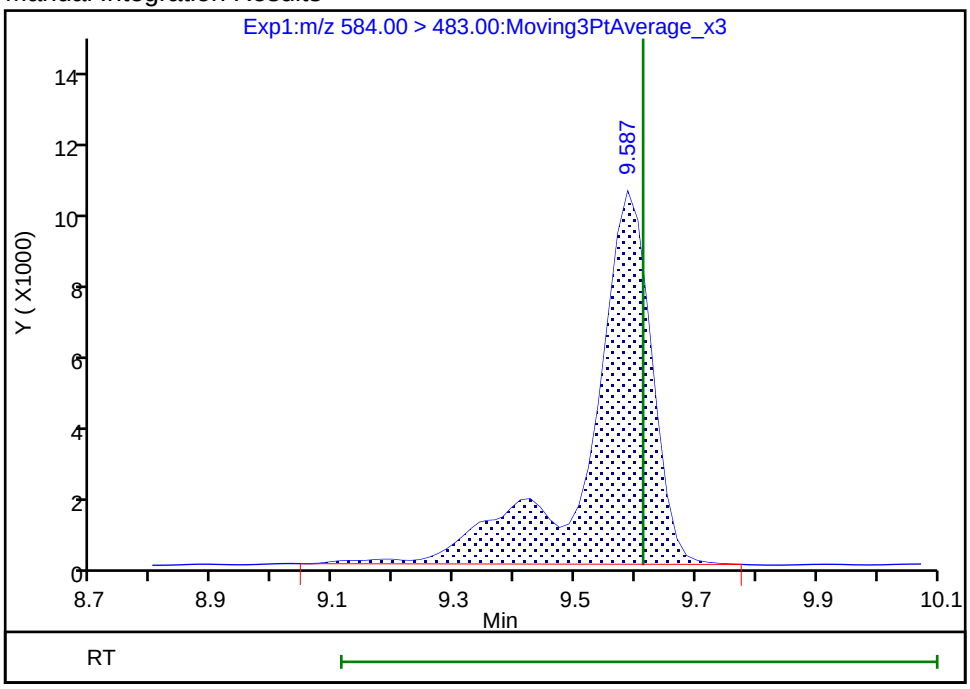
Processing Integration Results

RT: 9.59
Area: 59620
Amount: 0.052042
Amount Units: ng/ml



Manual Integration Results

RT: 9.59
Area: 74870
Amount: 0.051401
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:26:27
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

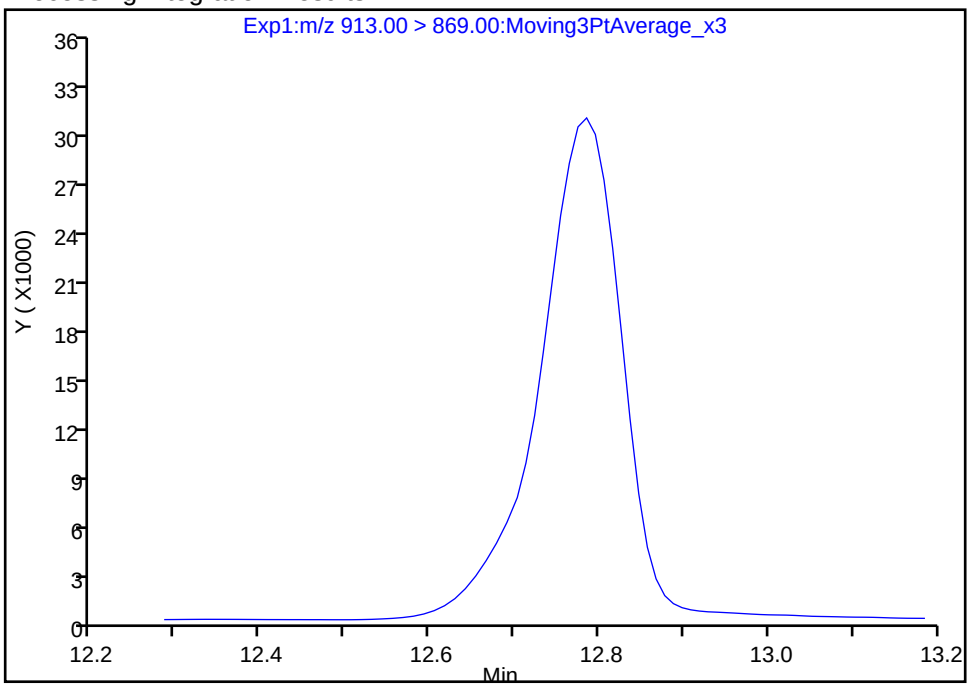
Data File:	\\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_009.d				
Injection Date:	12-Oct-2020 13:02:46	Instrument ID:	A10		
Lims ID:	IC STD 6				
Client ID:					
Operator ID:	Sac_inst_A10	ALS Bottle#:	9	Worklist Smp#:	7
Injection Vol:	950.0 ul	Dil. Factor:	1.0000		
Method:	A10_In_Line_SPE	Limit Group:	LC PFAS_DW ICAL		
Column:	Gemini C18 3um 3 x 100mm (3.00 mm)	Detector	EXP1		

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 1

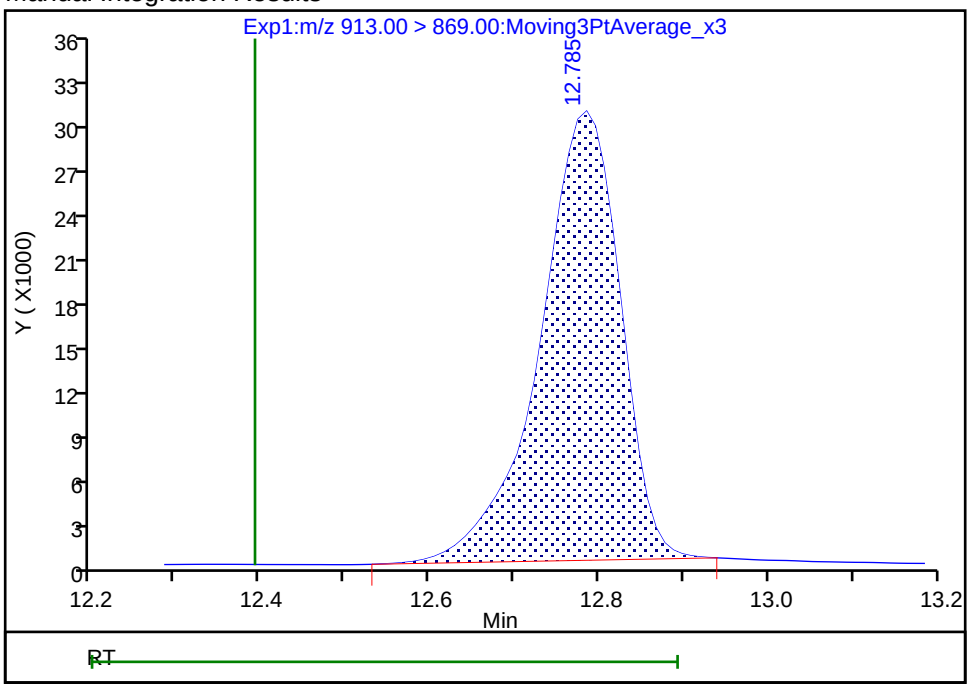
Processing Integration Results

Not Detected
Expected RT: 12.39



Manual Integration Results

RT: 12.79
Area: 200602
Amount: 0.074712
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:27:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_010.d
Lims ID: IC STD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 12-Oct-2020 13:21:12 ALS Bottle#: 10 Worklist Smp#: 8
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 7
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:23:38 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: koucharis Date: 12-Oct-2020 14:01:38
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										M
172	5.642	5.644	-0.002		1785590	0.0450		90.1	791	M
1 Perfluorobutanoic acid										M
169	5.642	5.647	-0.005	1.000	3064886	0.0976		97.6	283	M
D 4 13C5 PFPeA										
223	6.254	6.253	0.001		1627117	0.0479		95.8	15034	
5 Perfluoropentanoic acid										
219	6.254	6.253	0.001	1.000	3407309	0.0972		97.2	602	
D 3 13C3 PFBS										
80	6.297	6.305	-0.008		1851700	0.0441		94.8	5194	
6 Perfluorobutanesulfonic acid										
80	6.297	6.308	-0.011	1.000	3560733	0.0903	Target=1.50	102	5871	
99	6.297	6.308	-0.011	1.000	2345987		1.52(0.75-2.26)	102	2032	
D 7 M2-4:2 FTS										
81	6.669	6.688	-0.019		452640	NC			906	
8 4:2 FTS										
307	6.669	6.688	-0.019	1.000	2321307	NC	Target=2.45		23598	
81	6.669	6.688	-0.019	1.000	896437		2.59(1.22-3.67)		1888	
D 9 13C2 PFHxA										
270	6.738	6.741	-0.003		1691588	0.0468		93.5	15448	
10 Perfluorohexanoic acid										
269	6.738	6.744	-0.006	1.000	3201246	0.1019	Target=17.92	102	1487	
119	6.738	6.744	-0.006	1.000	175168		18.28(8.96-26.88)	102	475	
11 Perfluoropentanesulfonic acid										
80	6.738	6.755	-0.017	0.930	2923368	NC	Target=1.47		5424	
99	6.738	6.755	-0.017	0.930	1923310		1.52(0.74-2.21)		3525	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.880	6.888	-0.008		121466	NC			547	
13 HPFO-DA										
285	6.880	6.891	-0.011	1.000	542927	NC			473	
14 9ClFOS										M
351	7.142	7.212	-0.070	0.851	565	NC			1.1	M
D 15 18O2 PFHxS										
84	7.248	7.260	-0.012		1147564	0.0443		93.8	12837	
16 Perfluorohexanesulfonic acid										
80	7.248	7.260	-0.012	1.000	2494444	0.0906	Target=5.60	99.6	5485	
99	7.248	7.260	-0.012	1.000	423902		5.88(2.80-8.40)	99.6	1527	
D 17 13C4 PFHpA										
322	7.248	7.270	-0.022		1723766	0.0471		94.1	22349	
18 Perfluoroheptanoic acid										
319	7.248	7.272	-0.024	1.000	3268529	0.0927	Target=8.55	92.7	1133	
169	7.248	7.272	-0.024	1.000	395366		8.27(4.27-12.82)	92.7	4698	
19 DONA										
251	7.304	7.328	-0.024	0.871	14313379	NC	Target=2.62		29202	
85	7.304	7.328	-0.024	0.871	5297019		2.70(1.31-3.93)		12325	
D 22 M2-6:2 FTS										
81	7.790	7.813	-0.023		544126	0.0420		88.4	1537	
23 6:2 FTS										
407	7.790	7.813	-0.023	1.000	2592525	0.0912	Target=2.55	96.2	10427	
81	7.790	7.813	-0.023	1.000	1050488		2.47(1.27-3.82)	96.2	2060	
21 Perfluoroheptanesulfonic acid										
80	7.807	7.821	-0.014	0.931	2033930	0.0944	Target=6.95	99.2	5109	
99	7.807	7.821	-0.014	0.931	299919		6.78(3.48-10.43)	99.2	1447	
D 25 13C4 PFOA										
372	7.823	7.842	-0.019		2040528	0.0479		95.8	10402	
24 Perfluorooctanoic acid										
369	7.823	7.846	-0.023	1.000	3693911	0.0932	Target=1.41	93.2	708	
169	7.823	7.846	-0.023	1.000	2732163		1.35(0.71-2.12)	93.2	5574	
27 Perfluorooctanesulfonic acid										
80	8.389	8.413	-0.024	1.000	1692988	0.0926	Target=3.36	99.8	6224	
99	8.389	8.413	-0.024	1.000	470917		3.60(1.68-5.04)	99.8	1406	
D 26 13C4 PFOS										
80	8.389	8.413	-0.024		853487	0.0463		96.9	2726	
D 28 13C5 PFNA										
423	8.424	8.443	-0.019		1703940	0.0475		95.1	10158	
29 Perfluorononanoic acid										
419	8.424	8.448	-0.024	1.000	2930305	0.0972	Target=6.88	97.2	1244	
169	8.424	8.448	-0.024	1.000	432611		6.77(3.44-10.32)	97.2	2625	
D 30 13C8 FOSA										
78	8.960	8.968	-0.008		1244548	0.0568		114	7043	
31 Perfluorooctanesulfonamide										
78	8.960	8.969	-0.009	1.000	2579348	0.1034		103	12131	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
32 Perfluorononanesulfonic acid										
80	8.976	8.994	-0.018	1.070	1655729	NC	Target=6.23		7370	
99	8.960	8.994	-0.034	1.068	284392		5.82(3.11-9.34)		1142	
D 33 13C2 PFDA										
470	9.007	9.035	-0.028		1769280	0.0501		100	12244	
35 Perfluorodecanoic acid										
469	9.007	9.037	-0.030	1.000	2732717	0.0961	Target=14.44	96.1	1877	
169	9.007	9.037	-0.030	1.000	191364		14.28(7.22-21.66)	96.1	531	
D 34 M2-8:2 FTS										
81	9.007	9.037	-0.030		524161	0.0384		80.1	2557	
36 8:2 FTS										
507	9.007	9.037	-0.030	1.000	2416653	0.0995	Target=2.16	104	10711	
81	9.007	9.037	-0.030	1.000	1133970		2.13(1.08-3.24)	104	3589	
D 37 d3-NMeFOSAA										
419	9.288	9.317	-0.029		1173395	0.0475		95.1	3097	
38 NMeFOSAA										
419	9.302	9.327	-0.025	1.002	1975395	0.1012	Target=13.31	101	4878	
483	9.302	9.327	-0.025	1.002	151852		13.01(6.65-19.96)	101	1524	
39 Perfluorodecanesulfonic acid										
80	9.523	9.546	-0.023	1.135	1411298	0.1059	Target=2.51	110	9268	
99	9.523	9.546	-0.023	1.135	536226		2.63(1.26-3.77)	110	4777	
41 Perfluoroundecanoic acid										
519	9.571	9.597	-0.026	1.000	3177429	0.0981	Target=19.91	98.1	2109	
169	9.571	9.597	-0.026	1.000	167706		18.95(9.95-29.86)	98.1	2448	
D 40 d5-NEtFOSAA										
419	9.571	9.603	-0.032		1248858	0.0452		90.5	5646	
D 42 13C2 PFUnA										
520	9.571	9.595	-0.024		1836531	0.0504		101	16211	
43 NEtFOSA										
419	9.588	9.613	-0.025	1.002	2058073	0.1043	Target=13.66	104	19801	
483	9.588	9.613	-0.025	1.002	116384		17.68(6.83-20.48)	104	49.4	
44 11ClFOS										
451	9.794	9.828	-0.034	1.167	8472459	NC			13409	
46 Perfluorododecanoic acid										
569	10.096	10.127	-0.031	1.000	3260016	0.1023	Target=12.99	102	1177	
169	10.096	10.127	-0.031	1.000	231030		14.11(6.50-19.49)	102	2391	
D 45 13C2 PFDoA										
570	10.096	10.127	-0.031		1942439	0.0530		106	10987	
47 10:2 FTS										
607	10.118	10.152	-0.034	1.123	3284212	NC	Target=27.54		13469	
81	10.118	10.152	-0.034	1.123	115155		28.52(13.77-41.31)		1534	
48 PFDoS										
80	10.517	10.555	-0.038	1.254	556209	NC	Target=0.45		3197	
99	10.517	10.555	-0.038	1.254	1184630		0.47(0.22-0.67)		5273	
49 Perfluorotridecanoic acid										
619	10.591	10.622	-0.031	1.049	4117765	0.1214	Target=16.38	121	1190	
169	10.591	10.622	-0.031	1.049	266576		15.45(8.19-24.57)	121	2760	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 51 13C2 PFTeDA										
670	11.059	11.092	-0.033		1816797	0.0751		150	9658	
50 Perfluorotetradecanoic acid										
169	11.059	11.094	-0.035	1.000	172413	0.0926	Target=1.23	92.6	2888	
219	11.042	11.094	-0.052	0.998	145410		1.19(0.62-1.85)	92.6	2681	
D 52 13C2 PFHxDA										
770	11.914	11.966	-0.052		1203364	0.0801		160	6346	
54 Perfluorohexadecanoic acid										
769	11.914	11.967	-0.053	1.000	2107903	0.0991	Target=23.79	99.1	1060	
169	11.914	11.967	-0.053	1.000	84580		24.92(11.89-35.68)	99.1	1141	
53 Perfluorooctadecanoic acid										RM
869	12.762	12.393	0.369	1.071	273176	0.0517	Target=92.79	51.7	183	R
169	12.762	12.393	0.369	1.071	8963		30.48(46.39-139.18)	51.7	135	M

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- R - Failed Signal Ratio Test

Review Flags
- M - Manually Integrated

Reagents:

LCPFC-LL-L7_00021 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:23:39 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_010.d

Injection Date: 12-Oct-2020 13:21:12 Instrument ID: A10

Lims ID: IC STD 7

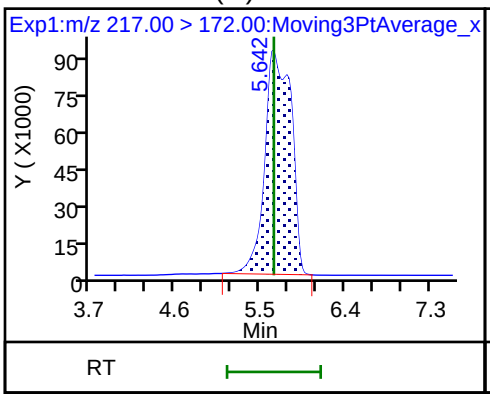
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 10 Worklist Smp#: 8

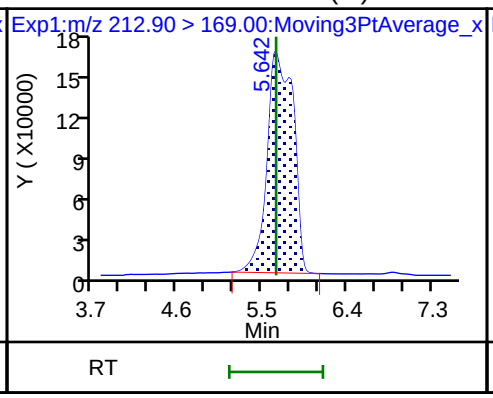
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

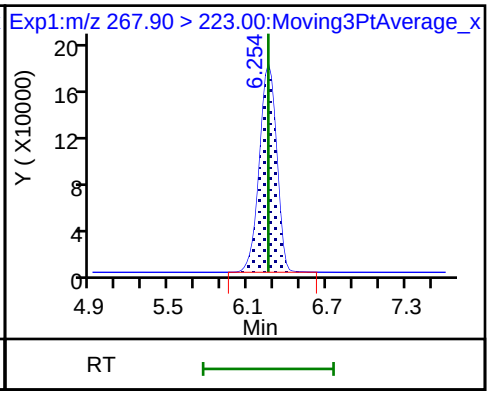
D 2 13C4 PFBA (M)



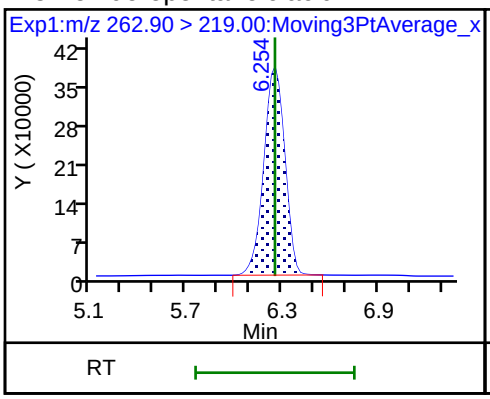
1 Perfluorobutanoic acid (M)



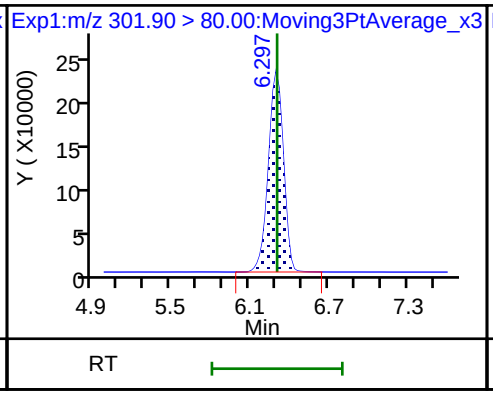
D 4 13C5 PFPeA



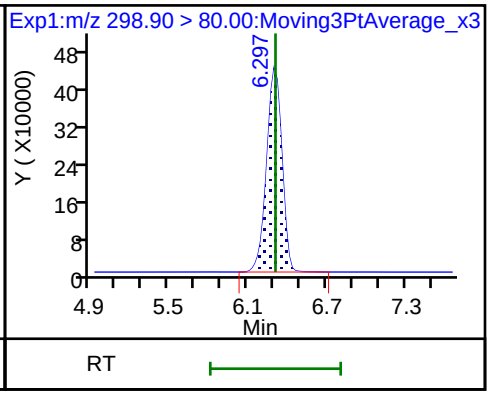
5 Perfluoropentanoic acid



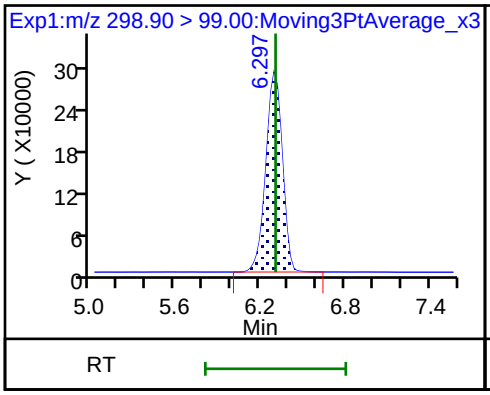
D 3 13C3 PFBS



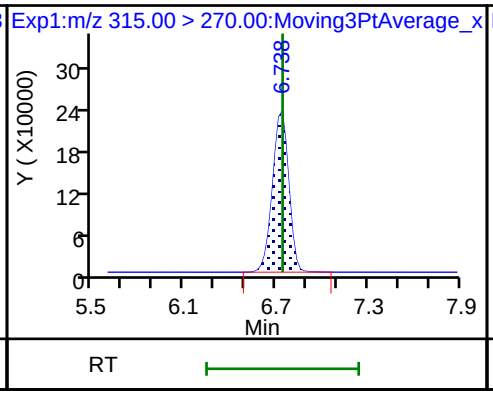
6 Perfluorobutanesulfonic acid



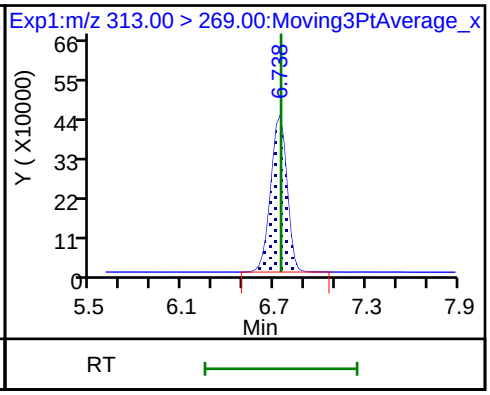
6 Perfluorobutanesulfonic acid



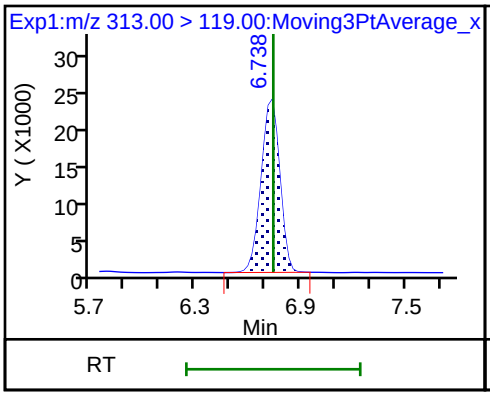
D 9 13C2 PFHxA



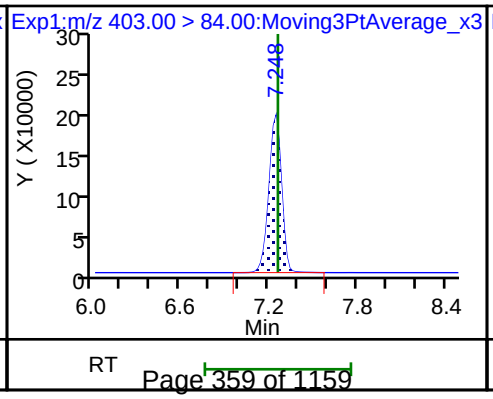
10 Perfluorohexanoic acid



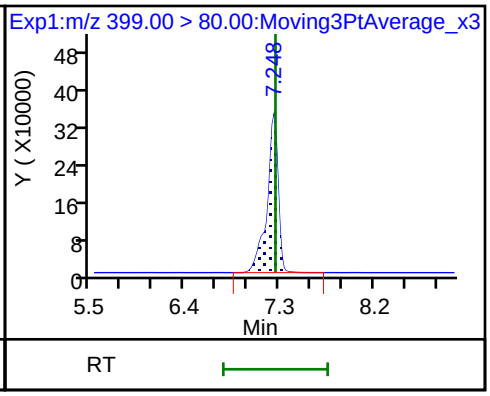
10 Perfluorohexanoic acid



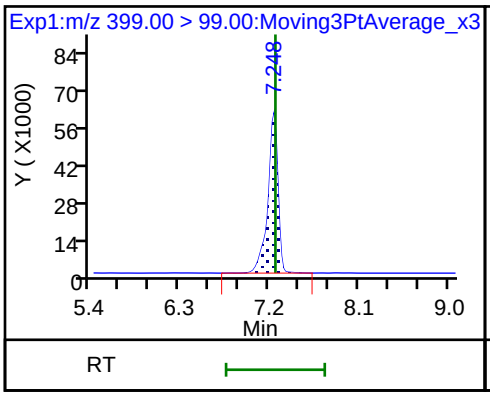
D 15 18O2 PFHxS



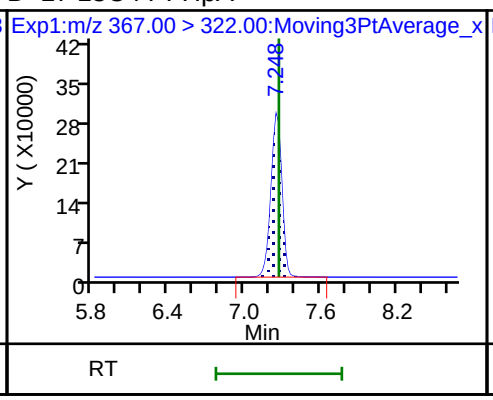
16 Perfluorohexanesulfonic acid



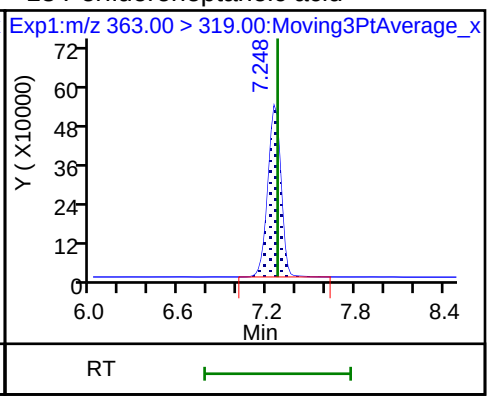
16 Perfluorohexanesulfonic acid



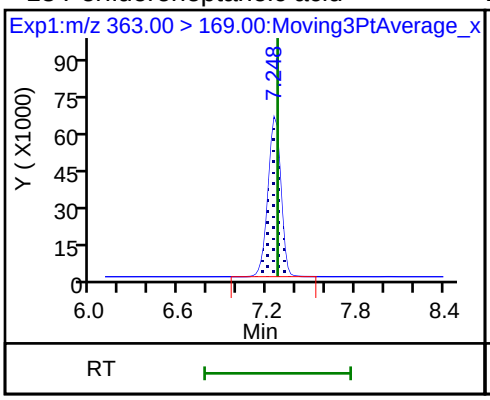
D 17 13C4 PFHpA



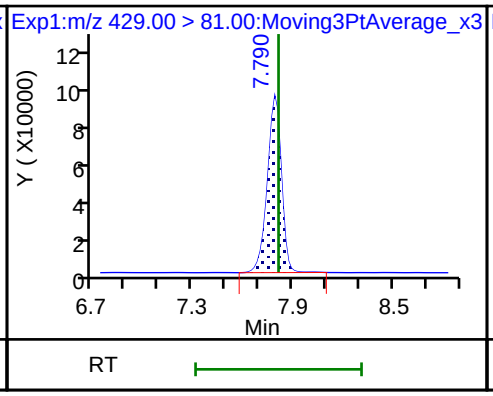
18 Perfluoroheptanoic acid



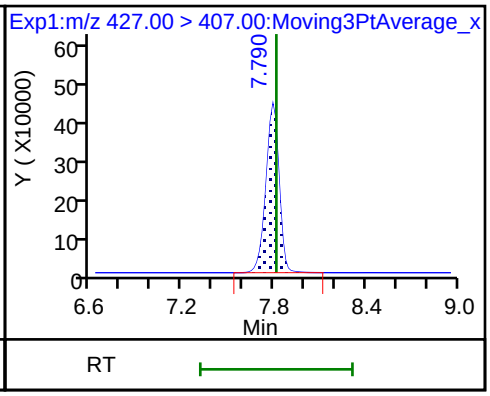
18 Perfluoroheptanoic acid



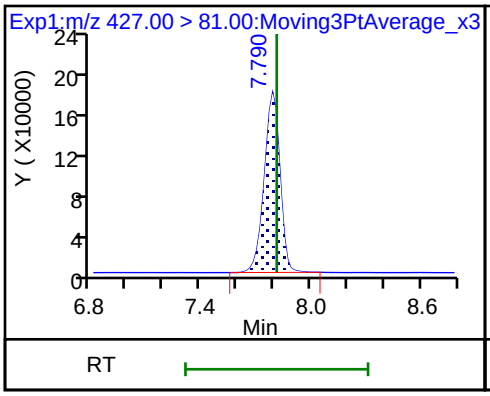
D 22 M2-6:2 FTS



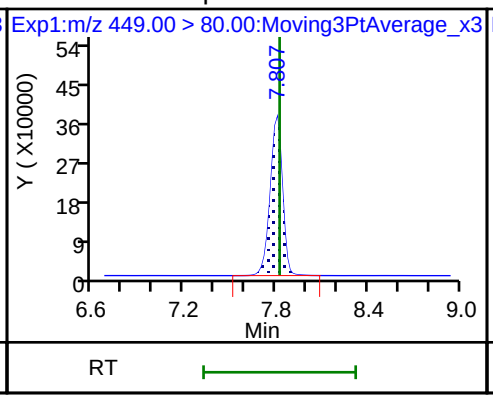
23 6:2 FTS



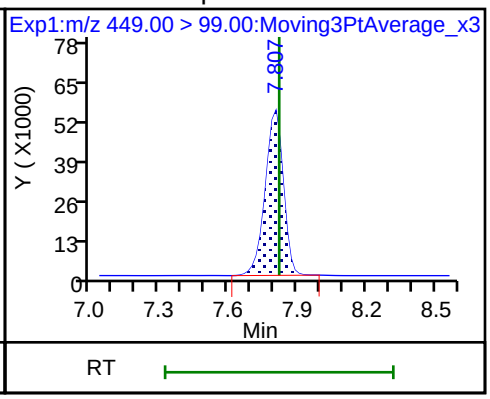
23 6:2 FTS



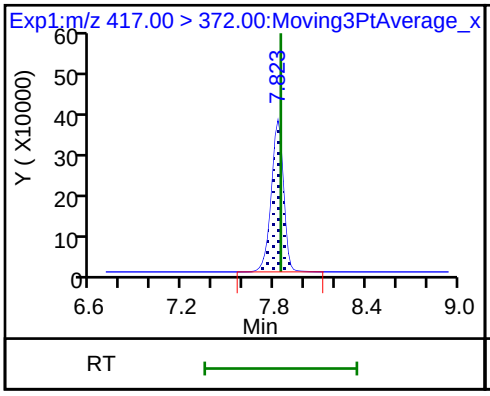
21 Perfluoroheptanesulfonic acid



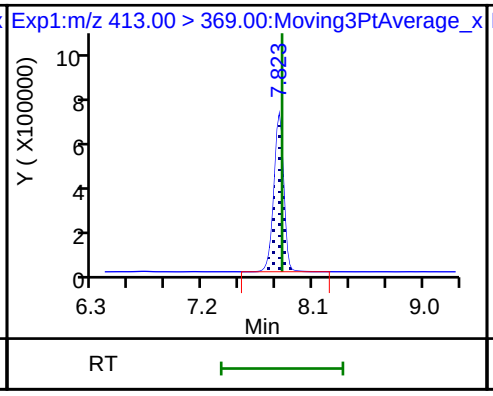
21 Perfluoroheptanesulfonic acid



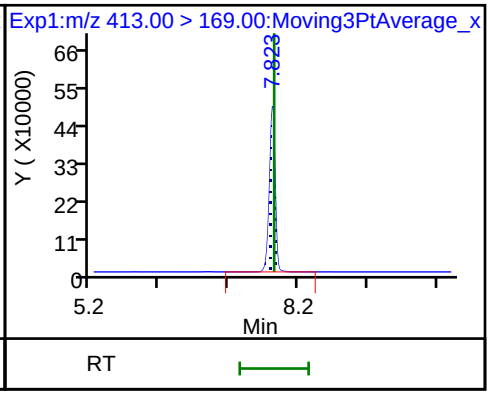
D 25 13C4 PFOA



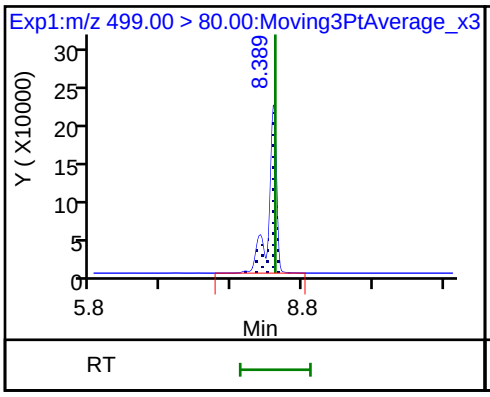
24 Perfluorooctanoic acid



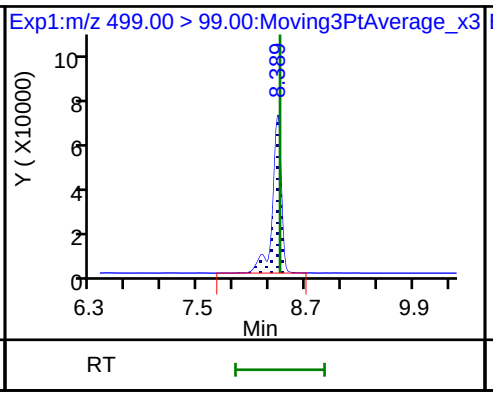
24 Perfluorooctanoic acid



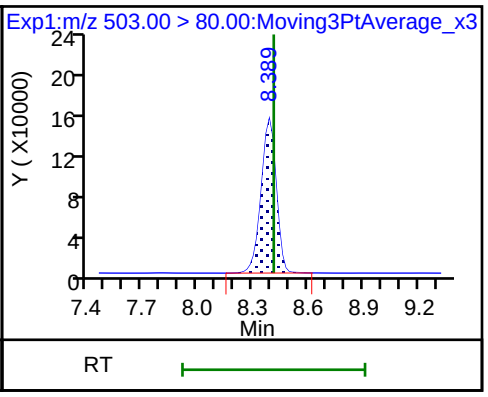
27 Perfluorooctanesulfonic acid



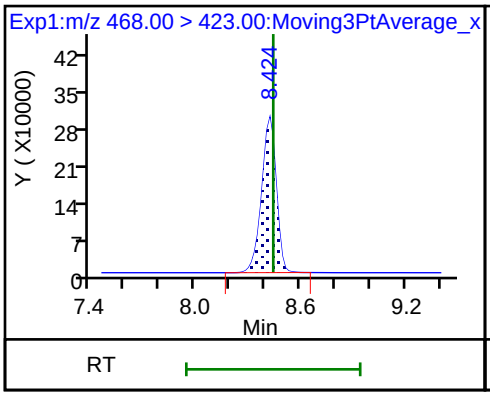
27 Perfluorooctanesulfonic acid



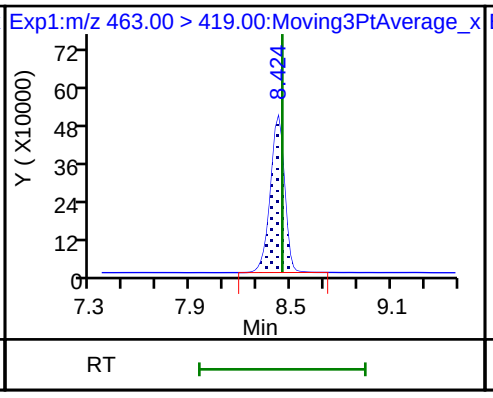
D 26 13C4 PFOS



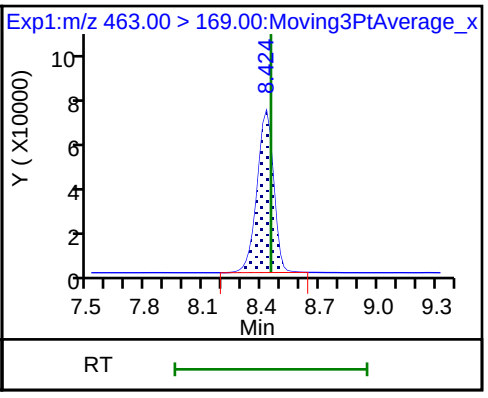
D 28 13C5 PFNA



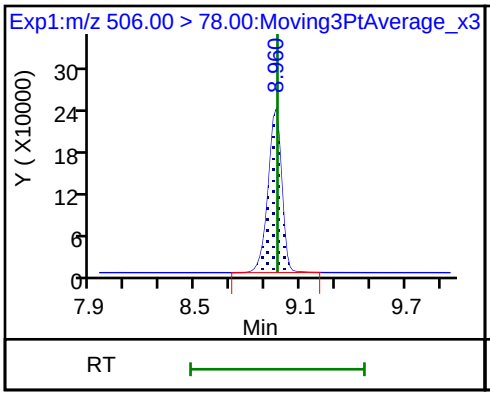
29 Perfluorononanoic acid



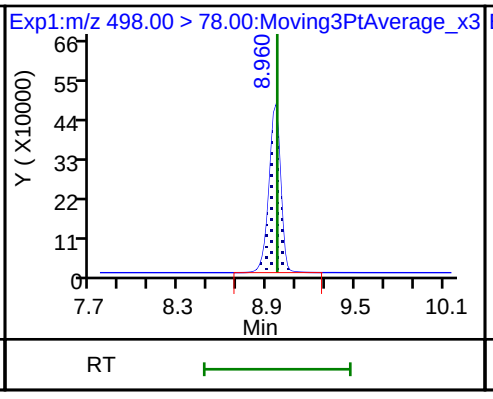
29 Perfluorononanoic acid



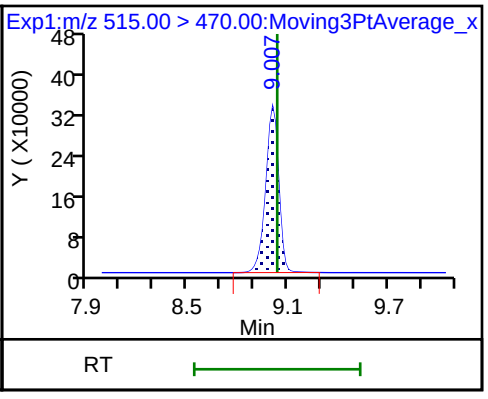
D 30 13C8 FOSA



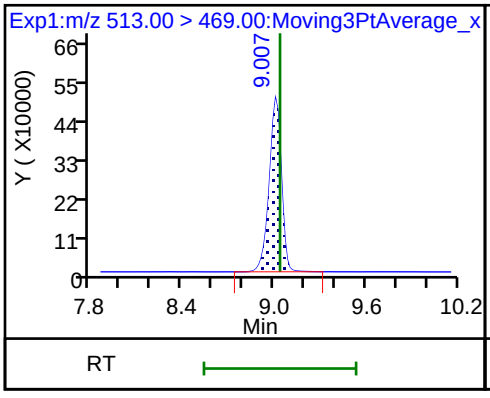
31 Perfluorooctanesulfonamide



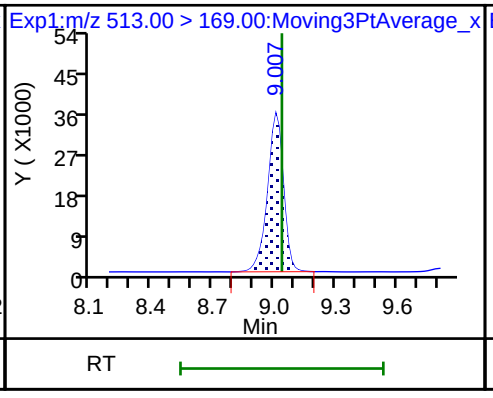
D 33 13C2 PFDA



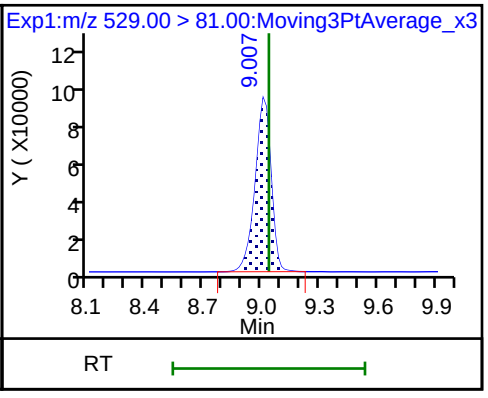
35 Perfluorodecanoic acid



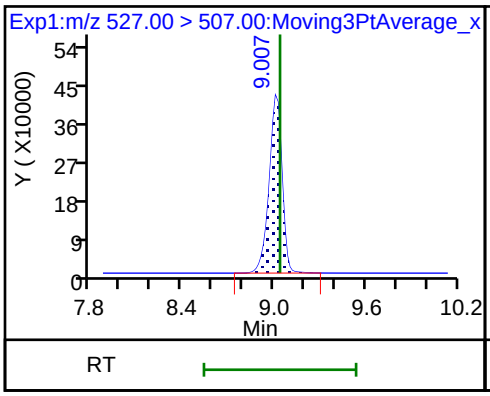
35 Perfluorodecanoic acid



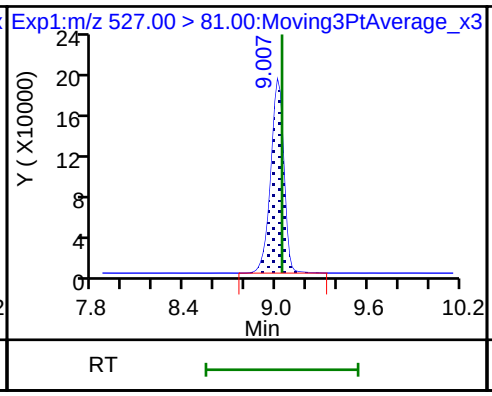
D 34 M2-8:2 FTS



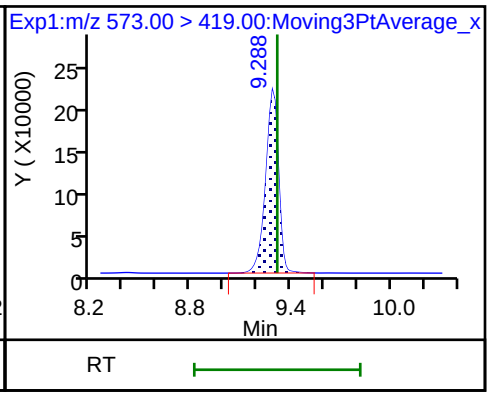
36 8:2 FTS



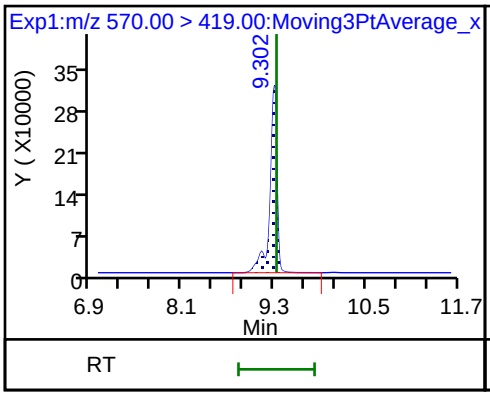
36 8:2 FTS



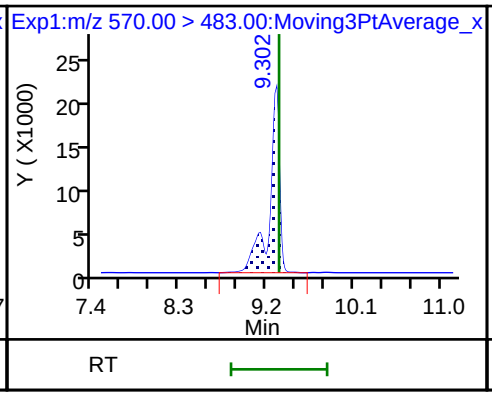
D 37 d3-NMeFOSAA



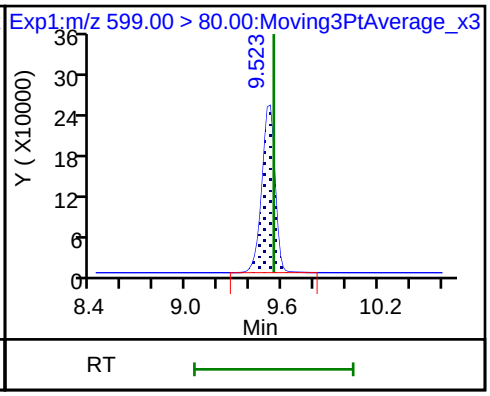
38 NMeFOSAA



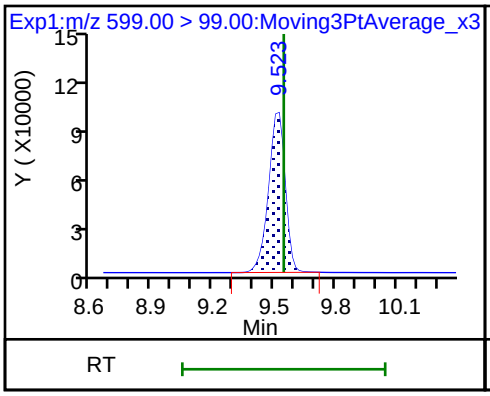
38 NMeFOSAA



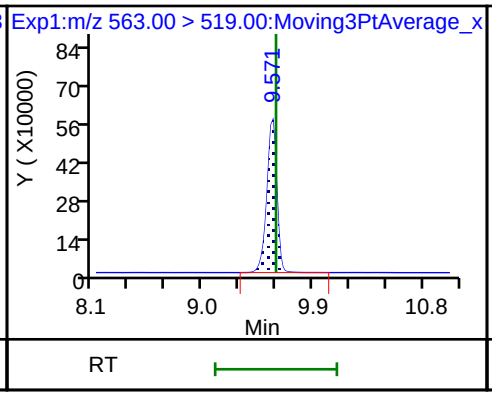
39 Perfluorodecanesulfonic acid



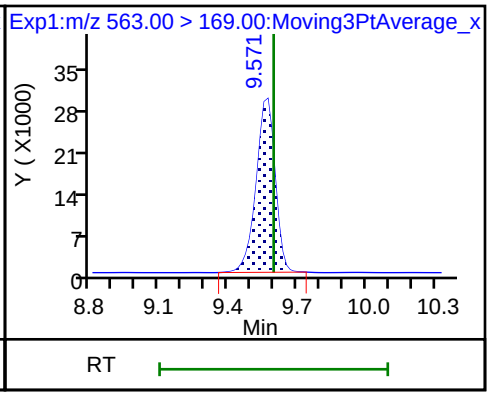
39 Perfluorodecanesulfonic acid



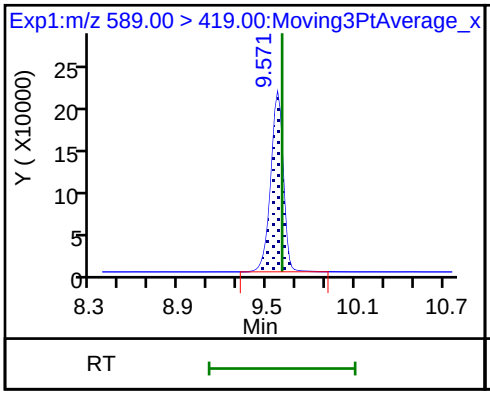
41 Perfluoroundecanoic acid



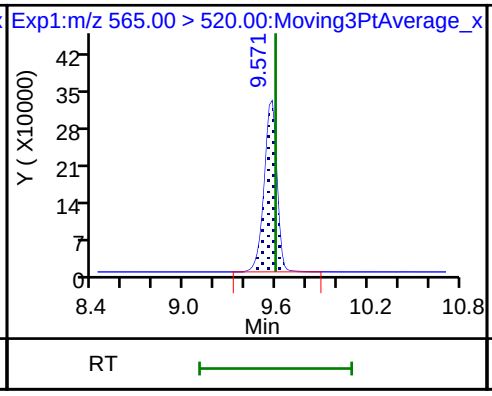
41 Perfluoroundecanoic acid



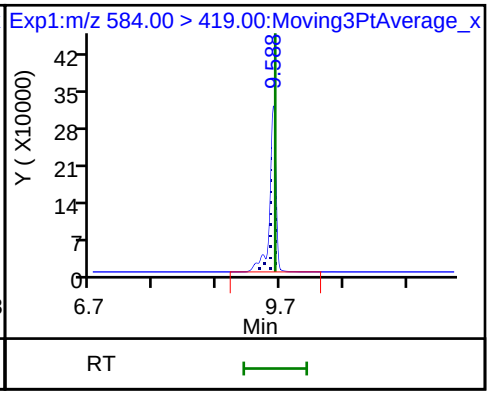
D 40 d5-NEtFOSAA



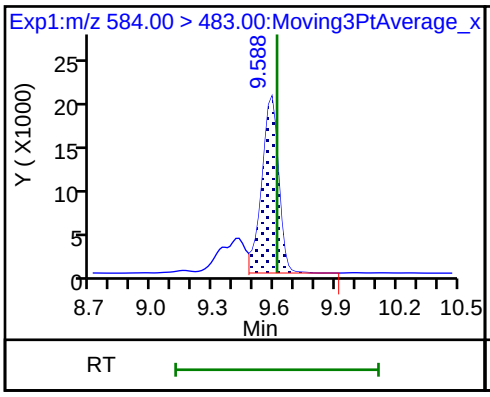
D 42 13C2 PFUnA



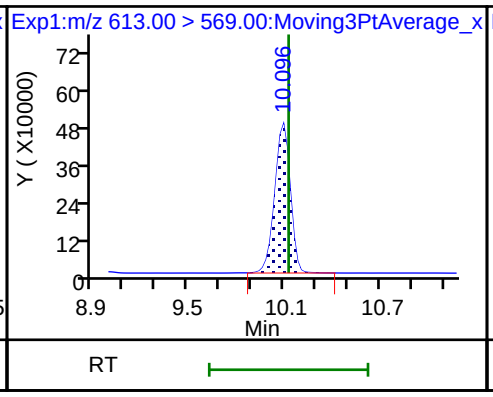
43 NEtFOSA



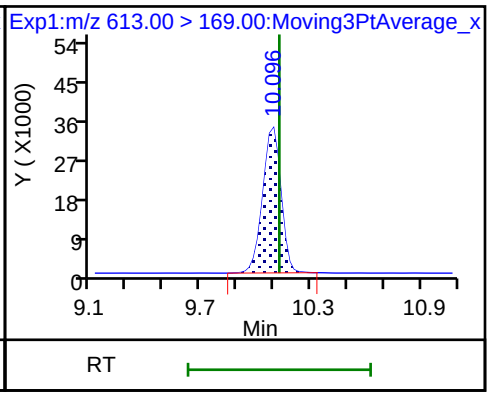
43 NEtFOSA



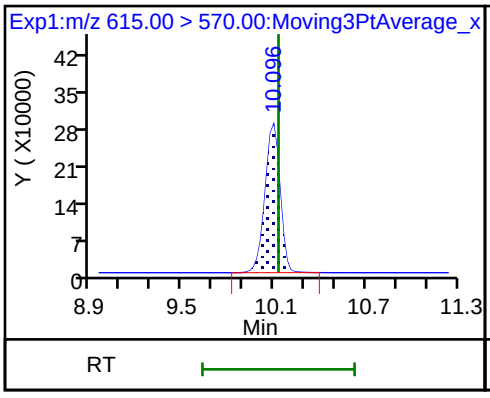
46 Perfluorododecanoic acid



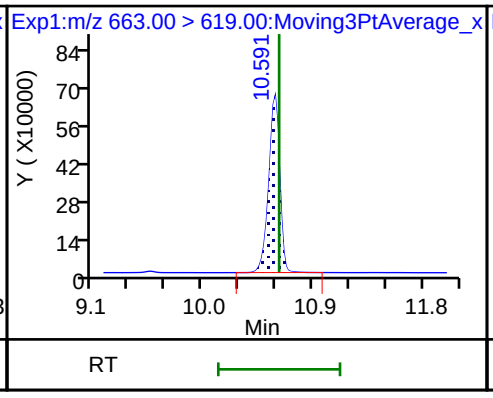
46 Perfluorododecanoic acid



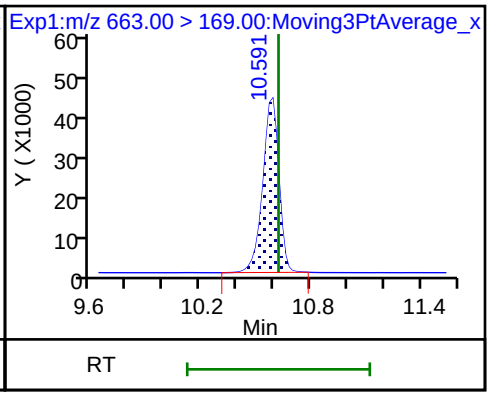
D 45 13C2 PFDoA



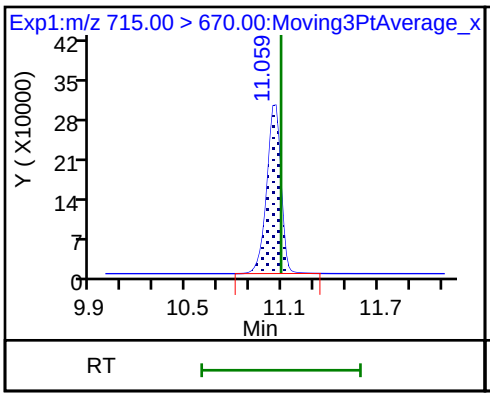
49 Perfluorotridecanoic acid



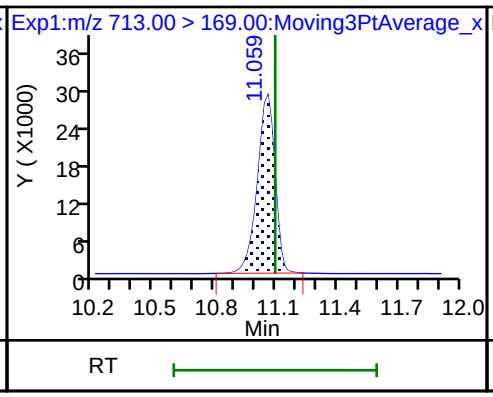
49 Perfluorotridecanoic acid



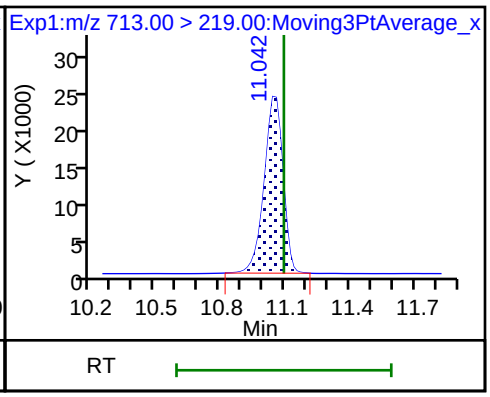
D 51 13C2 PFTeDA



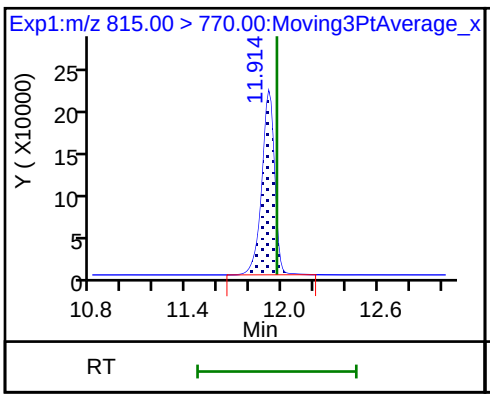
50 Perfluorotetradecanoic acid



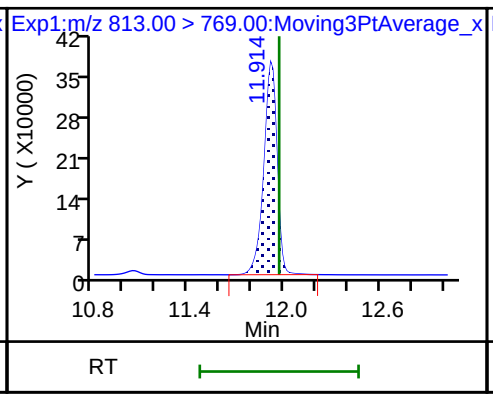
50 Perfluorotetradecanoic acid



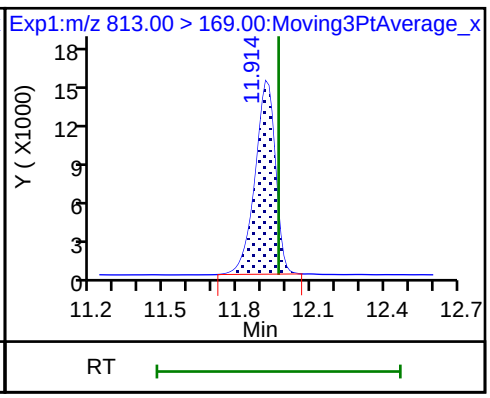
D 52 13C2 PFHxDA



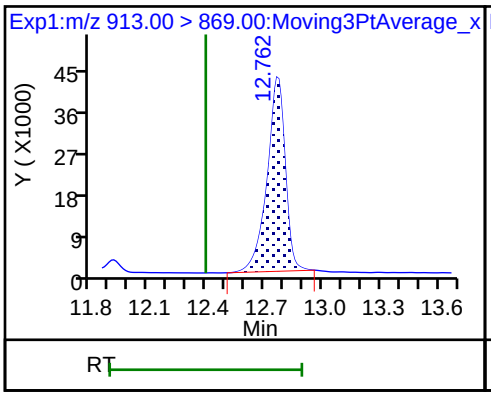
54 Perfluorohexadecanoic acid



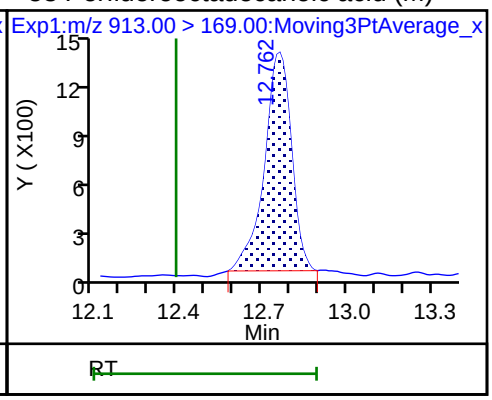
54 Perfluorohexadecanoic acid



53 Perfluorooctadecanoic acid



53 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

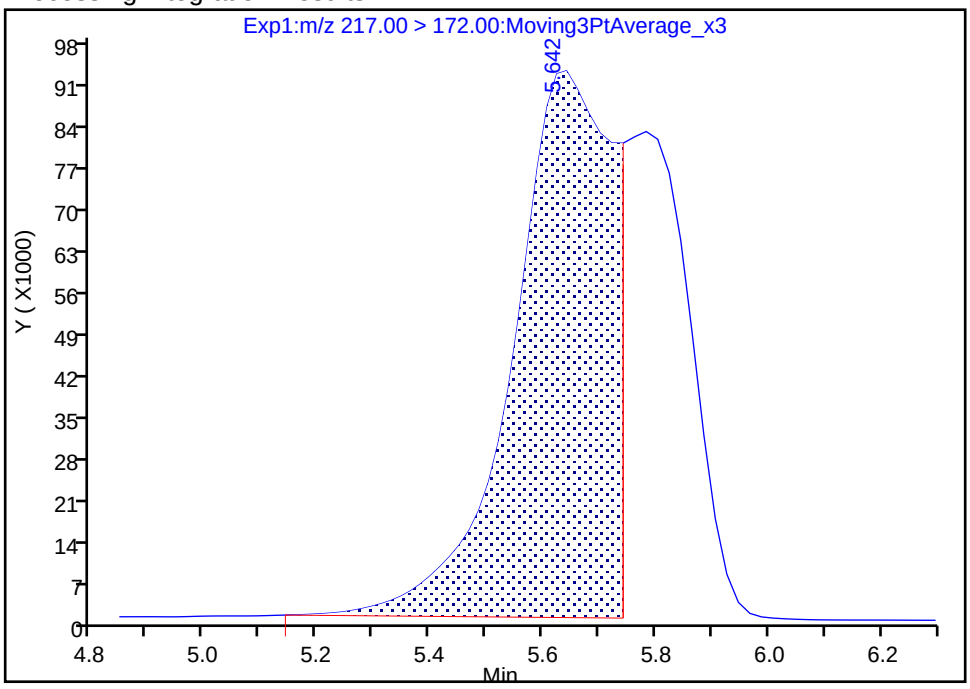
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_010.d
Injection Date: 12-Oct-2020 13:21:12 Instrument ID: A10
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 10 Worklist Smp#: 8
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

D 2 13C4 PFBA, CAS: STL00992

Signal: 1

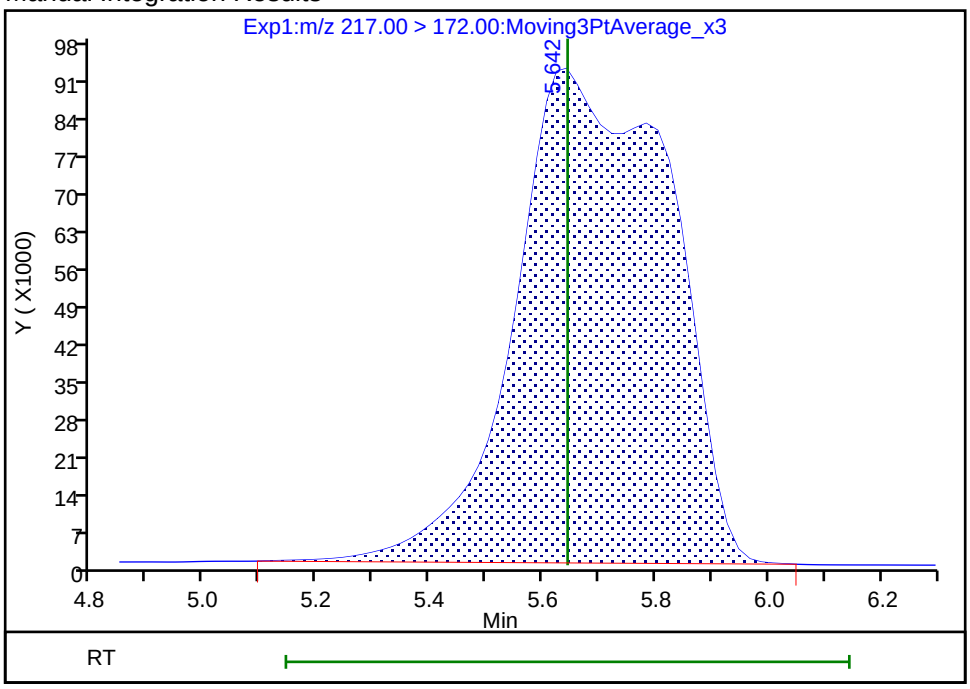
Processing Integration Results

RT: 5.64
Area: 1129395
Amount: 0.030066
Amount Units: ng/ml



Manual Integration Results

RT: 5.64
Area: 1785590
Amount: 0.045031
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:46:09
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

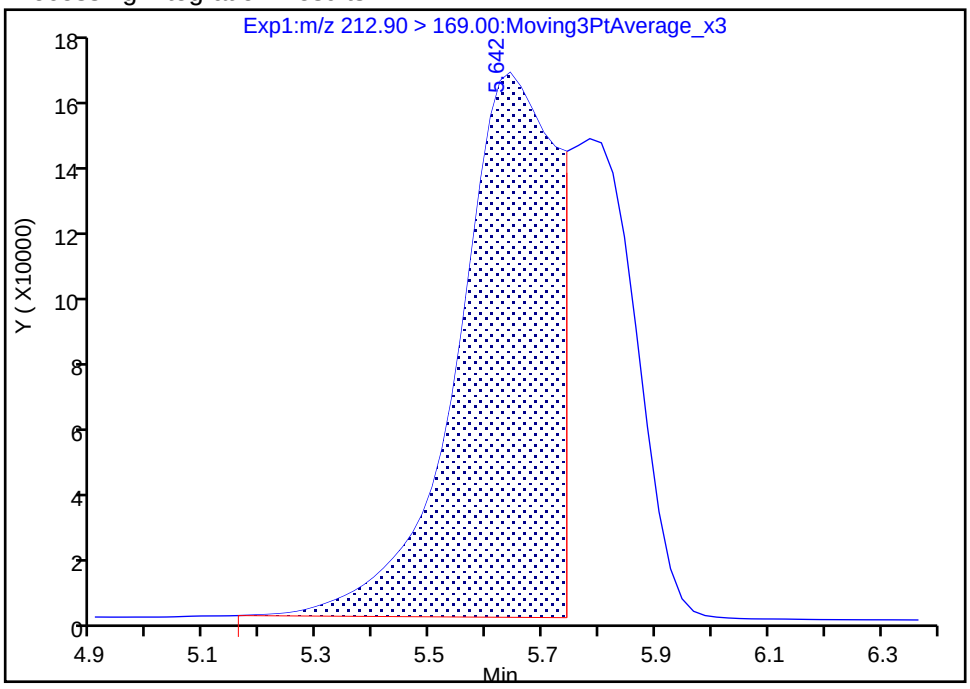
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_010.d
Injection Date: 12-Oct-2020 13:21:12 Instrument ID: A10
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 10 Worklist Smp#: 8
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

1 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

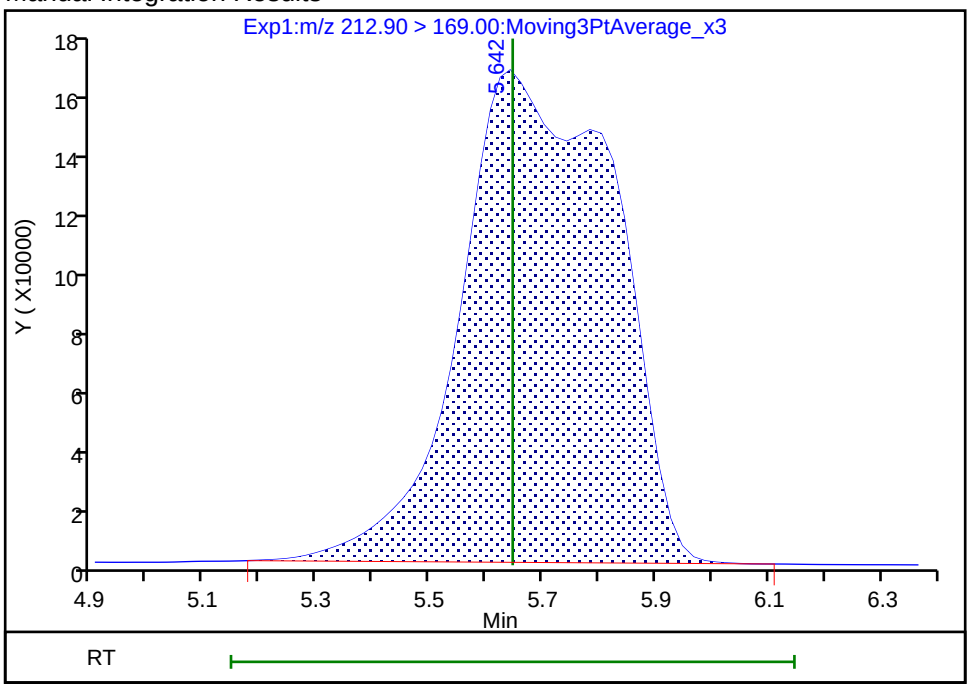
Processing Integration Results

RT: 5.64
Area: 1932070
Amount: 0.064715
Amount Units: ng/ml



Manual Integration Results

RT: 5.64
Area: 3064886
Amount: 0.097572
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:46:23
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

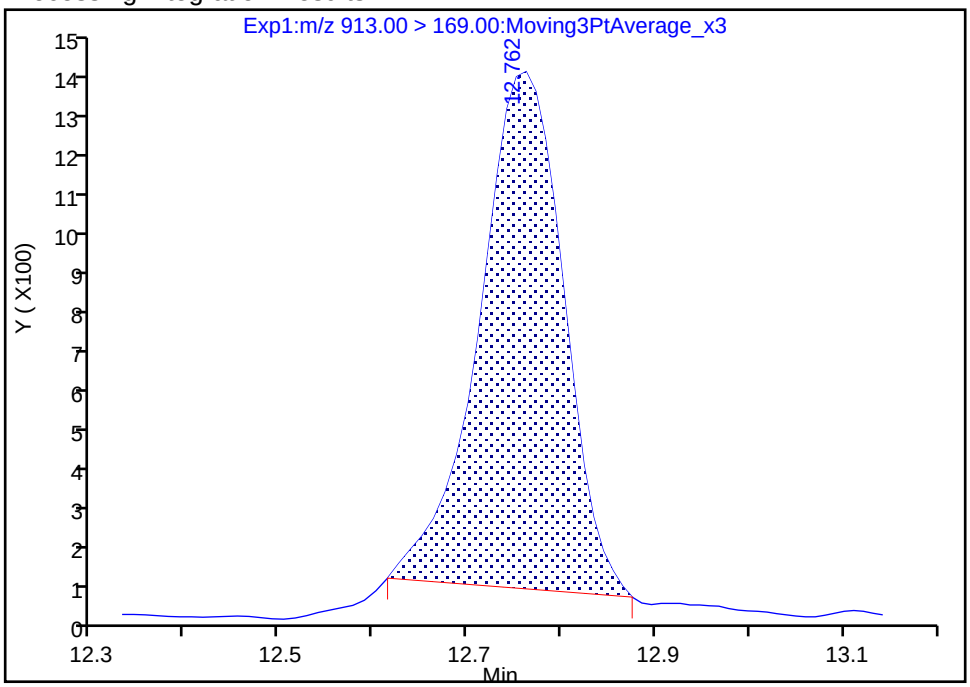
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_010.d
Injection Date: 12-Oct-2020 13:21:12 Instrument ID: A10
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 10 Worklist Smp#: 8
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

53 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

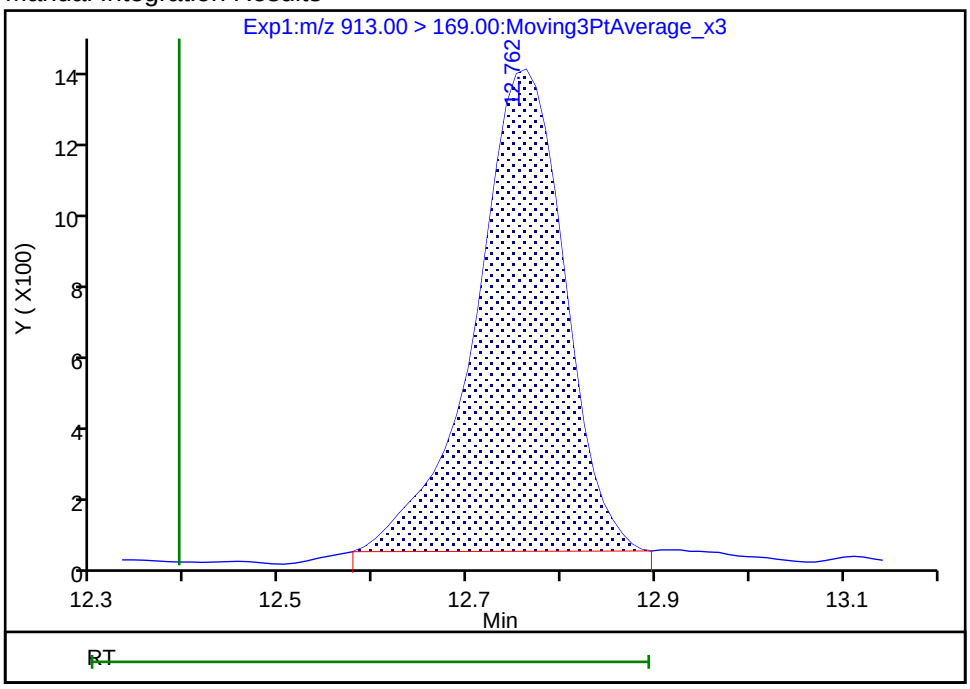
Processing Integration Results

RT: 12.76
Area: 8205
Amount: 0.050959
Amount Units: ng/ml



Manual Integration Results

RT: 12.76
Area: 8963
Amount: 0.051721
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 13:47:18
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d
Lims ID: IC STD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 12-Oct-2020 13:39:40 ALS Bottle#: 11 Worklist Smp#: 9
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 8
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:23:43 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: koucharis Date: 12-Oct-2020 14:21:07
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.621	5.644	-0.023		2057393	0.0519		104	10914	
1 Perfluorobutanoic acid										
169	5.621	5.647	-0.026	1.000	7138911	0.1972		98.6	899	
D 4 13C5 PFPeA										
223	6.230	6.253	-0.023		1694167	0.0499		99.8	14970	
5 Perfluoropentanoic acid										
219	6.230	6.253	-0.023	1.000	7146366	0.1958		97.9	1201	
D 3 13C3 PFBS										
80	6.293	6.305	-0.012		2024865	0.0482		104	5599	
6 Perfluorobutanesulfonic acid										
80	6.293	6.308	-0.015	1.000	7748130	0.1797	Target=1.50	102	11503	
99	6.293	6.308	-0.015	1.000	5080444		1.53(0.75-2.26)	102	4845	
D 7 M2-4:2 FTS										
81	6.665	6.688	-0.023		455035	NC			900	
8 4:2 FTS										
307	6.665	6.688	-0.023	1.000	4463991	NC	Target=2.45		28886	
81	6.665	6.688	-0.023	1.000	1760478		2.54(1.22-3.67)		3812	
D 9 13C2 PFHxA										
270	6.734	6.741	-0.007		1746393	0.0483		96.6	16719	
10 Perfluorohexanoic acid										
269	6.734	6.744	-0.010	1.000	6380174	0.1968	Target=17.92	98.4	2838	
119	6.734	6.744	-0.010	1.000	364092		17.52(8.96-26.88)	98.4	655	
11 Perfluoropentanesulfonic acid										
80	6.734	6.755	-0.021	0.931	5946201	NC	Target=1.47		8522	
99	6.734	6.755	-0.021	0.931	3964401		1.50(0.74-2.21)		6723	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.876	6.888	-0.012		105299	NC			512	
13 HPFO-DA										
285	6.876	6.891	-0.015	1.000	1141725	NC			1053	
14 9ClFOS										M
351	7.337	7.212	0.125	0.876	658	NC			0.7	M
D 15 18O2 PFHxS										
84	7.237	7.260	-0.023		1189654	0.0460		97.2	6622	
16 Perfluorohexanesulfonic acid										
80	7.237	7.260	-0.023	1.000	5223690	0.1830	Target=5.60	101	6033	
99	7.237	7.260	-0.023	1.000	936902		5.58(2.80-8.40)	101	3032	
D 17 13C4 PFHpA										
322	7.257	7.270	-0.013		1775112	0.0485		96.9	21739	
18 Perfluoroheptanoic acid										
319	7.257	7.272	-0.015	1.000	6917140	0.1905	Target=8.55	95.3	2344	
169	7.257	7.272	-0.015	1.000	812205		8.52(4.27-12.82)	95.3	10933	
19 DONA										
251	7.297	7.328	-0.031	0.871	28885809	NC	Target=2.62		57972	
85	7.297	7.328	-0.031	0.871	10971244		2.63(1.31-3.93)		22326	
D 22 M2-6:2 FTS										
81	7.792	7.813	-0.021		477751	0.0369		77.6	953	
23 6:2 FTS										
407	7.792	7.813	-0.021	1.000	4747633	0.1902	Target=2.55	100	18341	
81	7.792	7.813	-0.021	1.000	1900437		2.50(1.27-3.82)	100	3826	
21 Perfluoroheptanesulfonic acid										
80	7.792	7.821	-0.029	0.930	4155825	0.1818	Target=6.95	95.5	9060	
99	7.792	7.821	-0.029	0.930	619869		6.70(3.48-10.43)	95.5	2470	
D 25 13C4 PFOA										
372	7.810	7.842	-0.032		1985671	0.0466		93.2	8568	
24 Perfluorooctanoic acid										
369	7.829	7.846	-0.017	1.002	7721517	0.2003	Target=1.41	100	1308	
169	7.829	7.846	-0.017	1.002	5564265		1.39(0.71-2.12)	100	8546	
D 26 13C4 PFOS										
80	8.379	8.413	-0.034		905437	0.0491		103	2502	
27 Perfluorooctanesulfonic acid										M
80	8.379	8.413	-0.034	1.000	3531370	0.1821	Target=3.36	98.1	4457	M
99	8.379	8.413	-0.034	1.000	1009331		3.50(1.68-5.04)	98.1	2338	M
D 28 13C5 PFNA										
423	8.417	8.443	-0.026		1687867	0.0471		94.2	12293	
29 Perfluorononanoic acid										
419	8.417	8.448	-0.031	1.000	6068035	0.2032	Target=6.88	102	2659	
169	8.417	8.448	-0.031	1.000	856422		7.09(3.44-10.32)	102	5700	
D 30 13C8 FOSA										
78	8.953	8.968	-0.015		951569	0.0434		86.8	6771	
31 Perfluorooctanesulfonamide										
78	8.953	8.969	-0.016	1.000	3921909	0.2057		103	13289	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
32 Perfluorononanesulfonic acid										
80	8.970	8.994	-0.024	1.070	3260739	NC	Target=6.23		10617	
99	8.970	8.994	-0.024	1.070	566998		5.75(3.11-9.34)		2276	
D 33 13C2 PFDA										
470	9.003	9.035	-0.032		1631948	0.0462		92.4	8264	
35 Perfluorodecanoic acid										
469	9.003	9.037	-0.034	1.000	5332236	0.2033	Target=14.44	102	3075	
169	9.003	9.037	-0.034	1.000	379893		14.04(7.22-21.66)	102	602	
D 34 M2-8:2 FTS										
81	9.003	9.037	-0.034		536765	0.0393		82.0	2532	
36 8:2 FTS										
507	9.003	9.037	-0.034	1.000	4452801	0.1791	Target=2.16	93.5	17189	
81	9.003	9.037	-0.034	1.000	2128229		2.09(1.08-3.24)	93.5	5295	
D 37 d3-NMeFOSAA										
419	9.286	9.317	-0.031		1145141	0.0464		92.8	2343	
38 NMeFOSAA										
419	9.302	9.327	-0.025	1.002	3913986	0.2056	Target=13.31	103	59646	
483	9.286	9.327	-0.041	1.000	305171		12.83(6.65-19.96)	103	2340	
39 Perfluorodecanesulfonic acid										
80	9.516	9.546	-0.030	1.136	2687493	0.1900	Target=2.51	98.6	13580	
99	9.516	9.546	-0.030	1.136	1027877		2.61(1.26-3.77)	98.6	7845	
41 Perfluoroundecanoic acid										
519	9.565	9.597	-0.032	1.000	5862917	0.1902	Target=19.91	95.1	3296	
169	9.565	9.597	-0.032	1.000	304185		19.27(9.95-29.86)	95.1	3352	
D 40 d5-NEtFOSAA										
419	9.565	9.603	-0.038		1184871	0.0429		85.8	4396	
D 42 13C2 PFUnA										
520	9.565	9.595	-0.030		1747957	0.0480		96.0	20400	
43 NEtFOSA										
419	9.582	9.613	-0.031	1.002	3890344	0.2079	Target=13.66	104	28826	
483	9.582	9.613	-0.031	1.002	296952		13.10(6.83-20.48)	104	2011	
44 11ClFOS										
451	9.790	9.828	-0.038	1.168	15907277	NC			20460	
46 Perfluorododecanoic acid										
569	10.076	10.127	-0.051	1.000	5872778	0.2056	Target=12.99	103	2121	
169	10.076	10.127	-0.051	1.000	440363		13.34(6.50-19.49)	103	4135	
D 45 13C2 PFDoA										
570	10.076	10.127	-0.051		1740700	0.0475		95.0	10407	
47 10:2 FTS										
607	10.122	10.152	-0.030	1.124	5661750	NC	Target=27.54		15667	
81	10.099	10.152	-0.053	1.122	203305		27.85(13.77-41.31)		2200	
48 PFDoS										
80	10.514	10.555	-0.041	1.255	814772	NC	Target=0.45		4473	
99	10.514	10.555	-0.041	1.255	1688869		0.48(0.22-0.67)		5905	
49 Perfluorotridecanoic acid										
619	10.572	10.622	-0.050	1.049	6208662	0.2043	Target=16.38	102	2042	
169	10.572	10.622	-0.050	1.049	402701		15.42(8.19-24.57)	102	2878	

Report Date: 12-Oct-2020 15:23:43 Chrom Revision: 2.3 08-Oct-2020 16:36:14
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 51 13C2 PFTeDA										
670	11.035	11.092	-0.057		1210435	0.0501		100	8632	
50 Perfluorotetradecanoic acid										
169	11.052	11.094	-0.042	1.002	231247	0.1865	Target=1.23	93.2	3195	
219	11.052	11.094	-0.042	1.002	182010		1.27(0.62-1.85)	93.2	2730	
D 52 13C2 PFHxDA										
770	11.907	11.966	-0.059		763094	0.0508		102	3829	
54 Perfluorohexadecanoic acid										
769	11.907	11.967	-0.060	1.000	2784275	0.2070	Target=23.79	104	1562	
169	11.907	11.967	-0.060	1.000	110905		25.11(11.89-35.68)	104	1384	
53 Perfluorooctadecanoic acid										R
869	12.754	12.393	0.361	1.071	599789	0.1791	Target=92.79	89.5	300	R
169	12.754	12.393	0.361	1.071	19485		30.78(46.39-139.18)	89.5	218	

QC Flag Legend

Processing Flags
NC - Not Calibrated
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Reagents:

LCPFC-LL-L8_00021 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:23:43 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Injection Date: 12-Oct-2020 13:39:40 Instrument ID: A10

Lims ID: IC STD 8

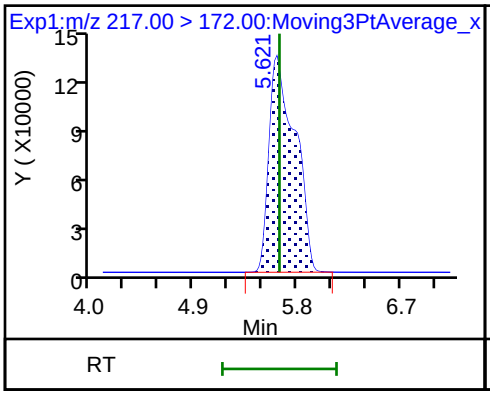
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 11 Worklist Smp#: 9

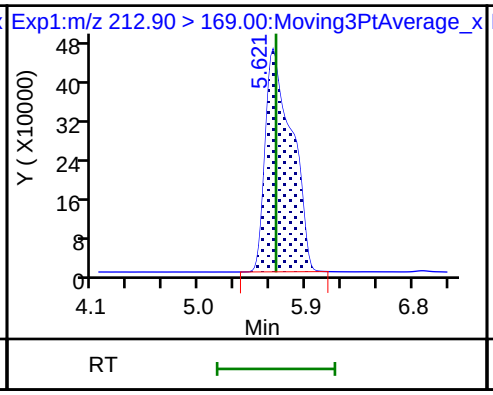
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

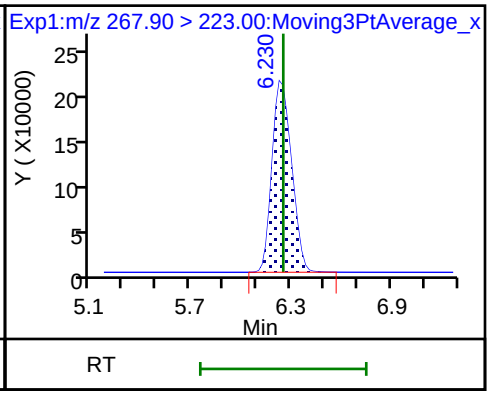
D 2 13C4 PFBA



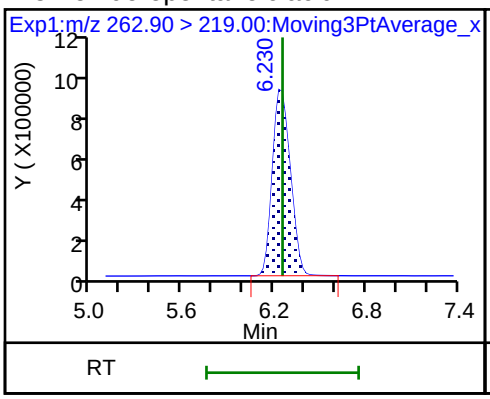
1 Perfluorobutanoic acid



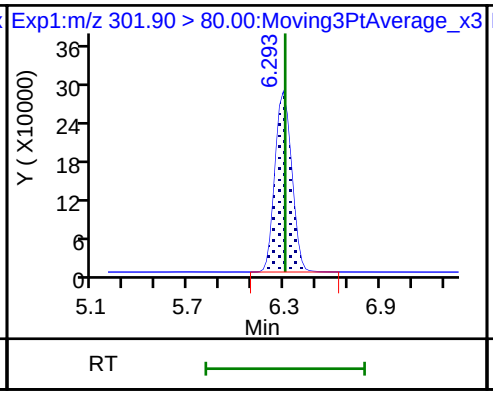
D 4 13C5 PFPeA



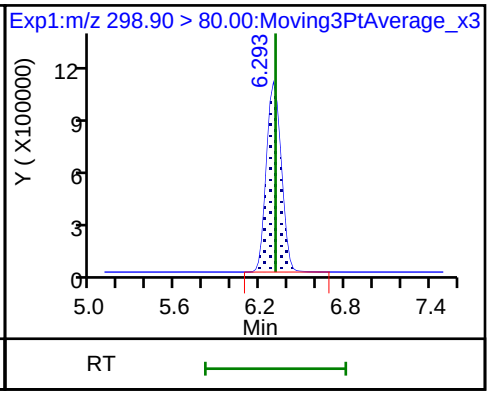
5 Perfluoropentanoic acid



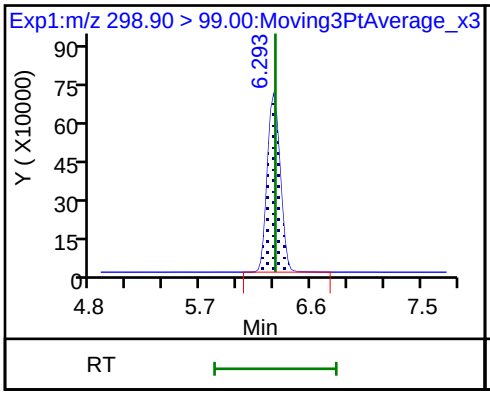
D 3 13C3 PFBS



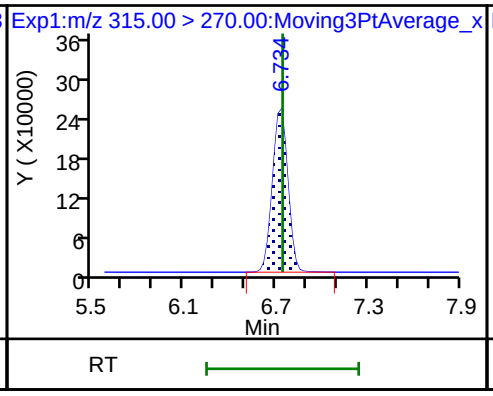
6 Perfluorobutanesulfonic acid



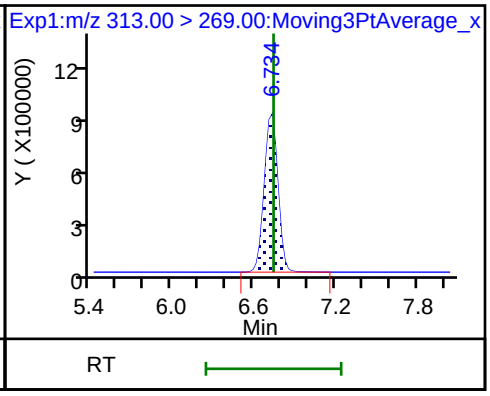
6 Perfluorobutanesulfonic acid



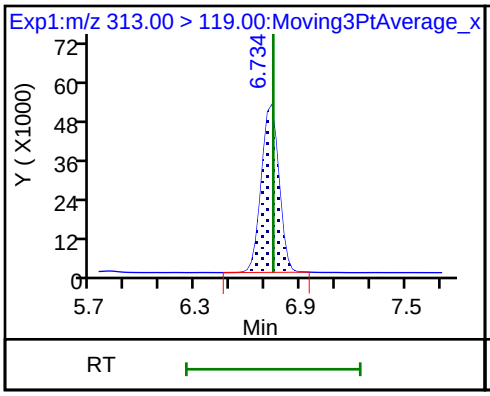
D 9 13C2 PFHxA



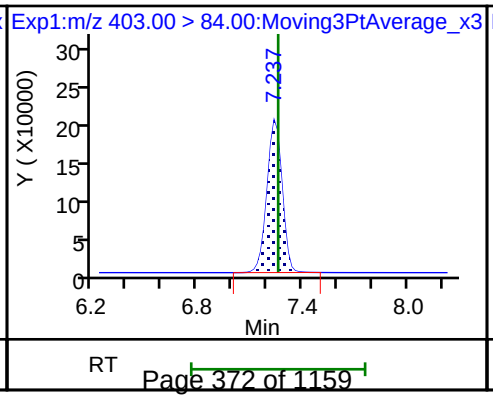
10 Perfluorohexanoic acid



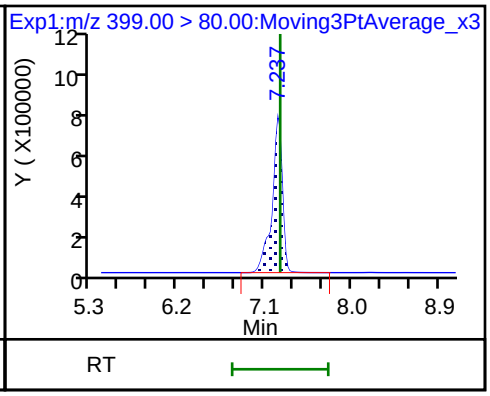
10 Perfluorohexanoic acid



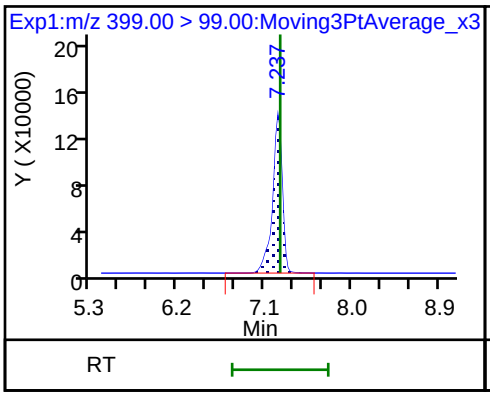
D 15 18O2 PFHxS



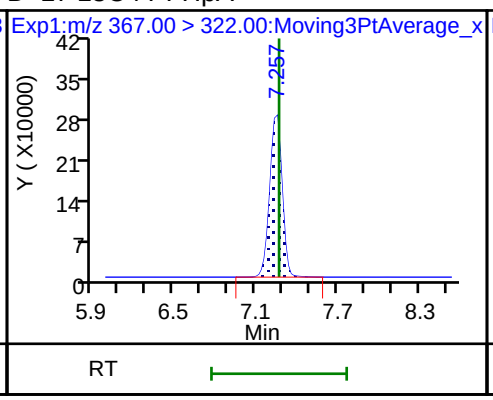
16 Perfluorohexanesulfonic acid



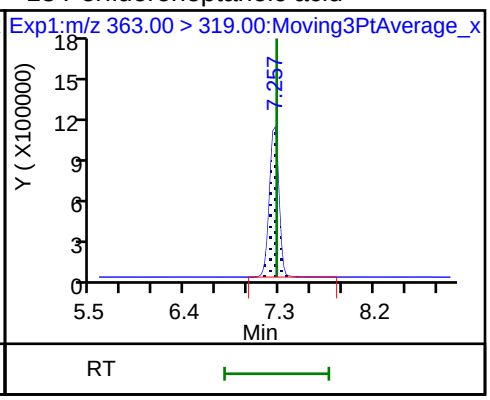
16 Perfluorohexanesulfonic acid



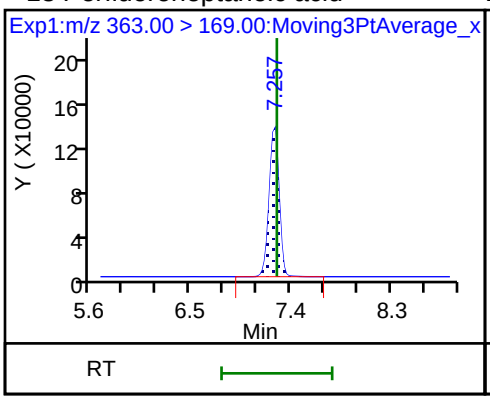
D 17 13C4 PFHpA



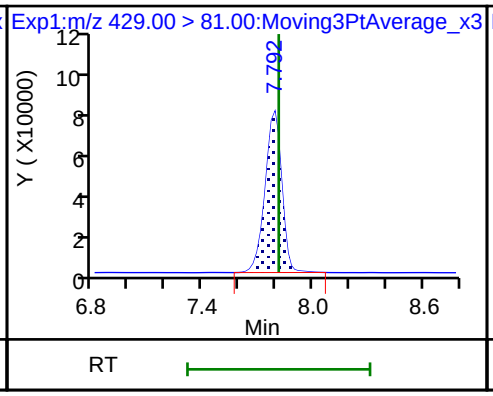
18 Perfluoroheptanoic acid



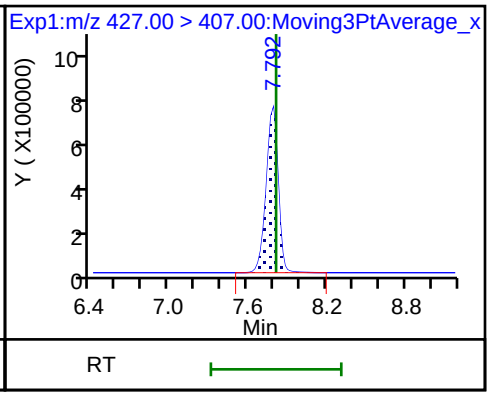
18 Perfluoroheptanoic acid



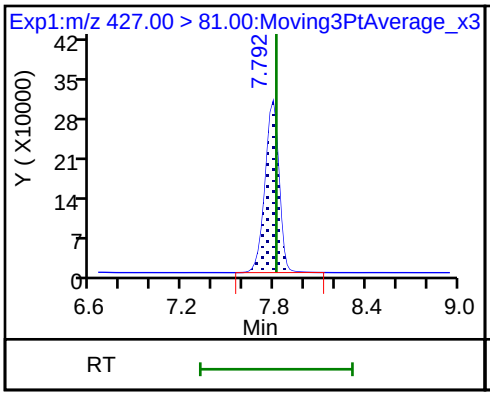
D 22 M2-6:2 FTS



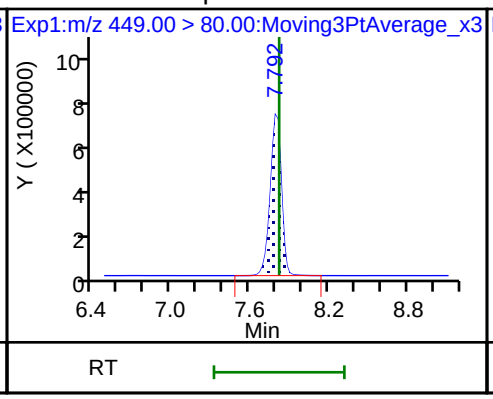
23 6:2 FTS



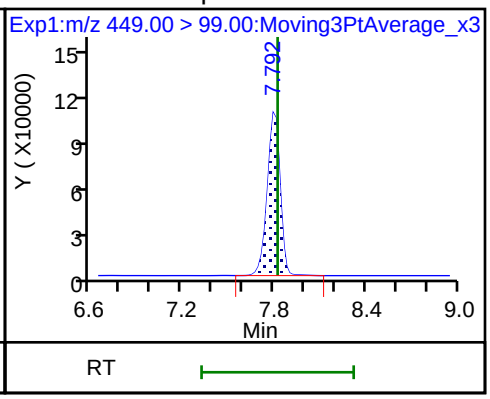
23 6:2 FTS



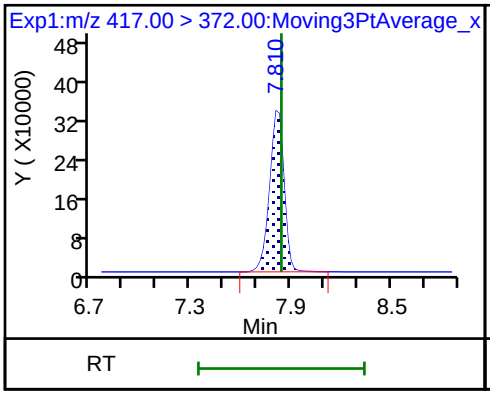
21 Perfluoroheptanesulfonic acid



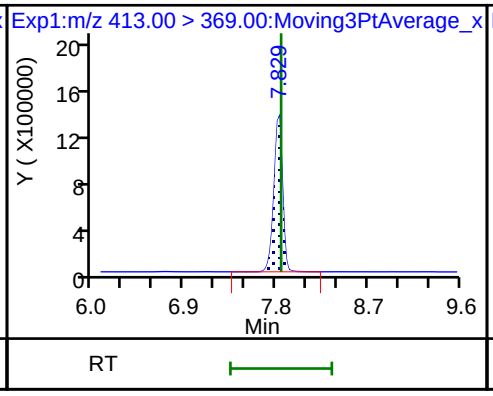
21 Perfluoroheptanesulfonic acid



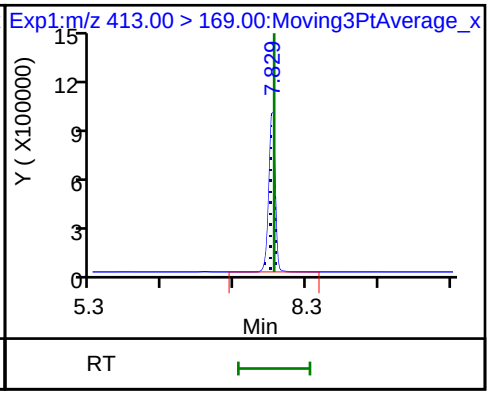
D 25 13C4 PFOA



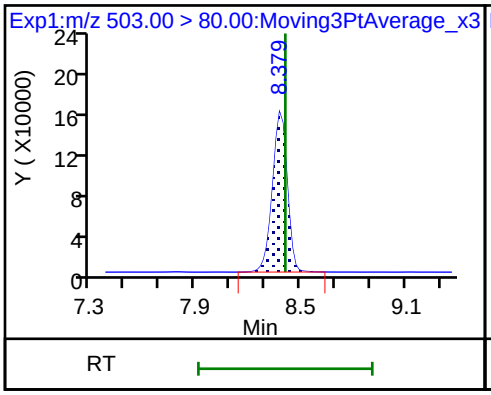
24 Perfluorooctanoic acid



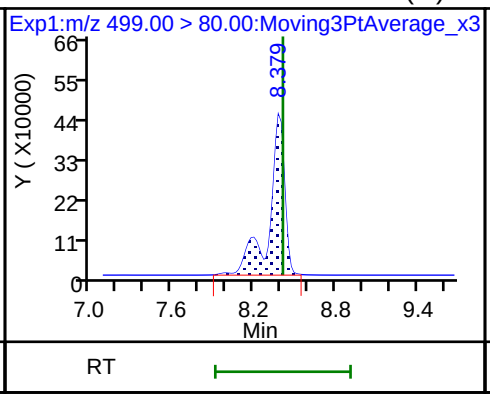
24 Perfluorooctanoic acid



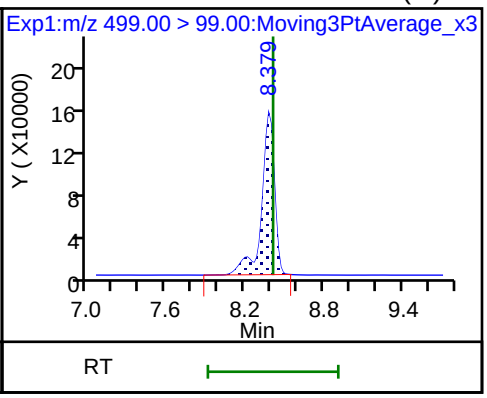
D 26 13C4 PFOS



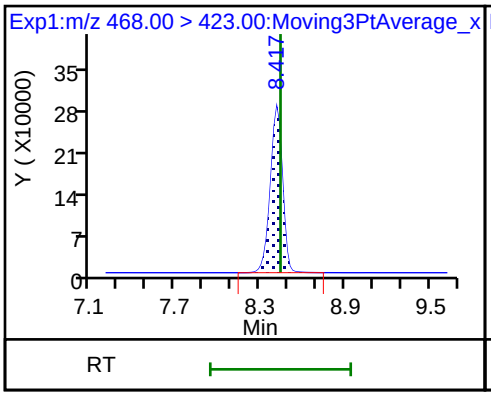
27 Perfluorooctanesulfonic acid (M)



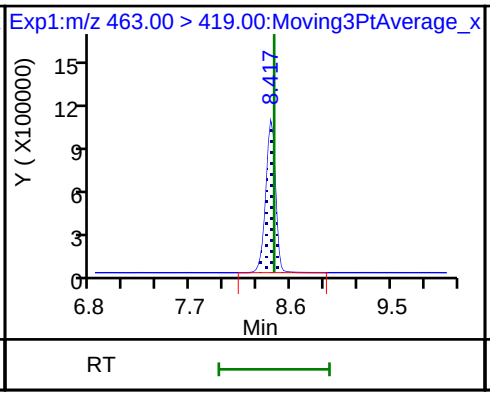
27 Perfluorooctanesulfonic acid (M)



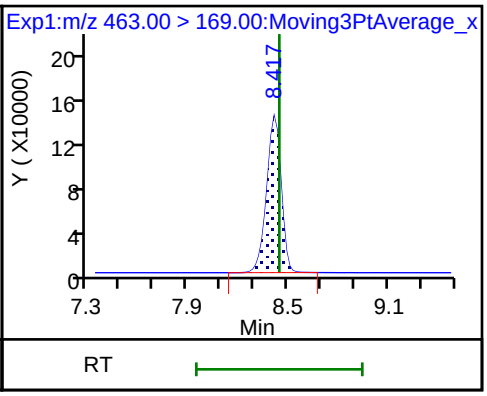
D 28 13C5 PFNA



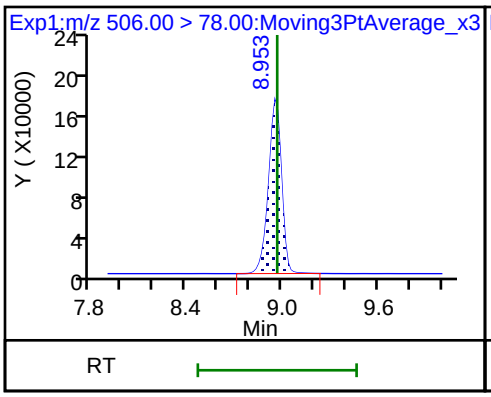
29 Perfluorononanoic acid



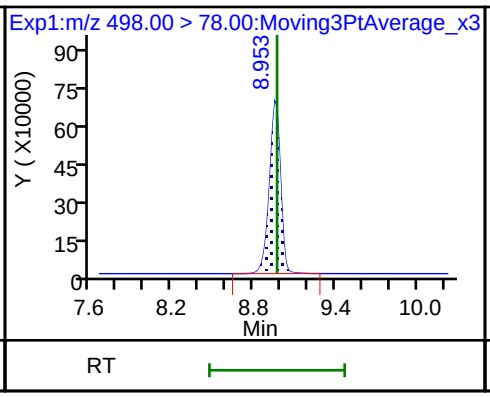
29 Perfluorononanoic acid



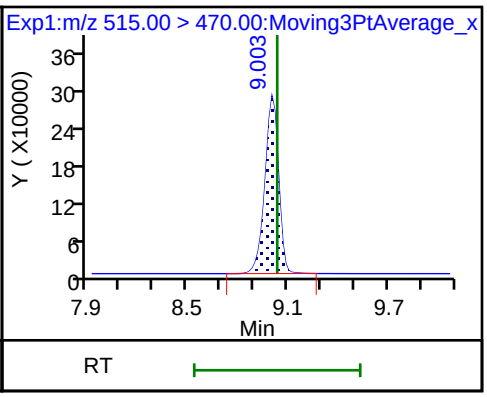
D 30 13C8 FOSA



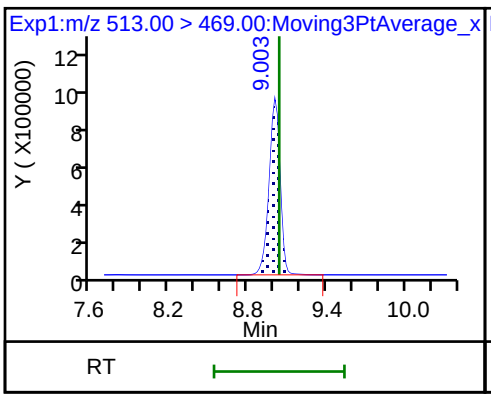
31 Perfluorooctanesulfonamide



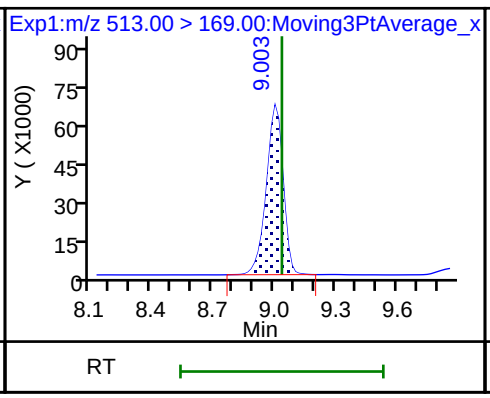
D 33 13C2 PFDA



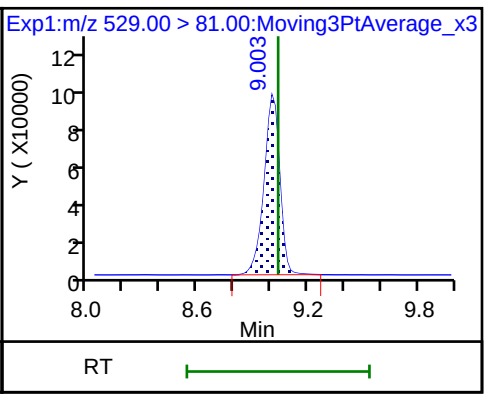
35 Perfluorodecanoic acid



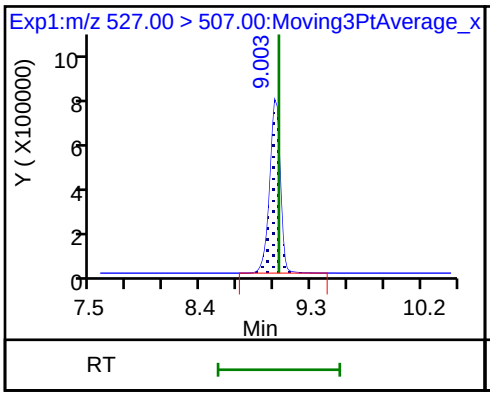
35 Perfluorodecanoic acid



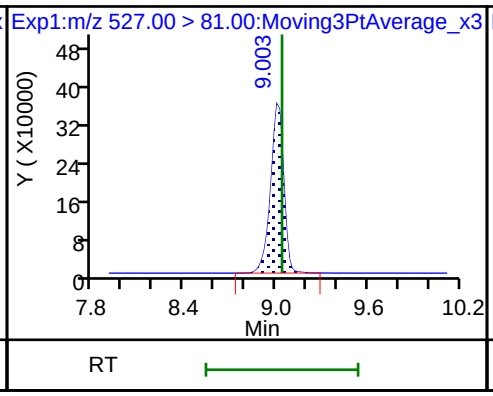
D 34 M2-8:2 FTS



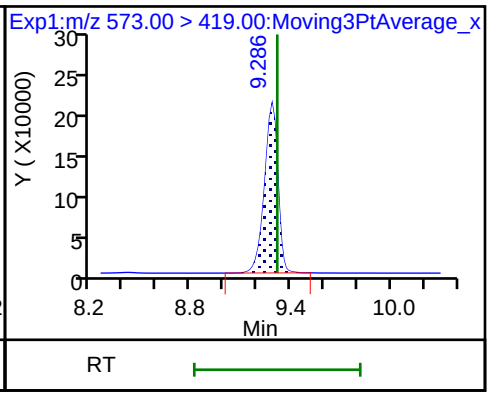
36 8:2 FTS



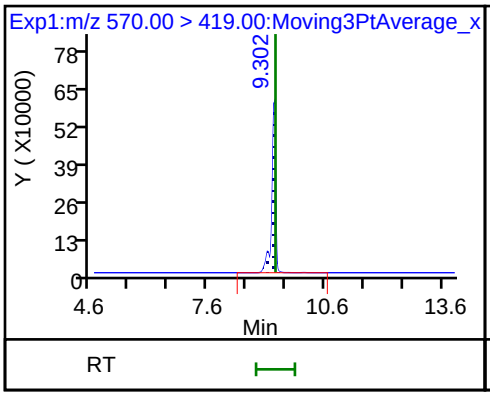
36 8:2 FTS



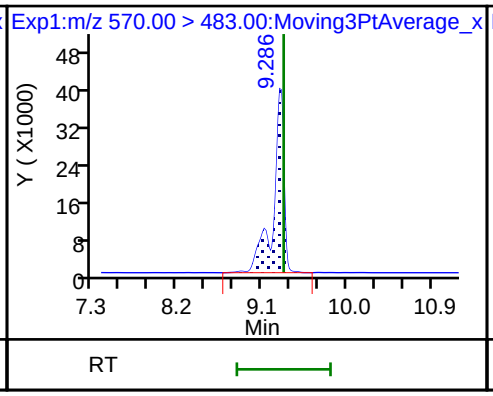
D 37 d3-NMeFOSAA



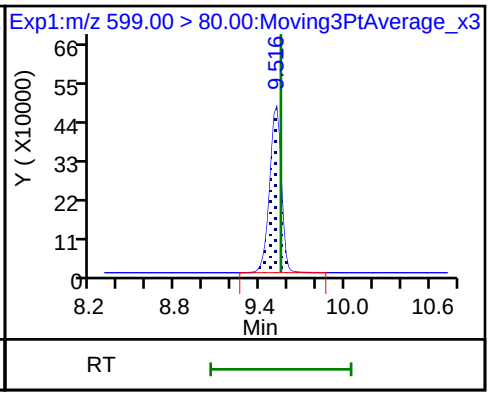
38 NMeFOSAA



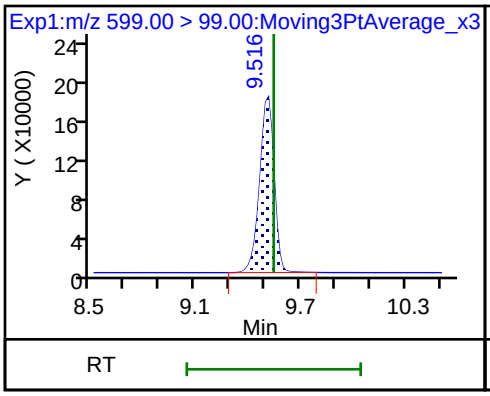
38 NMeFOSAA



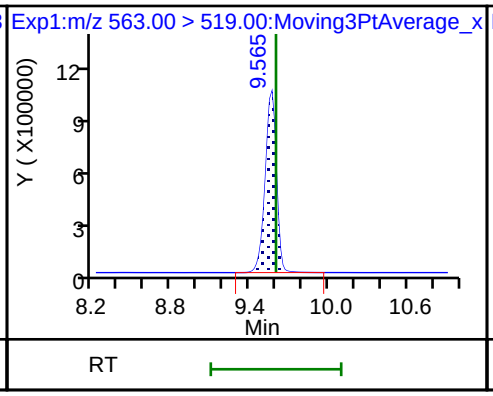
39 Perfluorodecanesulfonic acid



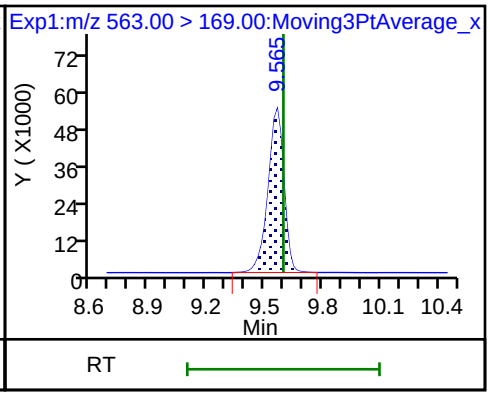
39 Perfluorodecanesulfonic acid



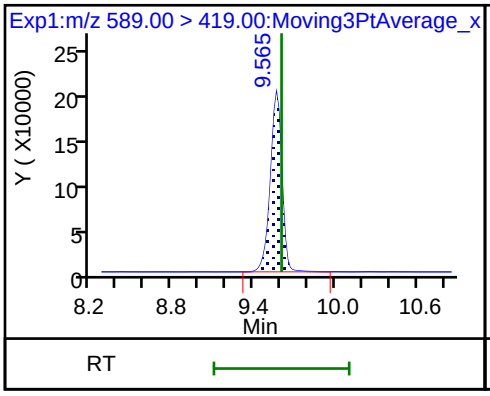
41 Perfluoroundecanoic acid



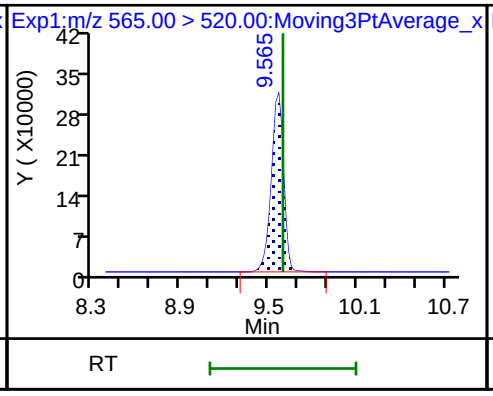
41 Perfluoroundecanoic acid



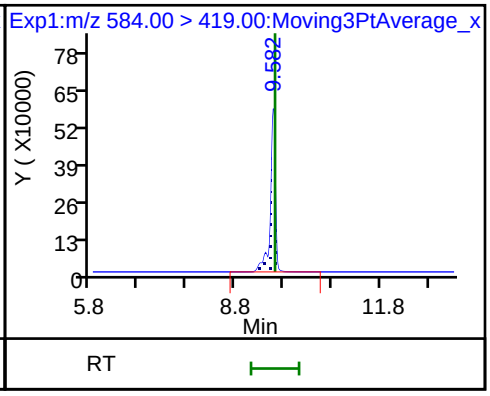
D 40 d5-NEtFOSAA



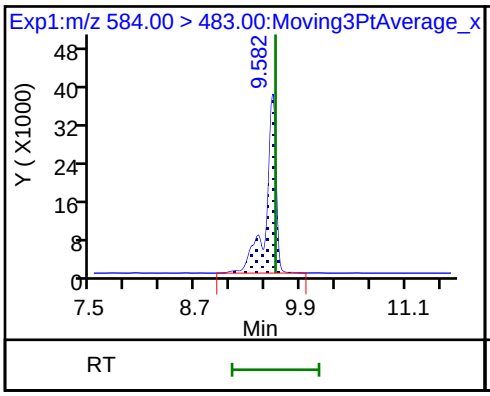
D 42 13C2 PFUnA



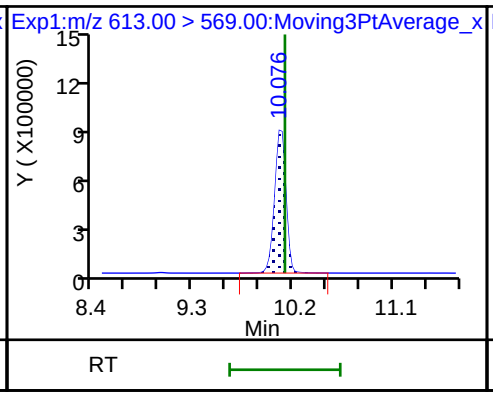
43 NEtFOSA



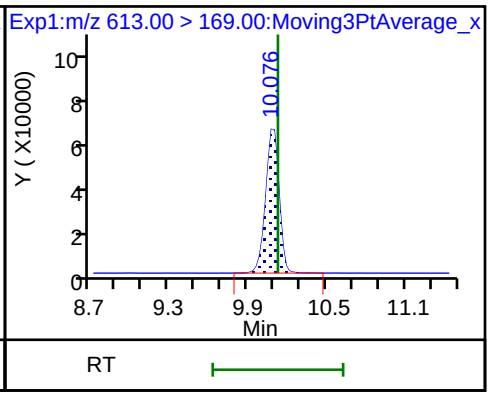
43 NEtFOSA



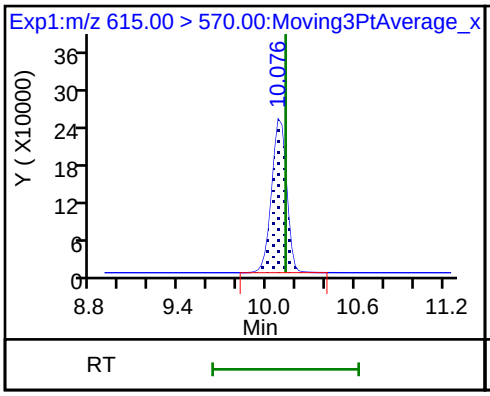
46 Perfluorododecanoic acid



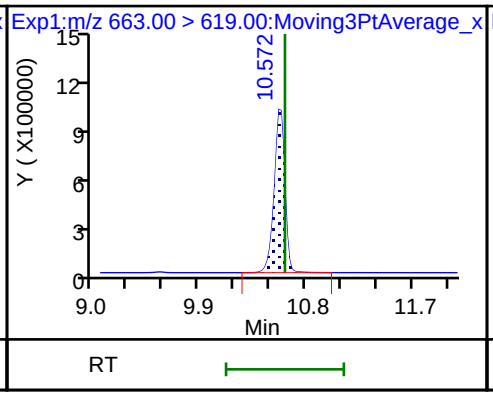
46 Perfluorododecanoic acid



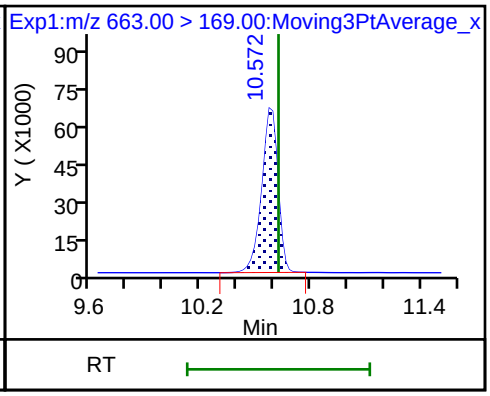
D 45 13C2 PFDoA



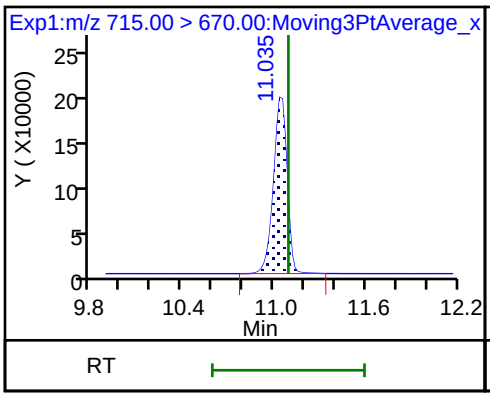
49 Perfluorotridecanoic acid



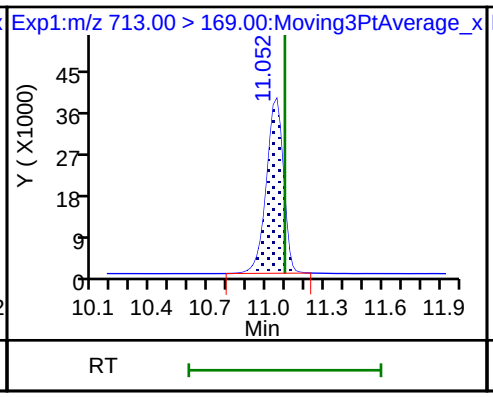
49 Perfluorotridecanoic acid



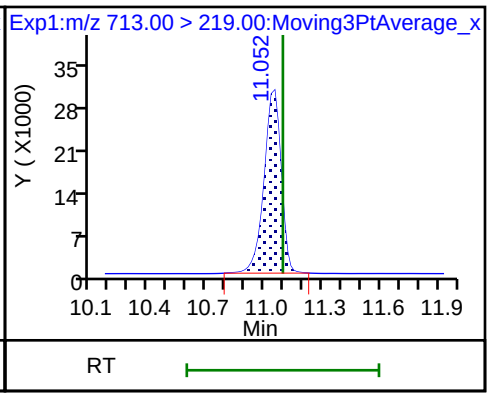
D 51 13C2 PFTeDA



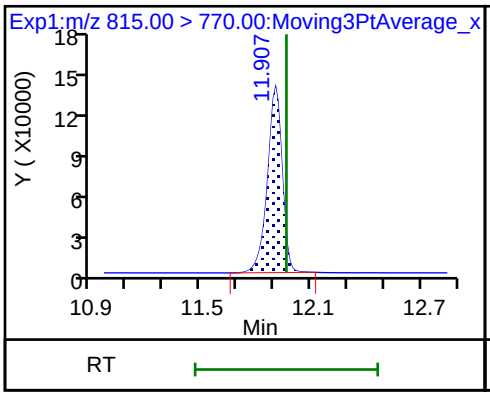
50 Perfluorotetradecanoic acid



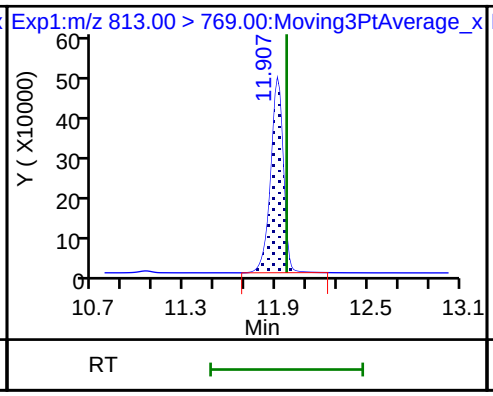
50 Perfluorotetradecanoic acid



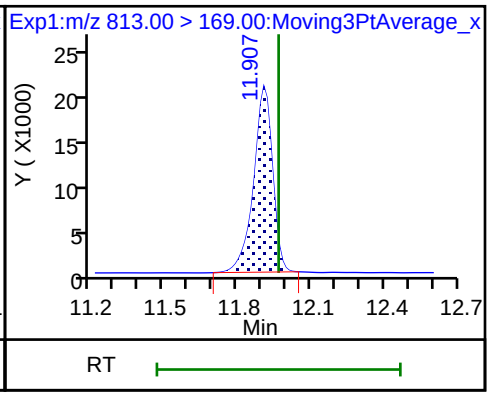
D 52 13C2 PFHxDA



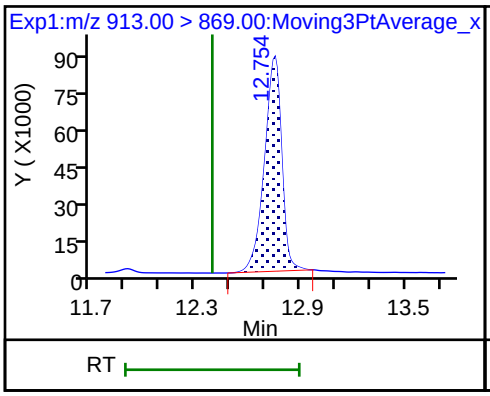
54 Perfluorohexadecanoic acid



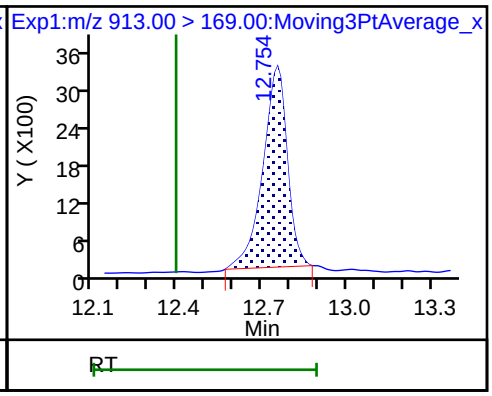
54 Perfluorohexadecanoic acid



53 Perfluorooctadecanoic acid



53 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

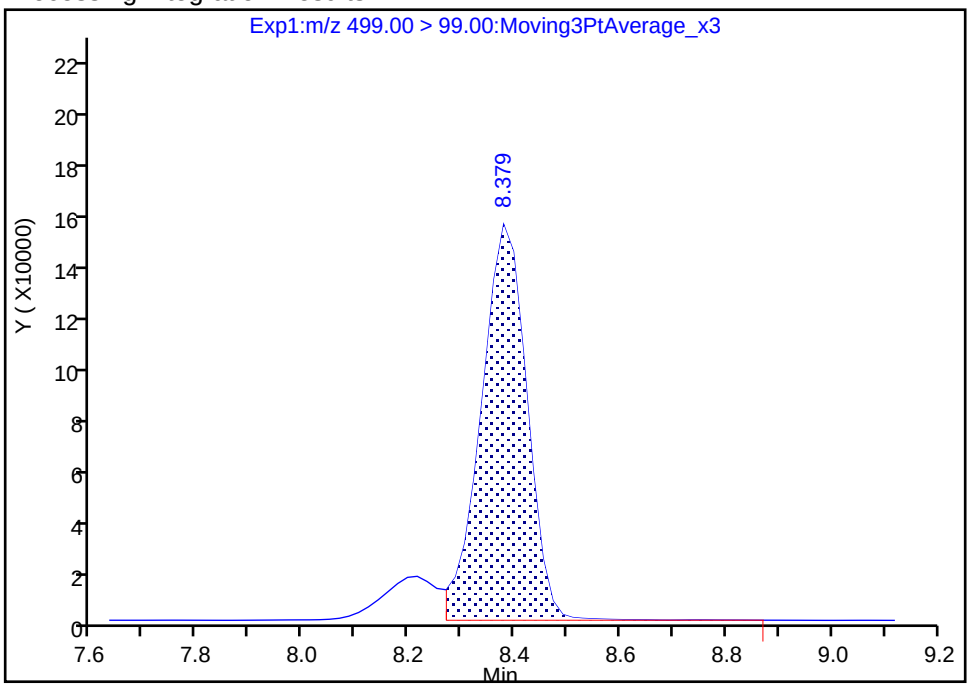
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d
Injection Date: 12-Oct-2020 13:39:40 Instrument ID: A10
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 11 Worklist Smp#: 9
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

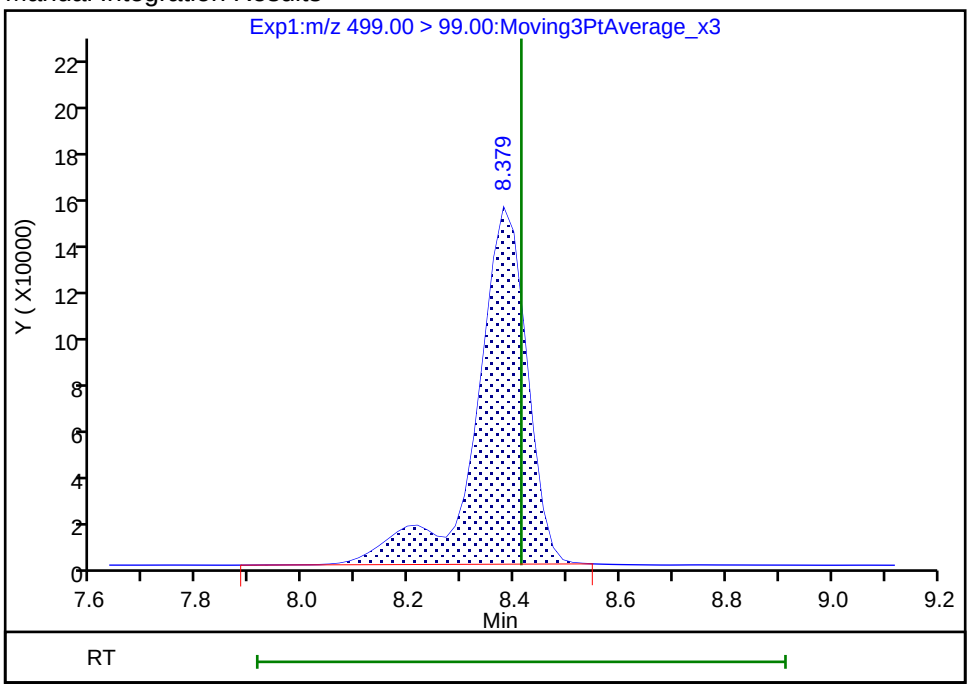
Processing Integration Results

RT: 8.38
Area: 900879
Amount: 0.182528
Amount Units: ng/ml



Manual Integration Results

RT: 8.38
Area: 1009331
Amount: 0.182141
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 14:10:20
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

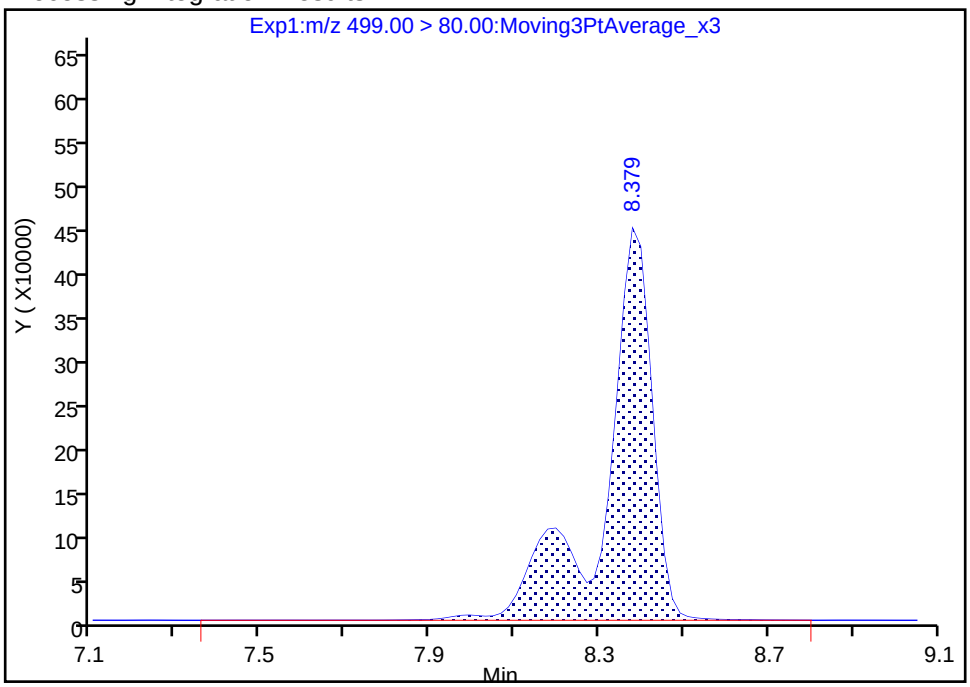
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d
Injection Date: 12-Oct-2020 13:39:40 Instrument ID: A10
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 11 Worklist Smp#: 9
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

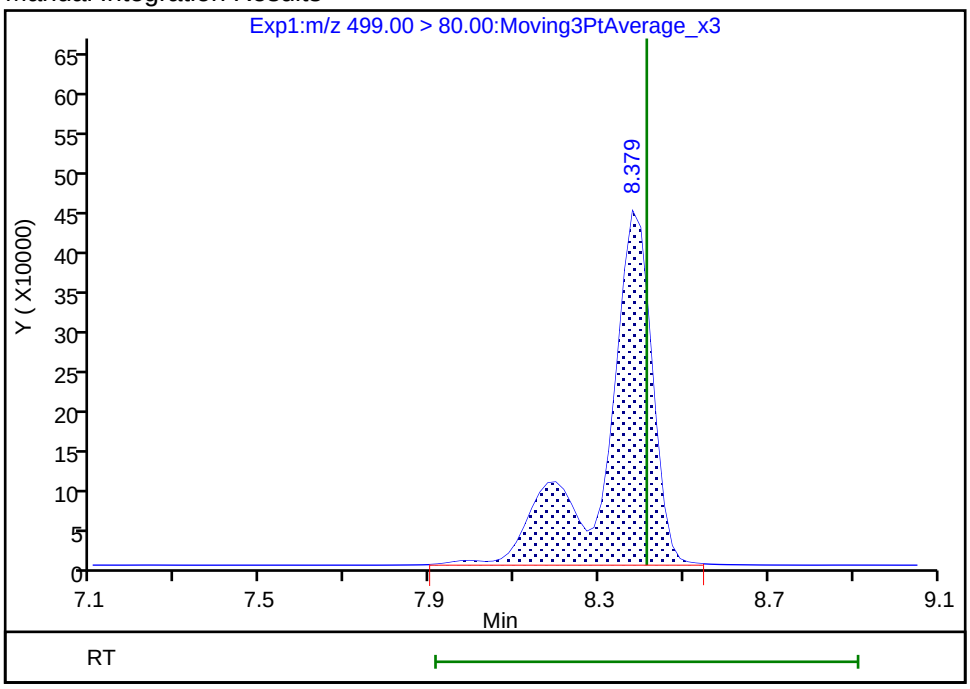
Processing Integration Results

RT: 8.38
Area: 3539923
Amount: 0.182528
Amount Units: ng/ml



Manual Integration Results

RT: 8.38
Area: 3531370
Amount: 0.182141
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 14:10:28
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Lab Sample ID: ICV 320-420930/11 Calibration Date: 10/12/2020 14:16

Instrument ID: A10 Calib Start Date: 10/12/2020 11:30

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 10/12/2020 13:39

Lab File ID: 2020.10.12_A10_DI_ICAL_013.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	AveID	0.8796	0.7733		44.0	50.0	-12.1	40.0
Perfluoropentanoic acid	AveID	1.077	0.8835		41.0	50.0	-18.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9899	0.9112		40.7	44.3	-7.9	50.0
Perfluorohexanoic acid	AveID	0.9282	0.8325		44.8	50.0	-10.3	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.023	0.8370		40.9	50.0	-18.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	0.9621		38.7	45.6	-15.2	40.0
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	AveID	2.482	2.303		44.1	47.5	-7.2	
Perfluoroheptanesulfonic acid	AveID	1.207	1.057		41.6	47.5	-12.4	50.0
Perfluorooctanoic acid (PFOA)	AveID	0.9707	0.8041		41.4	50.0	-17.2	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.024	0.8836		39.9	46.3	-13.7	40.0
Perfluorononanoic acid (PFNA)	AveID	0.8846	0.7295		41.2	50.0	-17.5	40.0
Perfluorooctanesulfonamide	AveID	1.002	0.9643		48.1	50.0	-3.7	40.0
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	AveID	2.219	2.049		44.3	48.0	-7.7	
Perfluorodecanoic acid	AveID	0.8034	0.7294		45.4	50.0	-9.2	40.0
N-methylperfluorooctanesulfonamidoacetic acid	AveID	0.8314	0.8773		52.8	50.0	5.5	
Perfluorodecanesulfonic acid	AveID	0.7467	0.6586		42.6	48.3	-11.8	50.0
Perfluoroundecanoic acid	AveID	0.8817	0.8288		47.0	50.0	-6.0	40.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	0.7896	0.8394		53.2	50.0	6.3	
Perfluorododecanoic acid	AveID	0.8205	0.7565		46.1	50.0	-7.8	40.0
Perfluorotridecanoic acid	AveID	0.8728	0.7421		42.5	50.0	-15.0	50.0
Perfluorotetradecanoic acid	AveID	0.0512	0.0420		41.0	50.0	-17.9	50.0
13C4 PFBA	Ave	39652308	43838100		55.3	50.0	10.6	50.0
13C5 PFPeA	Ave	33957935	38634640		56.9	50.0	13.8	50.0
13C3 PFBS	Ave	42025548	45321978		50.1	46.5	7.8	50.0
13C2 PFHxA	Ave	36170563	39500240		54.6	50.0	9.2	50.0
13C4 PFHpA	Ave	36625688	39687620		54.2	50.0	8.4	50.0
18O2 PFHxS	Ave	25876448	27025624		49.4	47.3	4.4	50.0
M2-6:2 FTS	Ave	12964621	12865432		47.1	47.5	-0.8	
13C4 PFOA	Ave	42598528	47651080		55.9	50.0	11.9	50.0
13C4 PFOS	Ave	18426344	20073787		52.1	47.8	8.9	50.0
13C5 PFNA	Ave	35838060	39694160		55.4	50.0	10.8	50.0
13C8 FOSA	Ave	21925450	22544500		51.4	50.0	2.8	50.0
13C2 PFDA	Ave	35324108	37245060		52.7	50.0	5.4	50.0
M2-8:2 FTS	Ave	13658455	13295324		46.6	47.9	-2.7	
13C2 PFUnA	Ave	36408055	38042400		52.2	50.0	4.5	50.0
13C2 PFDoA	Ave	36645348	42054340		57.4	50.0	14.8	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

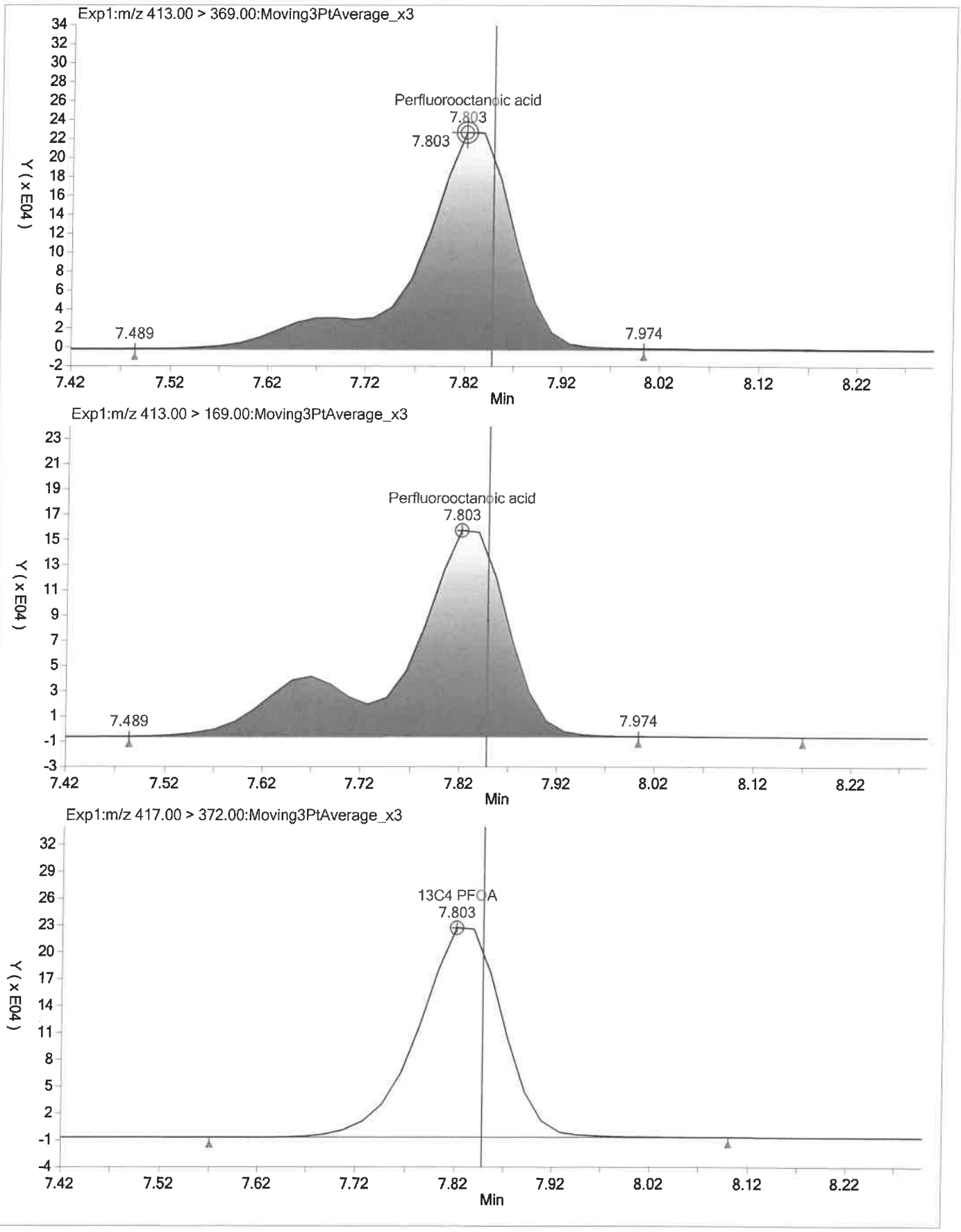
Lab Sample ID: ICV 320-420930/11 Calibration Date: 10/12/2020 14:16

Instrument ID: A10 Calib Start Date: 10/12/2020 11:30

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 10/12/2020 13:39

Lab File ID: 2020.10.12_A10_DI_ICAL_013.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFTeDA	Ave	24179970	21492100		44.4	50.0	-11.1	50.0
13C2 PFHxDA	Ave	15022995	9509420		31.6	50.0	-36.7	50.0


Exp1:m/z 413.00 > 369.00:Moving3PtAverage_x3
Perfluorooctanoic acid
7.803
7.803
7.489
7.974
Y (x E04)
Min
Exp1:m/z 413.00 > 169.00:Moving3PtAverage_x3
Perfluorooctanoic acid
7.803
7.489
7.974
Y (x E04)
Min
Exp1:m/z 417.00 > 372.00:Moving3PtAverage_x3
13C4 PFOA
7.803
Y (x E04)
Min

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_013.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 12-Oct-2020 14:16:34 ALS Bottle#: 13 Worklist Smp#: 11
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist:

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:26:13 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: koucharis Date: 12-Oct-2020 15:04:11
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.698	5.621	0.077		2191905	0.0553		111	17884	
1 Perfluorobutanoic acid										
169	5.719	5.621	0.098	1.004	1695090	0.0440			302	
D 4 13C5 PFPeA										
223	6.250	6.230	0.020		1931732	0.0569		114	20938	
5 Perfluoropentanoic acid										
219	6.250	6.230	0.020	1.000	1706756	0.0410			281	
D 3 13C3 PFBS										
80	6.293	6.293	0.0		2107472	0.0501		108	7030	
6 Perfluorobutanesulfonic acid										
80	6.293	6.293	0.0	1.000	1827448	0.0407	Target=1.50		3865	
99	6.293	6.293	0.0	1.000	1251057		1.46(0.75-2.26)		1335	
D 7 M2-4:2 FTS										
81	6.688	6.665	0.023		543145	NC			1088	
8 4:2 FTS										
307	6.688	6.665	0.023	1.000	1234457	NC	Target=2.45		15144	
81	6.688	6.665	0.023	1.000	466019		2.65(1.22-3.67)		1005	
D 9 13C2 PFHxA										
270	6.734	6.734	0.0		1975012	0.0546		109	21300	
10 Perfluorohexanoic acid										
269	6.734	6.734	0.0	1.000	1644227	0.0448	Target=17.92		837	
119	6.734	6.734	0.0	1.000	87736		18.74(8.96-26.88)		437	
11 Perfluoropentanesulfonic acid										
80	6.734	6.734	0.0	0.930	1405572	NC	Target=1.47		2431	
99	6.734	6.734	0.0	0.930	953637		1.47(0.74-2.21)		1627	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
287	6.876	6.876	0.0		113841	NC			415	
D 15 18O2 PFHxS										
84	7.244	7.237	0.007		1278312	0.0494		104	13266	
16 Perfluorohexanesulfonic acid										
80	7.244	7.237	0.007	1.000	1185651	0.0387	Target=5.60		2351	
99	7.244	7.237	0.007	1.000	215481		5.50(2.80-8.40)		700	
D 17 13C4 PFHpA										
322	7.244	7.257	-0.013		1984381	0.0542		108	22850	
18 Perfluoroheptanoic acid										
319	7.244	7.257	-0.013	1.000	1660863	0.0409	Target=8.55		620	
169	7.244	7.257	-0.013	1.000	201551		8.24(4.27-12.82)		2478	
D 22 M2-6:2 FTS										
81	7.787	7.792	-0.005		611108	0.0471		99.2	1516	
23 6:2 FTS										
407	7.787	7.792	-0.005	1.000	1407674	0.0441	Target=2.55		9124	
81	7.787	7.792	-0.005	1.000	541703		2.60(1.27-3.82)		1258	
21 Perfluoroheptanesulfonic acid										
80	7.803	7.792	0.011	0.932	1008085	0.0416	Target=6.95		2717	
99	7.803	7.792	0.011	0.932	146776		6.87(3.48-10.43)		691	
D 25 13C4 PFOA										
372	7.820	7.810	0.010		2382554	0.0559		112	23239	
24 Perfluorooctanoic acid										
369	7.820	7.829	-0.009	1.000	1915819	0.0414	Target=1.41		308	
169	7.820	7.829	-0.009	1.000	1288019		1.49(0.71-2.12)		5602	
27 Perfluorooctanesulfonic acid										M
80	8.376	8.379	-0.003	1.000	820821	0.0399	Target=3.36		2660	M
99	8.376	8.379	-0.003	1.000	235666		3.48(1.68-5.04)		888	M
D 26 13C4 PFOS										
80	8.376	8.379	-0.003		959527	0.0521		109	3191	
D 28 13C5 PFNA										
423	8.410	8.417	-0.007		1984708	0.0554		111	12481	
29 Perfluorononanoic acid										
419	8.410	8.417	-0.007	1.000	1447865	0.0412	Target=6.88		675	
169	8.410	8.417	-0.007	1.000	221289		6.54(3.44-10.32)		2463	
D 30 13C8 FOSA										
78	8.957	8.953	0.004		1127225	0.0514		103	8132	
31 Perfluorooctanesulfonamide										
78	8.957	8.953	0.004	1.000	1086976	0.0481			5151	
32 Perfluorononanesulfonic acid										
80	8.957	8.970	-0.013	1.069	796243	NC	Target=6.23		6004	
99	8.957	8.970	-0.013	1.069	132870		5.99(3.11-9.34)		622	
D 33 13C2 PFDA										
470	9.002	9.003	-0.001		1862253	0.0527		105	16330	
35 Perfluorodecanoic acid										
469	9.002	9.003	-0.001	1.000	1358369	0.0454	Target=14.44		898	
169	9.002	9.003	-0.001	1.000	100225		13.55(7.22-21.66)		1317	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 34 M2-8:2 FTS										
81	9.002	9.003	-0.001		636846	0.0466		97.3	2919	
36 8:2 FTS										
507	9.002	9.003	-0.001	1.000	1307761	0.0443	Target=2.16		6350	
81	9.002	9.003	-0.001	1.000	583632		2.24(1.08-3.24)		2116	
D 37 d3-NMeFOSAA										
419	9.277	9.286	-0.009		1227148	0.0497		99.4	5059	
38 NMeFOSAA										
419	9.292	9.302	-0.010	1.002	1076563	0.0528	Target=13.31		3741	
483	9.292	9.302	-0.010	1.002	66817		16.11(6.65-19.96)		1222	
39 Perfluorodecanesulfonic acid										
80	9.497	9.516	-0.019	1.134	637916	0.0426	Target=2.51		4533	
99	9.497	9.516	-0.019	1.134	257327		2.48(1.26-3.77)		2523	
D 42 13C2 PFUnA										
520	9.545	9.565	-0.020		1902120	0.0522		104	17268	
41 Perfluoroundecanoic acid										
519	9.545	9.565	-0.020	1.000	1576397	0.0470	Target=19.91		1044	
169	9.545	9.565	-0.020	1.000	74589		21.13(9.95-29.86)		937	
D 40 d5-NEtFOSAA										
419	9.562	9.565	-0.003		1457403	0.0528		106	5827	
43 NEtFOSA										
419	9.578	9.582	-0.004	1.002	1223360	0.0532	Target=13.66		14306	
483	9.578	9.582	-0.004	1.002	80705		15.16(6.83-20.48)		880	
46 Perfluorododecanoic acid										
569	10.079	10.076	0.003	1.000	1590697	0.0461	Target=12.99		558	
169	10.079	10.076	0.003	1.000	105875		15.02(6.50-19.49)		1296	
D 45 13C2 PFDoA										
570	10.079	10.076	0.003		2102717	0.0574		115	21201	
49 Perfluorotridecanoic acid										
619	10.578	10.572	0.006	1.050	1560388	0.0425	Target=16.38		420	
169	10.578	10.572	0.006	1.050	100675		15.50(8.19-24.57)		1633	
D 51 13C2 PFTeDA										
670	11.028	11.035	-0.007		1074605	0.0444		88.9	8656	
50 Perfluorotetradecanoic acid										
169	11.028	11.052	-0.024	1.000	45170	0.0410	Target=1.23		939	
219	11.028	11.052	-0.024	1.000	39058		1.16(0.62-1.85)		1132	
D 52 13C2 PFHxDA										
770	11.885	11.907	-0.022		475471	0.0316		63.3	3608	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFCIC_LLICV_00010 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:26:13 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_013.d

Injection Date: 12-Oct-2020 14:16:34 Instrument ID: A10

Lims ID: ICV

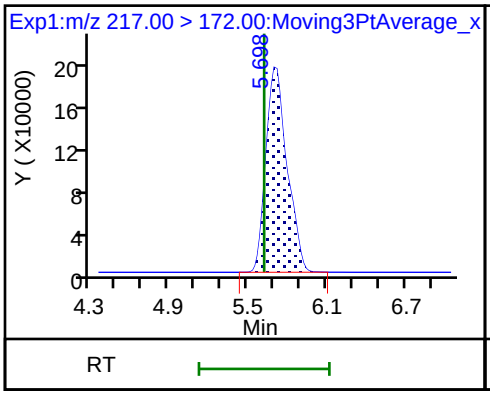
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 13 Worklist Smp#: 11

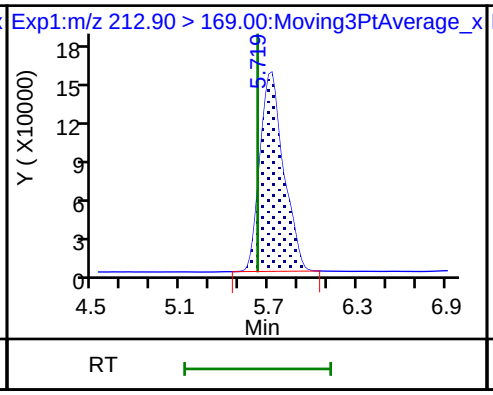
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

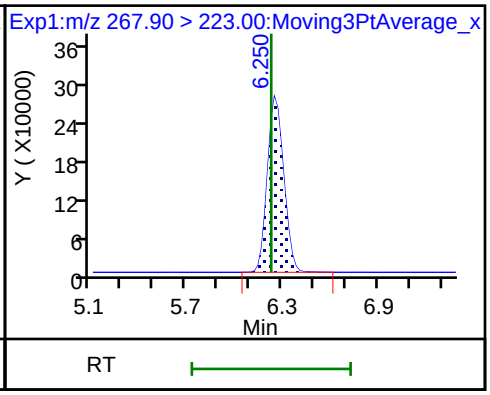
D 2 13C4 PFBA



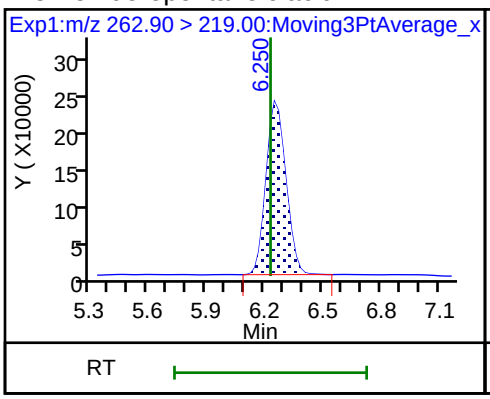
1 Perfluorobutanoic acid



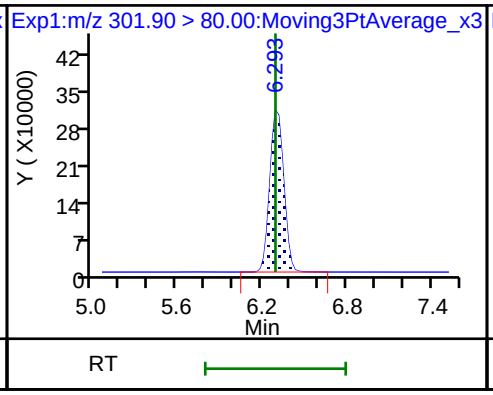
D 4 13C5 PFPeA



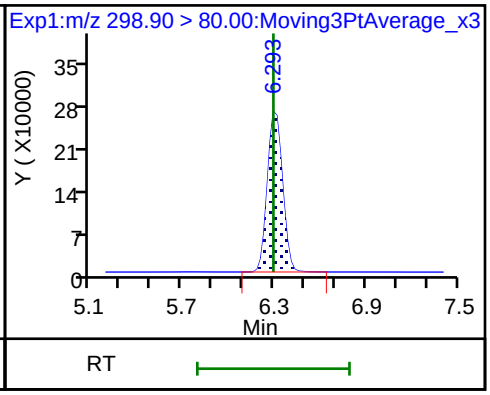
5 Perfluoropentanoic acid



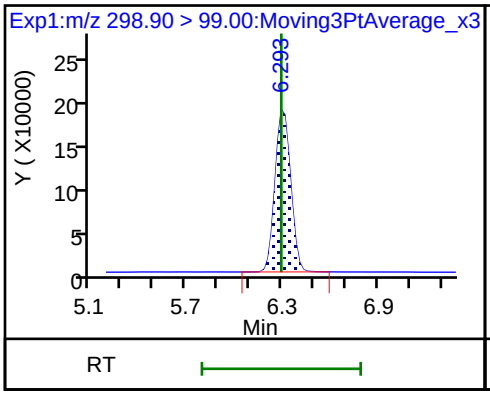
D 3 13C3 PFBS



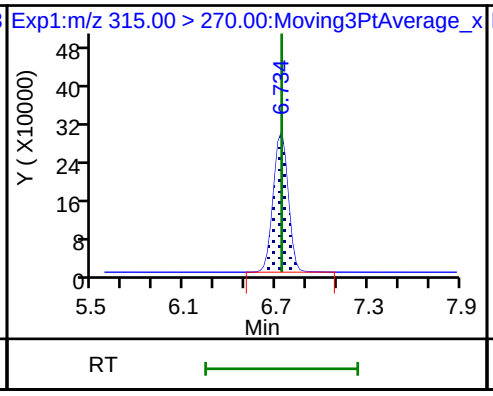
6 Perfluorobutanesulfonic acid



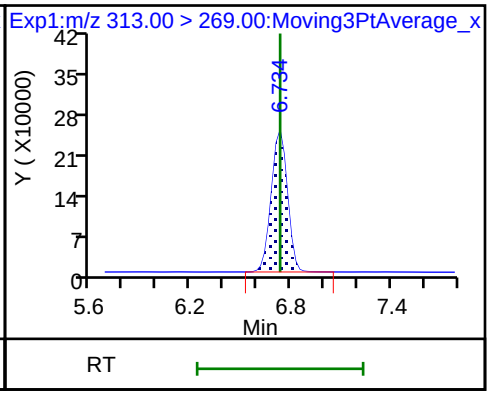
6 Perfluorobutanesulfonic acid



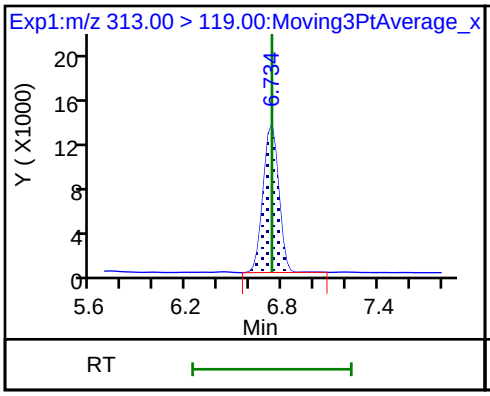
D 9 13C2 PFHxA



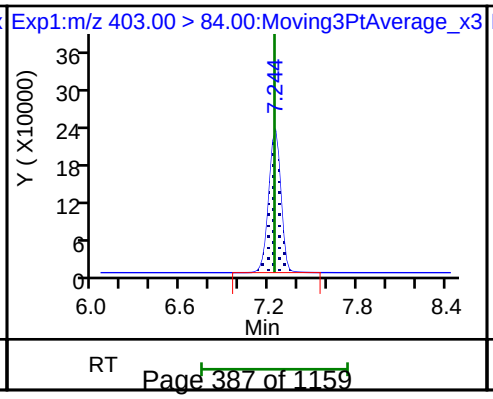
10 Perfluorohexanoic acid



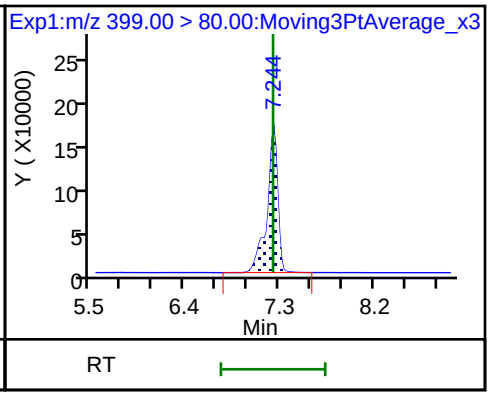
10 Perfluorohexanoic acid



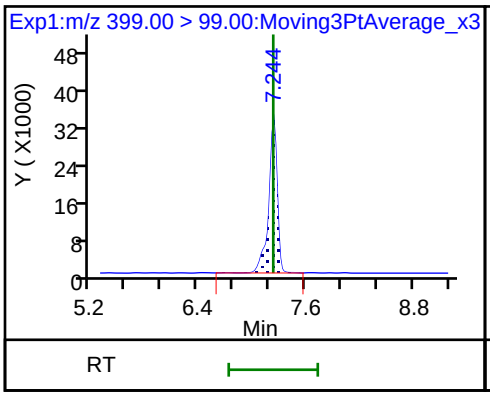
D 15 18O2 PFHxS



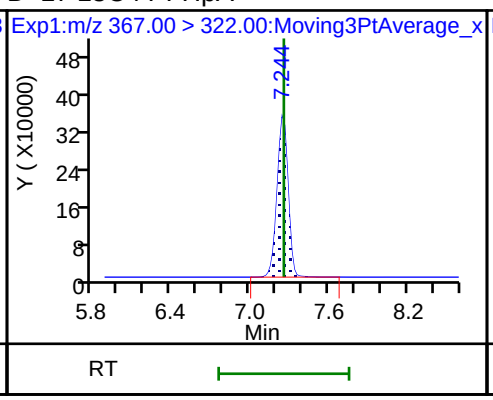
16 Perfluorohexanesulfonic acid



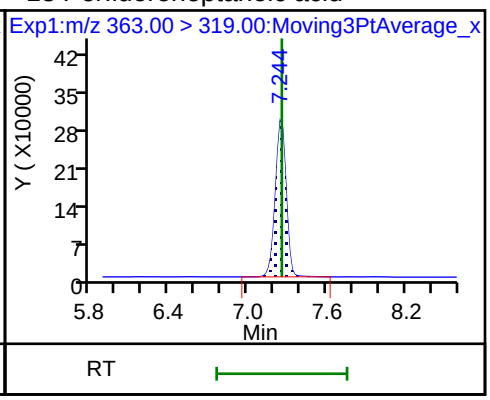
16 Perfluorohexanesulfonic acid



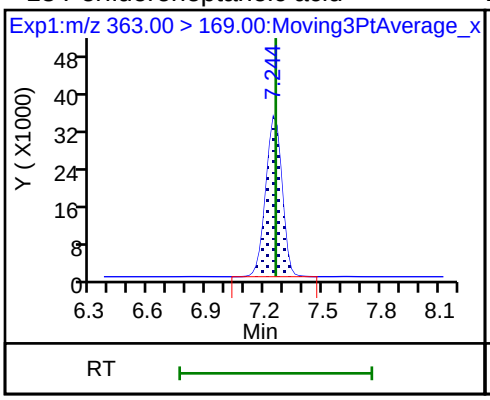
D 17 13C4 PFHpA



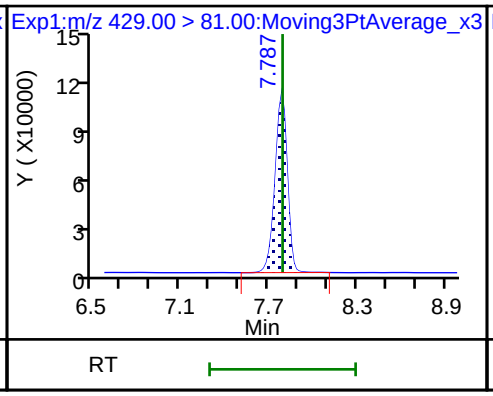
18 Perfluoroheptanoic acid



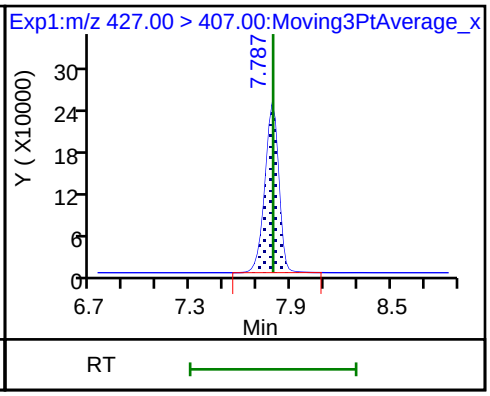
18 Perfluoroheptanoic acid



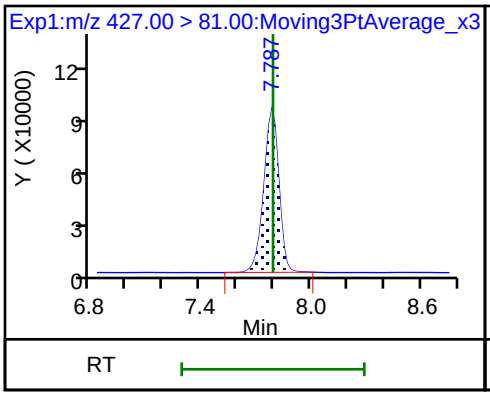
D 22 M2-6:2 FTS



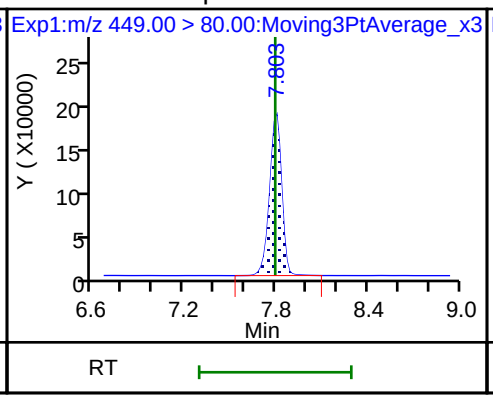
23 6:2 FTS



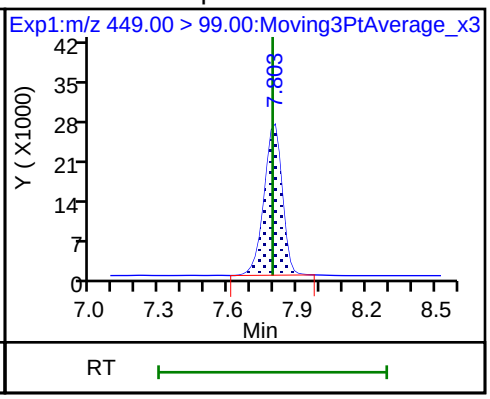
23 6:2 FTS



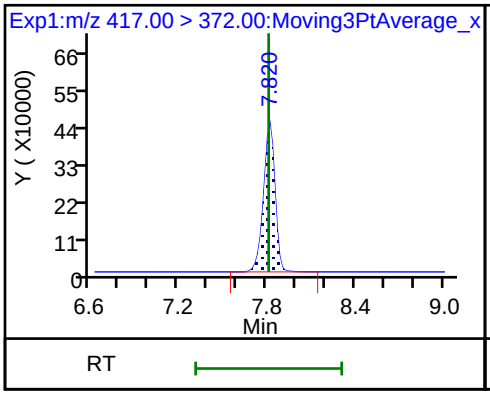
21 Perfluoroheptanesulfonic acid



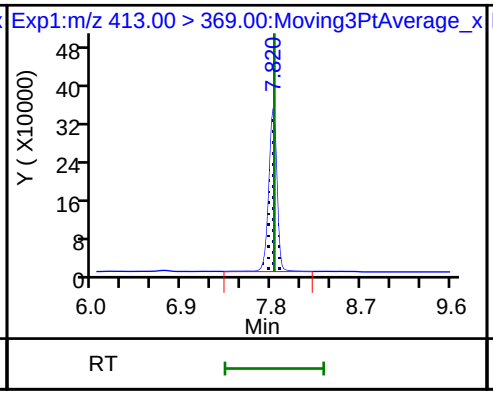
21 Perfluoroheptanesulfonic acid



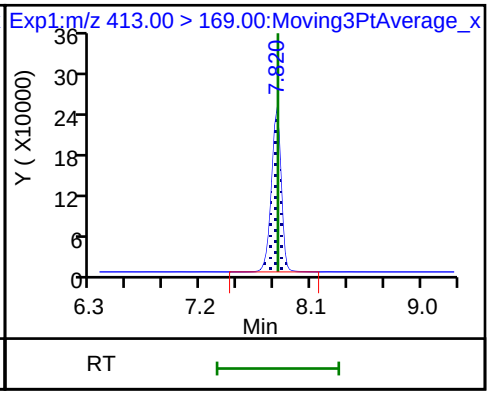
D 25 13C4 PFOA



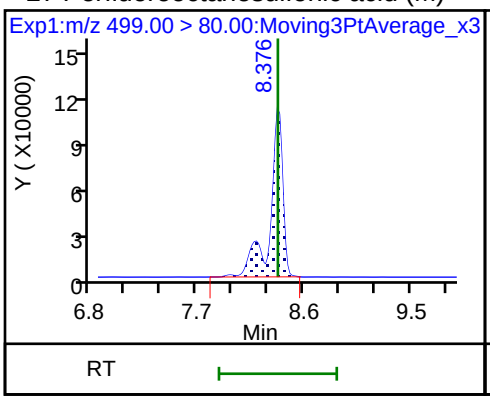
24 Perfluorooctanoic acid



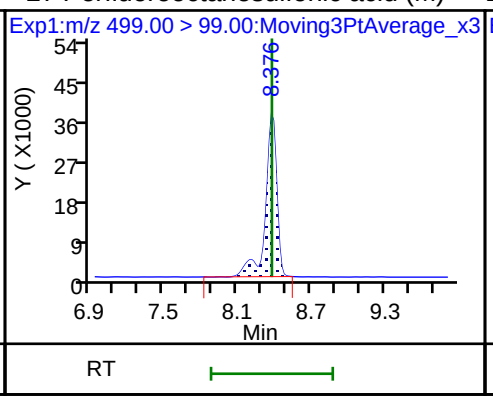
24 Perfluorooctanoic acid



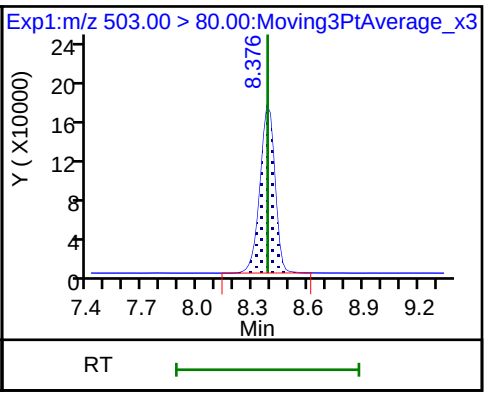
27 Perfluorooctanesulfonic acid (M)



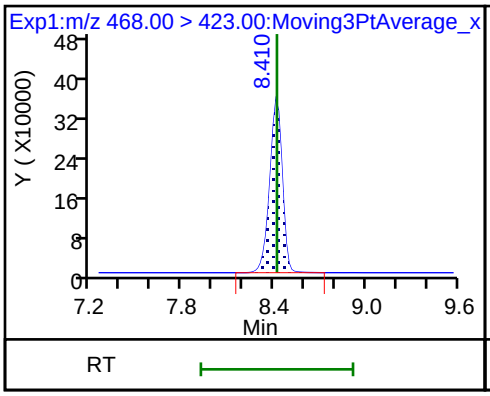
27 Perfluorooctanesulfonic acid (M)



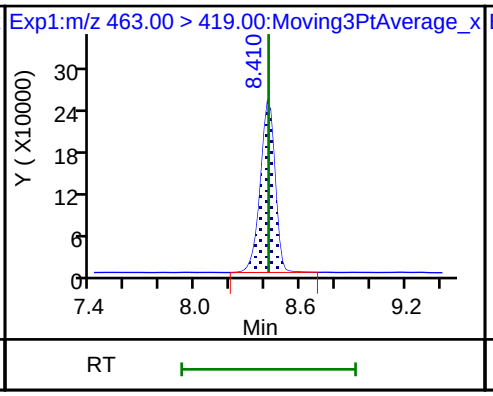
D 26 13C4 PFOS



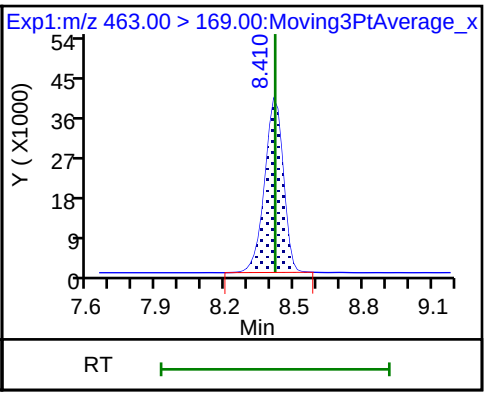
D 28 13C5 PFNA



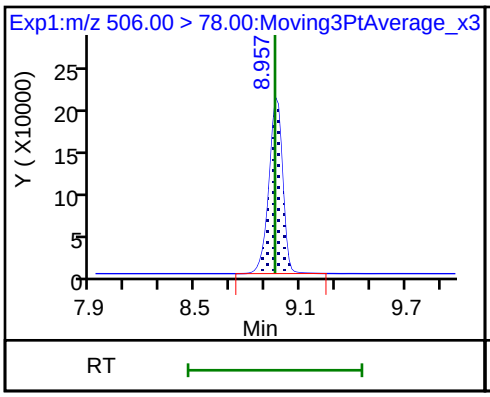
29 Perfluorononanoic acid



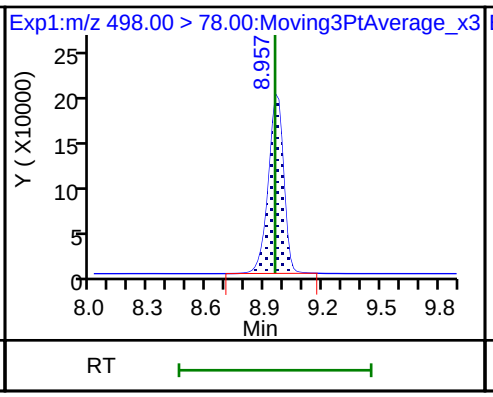
29 Perfluorononanoic acid



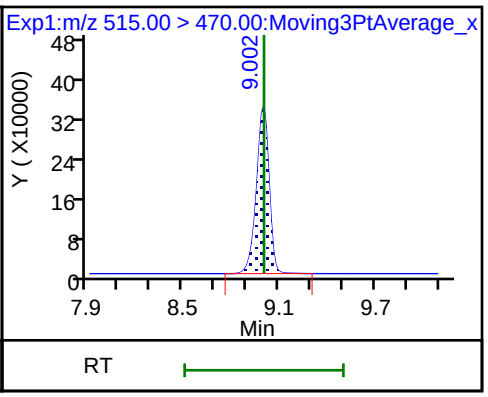
D 30 13C8 FOSA



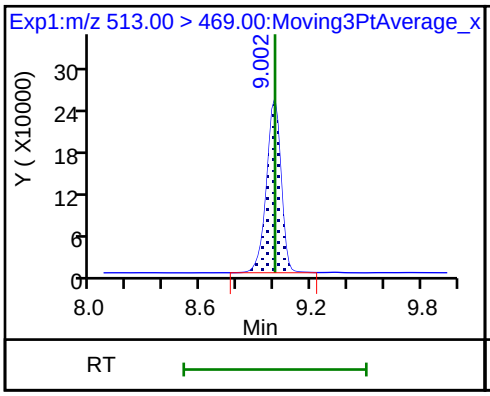
31 Perfluorooctanesulfonamide



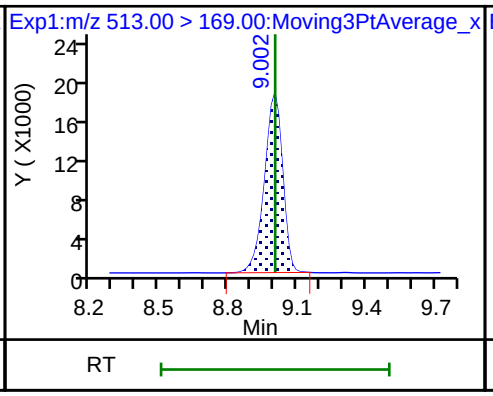
D 33 13C2 PFDA



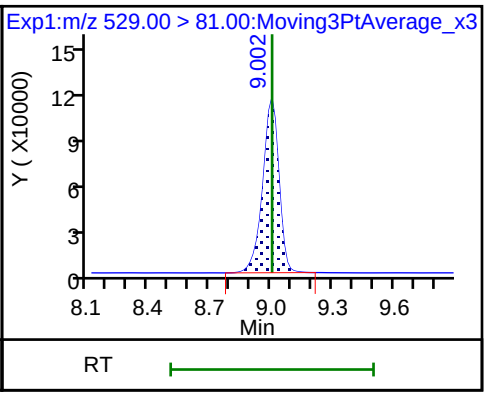
35 Perfluorodecanoic acid



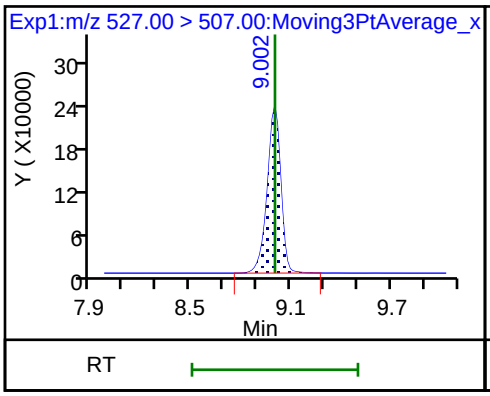
35 Perfluorodecanoic acid



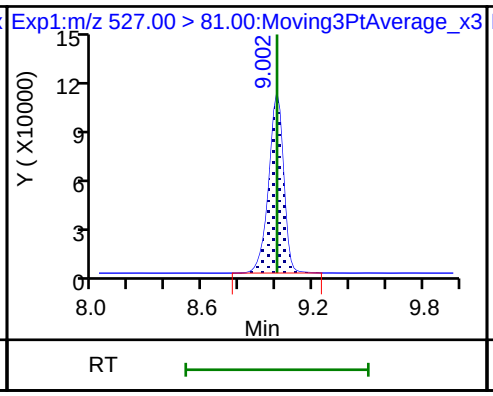
D 34 M2-8:2 FTS



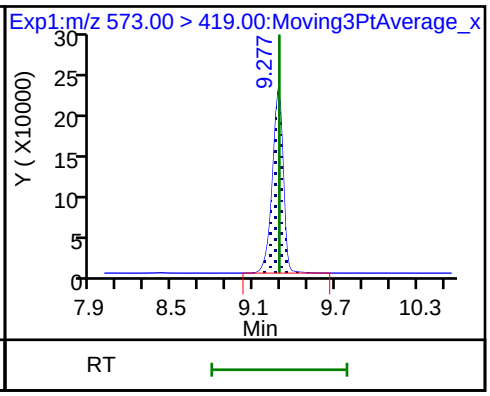
36 8:2 FTS



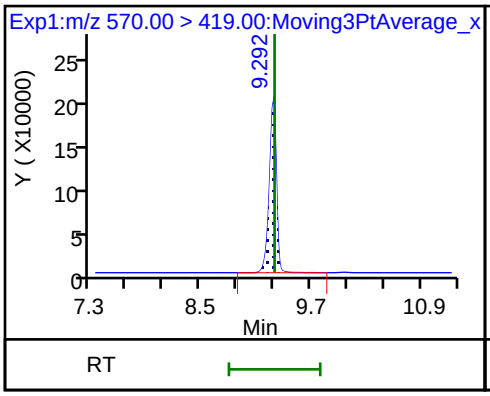
36 8:2 FTS



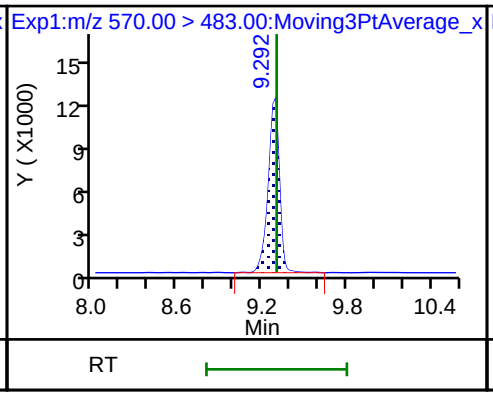
D 37 d3-NMeFOSAA



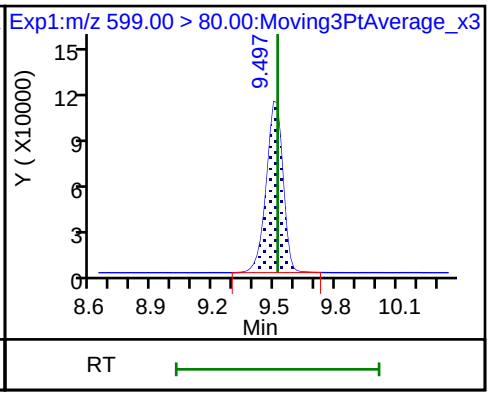
38 NMeFOSAA



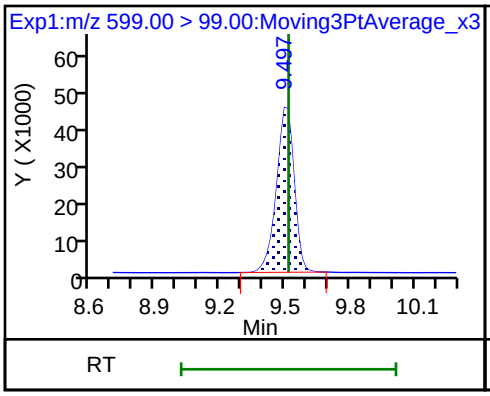
38 NMeFOSAA



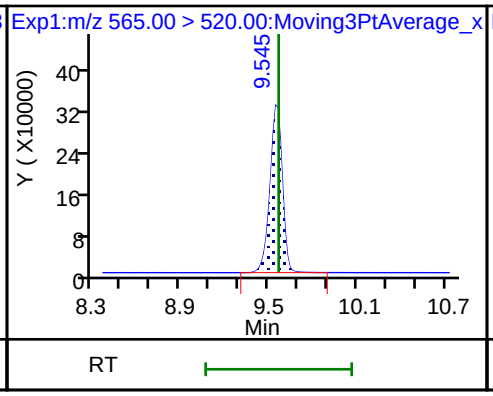
39 Perfluorodecanesulfonic acid



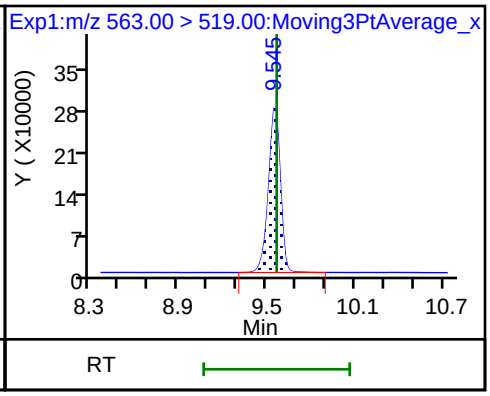
39 Perfluorodecanesulfonic acid



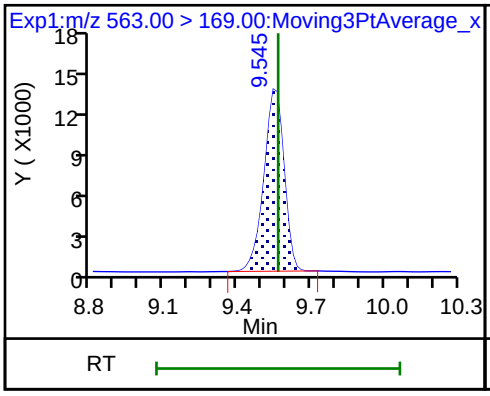
D 42 13C2 PFUnA



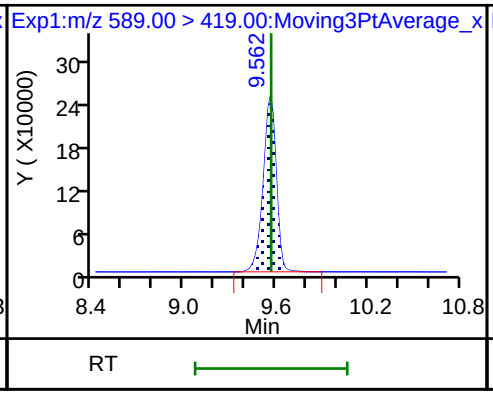
41 Perfluoroundecanoic acid



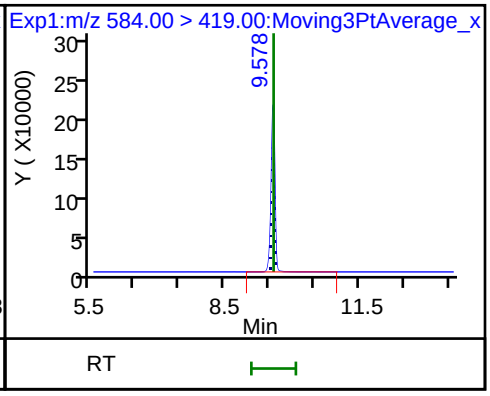
41 Perfluoroundecanoic acid



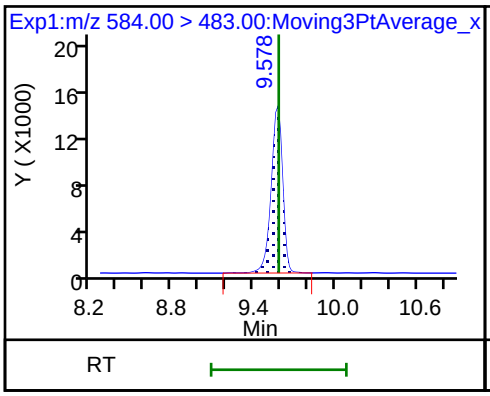
D 40 d5-NEtFOSAA



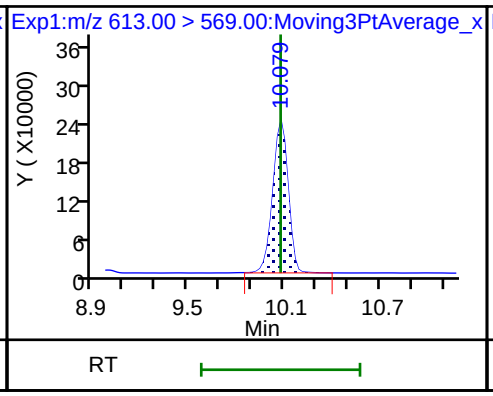
43 NEtFOSA



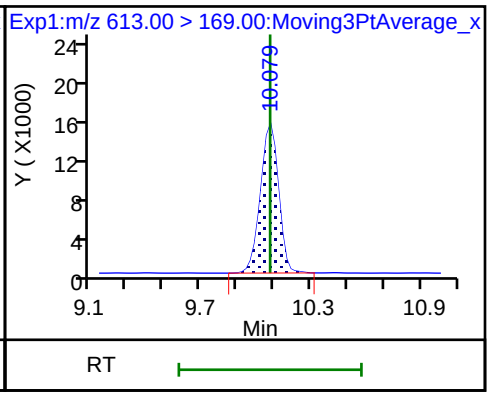
43 NEtFOSA



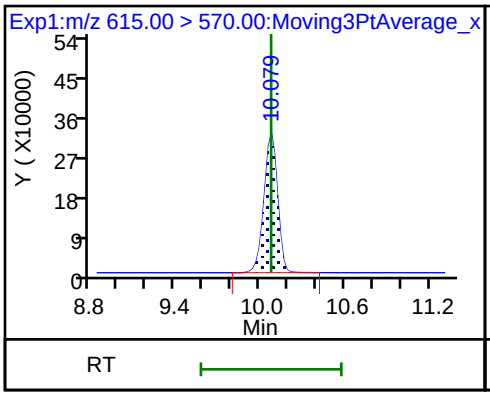
46 Perfluorododecanoic acid



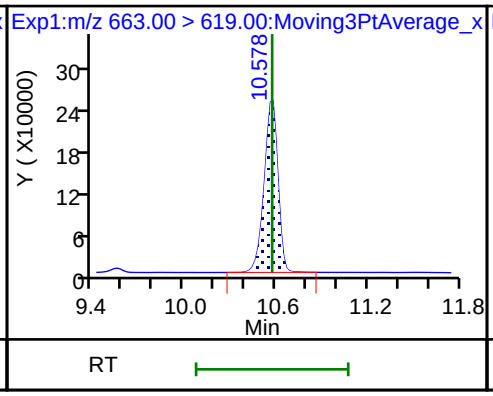
46 Perfluorododecanoic acid



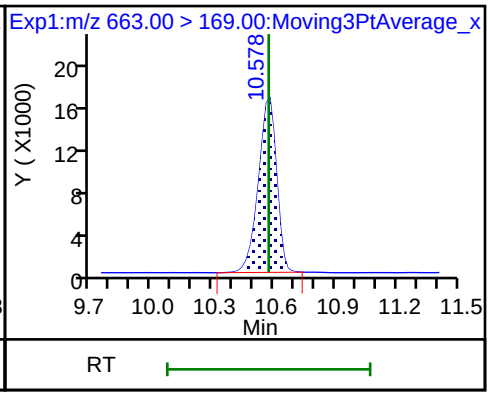
D 45 13C2 PFDoA



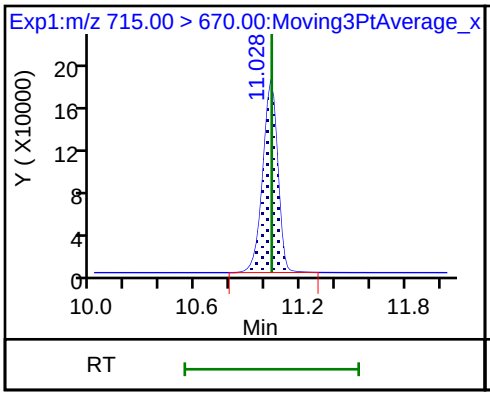
49 Perfluorotridecanoic acid



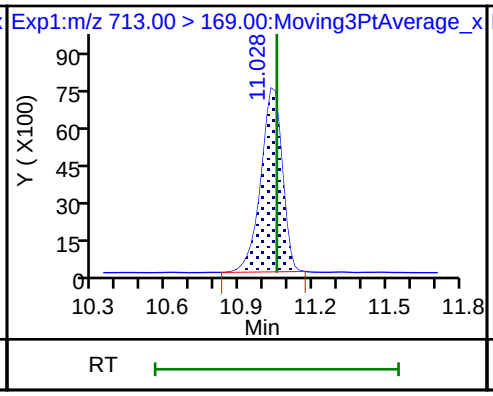
49 Perfluorotridecanoic acid



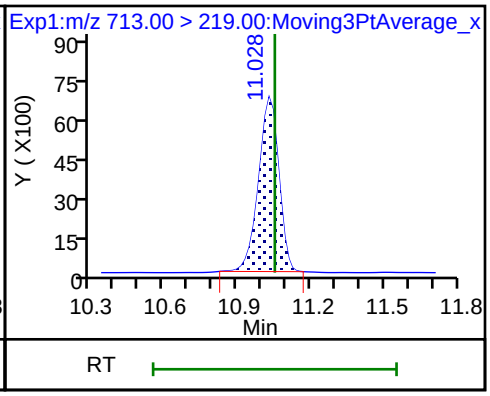
D 51 13C2 PFTeDA



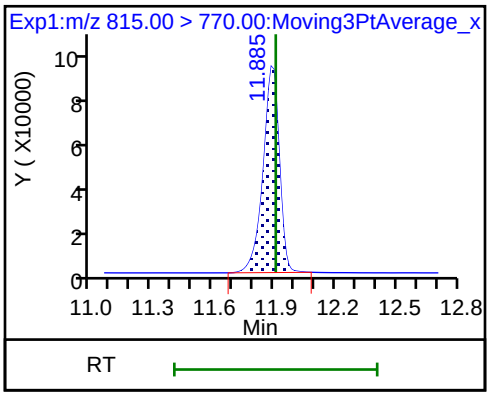
50 Perfluorotetradecanoic acid



50 Perfluorotetradecanoic acid



D 52 13C2 PFHxDA



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

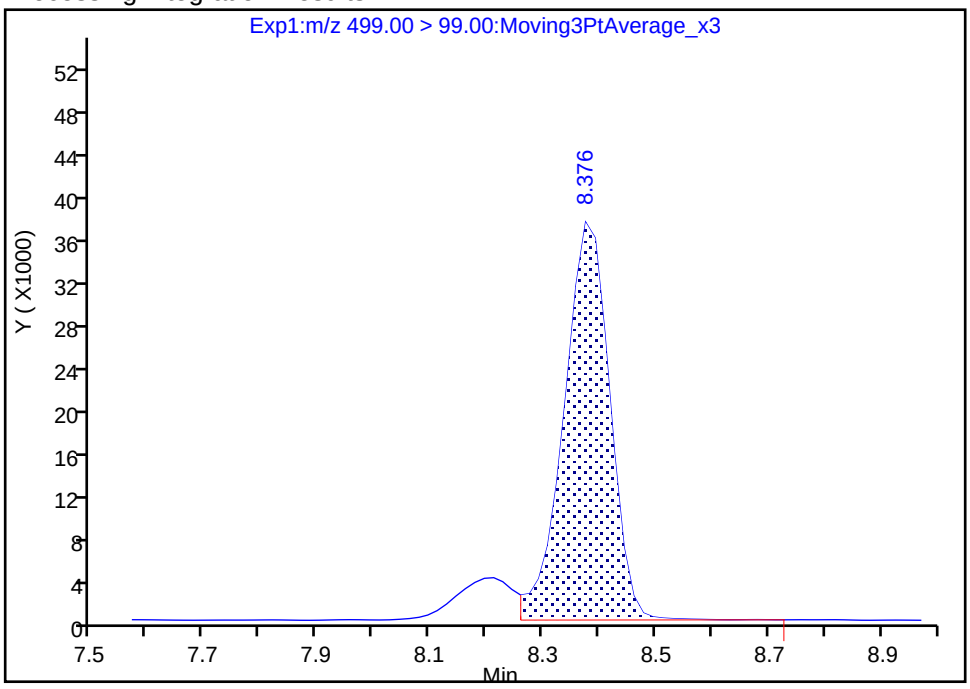
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_013.d
Injection Date: 12-Oct-2020 14:16:34 Instrument ID: A10
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 13 Worklist Smp#: 11
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

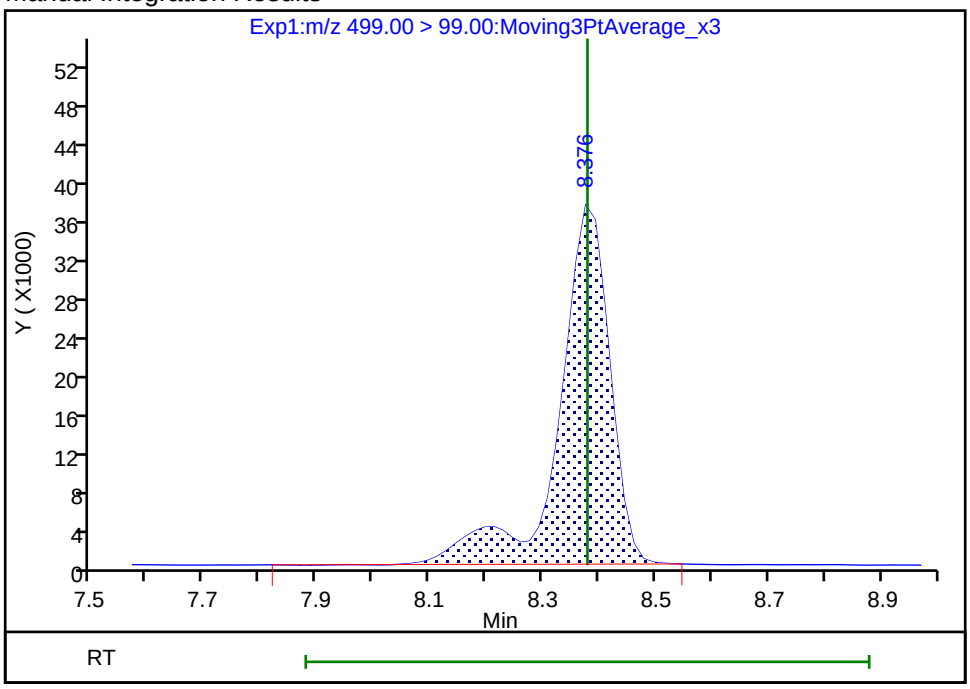
Processing Integration Results

RT: 8.38
Area: 211036
Amount: 0.040338
Amount Units: ng/ml



Manual Integration Results

RT: 8.38
Area: 235666
Amount: 0.039950
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 15:03:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

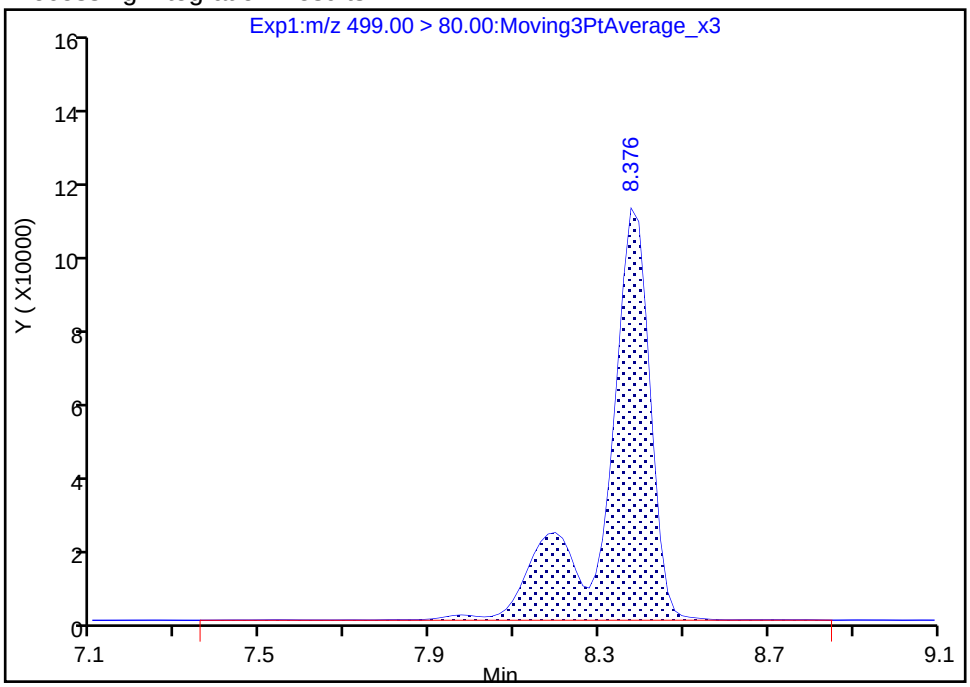
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_013.d
Injection Date: 12-Oct-2020 14:16:34 Instrument ID: A10
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 13 Worklist Smp#: 11
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

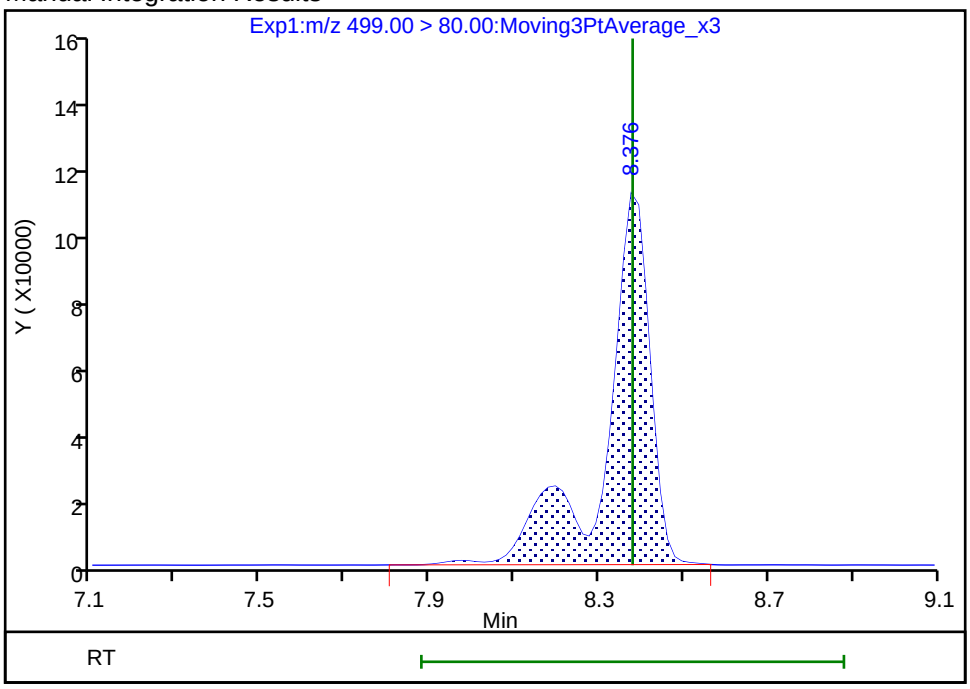
Processing Integration Results

RT: 8.38
Area: 828792
Amount: 0.040338
Amount Units: ng/ml



Manual Integration Results

RT: 8.38
Area: 820821
Amount: 0.039950
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 15:03:59
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCVL 320-434683/1 Calibration Date: 11/23/2020 10:40

Instrument ID: A10 Calib Start Date: 10/12/2020 11:30

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 10/12/2020 13:39

Lab File ID: 2020.11.23_A10_DI_A_004.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	AveID	0.8796	0.9018		2.05	2.00	2.5	50.0
Perfluoropentanoic acid	AveID	1.077	1.037		1.92	2.00	-3.8	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9899	0.8964		1.60	1.77	-9.4	50.0
Perfluorohexanoic acid	AveID	0.9282	0.9511		2.05	2.00	2.5	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	1.005		1.61	1.82	-11.4	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.023	0.9298		1.82	2.00	-9.1	50.0
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	AveID	2.482	2.153			1.90	-13.3	50.0
Perfluoroheptanesulfonic acid	AveID	1.207	1.268		2.00	1.90	5.1	50.0
Perfluorooctanoic acid (PFOA)	AveID	0.9707	0.8938		1.84	2.00	-7.9	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.024	0.9763		1.77	1.86	-4.6	50.0
Perfluorononanoic acid (PFNA)	AveID	0.8846	0.7862		1.78	2.00	-11.1	50.0
Perfluorooctanesulfonamide	AveID	1.002	0.8733		1.74	2.00	-12.8	50.0
Perfluorodecanoic acid	AveID	0.8034	0.7703		1.92	2.00	-4.1	50.0
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	AveID	2.219	2.045			1.92	-7.9	50.0
Perfluorodecanesulfonic acid	AveID	0.7467	0.8705		2.25	1.93	16.6	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	0.7896				2.00		
N-methylperfluorooctanesulfonamidoacetic acid	AveID	0.8314				2.00		
Perfluorododecanoic acid	AveID	0.8205				2.00		
Perfluorohexadecanoic acid	L2ID					2.00	-100.0*	50.0
Perfluorooctadecanoic acid	AveID	0.2195				2.00		
Perfluorotetradecanoic acid	AveID	0.0512				2.00		
Perfluorotridecanoic acid	AveID	0.8728				2.00		
Perfluoroundecanoic acid	AveID	0.8817				2.00		
13C4 PFBA	Ave	39652308	36047980		45.5	50.0	-9.1	50.0
13C5 PFPeA	Ave	33957935	30448280		44.8	50.0	-10.3	50.0
13C3 PFBS	Ave	42025548	37075355		41.0	46.5	-11.8	50.0
13C2 PFHxA	Ave	36170563	31497980		43.5	50.0	-12.9	50.0
13C4 PFHpA	Ave	36625688	32346200		44.2	50.0	-11.7	50.0
18O2 PFHxS	Ave	25876448	25872706		47.3	47.3	-0.0	50.0
M2-6:2 FTS	Ave	12964621	9808168		35.9	47.5	-24.3	50.0
13C4 PFOA	Ave	42598528	42891740		50.3	50.0	0.7	50.0
13C4 PFOS	Ave	18426344	18330397		47.6	47.8	-0.5	50.0
13C5 PFNA	Ave	35838060	36648340		51.1	50.0	2.3	50.0
13C8 FOSA	Ave	21925450	32470580		74.0	50.0	48.1	50.0
13C2 PFDA	Ave	35324108	37854060		53.6	50.0	7.2	50.0
M2-8:2 FTS	Ave	13658455	10358205		36.3	47.9	-24.2	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCVL 320-434683/1 Calibration Date: 11/23/2020 10:40

Instrument ID: A10 Calib Start Date: 10/12/2020 11:30

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 10/12/2020 13:39

Lab File ID: 2020.11.23_A10_DI_A_004.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFUnA	Ave	36408055	42580740		58.5	50.0	17.0	50.0
13C2 PFDoA	Ave	36645348	63439120		86.6	50.0	73.1*	50.0
13C2 PFTeDA	Ave	24179970	38364820		79.3	50.0	58.7*	50.0
13C2 PFHxDA	Ave	15022995	5049860		16.8	50.0	-66.4*	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 23-Nov-2020 10:40:26 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: CCV L2
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:24:39 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:24:39
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 Perfluorobutanoic acid										M
212.90 > 169.00	5.638	5.638	0.0	1.000	65013	0.002050		103	5.6	M
D 2 13C4 PFBA										M
217.00 > 172.00	5.638	5.638	0.0		1802399	0.0455		90.9	9611	M
5 Perfluoropentanoic acid										
262.90 > 219.00	6.250	6.250	0.0	1.000	63143	0.001925		96.2	14.7	
D 4 13C5 PFPeA										
267.90 > 223.00	6.250	6.250	0.0		1522414	0.0448		89.7	13260	
D 3 13C3 PFBS										
301.90 > 80.00	6.316	6.316	0.0		1724004	0.0410		88.2	5355	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	6.316	6.316	0.0	1.000	58757	0.001601	Target=1.50	90.6	124	
298.90 > 99.00	6.316	6.316	0.0	1.000	41778		1.41(0.75-2.26)		44.3	
D 7 M2-4:2 FTS										
329.00 > 81.00	6.688	6.688	0.0		343824	NC			885	
8 4:2 FTS										
327.00 > 307.00	6.688	6.688	0.0	1.000	33094	NC	Target=2.45		151	
327.00 > 81.00	6.711	6.688	0.023	1.003	14588		2.27(1.22-3.67)		33.9	
D 9 13C2 PFHxA										
315.00 > 270.00	6.757	6.757	0.0		1574899	0.0435		87.1	14739	
10 Perfluorohexanoic acid										
313.00 > 269.00	6.757	6.757	0.0	1.000	59918	0.002050	Target=17.92	102	39.3	
313.00 > 119.00	6.757	6.757	0.0	1.000	3091		19.38(8.96-26.88)		26.4	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	6.757	6.757	0.0	0.930	52240	NC	Target=1.47		88.3	
349.00 > 99.00	6.757	6.757	0.0	0.930	36643		1.43(0.74-2.21)		73.0	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
332.10 > 287.00	6.900	6.900	0.0		91776	NC			511	
13 HPFO-DA										
329.10 > 285.00	6.900	6.900	0.0	1.000	8821	NC			10.1	
16 Perfluorohexanesulfonic acid										M
399.00 > 80.00	7.244	7.244	0.0	0.997	47320	0.001612	Target=5.60	88.6	95.3	M
399.00 > 99.00	7.244	7.244	0.0	0.997	9114		5.19(2.80-8.40)		30.5	M
D 15 18O2 PFHxS										
403.00 > 84.00	7.263	7.263	0.0		1223779	0.0473		100.0	7148	
D 17 13C4 PFHpA										
367.00 > 322.00	7.263	7.263	0.0		1617310	0.0442		88.3	12651	
18 Perfluoroheptanoic acid										M
363.00 > 319.00	7.263	7.263	0.0	1.000	60153	0.001819	Target=8.55	90.9	34.2	M
363.00 > 169.00	7.263	7.263	0.0	1.000	6688		8.99(4.27-12.82)		101	M
19 DONA										
377.00 > 251.00	7.318	7.318	0.0	0.872	234148	NC	Target=2.62		1096	
377.00 > 85.00	7.318	7.318	0.0	0.872	93500		2.50(1.31-3.93)		382	
D 22 M2-6:2 FTS										
429.00 > 81.00	7.786	7.786	0.0		465888	0.0359		75.7	982	
23 6:2 FTS										
427.00 > 407.00	7.803	7.803	0.0	1.002	40031	0.001644	Target=2.55	86.7	356	
427.00 > 81.00	7.803	7.803	0.0	1.002	18201		2.20(1.27-3.82)		46.8	
21 Perfluoroheptanesulfonic acid										
449.00 > 80.00	7.803	7.803	0.0	0.930	44249	0.002000	Target=6.95	105	117	
449.00 > 99.00	7.803	7.803	0.0	0.930	4884		9.06(3.48-10.43)		21.7	
D 25 13C4 PFOA										
417.00 > 372.00	7.820	7.820	0.0		2144587	0.0503		101	11815	
24 Perfluorooctanoic acid										M
413.00 > 369.00	7.820	7.820	0.0	1.000	76674	0.001841	Target=1.41	92.1	16.9	M
413.00 > 169.00	7.820	7.820	0.0	1.000	52533		1.46(0.71-2.12)		207	
27 Perfluorooctanesulfonic acid										M
499.00 > 80.00	8.393	8.393	0.0	1.000	33214	0.001770	Target=3.36	95.4	146	M
499.00 > 99.00	8.376	8.393	-0.017	0.998	8545		3.89(1.68-5.04)		31.6	M
D 26 13C4 PFOS										
503.00 > 80.00	8.393	8.393	0.0		876193	0.0476		99.5	2165	
D 28 13C5 PFNA										
468.00 > 423.00	8.427	8.427	0.0		1832417	0.0511		102	9296	
29 Perfluorononanoic acid										
463.00 > 419.00	8.427	8.427	0.0	1.000	57623	0.001777	Target=6.88	88.9	33.4	
463.00 > 169.00	8.427	8.427	0.0	1.000	7297		7.90(3.44-10.32)		84.5	
32 Perfluorononanesulfonic acid										
549.00 > 80.00	8.970	8.970	0.0	1.069	31046	NC	Target=6.23		246	
549.00 > 99.00	8.955	8.970	-0.015	1.067	6762		4.59(3.11-9.34)		30.7	
D 34 M2-8:2 FTS										
529.00 > 81.00	9.001	9.001	0.0		496158	0.0363		75.8	2355	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
36 8:2 FTS										
527.00 > 507.00	9.016	9.016	0.0	1.002	40580	0.001765	Target=2.16	92.1	578	
527.00 > 81.00	9.016	9.016	0.0	1.002	18347		2.21(1.08-3.24)		95.9	
D 30 13C8 FOSA										
506.00 > 78.00	8.955	8.955	0.0		1623529	0.0740		148	13845	
31 Perfluorooctanesulfonamide										
498.00 > 78.00	8.955	8.955	0.0	1.000	56710	0.001743		87.2	741	
D 33 13C2 PFDA										
515.00 > 470.00	9.001	9.001	0.0		1892703	0.0536		107	15104	
35 Perfluorodecanoic acid										
513.00 > 469.00	9.001	9.001	0.0	1.000	58317	0.001918	Target=14.44	95.9	54.4	
513.00 > 169.00	9.001	9.001	0.0	1.000	3459		16.86(7.22-21.66)		27.0	
D 37 d3-NMeFOSAA										
573.00 > 419.00	9.290	9.290	0.0		1106407	0.0448		89.6	6140	
39 Perfluorodecanesulfonic acid										
599.00 > 80.00	9.511	9.511	0.0	1.133	30763	0.002248	Target=2.51	117	326	
599.00 > 99.00	9.511	9.511	0.0	1.133	11562		2.66(1.26-3.77)		175	
D 42 13C2 PFUnA										
565.00 > 520.00	9.560	9.560	0.0		2129037	0.0585		117	14651	
D 40 d5-NEtFOSAA										
589.00 > 419.00	9.576	9.576	0.0		1368929	0.0496		99.2	5452	
D 45 13C2 PFDoA										
615.00 > 570.00	10.099	10.099	0.0		3171956	0.0866		173	27173	
D 51 13C2 PFTeDA										
715.00 > 670.00	11.060	11.060	0.0		1918241	0.0793		159	11421	
D 52 13C2 PFHxDA										
815.00 > 770.00	11.908	11.908	0.0		252493	0.0168		33.6	1774	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC-LL-L2_00028 Amount Added: 1.00 Units: mL

Report Date: 24-Nov-2020 08:24:40 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d

Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10

Lims ID: CCVL

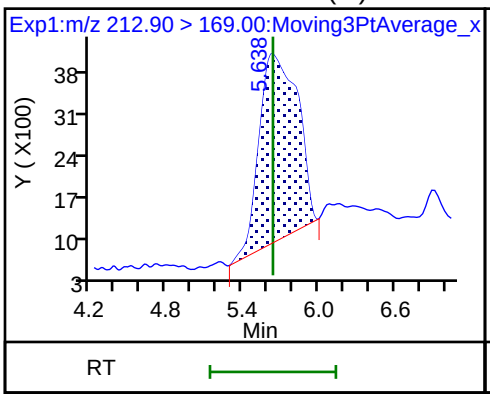
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1

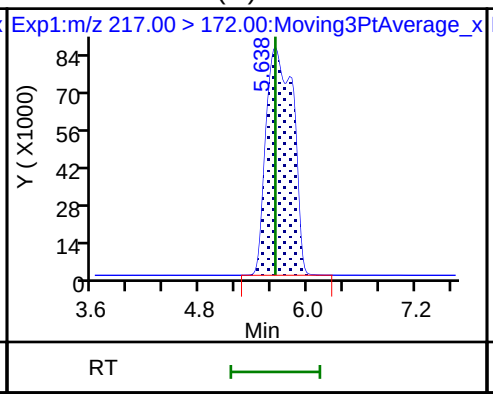
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

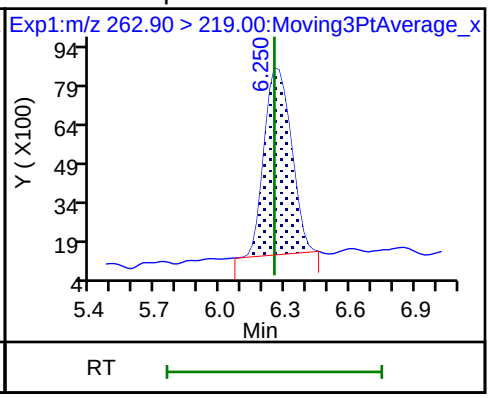
1 Perfluorobutanoic acid (M)



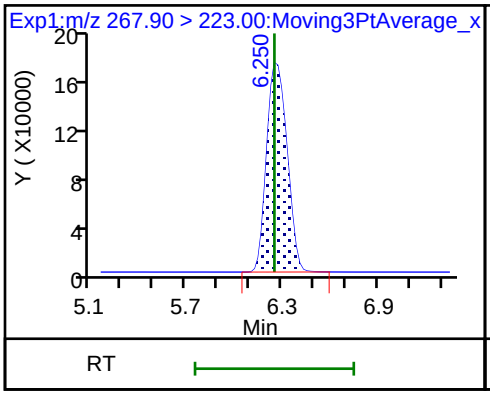
D 2 13C4 PFBA (M)



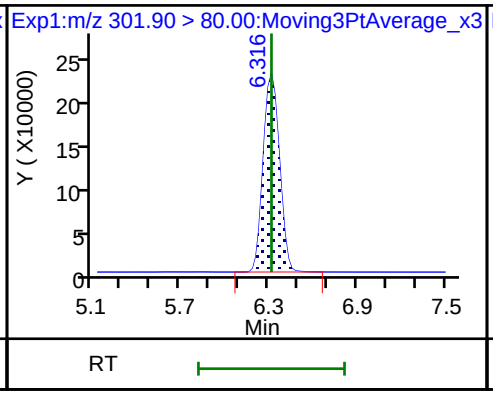
5 Perfluoropentanoic acid



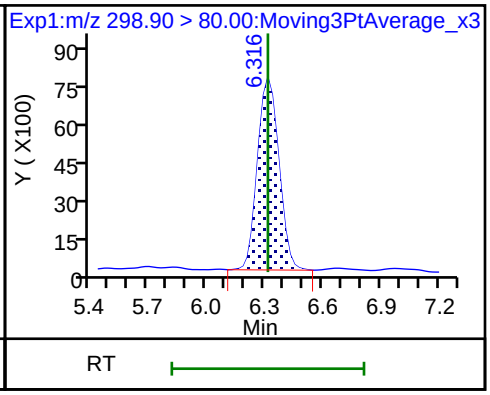
D 4 13C5 PFPeA



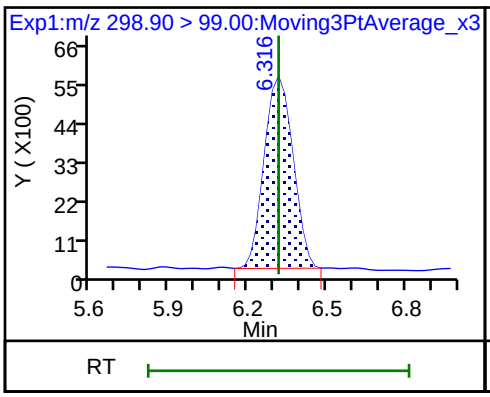
D 3 13C3 PFBS



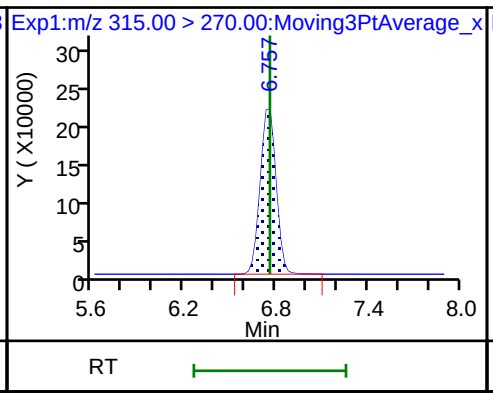
6 Perfluorobutanesulfonic acid



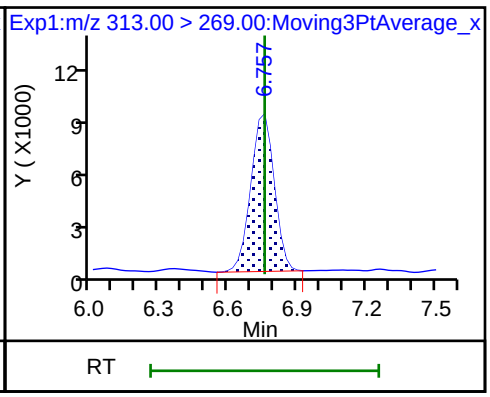
6 Perfluorobutanesulfonic acid



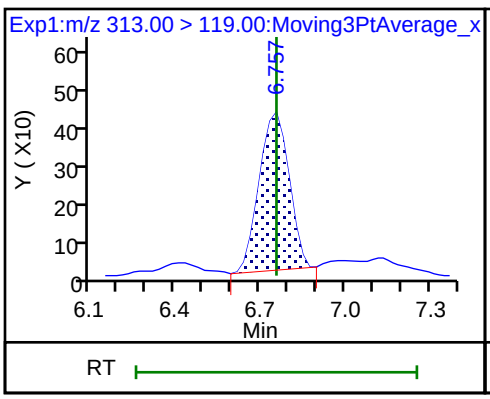
D 9 13C2 PFHxA



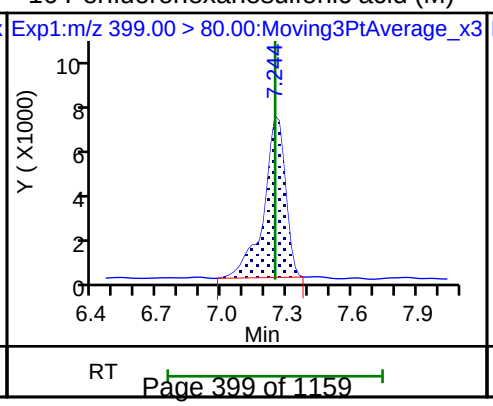
10 Perfluorohexanoic acid



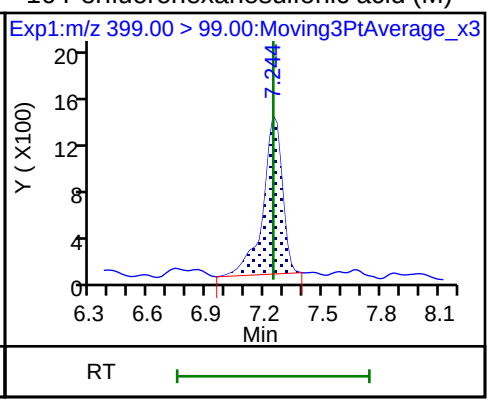
10 Perfluorohexanoic acid



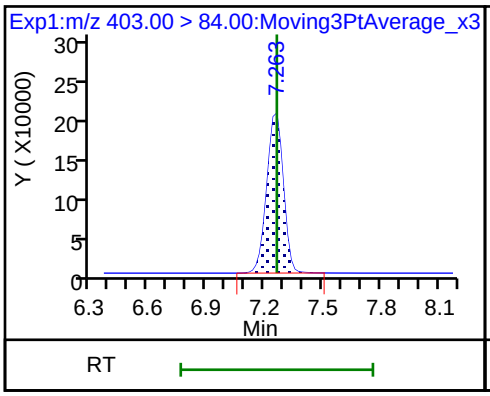
16 Perfluorohexanesulfonic acid (M)



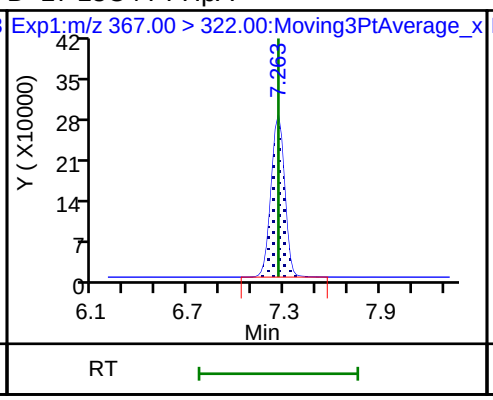
16 Perfluorohexanesulfonic acid (M)



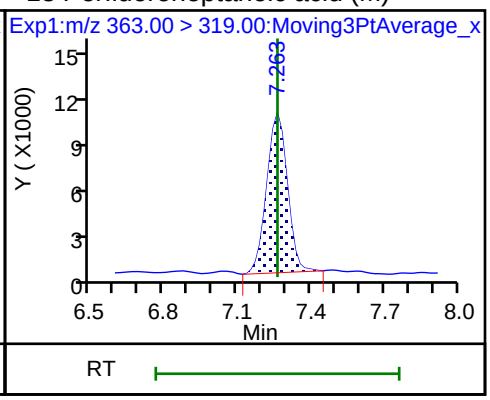
D 15 18O2 PFHxS



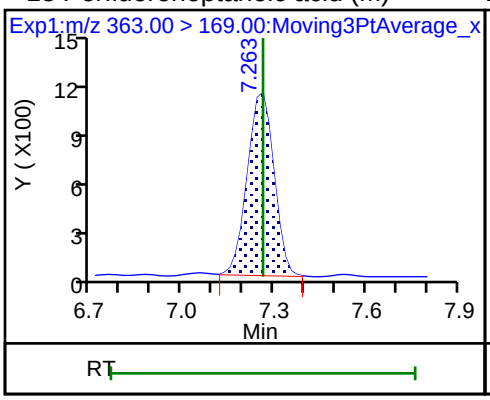
D 17 13C4 PFHpA



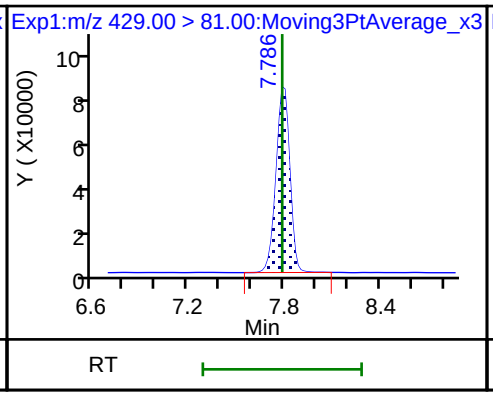
18 Perfluoroheptanoic acid (M)



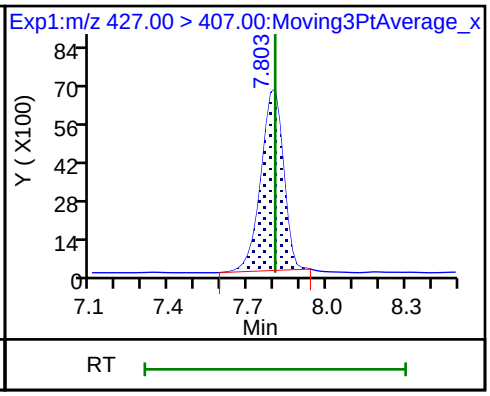
18 Perfluoroheptanoic acid (M)



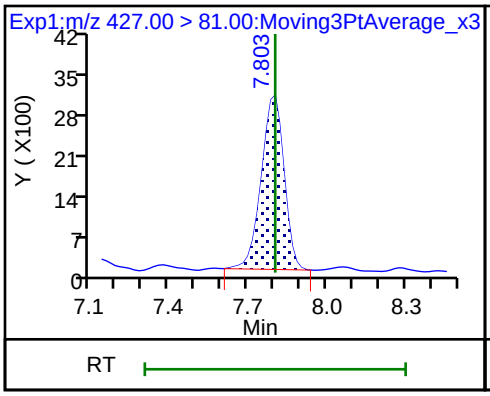
D 22 M2-6:2 FTS



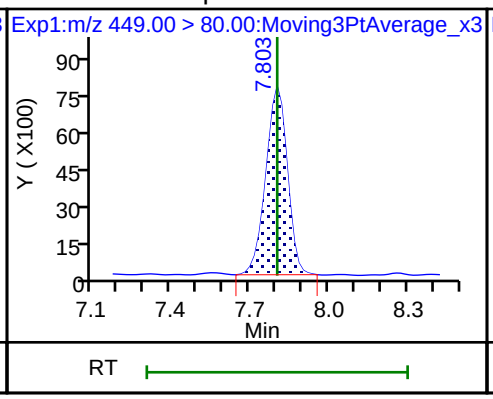
23 6:2 FTS



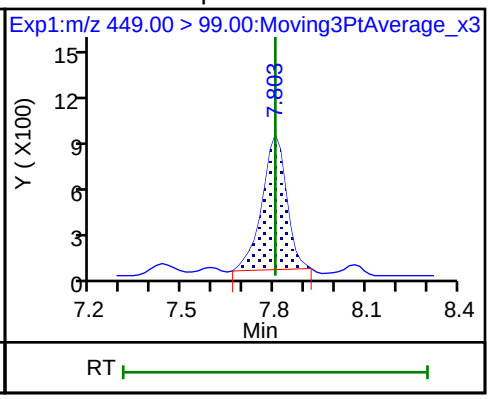
23 6:2 FTS



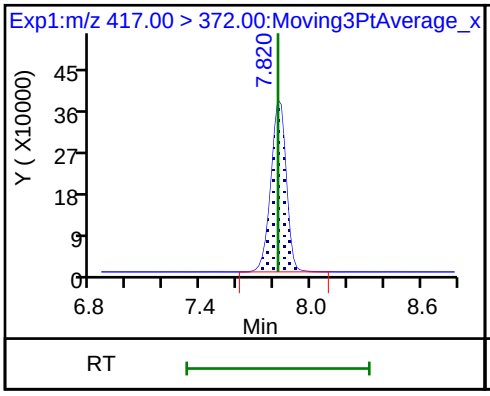
21 Perfluoroheptanesulfonic acid



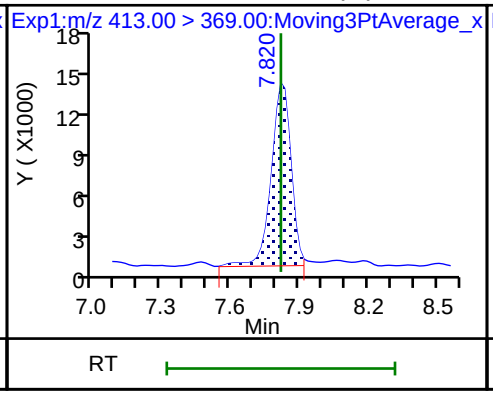
21 Perfluoroheptanesulfonic acid



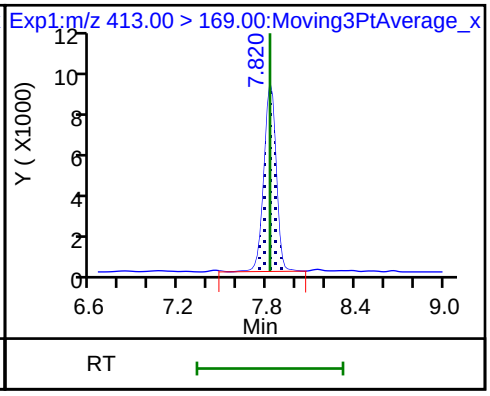
D 25 13C4 PFOA



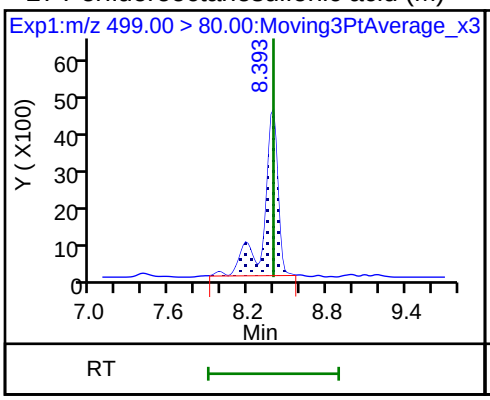
24 Perfluorooctanoic acid (M)



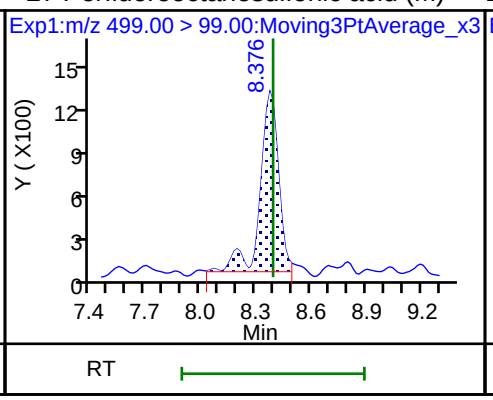
24 Perfluorooctanoic acid



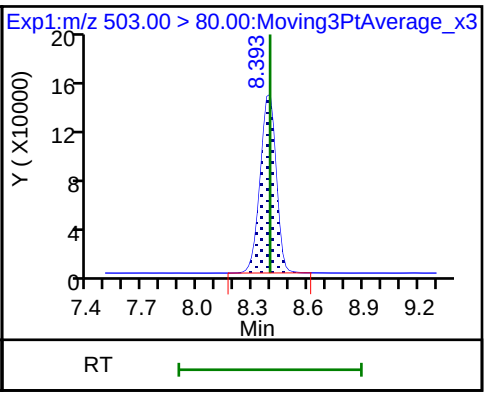
27 Perfluorooctanesulfonic acid (M)



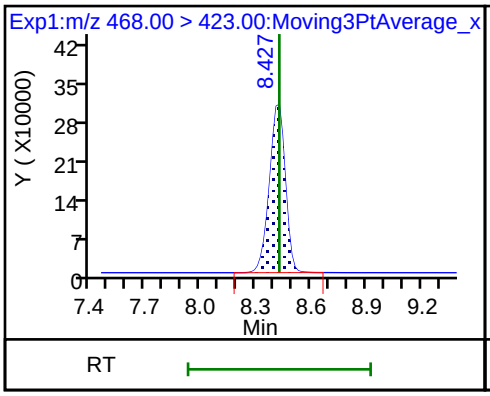
27 Perfluorooctanesulfonic acid (M)



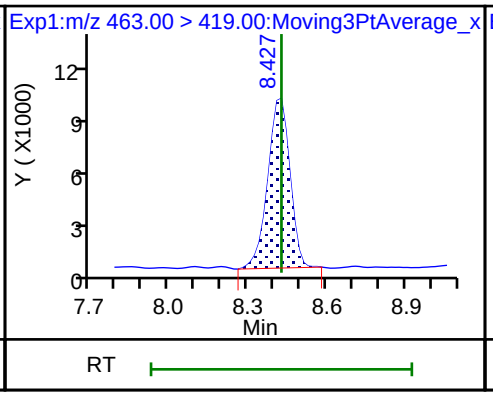
D 26 13C4 PFOS



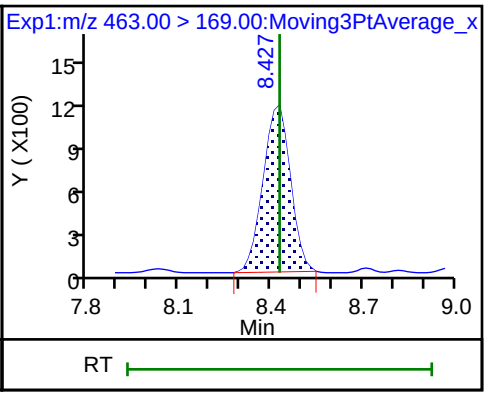
D 28 13C5 PFNA



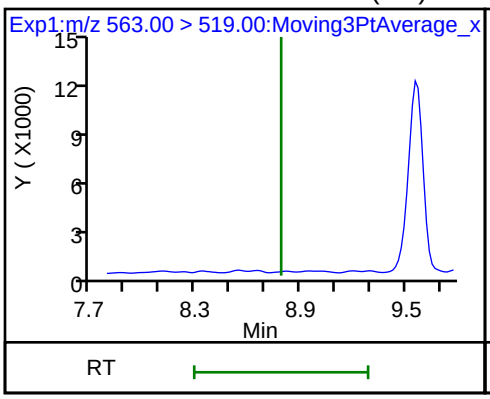
29 Perfluorononanoic acid



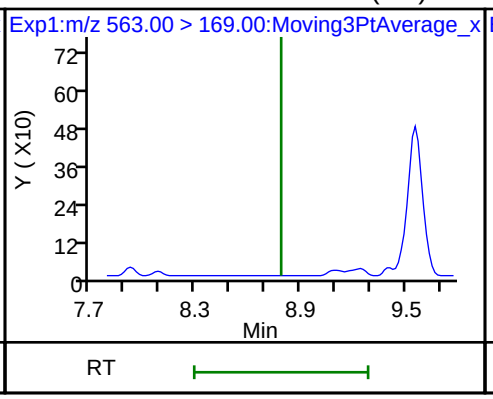
29 Perfluorononanoic acid



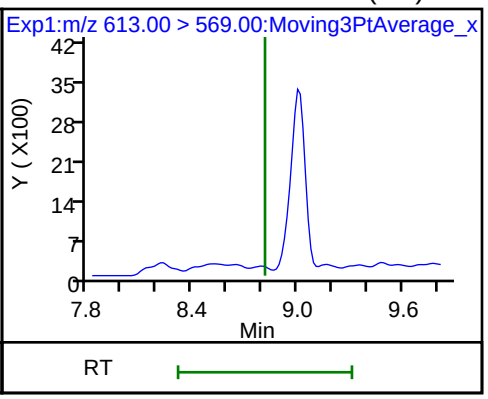
41 Perfluoroundecanoic acid (ND)



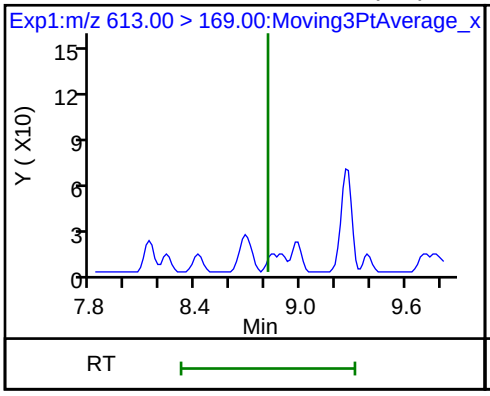
41 Perfluoroundecanoic acid (ND)



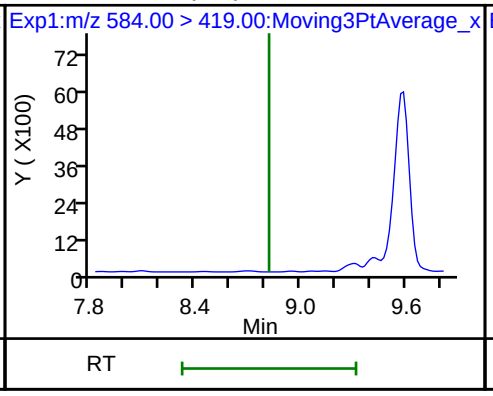
46 Perfluorododecanoic acid (ND)



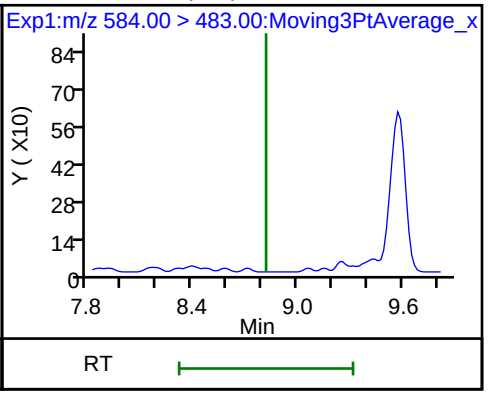
46 Perfluorododecanoic acid (ND)



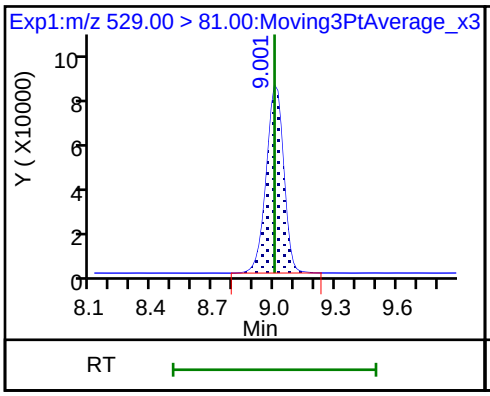
43 NEtFOSA (ND)



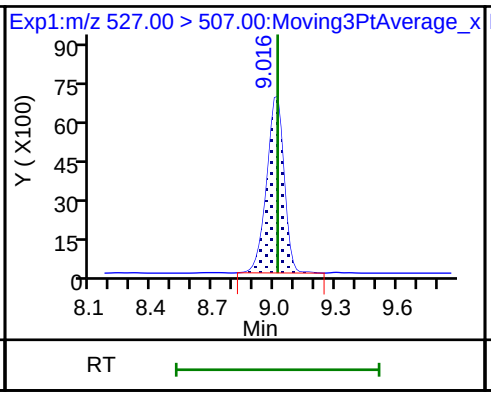
43 NEtFOSA (ND)



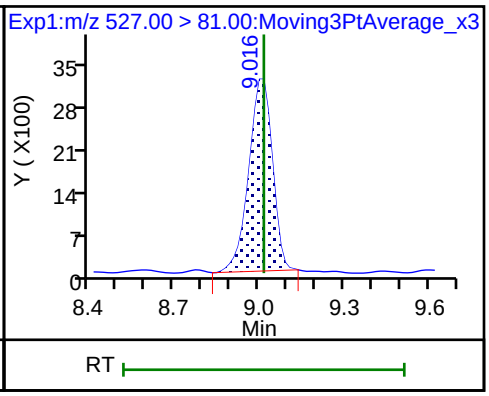
D 34 M2-8:2 FTS



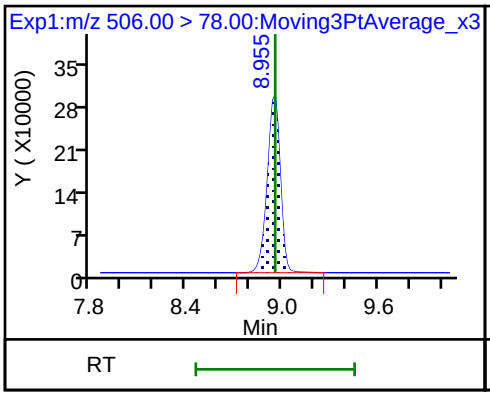
36 8:2 FTS



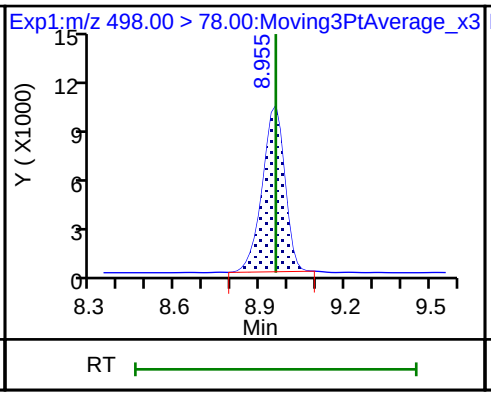
36 8:2 FTS



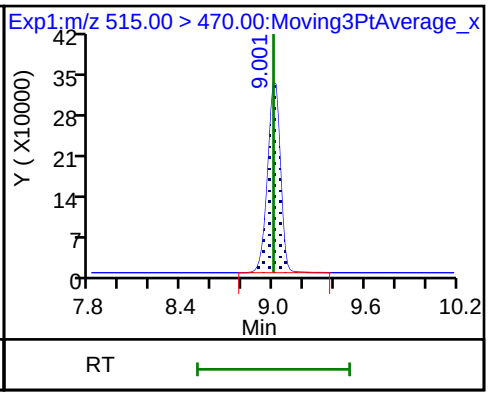
D 30 13C8 FOSA



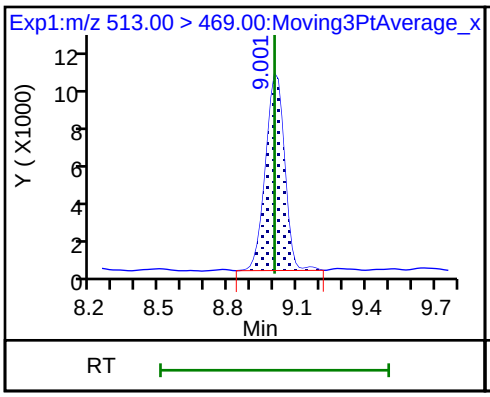
31 Perfluorooctanesulfonamide



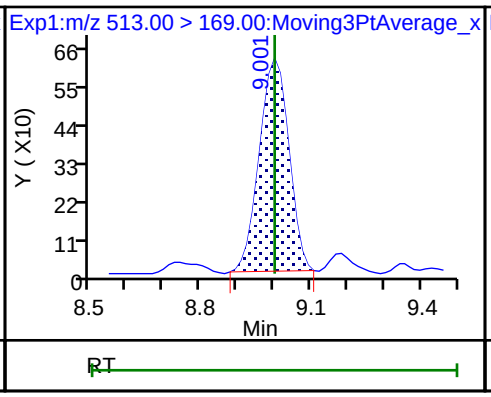
D 33 13C2 PFDA



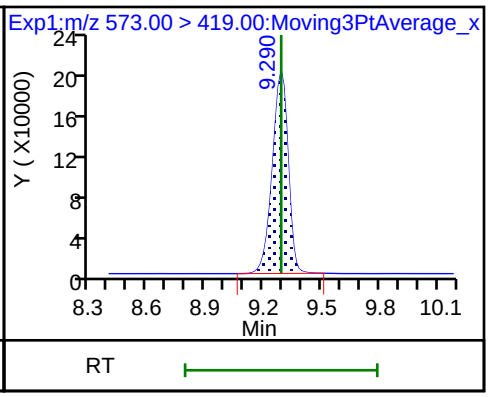
35 Perfluorodecanoic acid



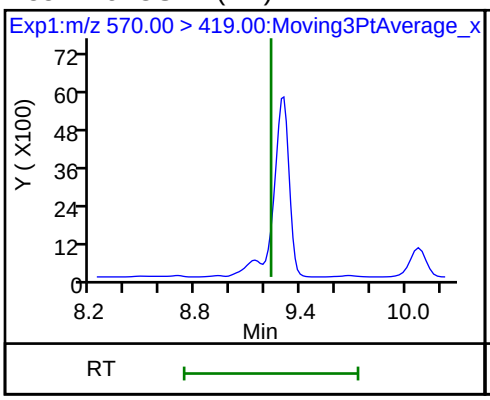
35 Perfluorodecanoic acid



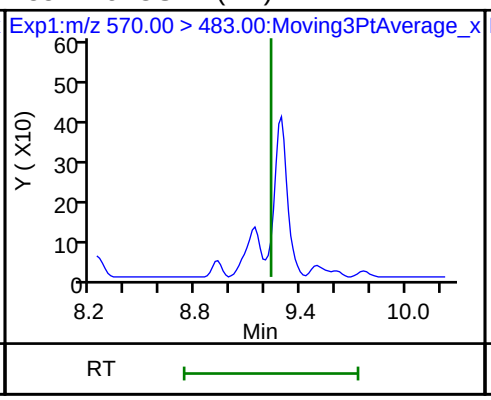
D 37 d3-NMeFOSAA



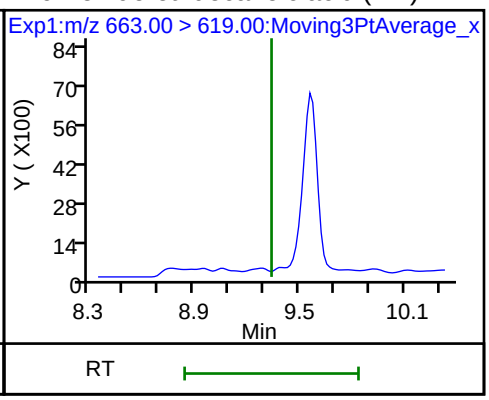
38 NMeFOSAA (ND)



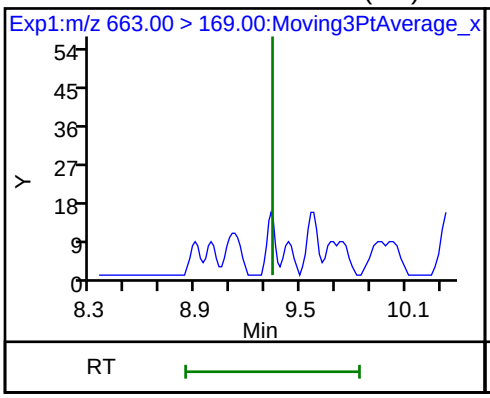
38 NMeFOSAA (ND)



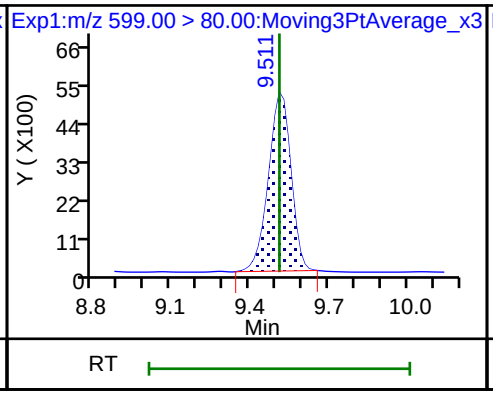
49 Perfluorotridecanoic acid (ND)



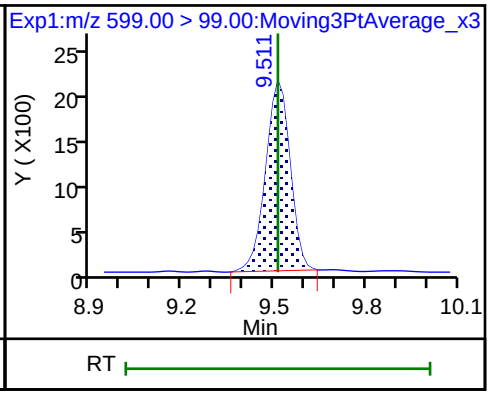
49 Perfluorotridecanoic acid (ND)



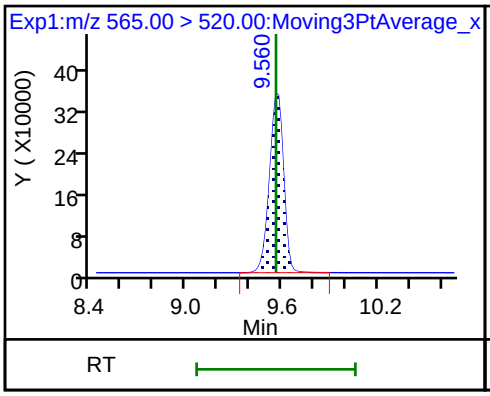
39 Perfluorodecanesulfonic acid



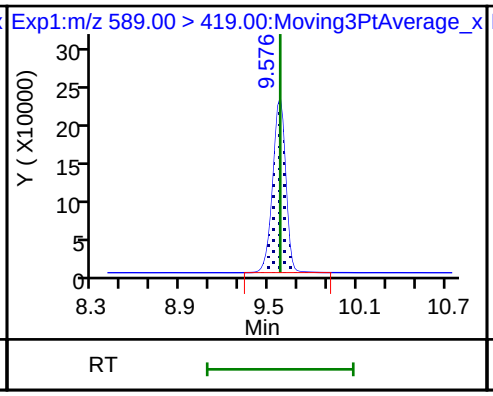
39 Perfluorodecanesulfonic acid



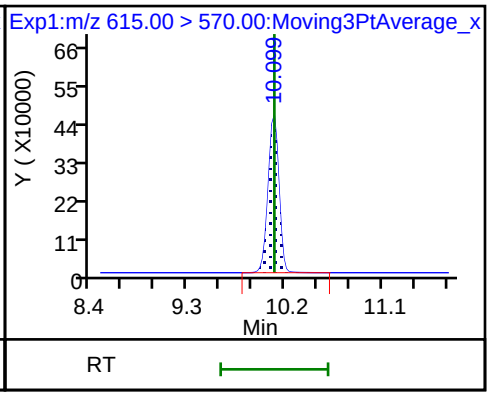
D 42 13C2 PFUnA



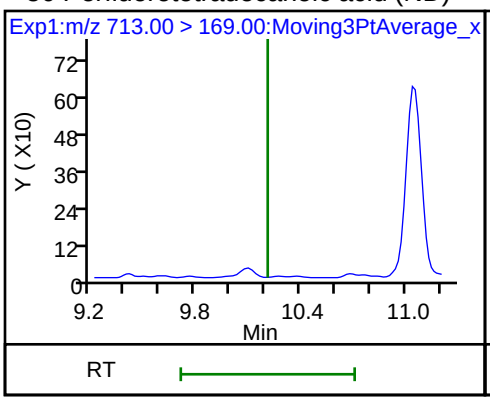
D 40 d5-NEtFOSAA



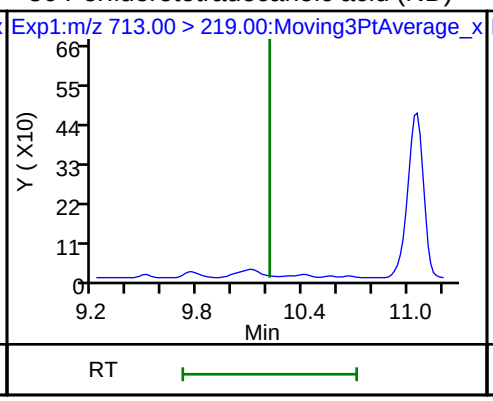
D 45 13C2 PFDoA



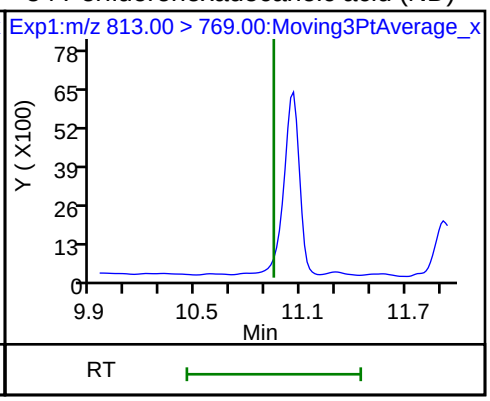
50 Perfluorotetradecanoic acid (ND)



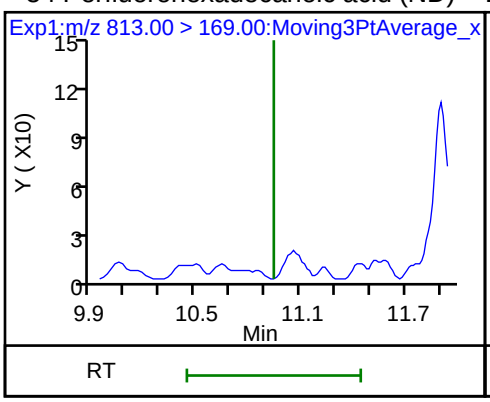
50 Perfluorotetradecanoic acid (ND)



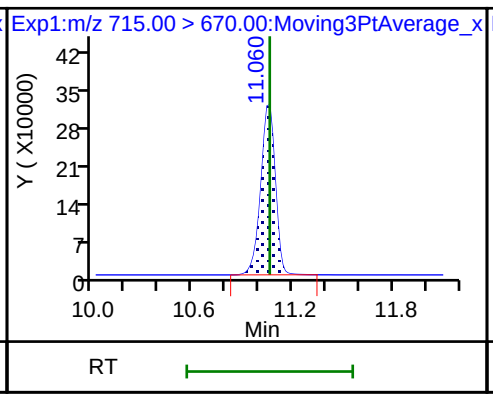
54 Perfluorohexadecanoic acid (ND)



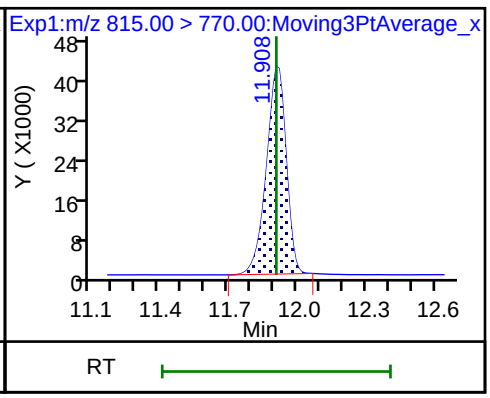
54 Perfluorohexadecanoic acid (ND)



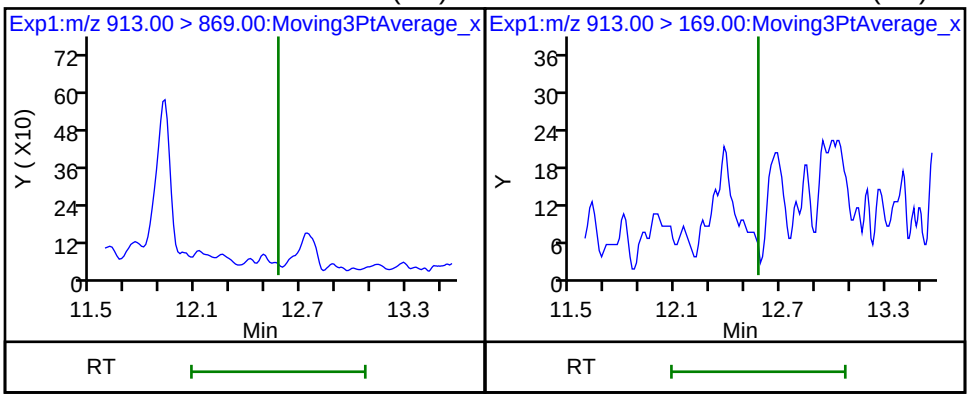
D 51 13C2 PFTeDA



D 52 13C2 PFHxDA



53 Perfluorooctadecanoic acid (ND) 53 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

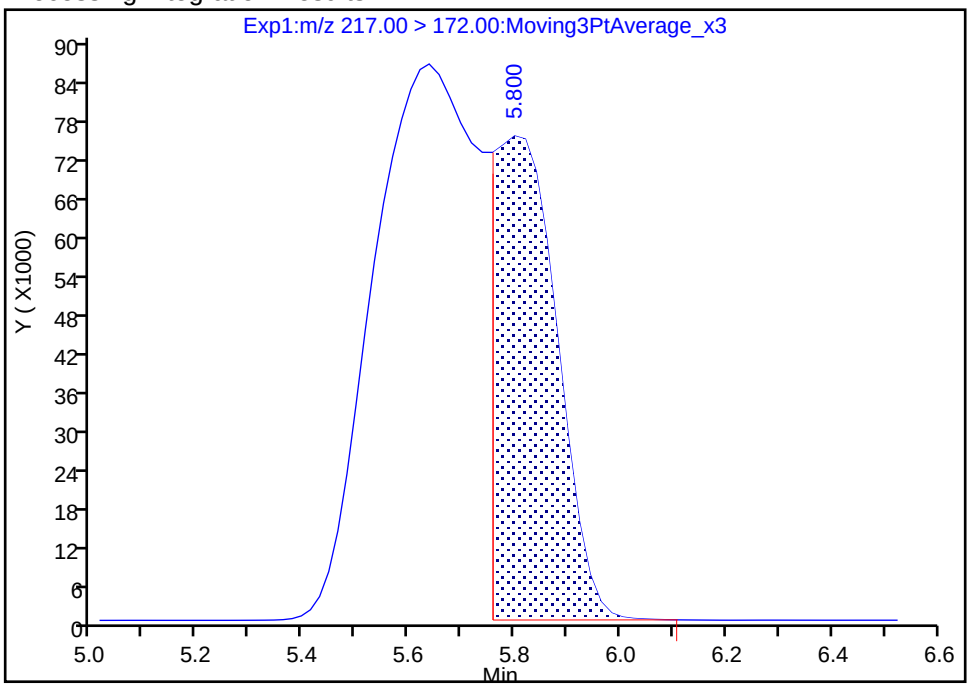
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

D 2 13C4 PFBA, CAS: STL00992

Signal: 1

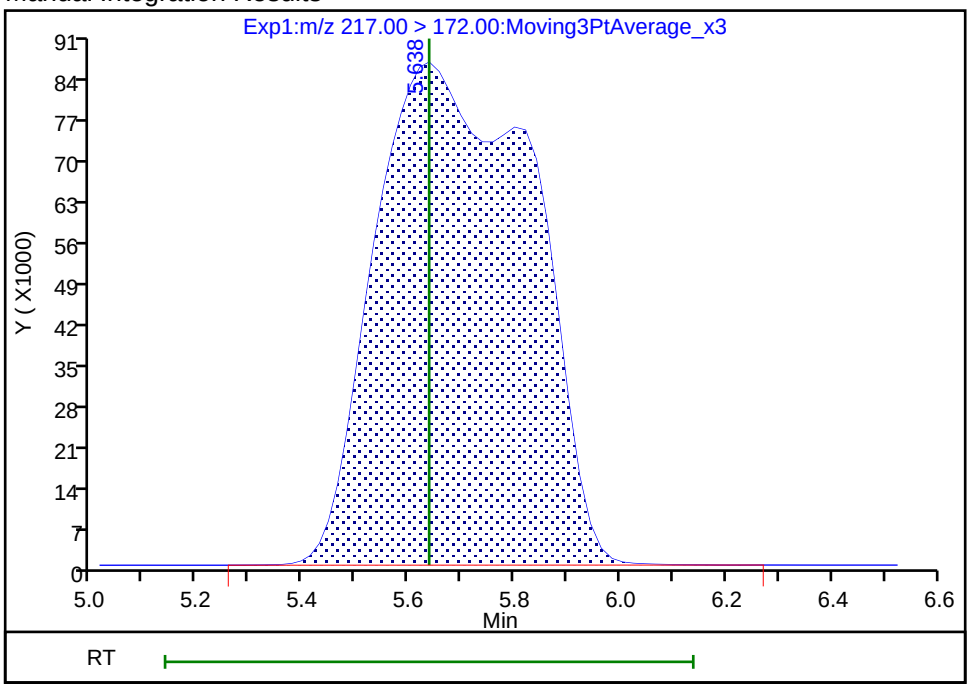
Processing Integration Results

RT: 5.80
Area: 599234
Amount: 0.015112
Amount Units: ng/ml



Manual Integration Results

RT: 5.64
Area: 1802399
Amount: 0.045455
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:23:17
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

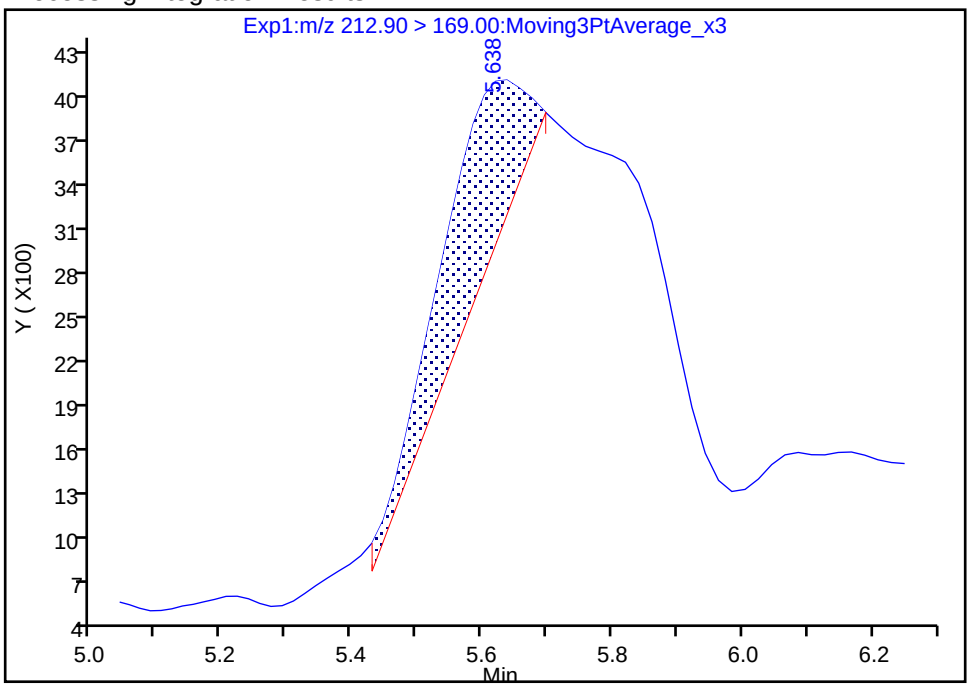
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

1 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

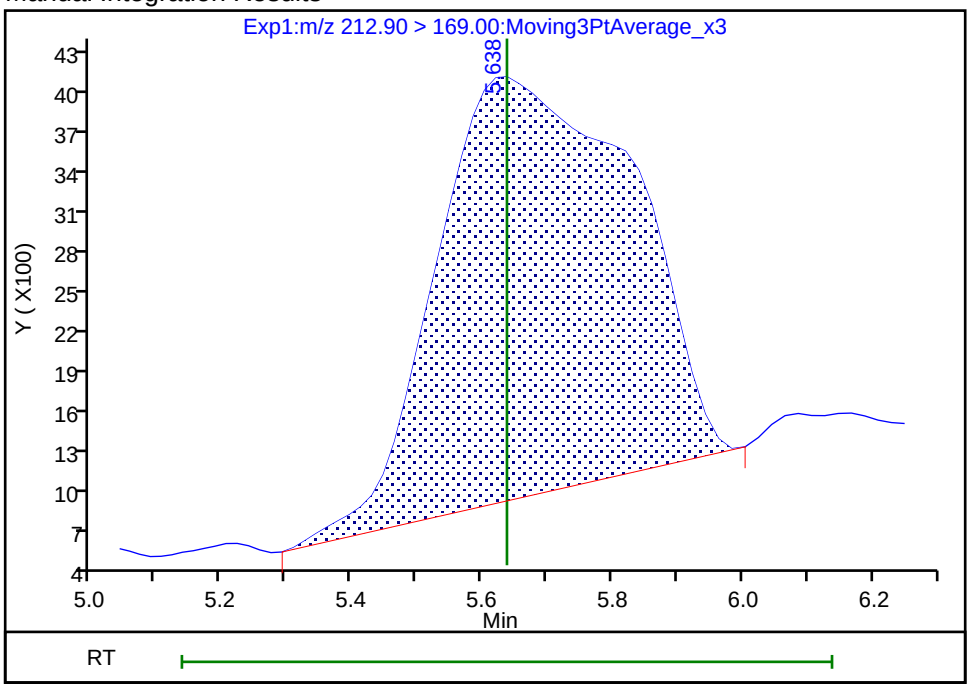
Processing Integration Results

RT: 5.64
Area: 10627
Amount: 0.000335
Amount Units: ng/ml



Manual Integration Results

RT: 5.64
Area: 65013
Amount: 0.002050
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:23:46
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

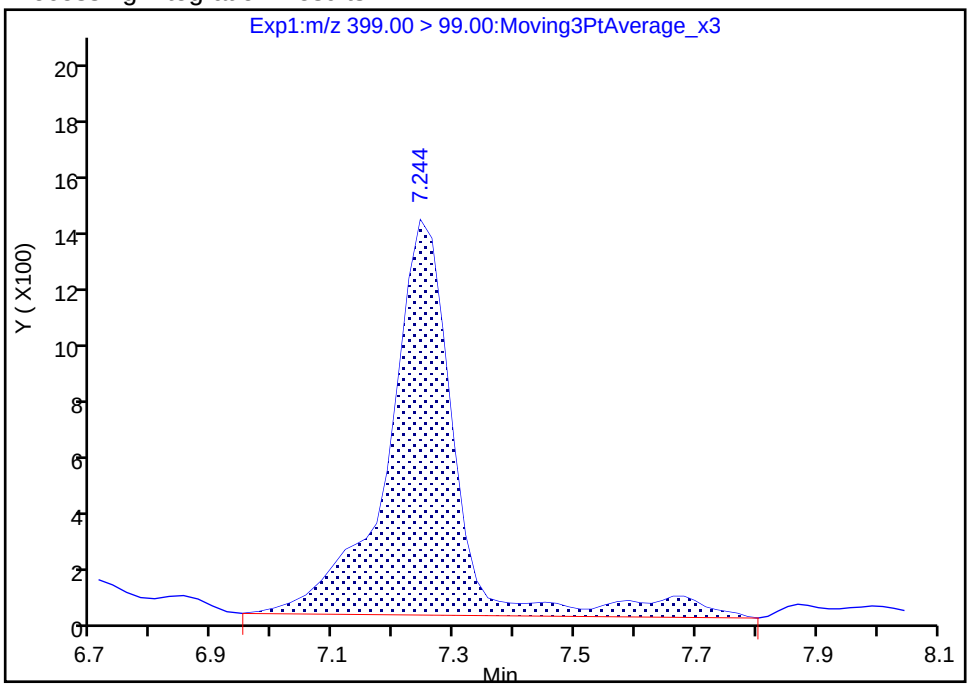
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

16 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

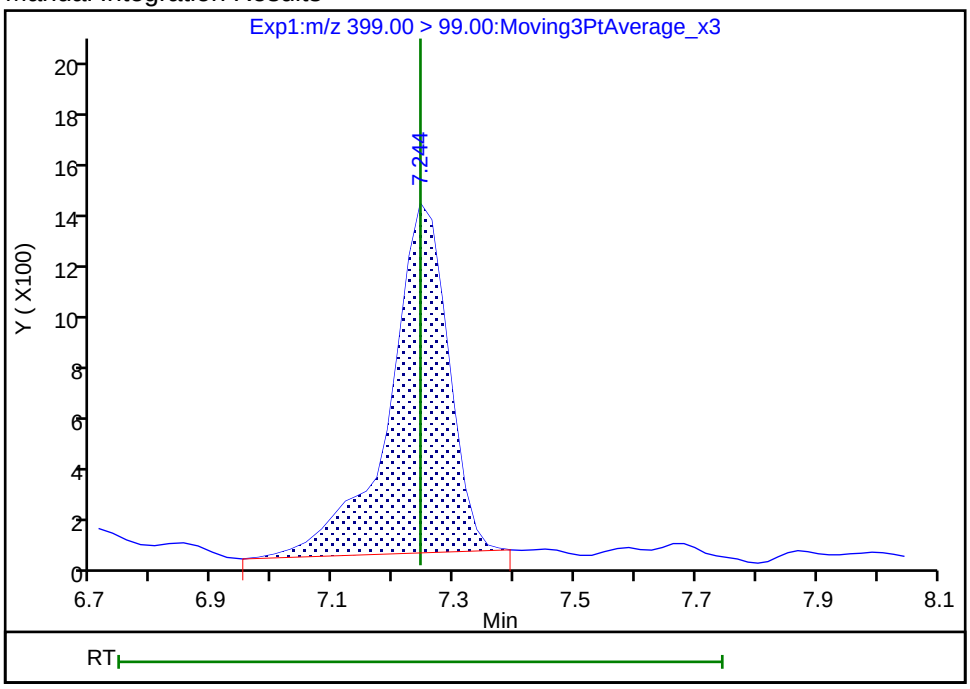
Processing Integration Results

RT: 7.24
Area: 10686
Amount: 0.001660
Amount Units: ng/ml



Manual Integration Results

RT: 7.24
Area: 9114
Amount: 0.001612
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:24:03
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

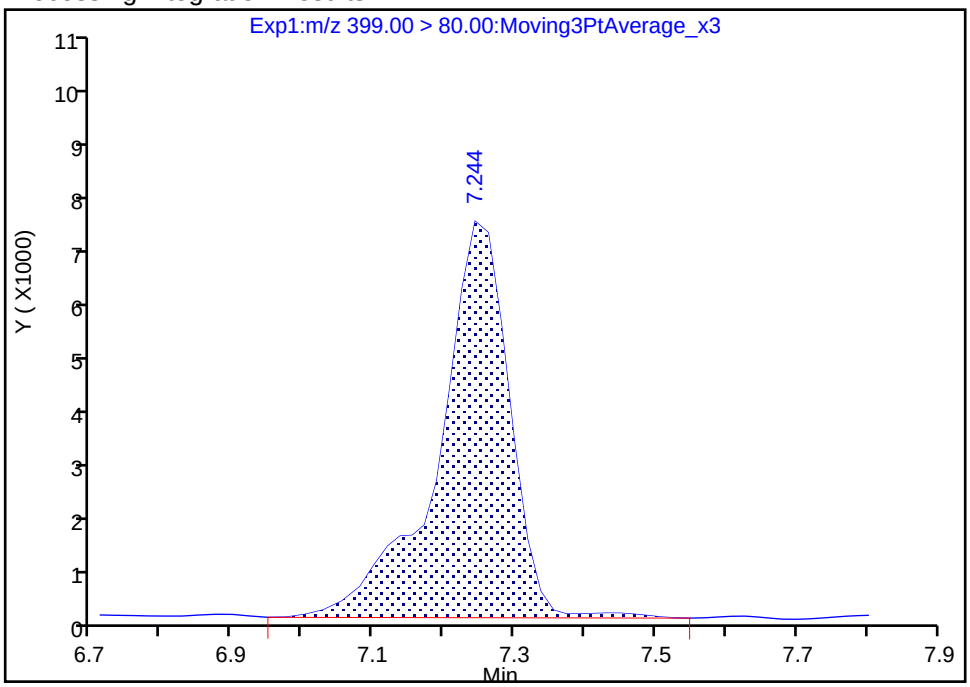
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

16 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

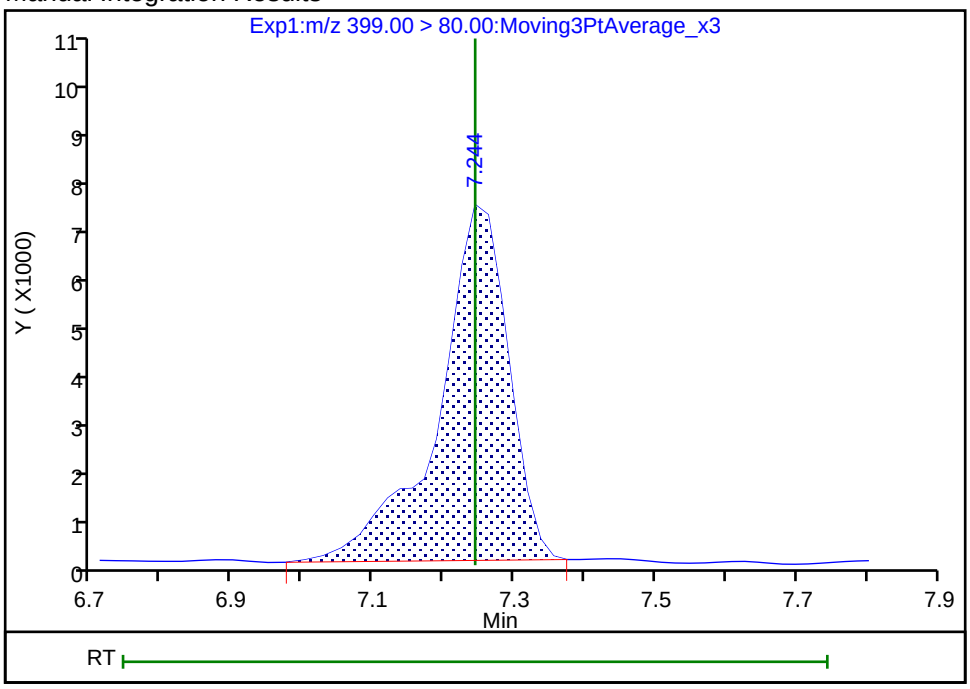
Processing Integration Results

RT: 7.24
Area: 48721
Amount: 0.001660
Amount Units: ng/ml



Manual Integration Results

RT: 7.24
Area: 47320
Amount: 0.001612
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:24:07
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

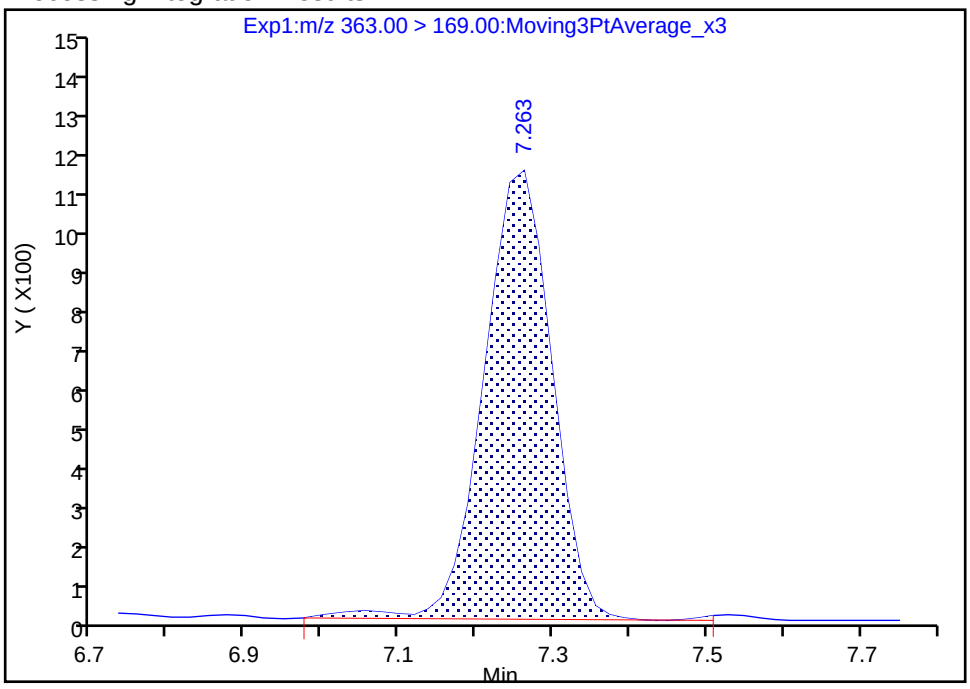
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

18 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

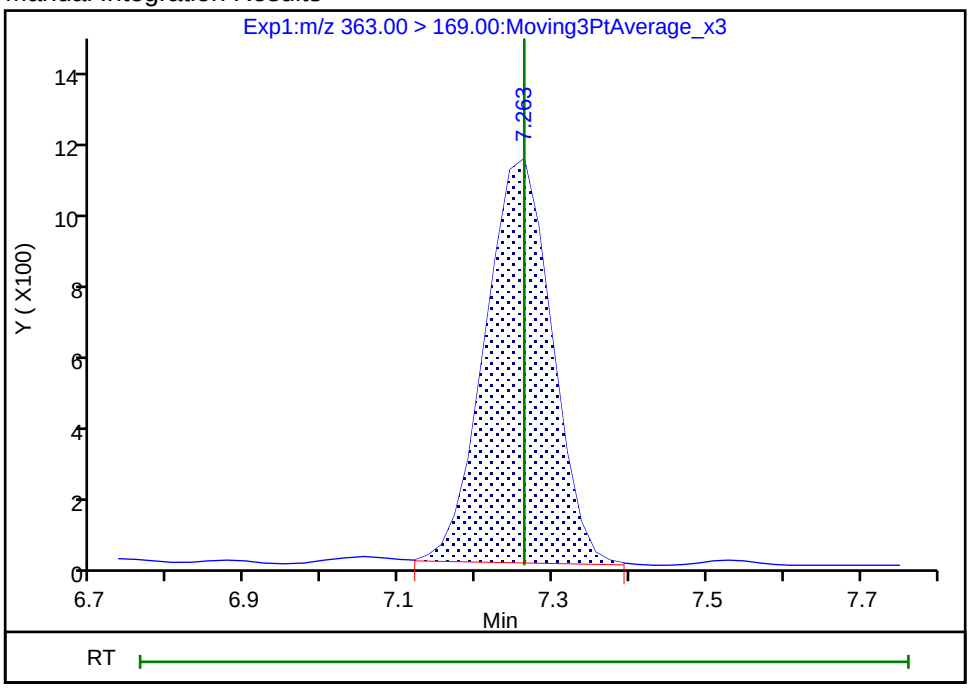
Processing Integration Results

RT: 7.26
Area: 6871
Amount: 0.001863
Amount Units: ng/ml



Manual Integration Results

RT: 7.26
Area: 6688
Amount: 0.001819
Amount Units: ng/ml



Reviewer: vangmy, 23-Nov-2020 11:15:37
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

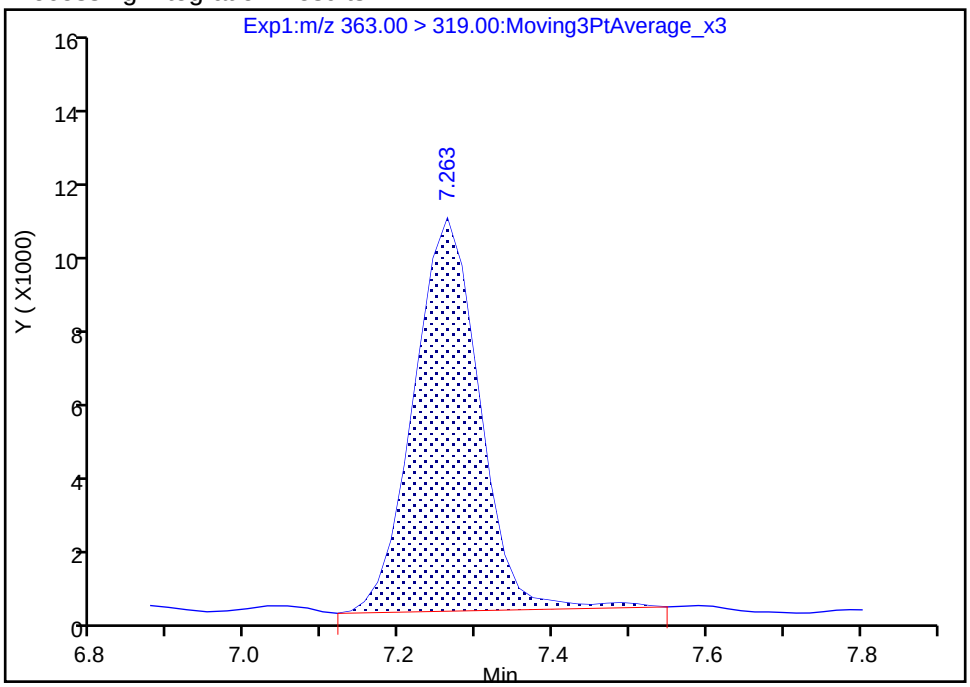
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

18 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

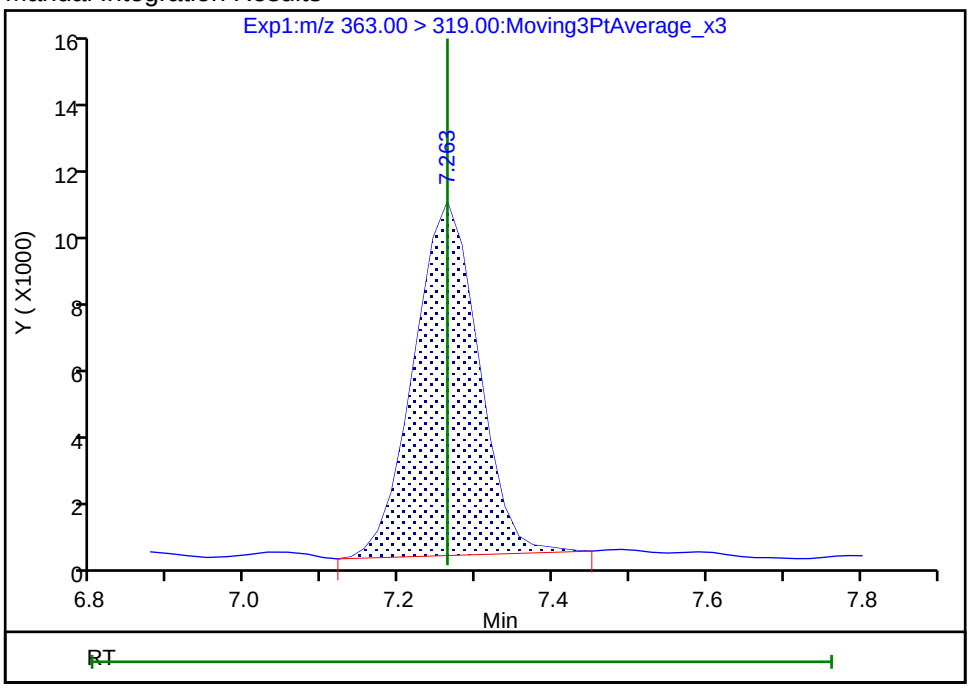
Processing Integration Results

RT: 7.26
Area: 61604
Amount: 0.001863
Amount Units: ng/ml



Manual Integration Results

RT: 7.26
Area: 60153
Amount: 0.001819
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:24:14
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

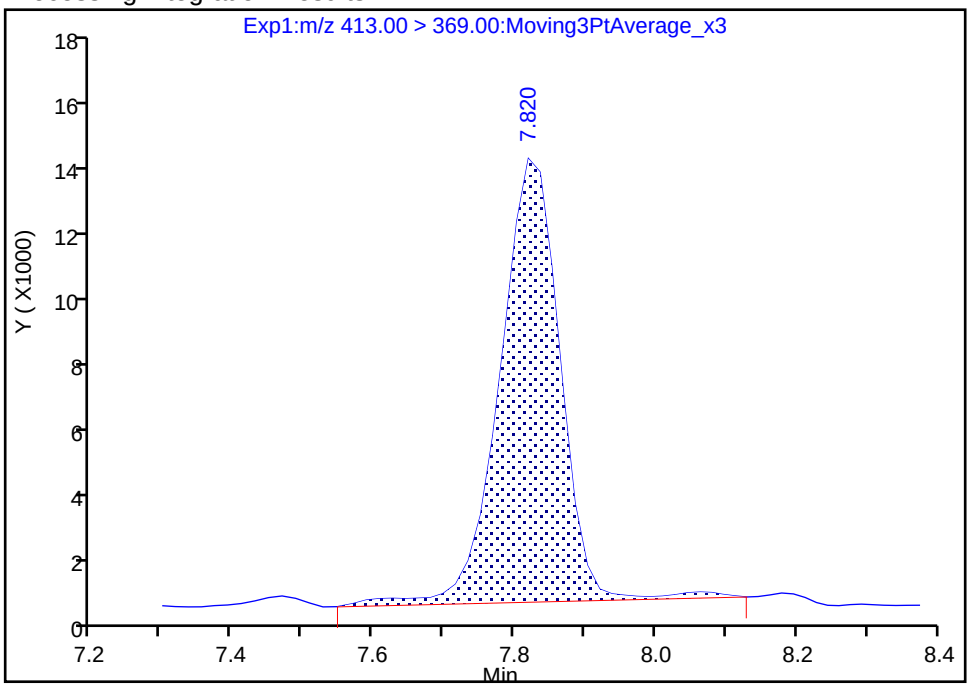
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

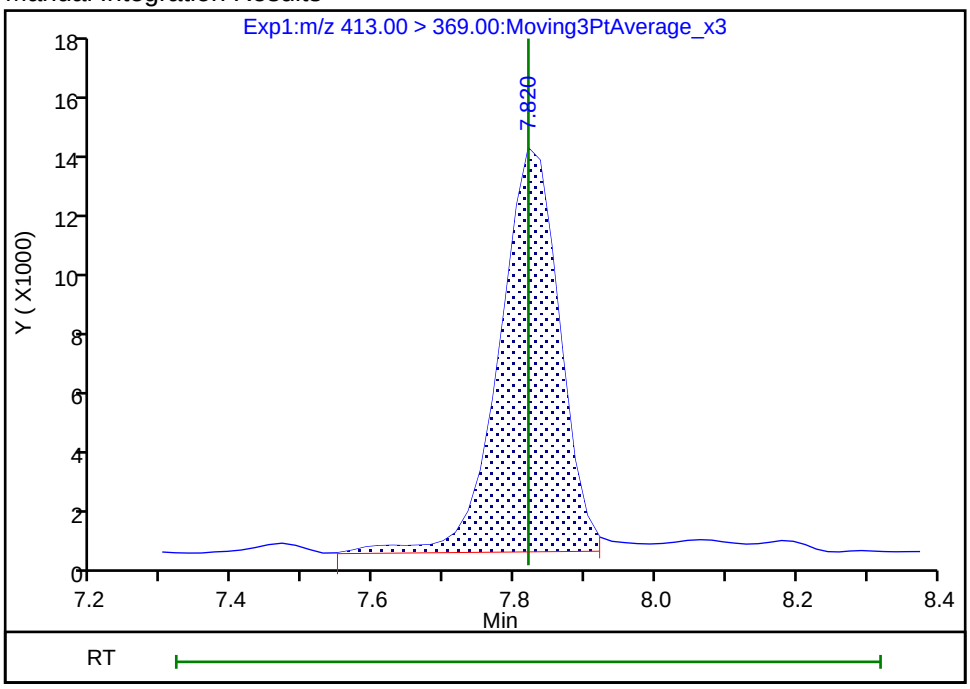
Processing Integration Results

RT: 7.82
Area: 76590
Amount: 0.001839
Amount Units: ng/ml



Manual Integration Results

RT: 7.82
Area: 76674
Amount: 0.001841
Amount Units: ng/ml



Reviewer: vangmy, 23-Nov-2020 11:15:48
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

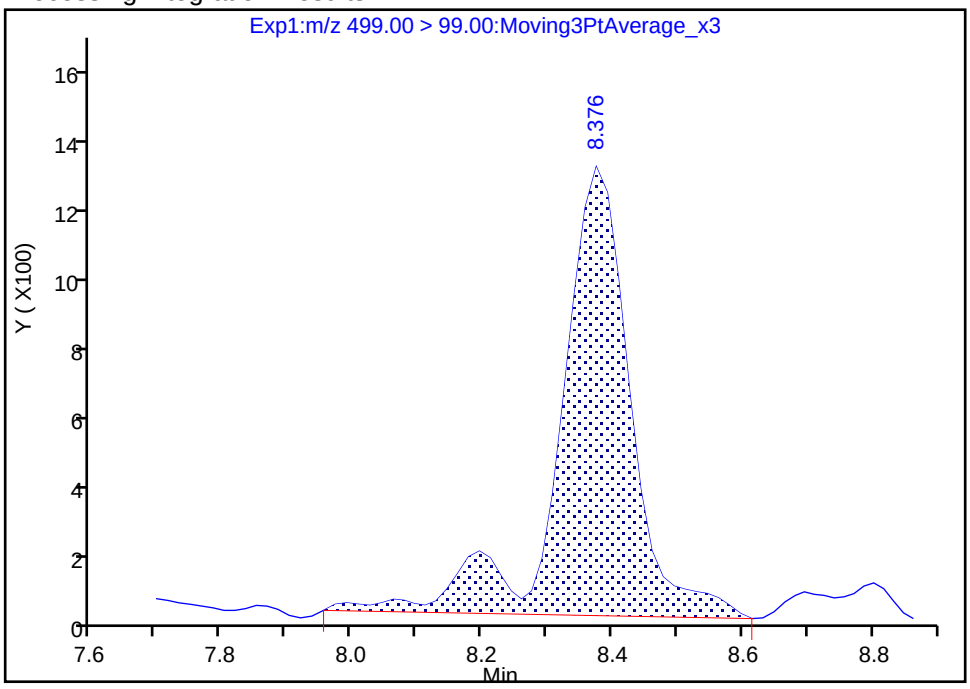
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

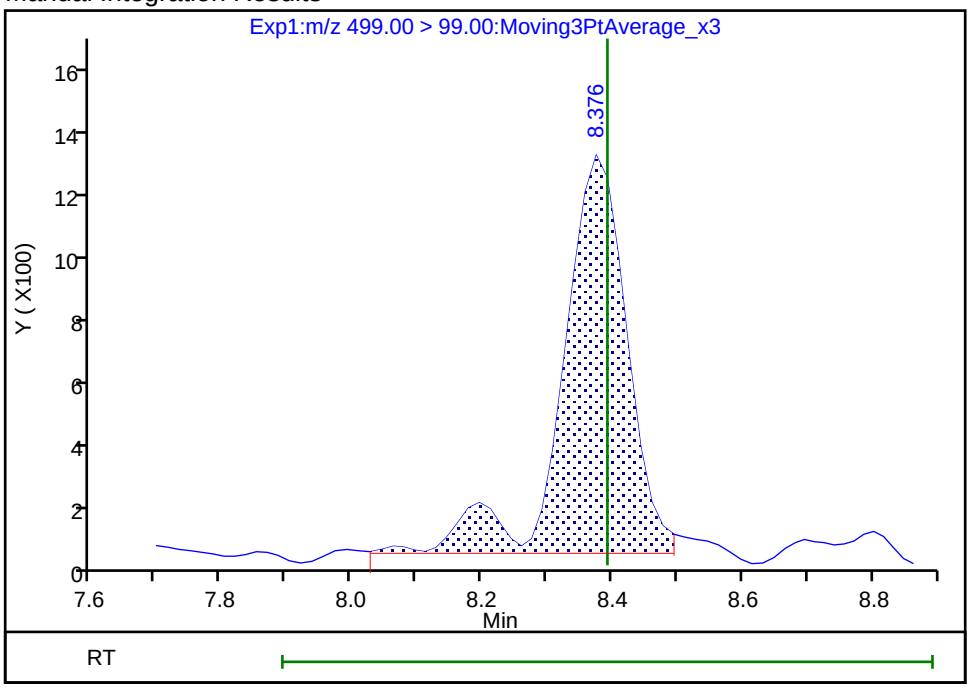
Processing Integration Results

RT: 8.38
Area: 9545
Amount: 0.001876
Amount Units: ng/ml



Manual Integration Results

RT: 8.38
Area: 8545
Amount: 0.001770
Amount Units: ng/ml



Reviewer: vangmy, 23-Nov-2020 11:16:00
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

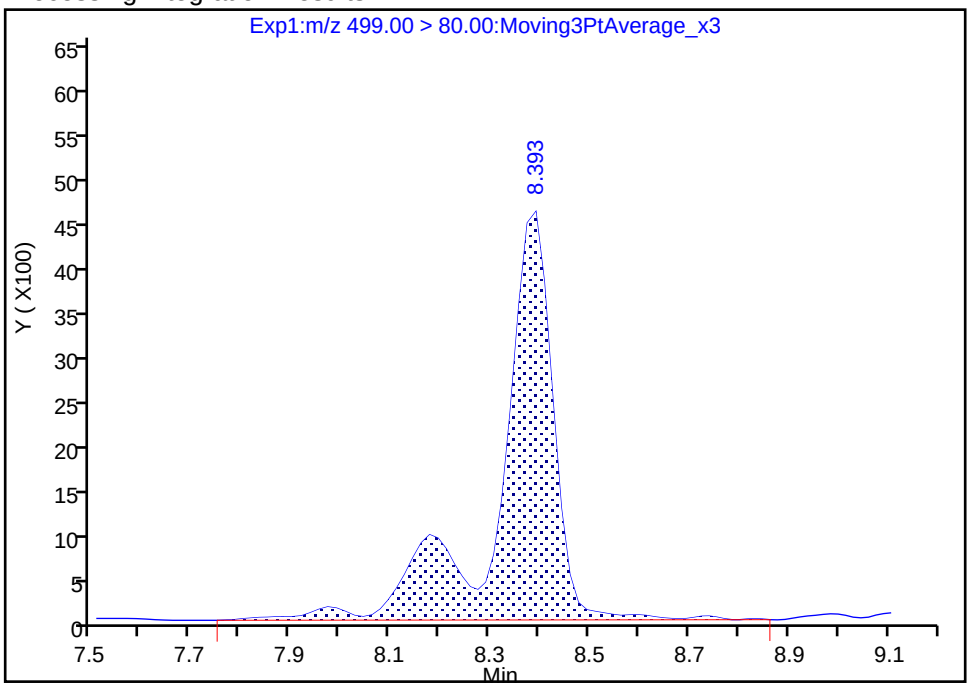
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_004.d
Injection Date: 23-Nov-2020 10:40:26 Instrument ID: A10
Lims ID: CCVL
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

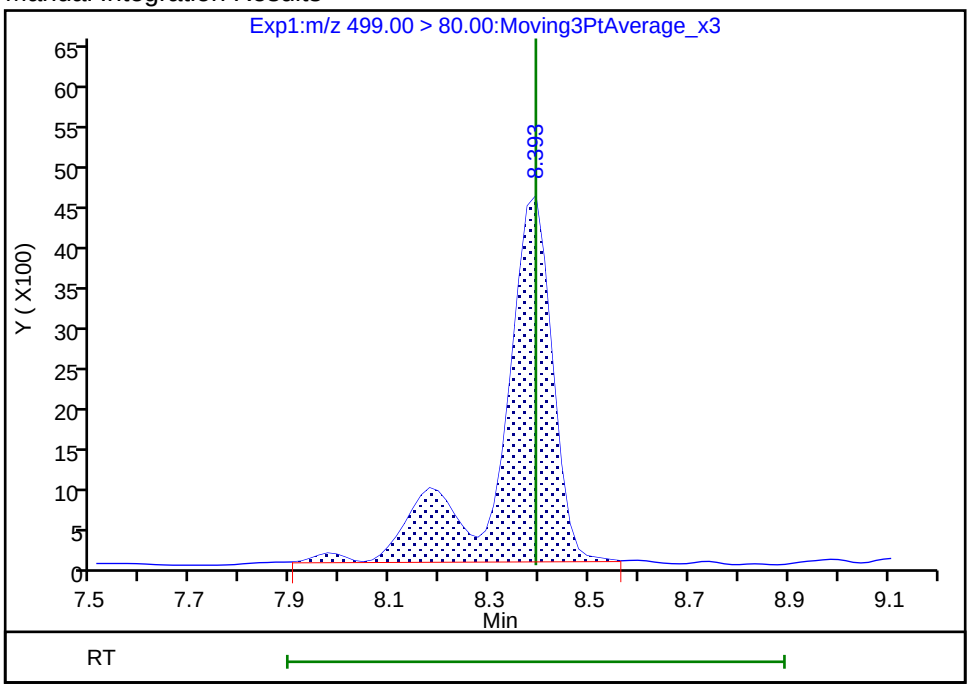
Processing Integration Results

RT: 8.39
Area: 35198
Amount: 0.001876
Amount Units: ng/ml



Manual Integration Results

RT: 8.39
Area: 33214
Amount: 0.001770
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:24:32
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCV 320-434683/3 Calibration Date: 11/23/2020 11:17

Instrument ID: A10 Calib Start Date: 10/12/2020 11:30

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 10/12/2020 13:39

Lab File ID: 2020.11.23_A10_DI_A_006.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	AveID	0.8796	0.8434		19.2	20.0	-4.1	40.0
Perfluoropentanoic acid	AveID	1.077	1.018		18.9	20.0	-5.5	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9899	0.9781		17.5	17.7	-1.2	40.0
Perfluorohexanoic acid	AveID	0.9282	0.9625		20.7	20.0	3.7	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.023	0.8978		17.6	20.0	-12.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	1.089		17.5	18.2	-4.0	40.0
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	AveID	2.482	2.319			19.0	-6.6	40.0
Perfluoroheptanesulfonic acid	AveID	1.207	1.248		19.7	19.0	3.4	50.0
Perfluorooctanoic acid (PFOA)	AveID	0.9707	0.9287		19.1	20.0	-4.3	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.024	1.014		18.4	18.6	-0.9	40.0
Perfluorononanoic acid (PFNA)	AveID	0.8846	0.8817		19.9	20.0	-0.3	40.0
Perfluorooctanesulfonamide	AveID	1.002	1.018		20.3	20.0	1.6	40.0
Perfluorodecanoic acid	AveID	0.8034	0.8066		20.1	20.0	0.4	40.0
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	AveID	2.219	2.141			19.2	-3.5	40.0
N-methylperfluorooctanesulfonamidoacetic acid	AveID	0.8314	0.8247			20.0	-0.8	40.0
Perfluorodecanesulfonic acid	AveID	0.7467	0.8096		20.9	19.3	8.4	50.0
Perfluorooctadecanoic acid	AveID	0.2195	0.1827		16.7	20.0	-16.7	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	0.7896				20.0		
Perfluorododecanoic acid	AveID	0.8205				20.0		
Perfluorohexadecanoic acid	L2ID					20.0	-100.0*	50.0
Perfluorotetradecanoic acid	AveID	0.0512				20.0		
Perfluorotridecanoic acid	AveID	0.8728				20.0		
Perfluoroundecanoic acid	AveID	0.8817				20.0		
13C4 PFBA	Ave	39652308	34687160		43.7	50.0	-12.5	50.0
13C5 PFPeA	Ave	33957935	29631020		43.6	50.0	-12.7	50.0
13C3 PFBS	Ave	42025548	36713419		40.6	46.5	-12.6	50.0
13C2 PFHxA	Ave	36170563	30375440		42.0	50.0	-16.0	50.0
13C4 PFHpA	Ave	36625688	34645860		47.3	50.0	-5.4	50.0
18O2 PFHxS	Ave	25876448	25789915		47.1	47.3	-0.3	50.0
M2-6:2 FTS	Ave	12964621	9811768		35.9	47.5	-24.3	50.0
13C4 PFOA	Ave	42598528	40966640		48.1	50.0	-3.8	50.0
13C4 PFOS	Ave	18426344	17436946		45.2	47.8	-5.4	50.0
13C5 PFNA	Ave	35838060	35717240		49.8	50.0	-0.3	50.0
13C8 FOSA	Ave	21925450	25743120		58.7	50.0	17.4	50.0
13C2 PFDA	Ave	35324108	34114360		48.3	50.0	-3.4	50.0
M2-8:2 FTS	Ave	13658455	9035846		31.7	47.9	-33.8	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCV 320-434683/3 Calibration Date: 11/23/2020 11:17

Instrument ID: A10 Calib Start Date: 10/12/2020 11:30

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 10/12/2020 13:39

Lab File ID: 2020.11.23_A10_DI_A_006.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFUnA	Ave	36408055	36407160		50.0	50.0	0.0	50.0
13C2 PFDoA	Ave	36645348	44177580		60.3	50.0	20.6	50.0
13C2 PFTeDA	Ave	24179970	59841720		124	50.0	147.5*	50.0
13C2 PFHxDA	Ave	15022995	31146620		104	50.0	107.3*	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 23-Nov-2020 11:17:19 ALS Bottle#: 6 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:25:46 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:25:46
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 Perfluorobutanoic acid										M
212.90 > 169.00	5.621	5.621	0.0	0.969	585135	0.0192		95.9	44.8	M
D 2 13C4 PFBA										M
217.00 > 172.00	5.800	5.800	0.0		1734358	0.0437		87.5	9012	M
D 4 13C5 PFPeA										
267.90 > 223.00	6.250	6.250	0.0		1481551	0.0436		87.3	12378	
5 Perfluoropentanoic acid										
262.90 > 219.00	6.250	6.250	0.0	1.000	603312	0.0189		94.5	132	
D 3 13C3 PFBS										
301.90 > 80.00	6.316	6.316	0.0		1707174	0.0406		87.4	5141	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	6.316	6.316	0.0	1.000	634855	0.0175	Target=1.50	98.8	1008	
298.90 > 99.00	6.293	6.316	-0.023	0.996	426478		1.49(0.75-2.26)		450	
D 7 M2-4:2 FTS										
329.00 > 81.00	6.688	6.688	0.0		330146	NC			706	
8 4:2 FTS										
327.00 > 307.00	6.688	6.688	0.0	1.000	316543	NC	Target=2.45		3453	
327.00 > 81.00	6.688	6.688	0.0	1.000	133335		2.37(1.22-3.67)		294	
D 9 13C2 PFHxA										
315.00 > 270.00	6.734	6.734	0.0		1518772	0.0420		84.0	10287	
10 Perfluorohexanoic acid										
313.00 > 269.00	6.734	6.734	0.0	1.000	584708	0.0207	Target=17.92	104	390	
313.00 > 119.00	6.734	6.734	0.0	1.000	26604		21.98(8.96-26.88)		244	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	6.757	6.757	0.0	0.933	570017	NC	Target=1.47		690	
349.00 > 99.00	6.757	6.757	0.0	0.933	392857		1.45(0.74-2.21)		713	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 HPFO-DA										
329.10 > 285.00	6.876	6.876	0.0	1.000	94062	NC			114	
D 12 13C3 HFPO-DA										
332.10 > 287.00	6.876	6.876	0.0		108333	NC			562	
16 Perfluorohexanesulfonic acid										
399.00 > 80.00	7.244	7.244	0.0	1.000	511352	0.0175	Target=5.60	96.0	827	
399.00 > 99.00	7.244	7.244	0.0	1.000	92975		5.50(2.80-8.40)		350	
D 15 18O2 PFHxS										
403.00 > 84.00	7.244	7.244	0.0		1219863	0.0471		99.7	10328	
D 17 13C4 PFHpA										
367.00 > 322.00	7.244	7.244	0.0		1732293	0.0473		94.6	16474	
18 Perfluoroheptanoic acid										
363.00 > 319.00	7.244	7.244	0.0	1.000	622104	0.0176	Target=8.55	87.8	333	
363.00 > 169.00	7.244	7.244	0.0	1.000	77819		7.99(4.27-12.82)		1011	
19 DONA										
377.00 > 251.00	7.300	7.300	0.0	0.873	2639961	NC	Target=2.62		8258	
377.00 > 85.00	7.300	7.300	0.0	0.873	1036625		2.55(1.31-3.93)		3661	
D 22 M2-6:2 FTS										
429.00 > 81.00	7.771	7.771	0.0		466059	0.0359		75.7	964	
23 6:2 FTS										
427.00 > 407.00	7.771	7.771	0.0	1.000	431437	0.0177	Target=2.55	93.4	4058	
427.00 > 81.00	7.771	7.771	0.0	1.000	167269		2.58(1.27-3.82)		285	
21 Perfluoroheptanesulfonic acid										
449.00 > 80.00	7.789	7.789	0.0	0.931	414254	0.0197	Target=6.95	103	771	
449.00 > 99.00	7.789	7.789	0.0	0.931	61654		6.72(3.48-10.43)		289	
24 Perfluorooctanoic acid										
413.00 > 369.00	7.805	7.805	0.0	1.000	760893	0.0191	Target=1.41	95.7	162	
413.00 > 169.00	7.805	7.805	0.0	1.000	559902		1.36(0.71-2.12)		2040	
D 25 13C4 PFOA										
417.00 > 372.00	7.805	7.805	0.0		2048332	0.0481		96.2	12348	
27 Perfluorooctanesulfonic acid										M
499.00 > 80.00	8.362	8.362	0.0	1.000	328129	0.0184	Target=3.36	99.1	908	
499.00 > 99.00	8.362	8.362	0.0	1.000	99319		3.30(1.68-5.04)		385	M
D 26 13C4 PFOS										
503.00 > 80.00	8.362	8.362	0.0		833486	0.0452		94.6	1760	
29 Perfluorononanoic acid										
463.00 > 419.00	8.397	8.397	0.0	1.000	629813	0.0199	Target=6.88	99.7	404	
463.00 > 169.00	8.397	8.397	0.0	1.000	96006		6.56(3.44-10.32)		1115	
D 28 13C5 PFNA										
468.00 > 423.00	8.397	8.397	0.0		1785862	0.0498		99.7	13497	
D 30 13C8 FOSA										
506.00 > 78.00	8.943	8.943	0.0		1287156	0.0587		117	9188	
31 Perfluorooctanesulfonamide										
498.00 > 78.00	8.943	8.943	0.0	1.000	524098	0.0203		102	5133	
32 Perfluorononanesulfonic acid										
549.00 > 80.00	8.943	8.943	0.0	1.069	304205	NC	Target=6.23		1779	
549.00 > 99.00	8.943	8.943	0.0	1.069	59060		5.15(3.11-9.34)		270	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 33 13C2 PFDA										
515.00 > 470.00	8.974	8.974	0.0		1705718	0.0483		96.6	6827	
35 Perfluorodecanoic acid										
513.00 > 469.00	8.974	8.974	0.0	1.000	550365	0.0201	Target=14.44	100	477	
513.00 > 169.00	8.989	8.974	0.015	1.002	39436		13.96(7.22-21.66)		401	
D 34 M2-8:2 FTS										
529.00 > 81.00	8.989	8.989	0.0		432817	0.0317		66.2	1918	
36 8:2 FTS										
527.00 > 507.00	8.989	8.989	0.0	1.000	370676	0.0185	Target=2.16	96.5	3510	
527.00 > 81.00	8.989	8.989	0.0	1.000	178004		2.08(1.08-3.24)		658	
38 NMeFOSAA										
570.00 > 419.00	9.264	9.264	0.0	1.000	337506	0.0198	Target=13.31	99.2	989	
570.00 > 483.00	9.279	9.264	0.015	1.002	23461		14.39(6.65-19.96)		181	
D 37 d3-NMeFOSAA										
573.00 > 419.00	9.264	9.264	0.0		1023126	0.0414		82.9	5164	
39 Perfluorodecanesulfonic acid										
599.00 > 80.00	9.483	9.483	0.0	1.134	272182	0.0209	Target=2.51	108	1834	
599.00 > 99.00	9.483	9.483	0.0	1.134	103602		2.63(1.26-3.77)		1300	
D 42 13C2 PFUnA										
565.00 > 520.00	9.531	9.531	0.0		1820358	0.0500		100	17665	
D 40 d5-NEtFOSAA										
589.00 > 419.00	9.548	9.548	0.0		1223710	0.0443		88.6	4618	
D 45 13C2 PFDoA										
615.00 > 570.00	10.064	10.064	0.0		2208879	0.0603		121	15497	
D 51 13C2 PFTeDA										
715.00 > 670.00	11.017	11.017	0.0		2992086	0.1237		247	12495	
D 52 13C2 PFHxDA										
815.00 > 770.00	11.864	11.864	0.0		1557331	0.1037		207	6527	
53 Perfluorooctadecanoic acid										R
913.00 > 869.00	12.663	12.663	0.0	1.067	113825	0.0167	Target=92.79	83.3	92.2	R
913.00 > 169.00	12.663	12.663	0.0	1.067	3812		29.86(46.39-139.18)		76.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Reagents:

LCPFC-LL-L5_00034 Amount Added: 1.00 Units: mL

Report Date: 24-Nov-2020 08:25:47 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Injection Date: 23-Nov-2020 11:17:19 Instrument ID: A10

Lims ID: CCV L5

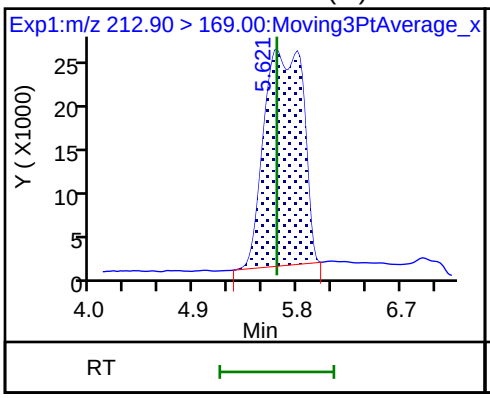
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 3

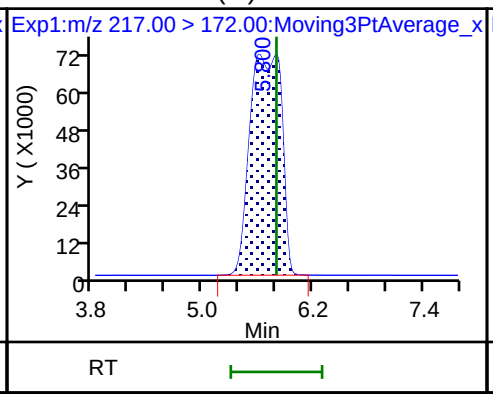
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

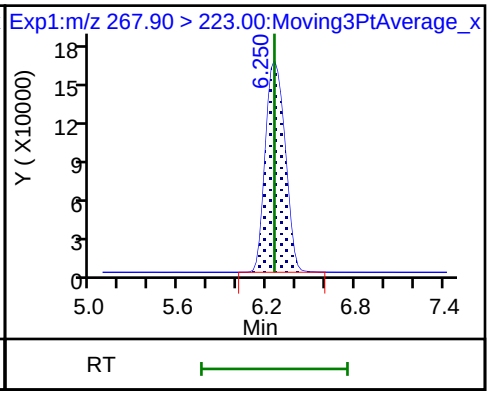
1 Perfluorobutanoic acid (M)



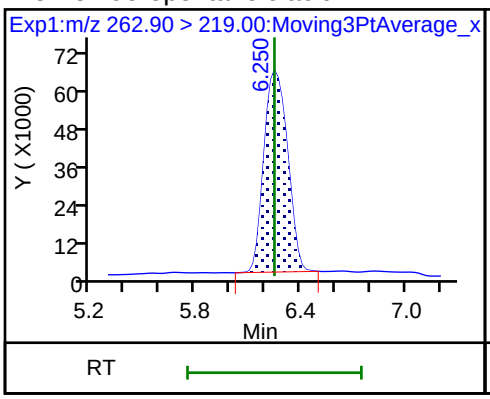
D 2 13C4 PFBA (M)



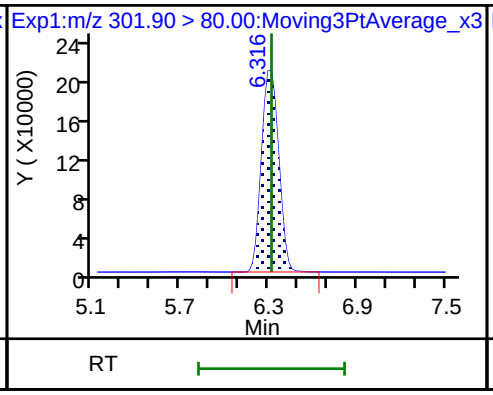
D 4 13C5 PFPeA



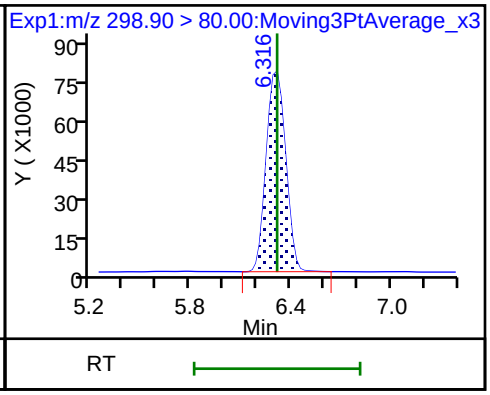
5 Perfluoropentanoic acid



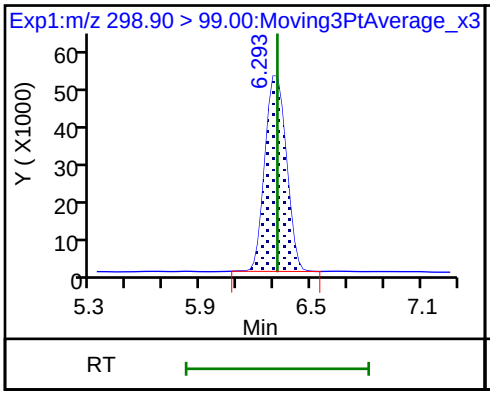
D 3 13C3 PFBS



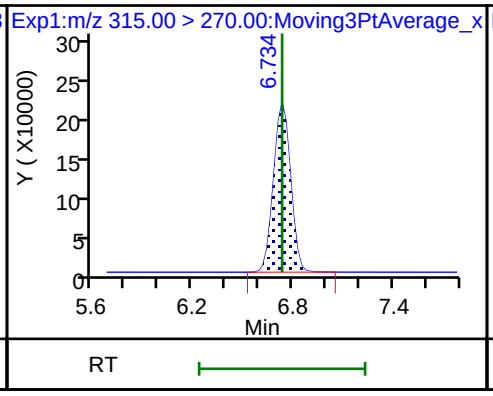
6 Perfluorobutanesulfonic acid



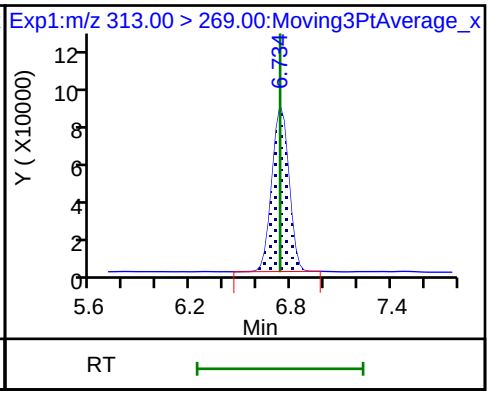
6 Perfluorobutanesulfonic acid



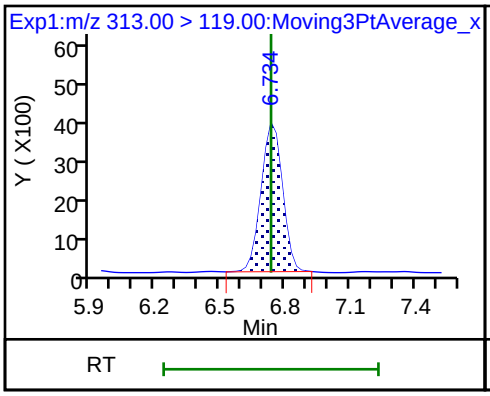
D 9 13C2 PFHxA



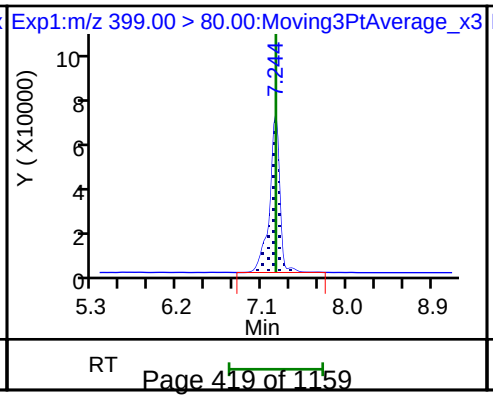
10 Perfluorohexanoic acid



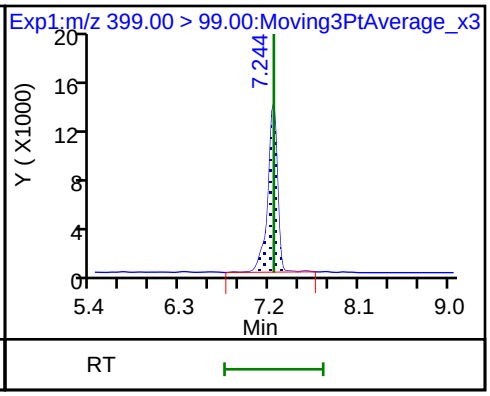
10 Perfluorohexanoic acid



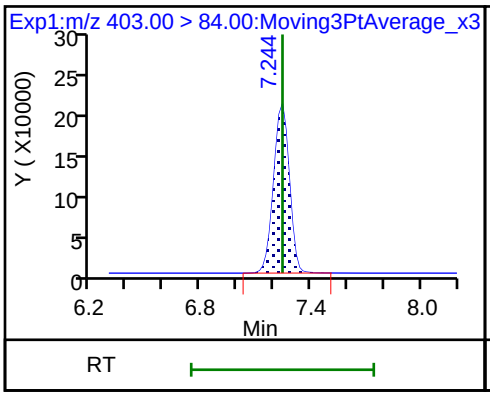
16 Perfluorohexanesulfonic acid



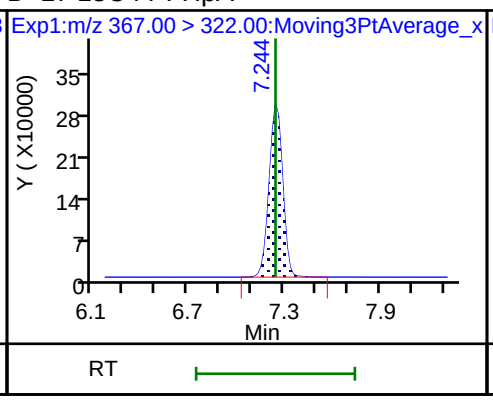
16 Perfluorohexanesulfonic acid



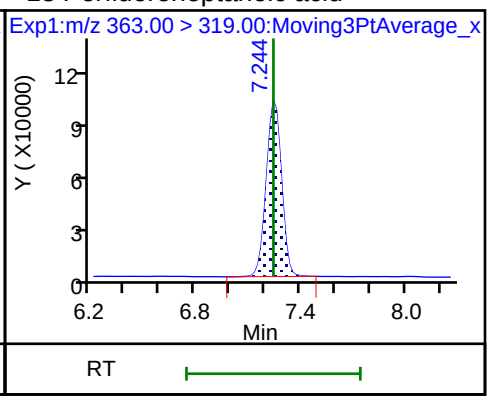
D 15 18O2 PFHxS



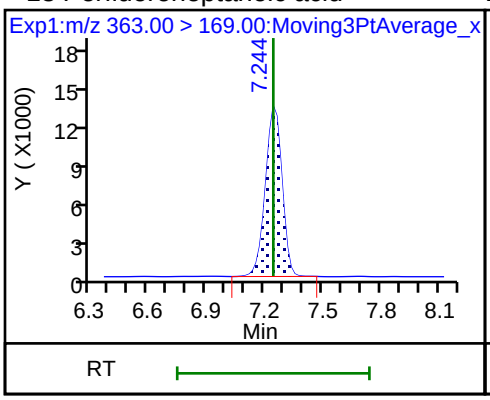
D 17 13C4 PFHpA



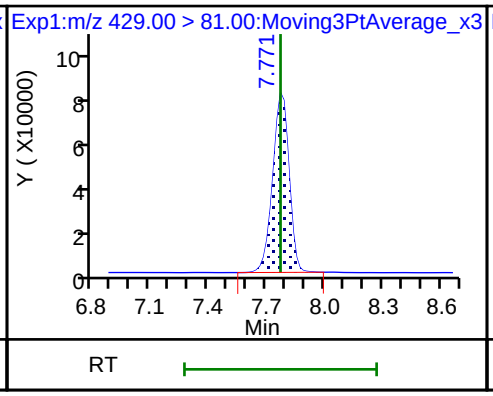
18 Perfluoroheptanoic acid



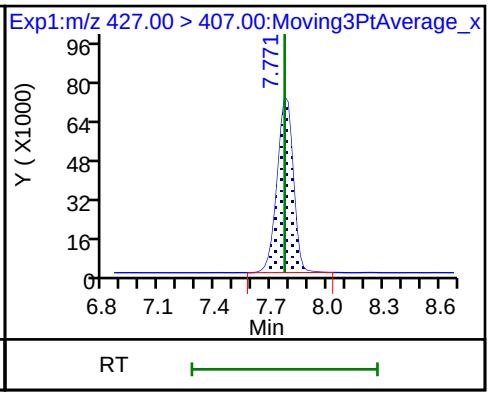
18 Perfluoroheptanoic acid



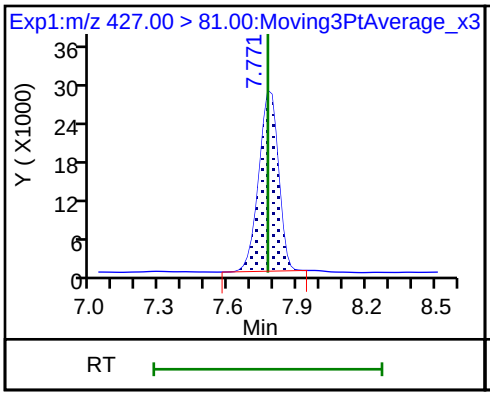
D 22 M2-6:2 FTS



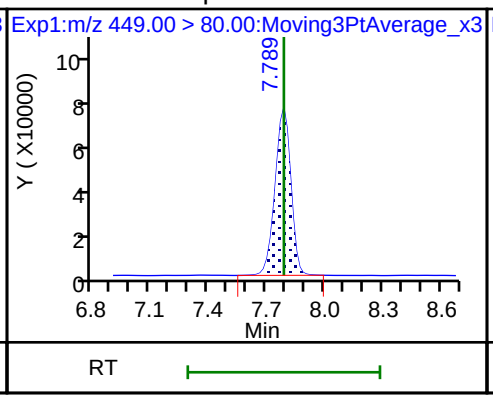
23 6:2 FTS



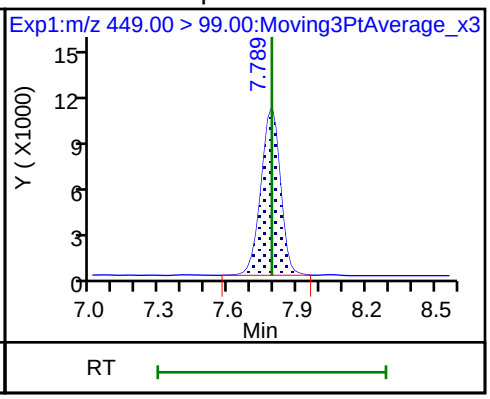
23 6:2 FTS



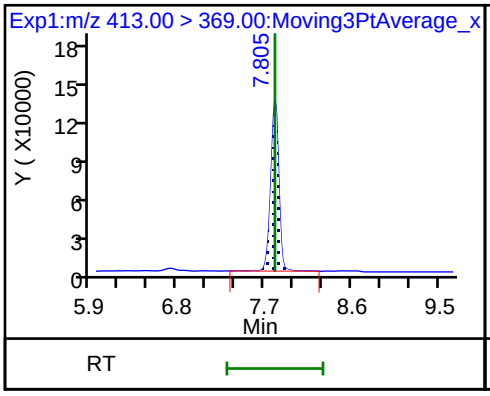
21 Perfluoroheptanesulfonic acid



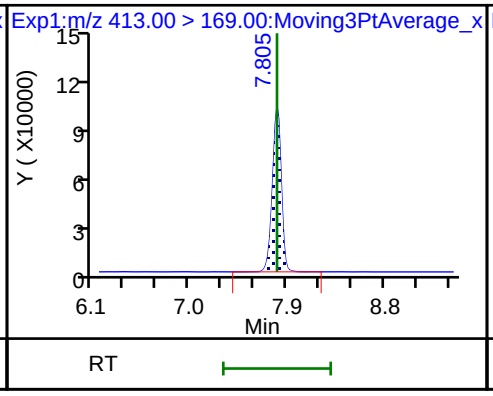
21 Perfluoroheptanesulfonic acid



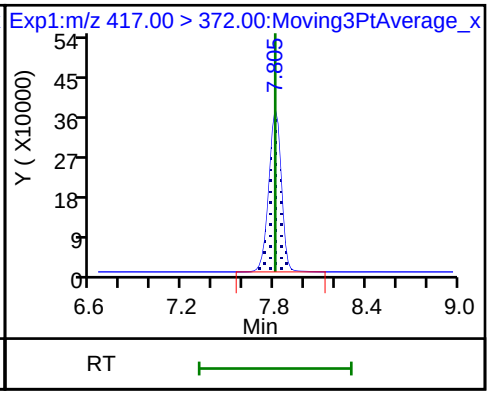
24 Perfluorooctanoic acid



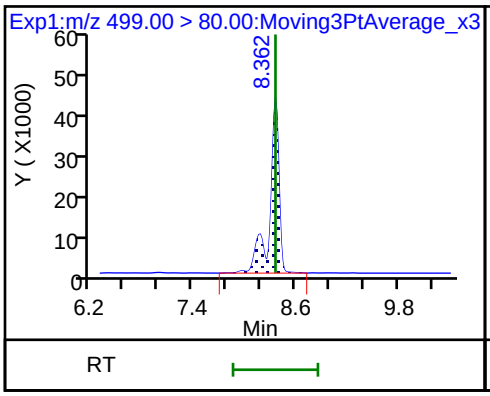
24 Perfluorooctanoic acid



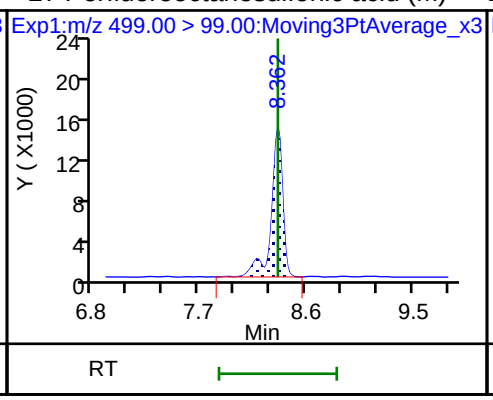
D 25 13C4 PFOA



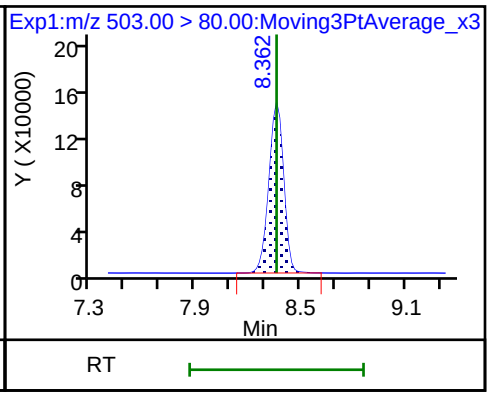
27 Perfluorooctanesulfonic acid



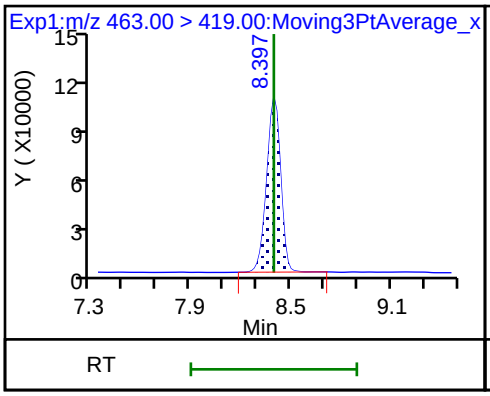
27 Perfluorooctanesulfonic acid (M)



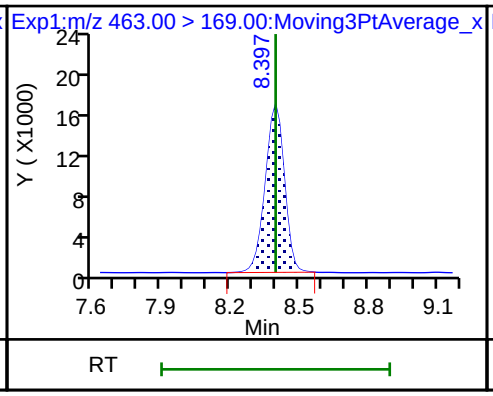
D 26 13C4 PFOS



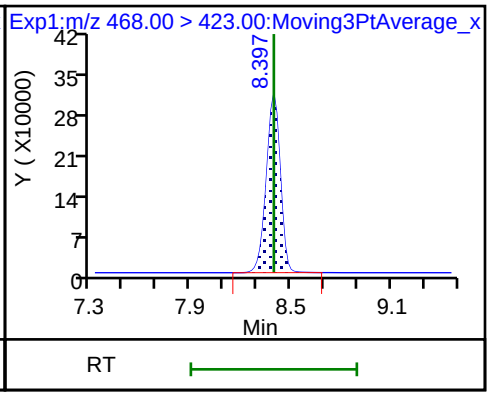
29 Perfluorononanoic acid



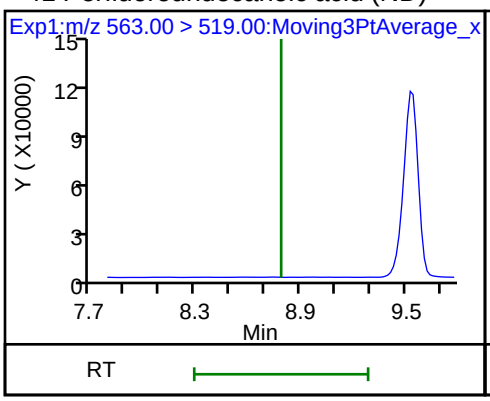
29 Perfluorononanoic acid



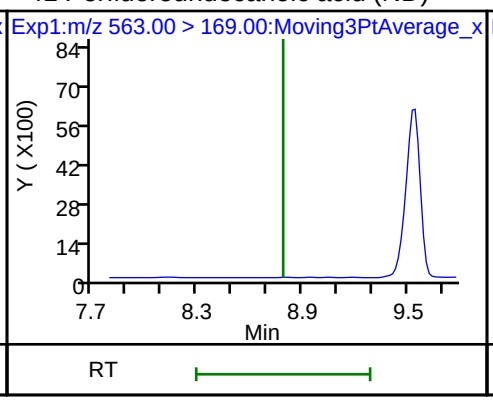
D 28 13C5 PFNA



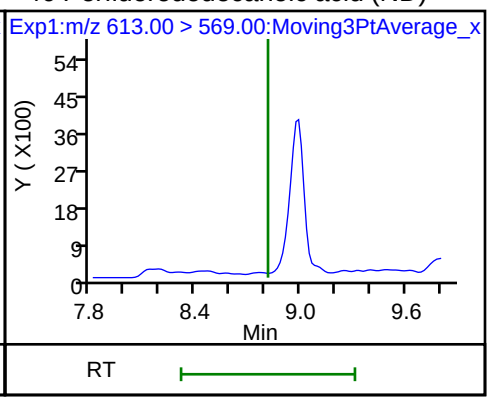
41 Perfluoroundecanoic acid (ND)



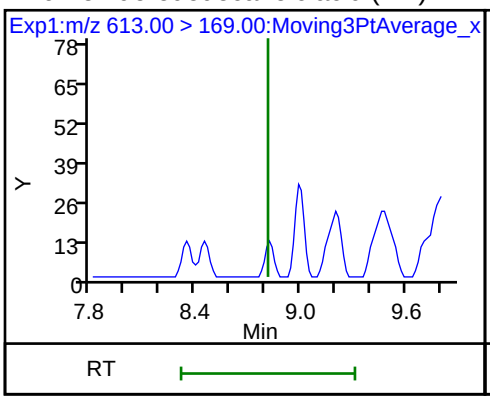
41 Perfluoroundecanoic acid (ND)



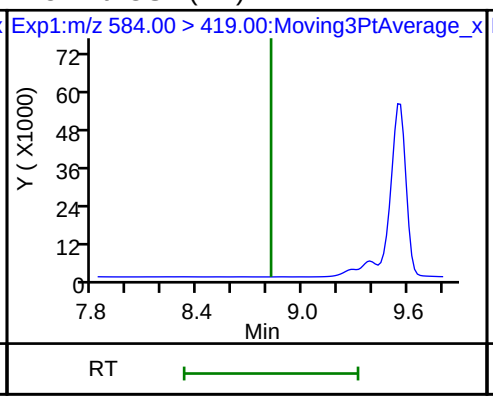
46 Perfluorododecanoic acid (ND)



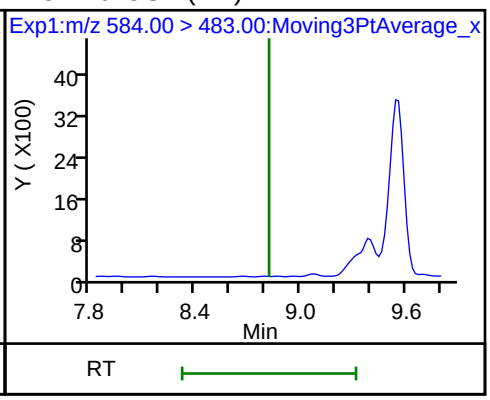
46 Perfluorododecanoic acid (ND)



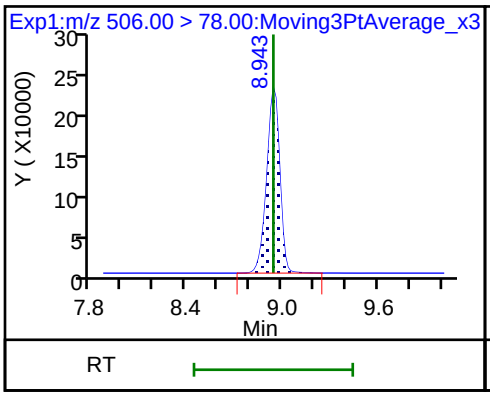
43 NEtFOSA (ND)



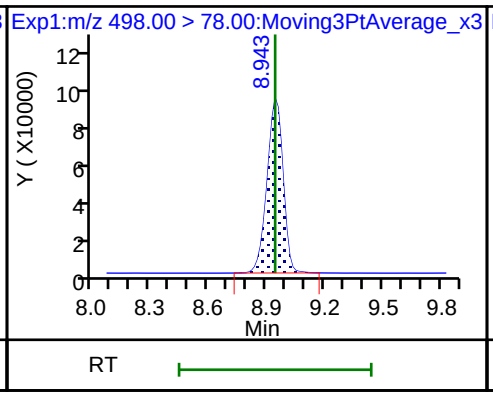
43 NEtFOSA (ND)



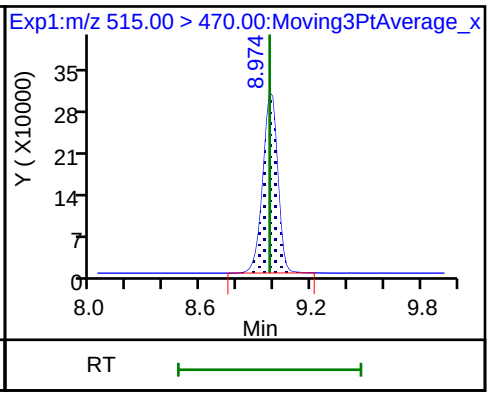
D 30 13C8 FOSA



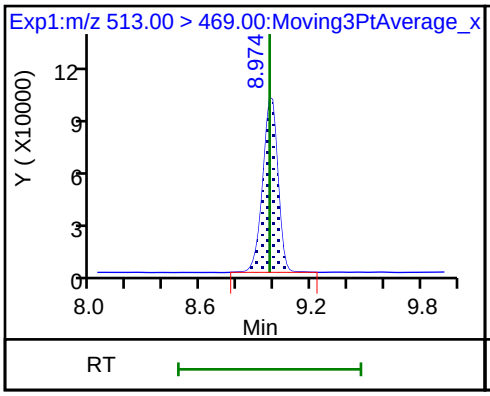
31 Perfluorooctanesulfonamide



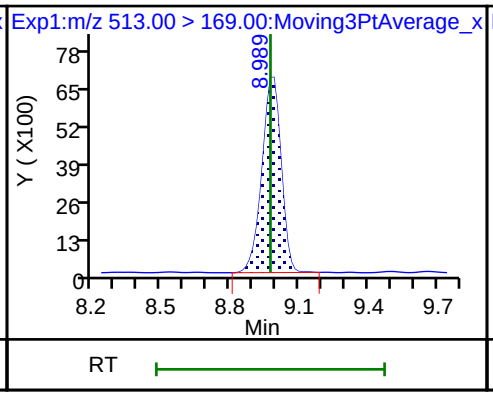
D 33 13C2 PFDA



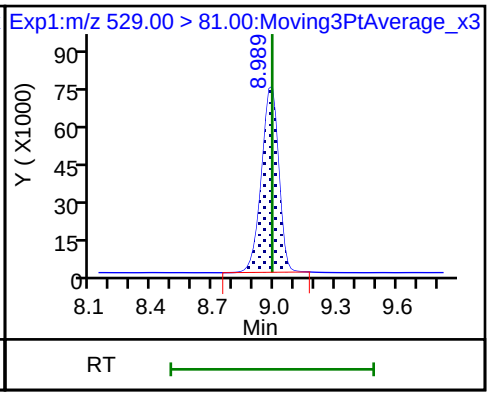
35 Perfluorodecanoic acid



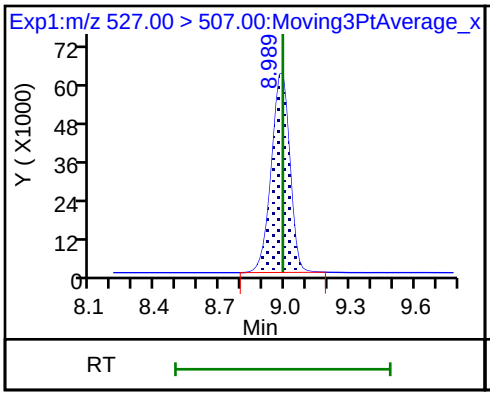
35 Perfluorodecanoic acid



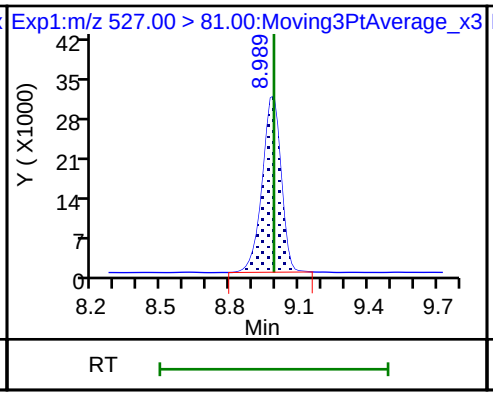
D 34 M2-8:2 FTS



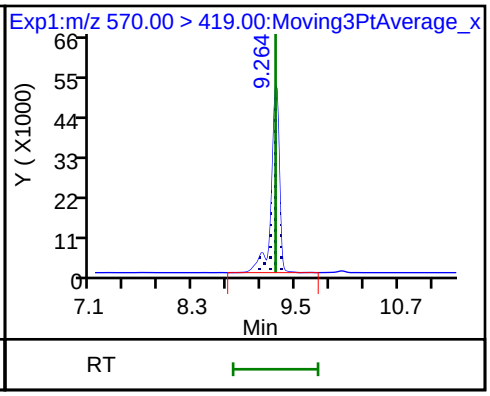
36 8:2 FTS



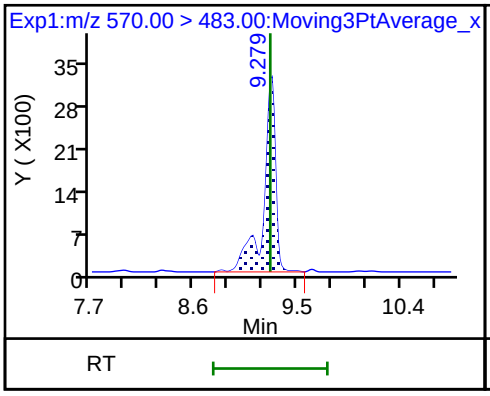
36 8:2 FTS



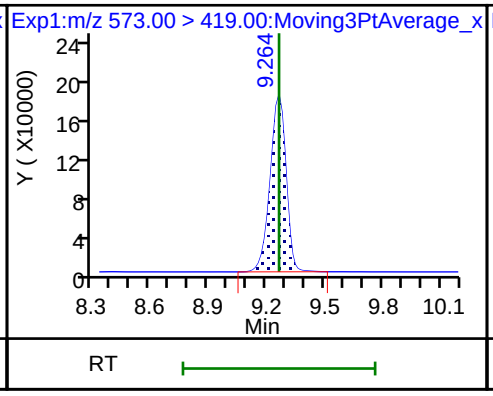
38 NMeFOSAA



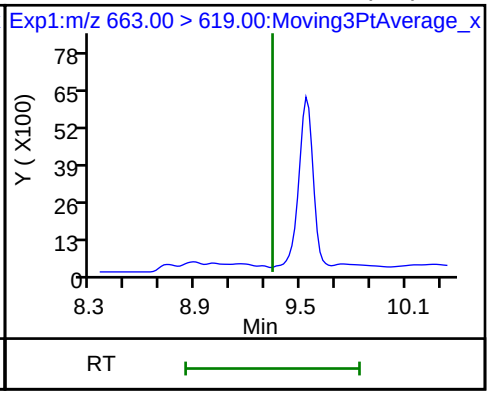
38 NMeFOSAA



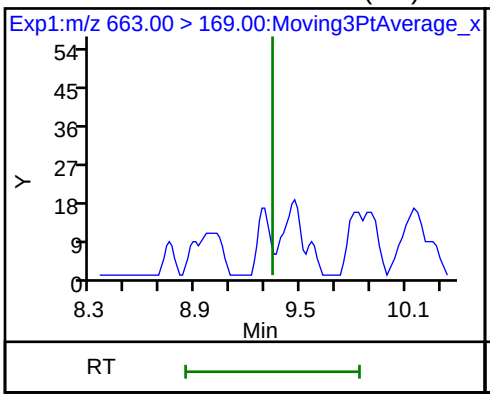
D 37 d3-NMeFOSAA



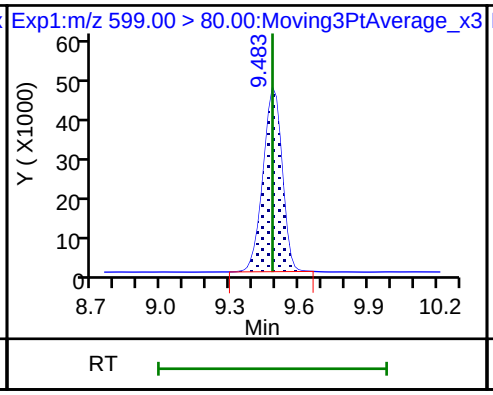
49 Perfluorotridecanoic acid (ND)



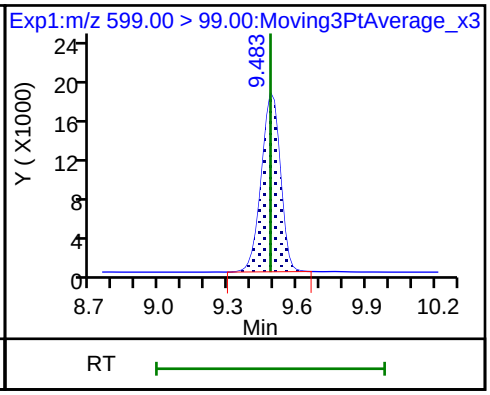
49 Perfluorotridecanoic acid (ND)



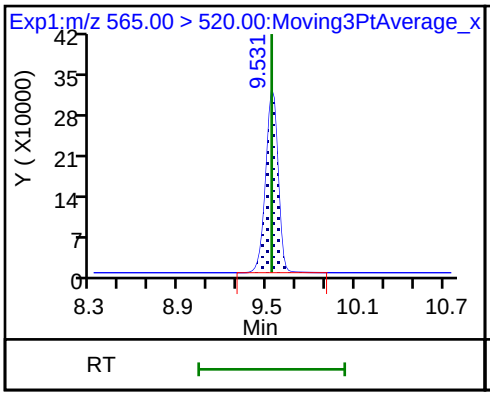
39 Perfluorodecanesulfonic acid



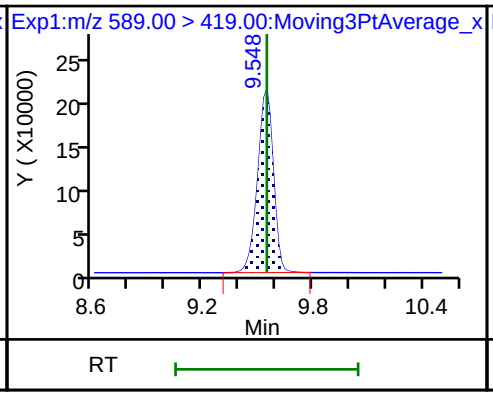
39 Perfluorodecanesulfonic acid



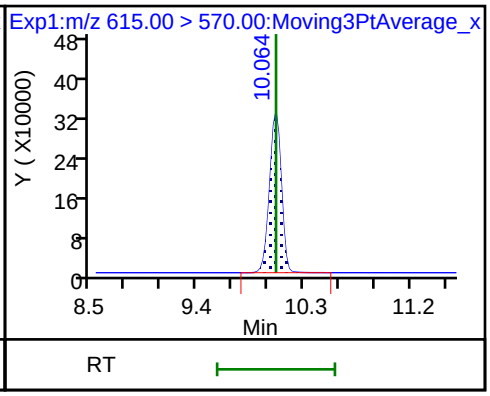
D 42 13C2 PFUnA



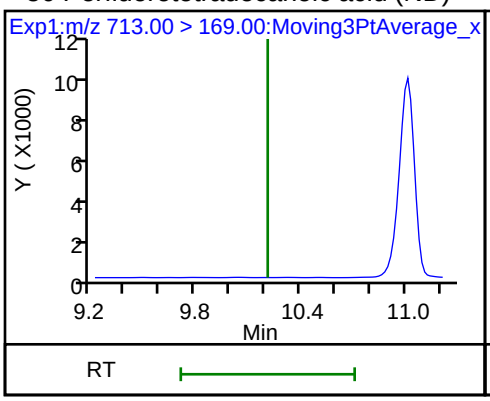
D 40 d5-NEtFOSAA



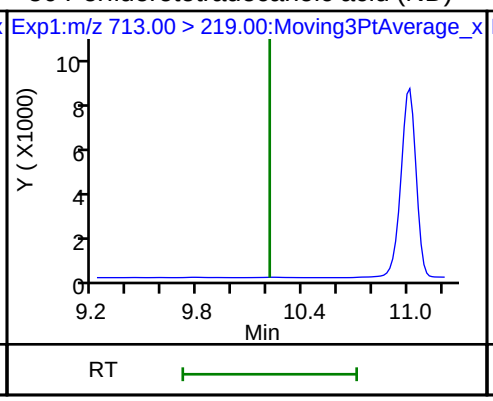
D 45 13C2 PFDoA



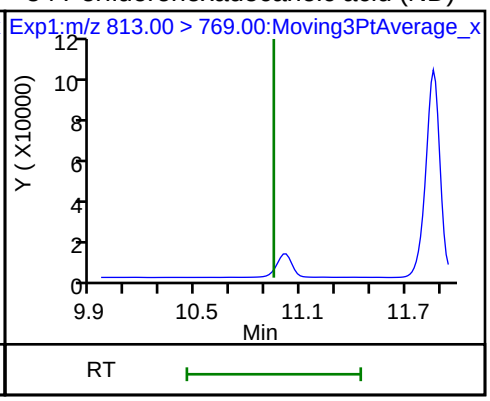
50 Perfluorotetradecanoic acid (ND)



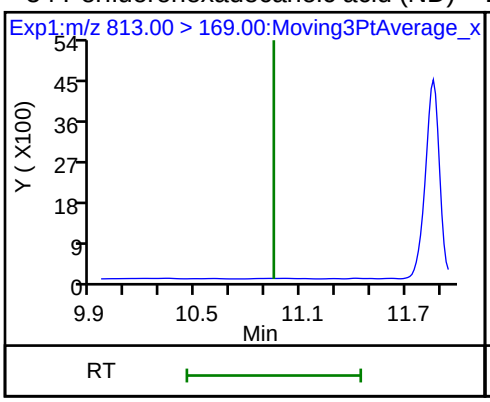
50 Perfluorotetradecanoic acid (ND)



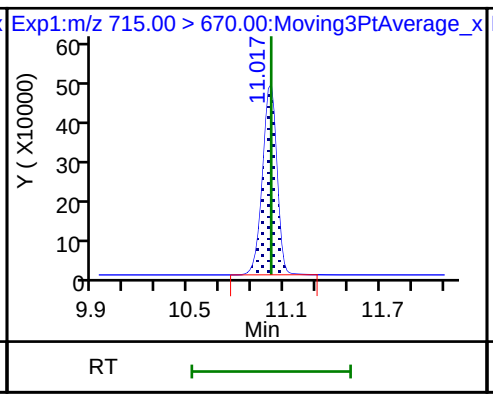
54 Perfluorohexadecanoic acid (ND)



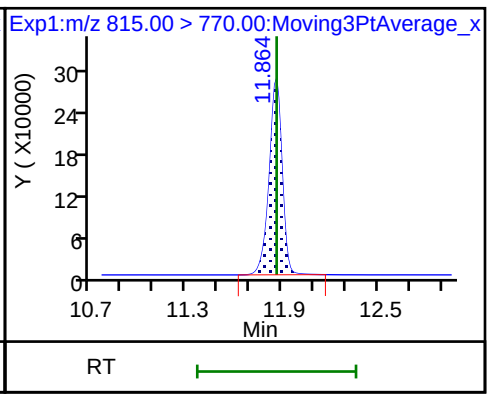
54 Perfluorohexadecanoic acid (ND)



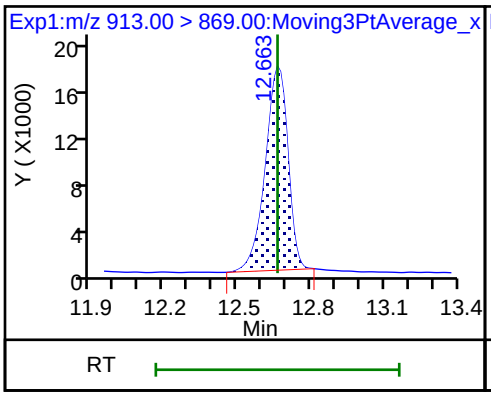
D 51 13C2 PFTeDA



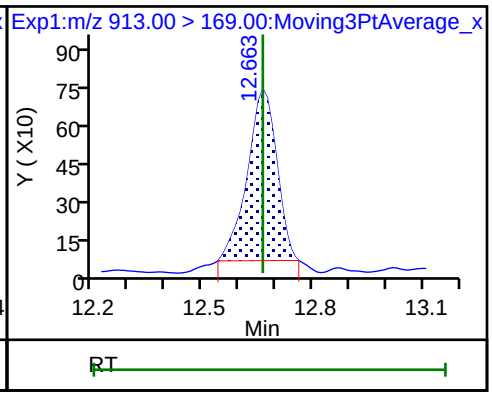
D 52 13C2 PFHxDA



53 Perfluorooctadecanoic acid



53 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

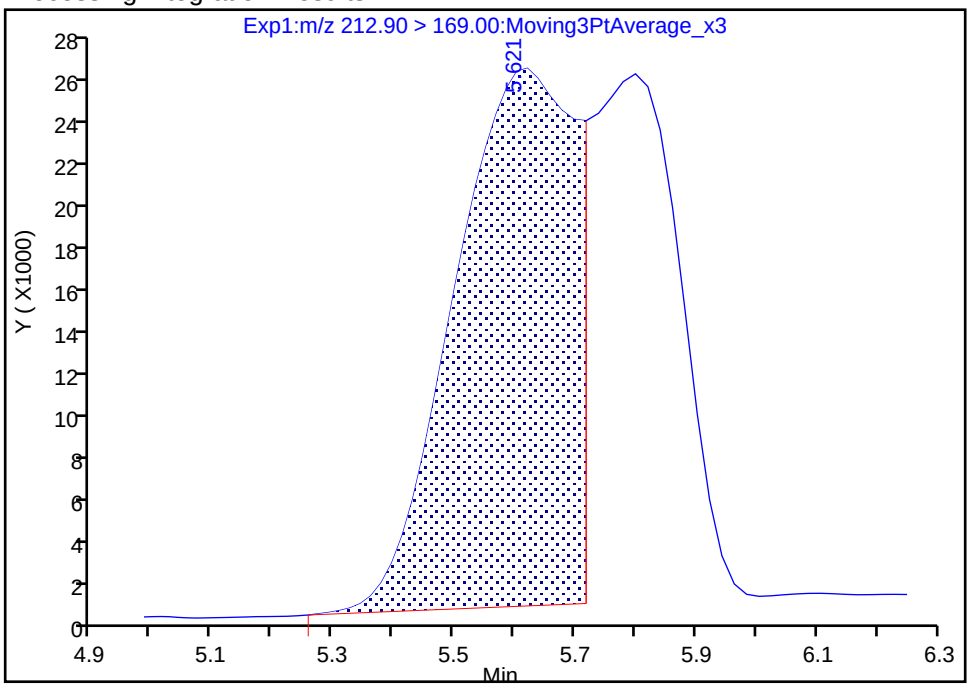
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d
Injection Date: 23-Nov-2020 11:17:19 Instrument ID: A10
Lims ID: CCV L5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

1 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

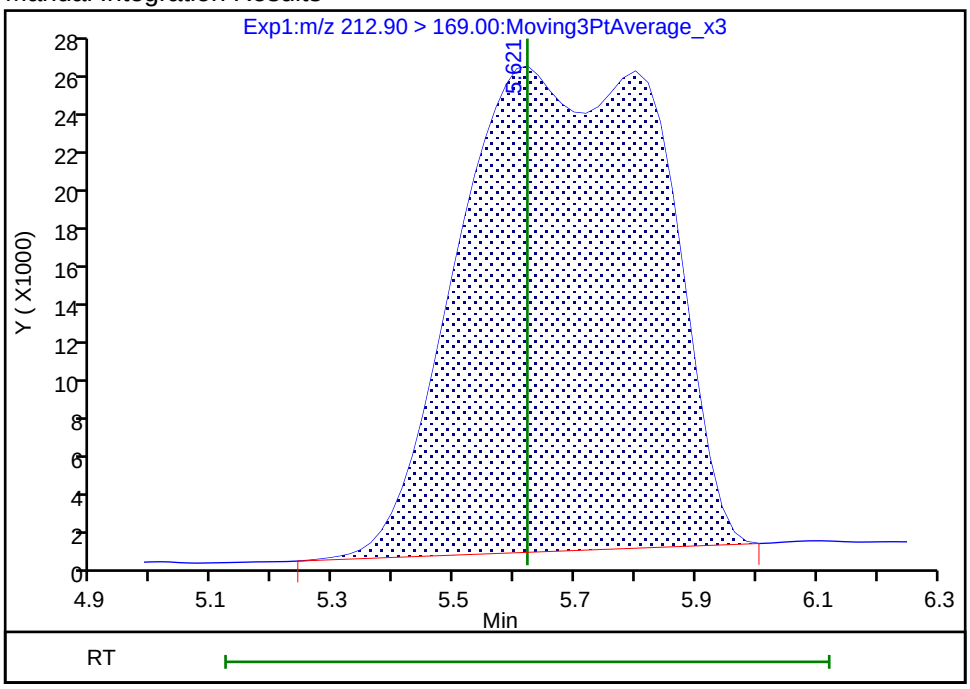
Processing Integration Results

RT: 5.62
Area: 342059
Amount: 0.011211
Amount Units: ng/ml



Manual Integration Results

RT: 5.62
Area: 585135
Amount: 0.019178
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:25:30
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

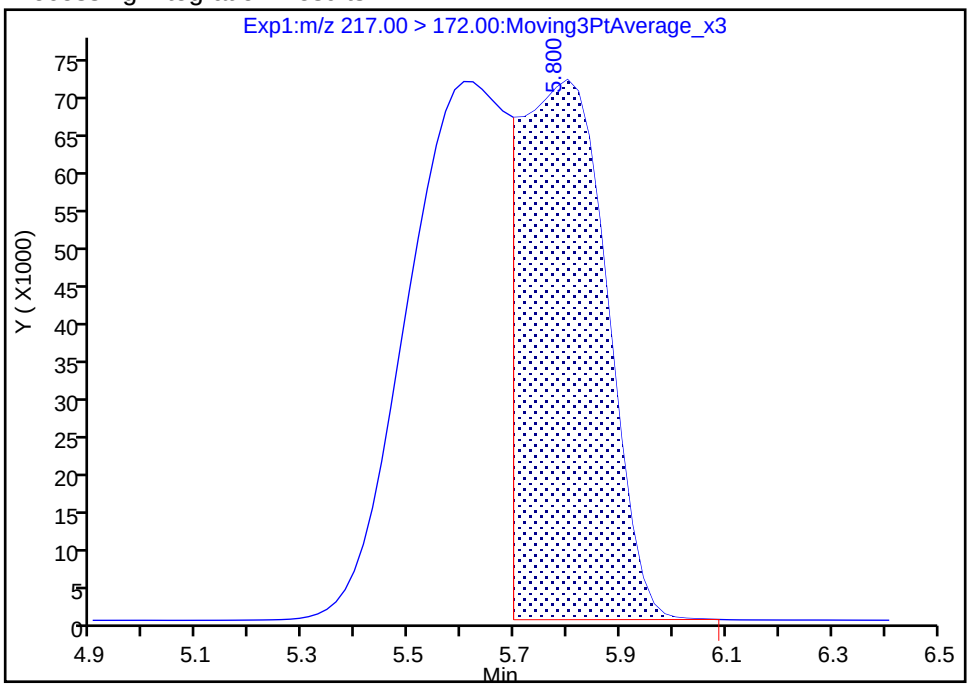
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d
Injection Date: 23-Nov-2020 11:17:19 Instrument ID: A10
Lims ID: CCV L5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

D 2 13C4 PFBA, CAS: STL00992

Signal: 1

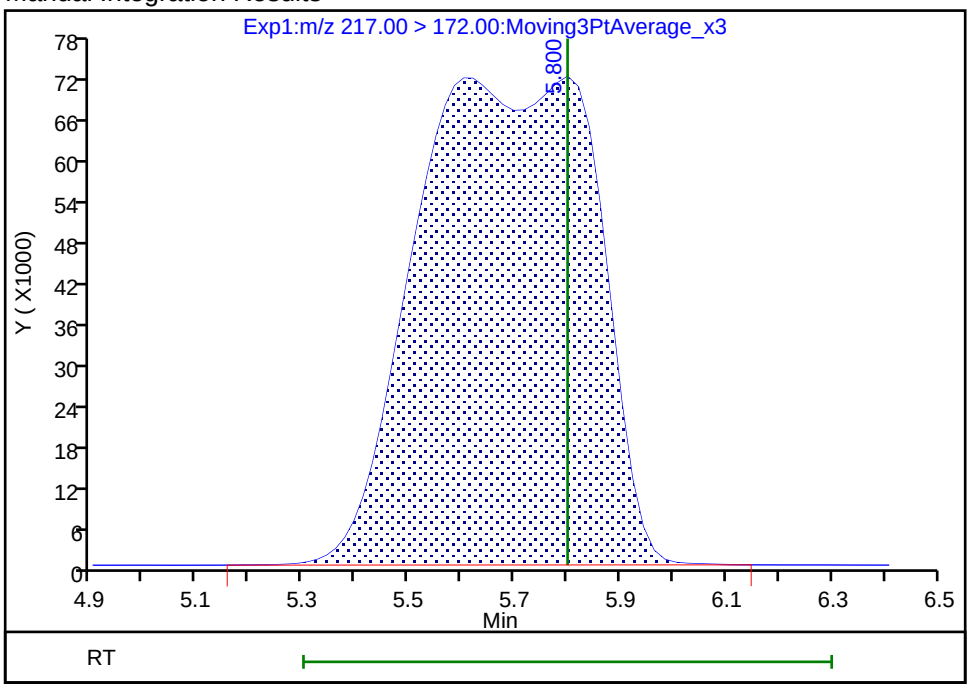
Processing Integration Results

RT: 5.80
Area: 802195
Amount: 0.020231
Amount Units: ng/ml



Manual Integration Results

RT: 5.80
Area: 1734358
Amount: 0.043739
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:25:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

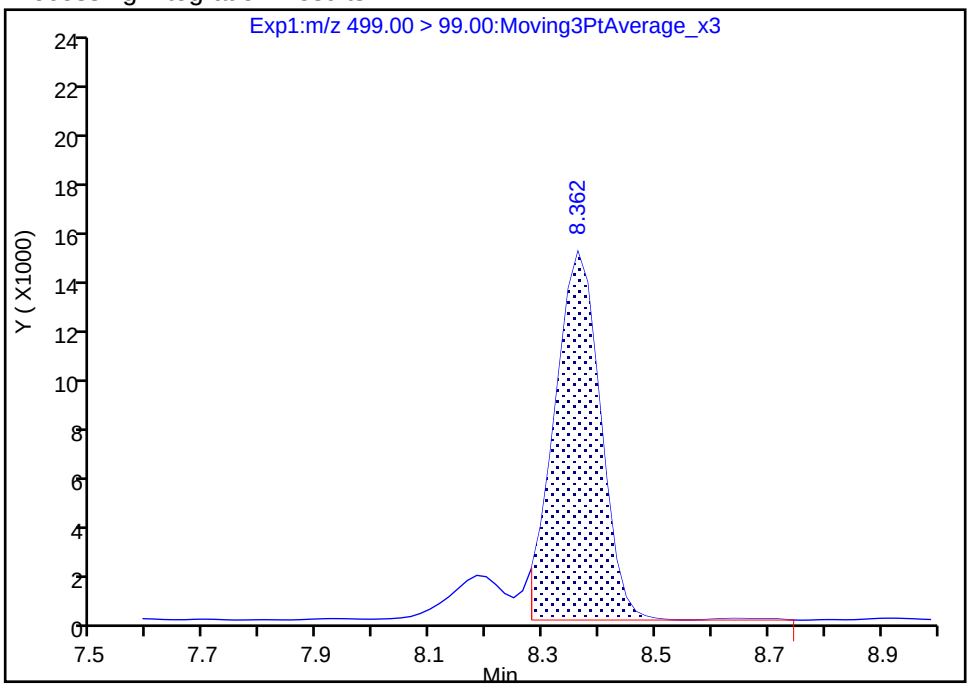
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d
Injection Date: 23-Nov-2020 11:17:19 Instrument ID: A10
Lims ID: CCV L5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 3
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

27 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

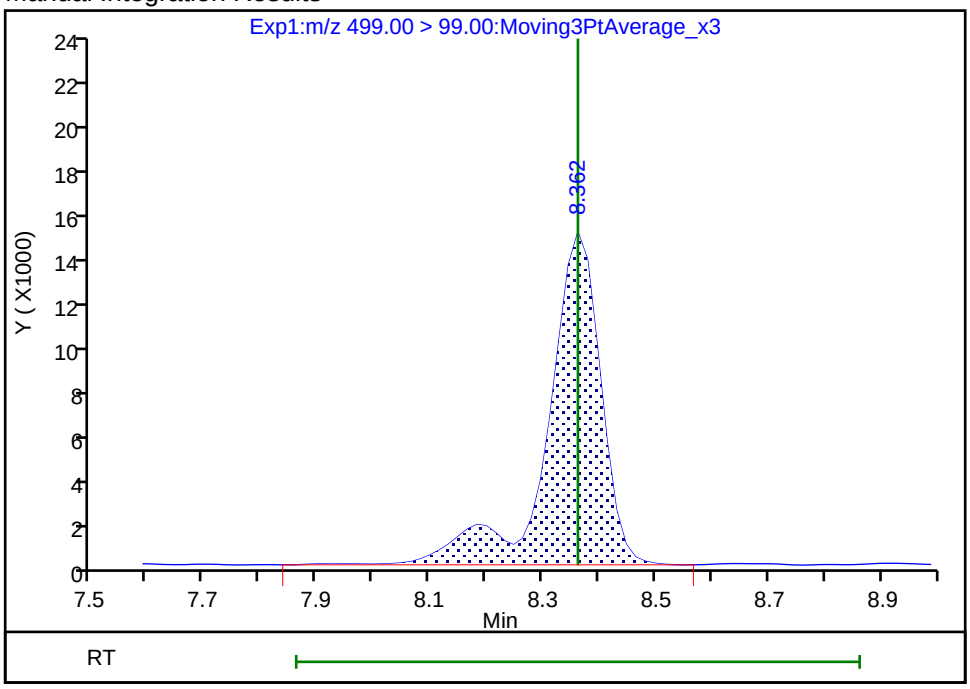
Processing Integration Results

RT: 8.36
Area: 84955
Amount: 0.018385
Amount Units: ng/ml



Manual Integration Results

RT: 8.36
Area: 99319
Amount: 0.018385
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:25:42
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCV 320-434683/14 Calibration Date: 11/23/2020 14:40

Instrument ID: A10 Calib Start Date: 10/12/2020 11:30

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 10/12/2020 13:39

Lab File ID: 2020.11.23_A10_DI_A_017.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	AveID	0.8796	0.8631		49.1	50.0	-1.9	40.0
Perfluoropentanoic acid	AveID	1.077	1.109		51.5	50.0	3.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9899	1.055		47.1	44.2	6.6	40.0
Perfluorohexanoic acid	AveID	0.9282	0.9861		53.1	50.0	6.2	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.023	0.9828		48.1	50.0	-3.9	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	1.038		41.6	45.5	-8.5	40.0
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	AveID	2.482	2.853		54.5	47.4	15.0	40.0
Perfluoroheptanesulfonic acid	AveID	1.207	1.262		49.8	47.6	4.6	50.0
Perfluorooctanoic acid (PFOA)	AveID	0.9707	1.004		51.7	50.0	3.4	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.024	1.033		46.8	46.4	1.0	40.0
Perfluorononanoic acid (PFNA)	AveID	0.8846	0.9497		53.7	50.0	7.4	40.0
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	AveID	2.219	2.279		49.2	47.9	2.7	40.0
Perfluorodecanoic acid	AveID	0.8034	0.8187		50.9	50.0	1.9	40.0
Perfluorooctanesulfonamide	AveID	1.002	1.083		54.0	50.0	8.1	40.0
N-methylperfluorooctanesulfonamidoacetic acid	AveID	0.8314	0.8627		51.9	50.0	3.8	40.0
Perfluorodecanesulfonic acid	AveID	0.7467	0.7193		46.4	48.2	-3.7	50.0
Perfluorooctadecanoic acid	AveID	0.2195	0.2571		58.6	50.0	17.1	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	0.7896				50.0		
Perfluorododecanoic acid	AveID	0.8205				50.0		
Perfluorohexadecanoic acid	L2ID					50.0	-100.0*	50.0
Perfluorotetradecanoic acid	AveID	0.0512				50.0		
Perfluorotridecanoic acid	AveID	0.8728				50.0		
Perfluoroundecanoic acid	AveID	0.8817				50.0		
13C4 PFBA	Ave	39652308	34345220		43.3	50.0	-13.4	50.0
13C5 PFPeA	Ave	33957935	30117460		44.3	50.0	-11.3	50.0
13C3 PFBS	Ave	42025548	37657914		41.7	46.5	-10.4	50.0
13C2 PFHxA	Ave	36170563	31531900		43.6	50.0	-12.8	50.0
13C4 PFHpA	Ave	36625688	32987780		45.0	50.0	-9.9	50.0
18O2 PFHxS	Ave	25876448	26034440		47.6	47.3	0.6	50.0
M2-6:2 FTS	Ave	12964621	9871537		36.2	47.5	-23.9	50.0
13C4 PFOA	Ave	42598528	39748900		46.7	50.0	-6.7	50.0
13C4 PFOS	Ave	18426344	18012071		46.7	47.8	-2.2	50.0
13C5 PFNA	Ave	35838060	34014440		47.5	50.0	-5.1	50.0
13C2 PFDA	Ave	35324108	34125060		48.3	50.0	-3.4	50.0
13C8 FOSA	Ave	21925450	20873760		47.6	50.0	-4.8	50.0
M2-8:2 FTS	Ave	13658455	10049478		35.2	47.9	-26.4	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Lab Sample ID: CCV 320-434683/14 Calibration Date: 11/23/2020 14:40

Instrument ID: A10 Calib Start Date: 10/12/2020 11:30

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 10/12/2020 13:39

Lab File ID: 2020.11.23_A10_DI_A_017.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFUnA	Ave	36408055	35636540		48.9	50.0	-2.1	50.0
13C2 PFDoA	Ave	36645348	38076900		52.0	50.0	3.9	50.0
13C2 PFTeDA	Ave	24179970	29770100		61.6	50.0	23.1	50.0
13C2 PFHxDA	Ave	15022995	21579520		71.8	50.0	43.6	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_017.d
Lims ID: CCV L6
Client ID:
Sample Type: CCV
Inject. Date: 23-Nov-2020 14:40:07 ALS Bottle#: 17 Worklist Smp#: 14
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: CCV L6
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10
Sublist: chrom-A10_In_Line_SPE*sub12

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:30:30 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:30:30
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 Perfluorobutanoic acid										M
212.90 > 169.00	5.803	5.803	0.0	1.000	1482243	0.0491		98.1	141	M
D 2 13C4 PFBA										M
217.00 > 172.00	5.803	5.803	0.0		1717261	0.0433		86.6	4140	M
D 4 13C5 PFPeA										
267.90 > 223.00	6.233	6.233	0.0		1505873	0.0443		88.7	13087	
5 Perfluoropentanoic acid										
262.90 > 219.00	6.233	6.250	-0.017	1.000	1670530	0.0515		103	389	
D 3 13C3 PFBS										
301.90 > 80.00	6.297	6.297	0.0		1751093	0.0417		89.6	8041	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	6.297	6.316	-0.019	1.000	1756059	0.0471	Target=1.50	107	3533	
298.90 > 99.00	6.297	6.316	-0.019	1.000	1162852		1.51(0.75-2.26)		1206	
D 7 M2-4:2 FTS										
329.00 > 81.00	6.668	6.668	0.0		357890	NC			785	
8 4:2 FTS										
327.00 > 307.00	6.668	6.688	-0.020	1.000	971070	NC	Target=2.45		6765	
327.00 > 81.00	6.668	6.688	-0.020	1.000	372069		2.61(1.22-3.67)		1090	
D 9 13C2 PFHxA										
315.00 > 270.00	6.715	6.715	0.0		1576595	0.0436		87.2	14815	
10 Perfluorohexanoic acid										
313.00 > 269.00	6.715	6.734	-0.019	1.000	1554711	0.0531	Target=17.92	106	872	
313.00 > 119.00	6.715	6.734	-0.019	1.000	82055		18.95(8.96-26.88)		451	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	6.738	6.757	-0.019	0.932	1458330	NC	Target=1.47		1027	
349.00 > 99.00	6.738	6.757	-0.019	0.932	998453		1.46(0.74-2.21)		2379	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 HPFO-DA										
329.10 > 285.00	6.855	6.876	-0.021	1.000	249883	NC			279	
D 12 13C3 HFPO-DA										
332.10 > 287.00	6.855	6.855	0.0		96672	NC			557	
16 Perfluorohexanesulfonic acid										
399.00 > 80.00	7.229	7.244	-0.015	1.000	1229568	0.0416	Target=5.60	91.5	1908	
399.00 > 99.00	7.229	7.244	-0.015	1.000	229165		5.37(2.80-8.40)		1218	
D 15 18O2 PFHxS										
403.00 > 84.00	7.229	7.229	0.0		1231429	0.0476		101	7383	
D 17 13C4 PFHpA										
367.00 > 322.00	7.229	7.229	0.0		1649389	0.0450		90.1	14673	
18 Perfluoroheptanoic acid										
363.00 > 319.00	7.229	7.244	-0.015	1.000	1621021	0.0481	Target=8.55	96.1	494	
363.00 > 169.00	7.229	7.244	-0.015	1.000	183350		8.84(4.27-12.82)		2838	
19 DONA										
377.00 > 251.00	7.285	7.300	-0.015	0.874	6703958	NC	Target=2.62		24296	
377.00 > 85.00	7.285	7.300	-0.015	0.874	2640635		2.54(1.31-3.93)		9579	
D 22 M2-6:2 FTS										
429.00 > 81.00	7.755	7.755	0.0		468898	0.0362		76.1	1028	
23 6:2 FTS										
427.00 > 407.00	7.755	7.771	-0.016	1.000	1335139	0.0545	Target=2.55	115	8300	
427.00 > 81.00	7.755	7.771	-0.016	1.000	526114		2.54(1.27-3.82)		1112	
21 Perfluoroheptanesulfonic acid										
449.00 > 80.00	7.773	7.789	-0.016	0.933	1082313	0.0498	Target=6.95	105	2227	
449.00 > 99.00	7.773	7.789	-0.016	0.933	151807		7.13(3.48-10.43)		981	
24 Perfluorooctanoic acid										
413.00 > 369.00	7.790	7.805	-0.015	1.000	1994545	0.0517	Target=1.41	103	399	
413.00 > 169.00	7.790	7.805	-0.015	1.000	1420088		1.40(0.71-2.12)		5229	
D 25 13C4 PFOA										
417.00 > 372.00	7.790	7.790	0.0		1987445	0.0467		93.3	12264	
27 Perfluorooctanesulfonic acid										
499.00 > 80.00	8.332	8.362	-0.030	1.000	863582	0.0468	Target=3.36	101	2607	
499.00 > 99.00	8.332	8.362	-0.030	1.000	253266		3.41(1.68-5.04)		1360	
D 26 13C4 PFOS										
503.00 > 80.00	8.332	8.332	0.0		860977	0.0467		97.8	2299	
29 Perfluorononanoic acid										
463.00 > 419.00	8.367	8.397	-0.030	1.000	1615140	0.0537	Target=6.88	107	784	
463.00 > 169.00	8.367	8.397	-0.030	1.000	234318		6.89(3.44-10.32)		1973	
D 28 13C5 PFNA										
468.00 > 423.00	8.367	8.367	0.0		1700722	0.0475		94.9	10529	
D 30 13C8 FOSA										
506.00 > 78.00	8.941	8.941	0.0		1043688	0.0476		95.2	5961	
31 Perfluorooctanesulfonamide										
498.00 > 78.00	8.941	8.943	-0.002	1.000	1130161	0.0540		108	5598	
32 Perfluorononanesulfonic acid										
549.00 > 80.00	8.911	8.943	-0.032	1.069	782524	NC	Target=6.23		3413	
549.00 > 99.00	8.911	8.943	-0.032	1.069	140122		5.58(3.11-9.34)		575	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 33 13C2 PFDA										
515.00 > 470.00	8.941	8.941	0.0		1706253	0.0483		96.6	11786	
35 Perfluorodecanoic acid										
513.00 > 469.00	8.941	8.974	-0.033	1.000	1396883	0.0509	Target=14.44	102	818	
513.00 > 169.00	8.941	8.974	-0.033	1.000	98202		14.22(7.22-21.66)		715	
D 34 M2-8:2 FTS										
529.00 > 81.00	8.941	8.941	0.0		481370	0.0352		73.6	1897	
36 8:2 FTS										
527.00 > 507.00	8.941	8.989	-0.048	1.000	1096993	0.0492	Target=2.16	103	4838	
527.00 > 81.00	8.941	8.989	-0.048	1.000	475473		2.31(1.08-3.24)		1706	
38 NMeFOSAA										
570.00 > 419.00	9.231	9.264	-0.033	1.002	980000	0.0519	Target=13.31	104	3042	
570.00 > 483.00	9.231	9.264	-0.033	1.002	67184		14.59(6.65-19.96)		758	
D 37 d3-NMeFOSAA										
573.00 > 419.00	9.216	9.216	0.0		1136031	0.0460		92.0	5218	
39 Perfluorodecanesulfonic acid										
599.00 > 80.00	9.448	9.483	-0.035	1.134	624493	0.0464	Target=2.51	96.3	3486	
599.00 > 99.00	9.448	9.483	-0.035	1.134	245393		2.54(1.26-3.77)		1647	
D 42 13C2 PFUnA										
565.00 > 520.00	9.497	9.497	0.0		1781827	0.0489		97.9	11469	
D 40 d5-NEtFOSAA										
589.00 > 419.00	9.497	9.497	0.0		1242877	0.0450		90.0	5605	
D 45 13C2 PFDoA										
615.00 > 570.00	10.013	10.013	0.0		1903845	0.0520		104	16485	
D 51 13C2 PFTeDA										
715.00 > 670.00	10.963	10.963	0.0		1488505	0.0616		123	8934	
D 52 13C2 PFHxDA										
815.00 > 770.00	11.798	11.798	0.0		1078976	0.0718		144	4474	
53 Perfluorooctadecanoic acid										R
913.00 > 869.00	12.573	12.663	-0.090	1.066	277381	0.0586	Target=92.79	117	221	R
913.00 > 169.00	12.560	12.663	-0.103	1.065	10006		27.72(46.39-139.18)		160	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- R - Failed Signal Ratio Test

Review Flags
- M - Manually Integrated

Reagents:

LCPFC-LL-L6_00030 Amount Added: 1.00 Units: mL

Report Date: 24-Nov-2020 08:30:32 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_017.d

Injection Date: 23-Nov-2020 14:40:07 Instrument ID: A10

Lims ID: CCV L6

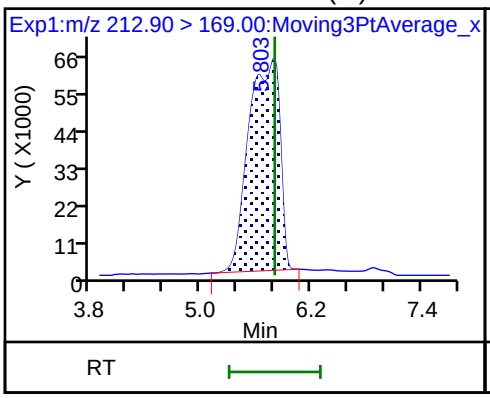
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 14

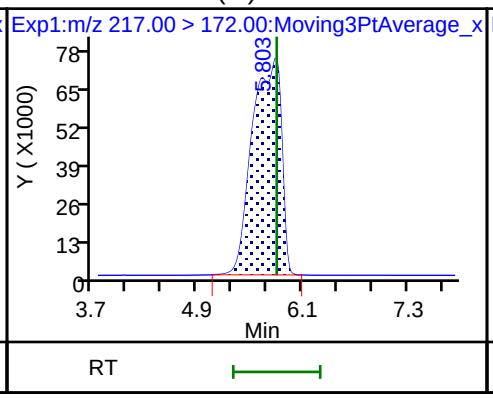
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

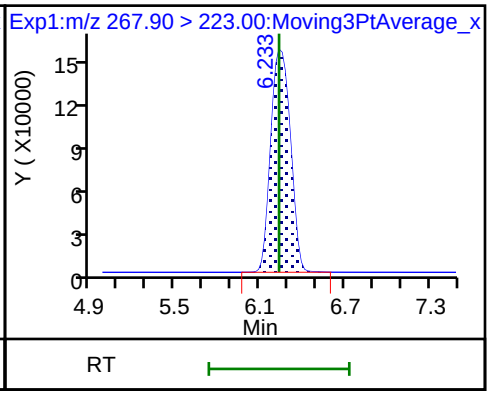
1 Perfluorobutanoic acid (M)



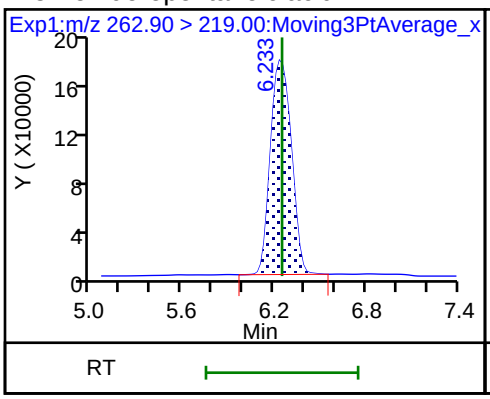
D 2 13C4 PFBA (M)



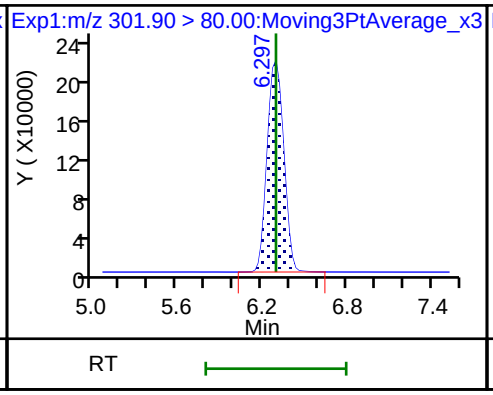
D 4 13C5 PFPeA



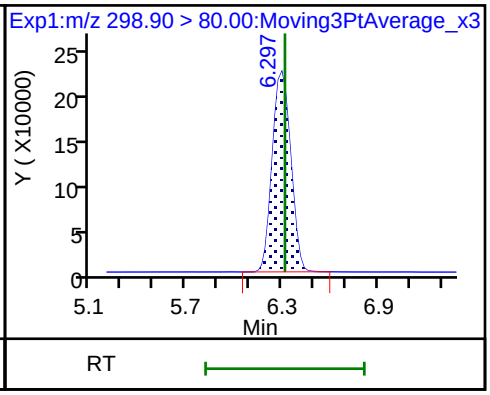
5 Perfluoropentanoic acid



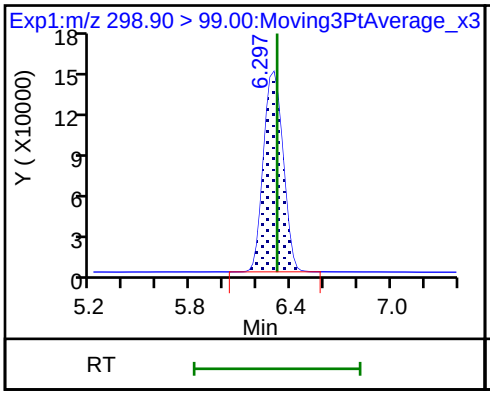
D 3 13C3 PFBS



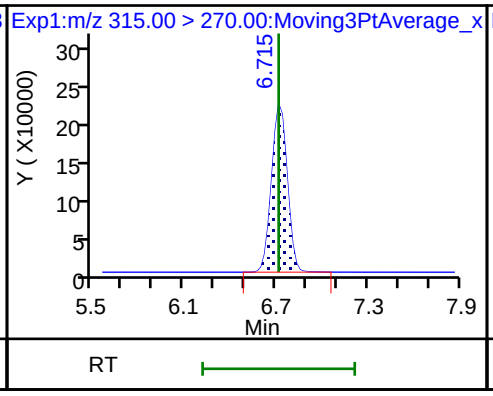
6 Perfluorobutanesulfonic acid



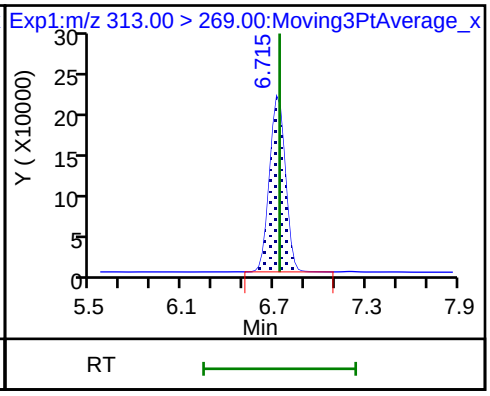
6 Perfluorobutanesulfonic acid



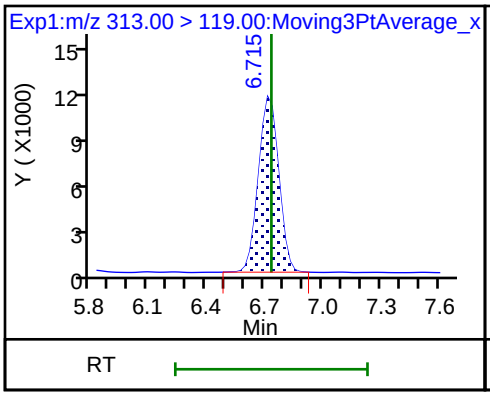
D 9 13C2 PFHxA



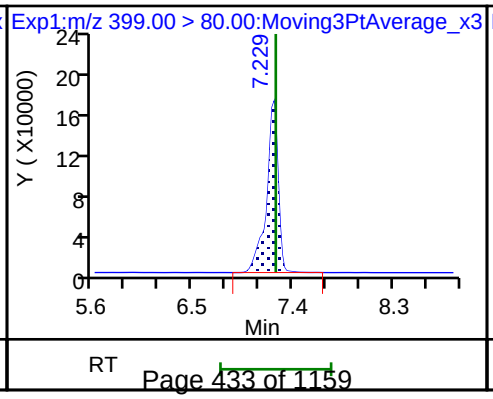
10 Perfluorohexanoic acid



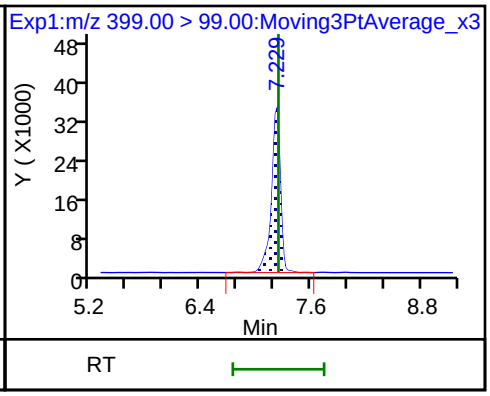
10 Perfluorohexanoic acid



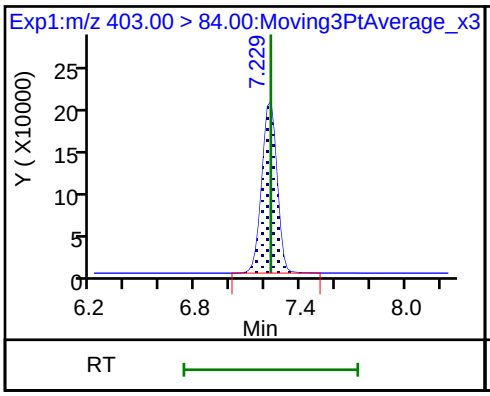
16 Perfluorohexanesulfonic acid



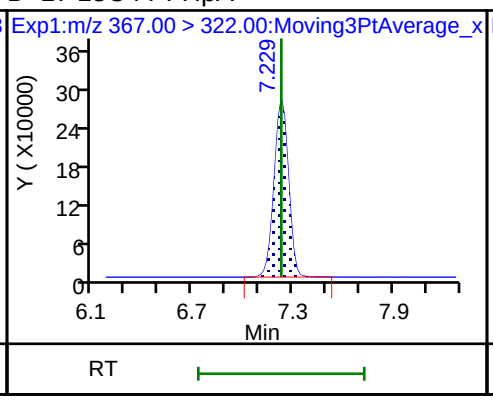
16 Perfluorohexanesulfonic acid



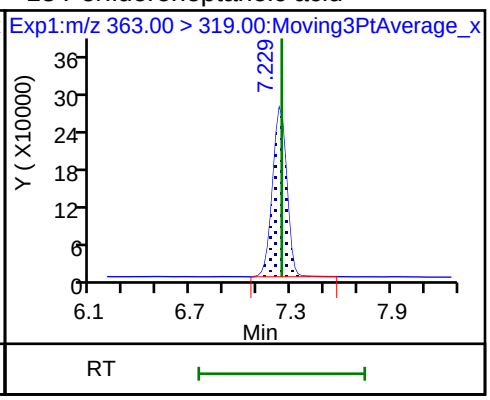
D 15 18O2 PFHxS



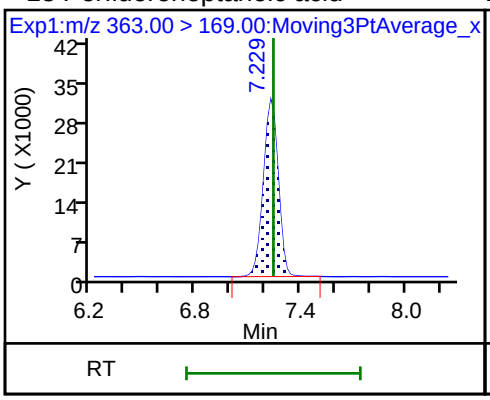
D 17 13C4 PFHpA



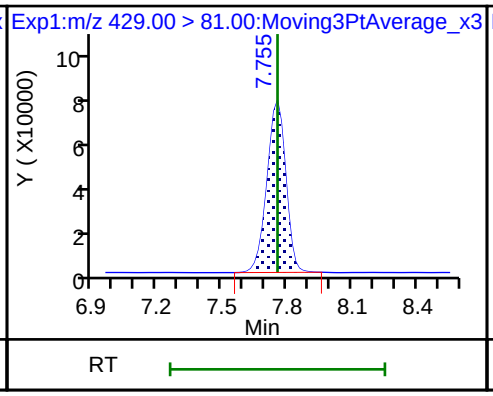
18 Perfluoroheptanoic acid



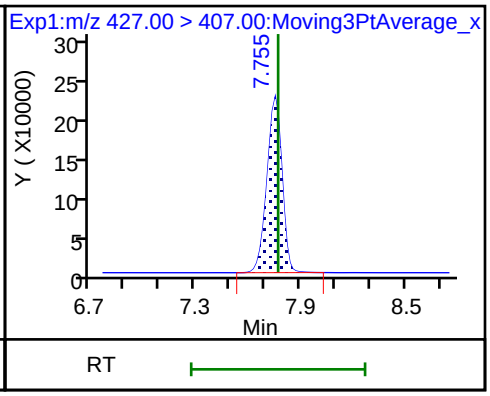
18 Perfluoroheptanoic acid



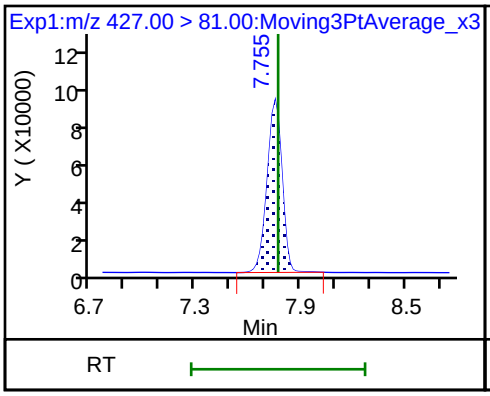
D 22 M2-6:2 FTS



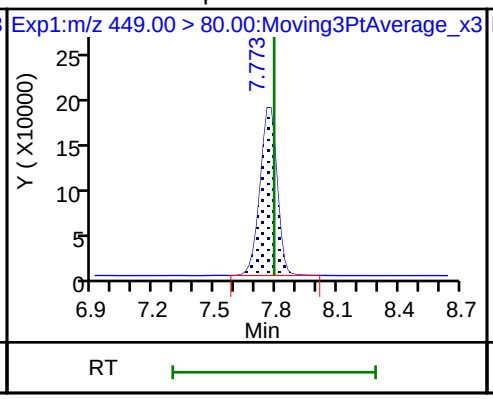
23 6:2 FTS



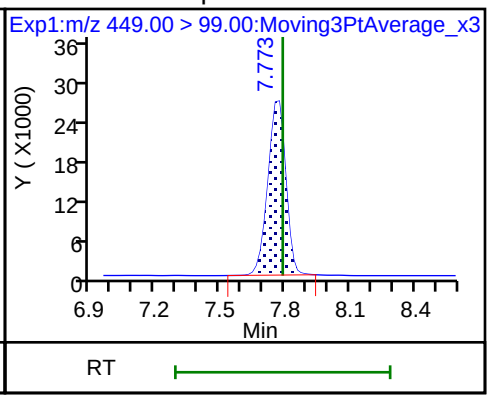
23 6:2 FTS



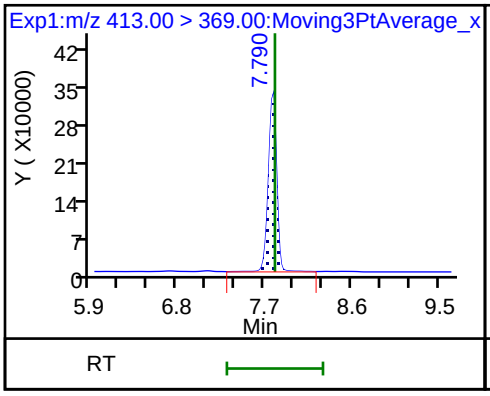
21 Perfluoroheptanesulfonic acid



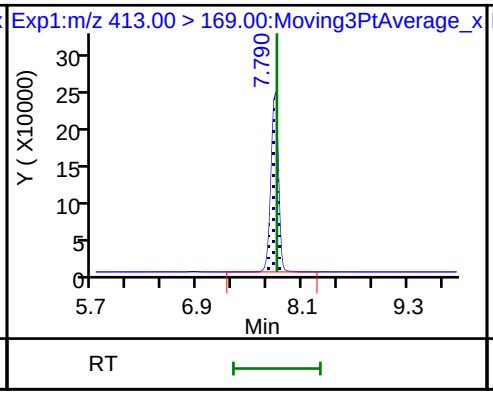
21 Perfluoroheptanesulfonic acid



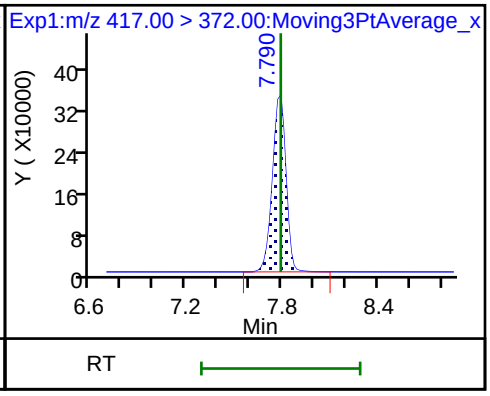
24 Perfluorooctanoic acid



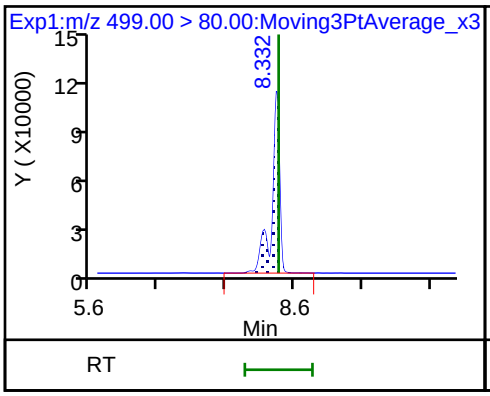
24 Perfluorooctanoic acid



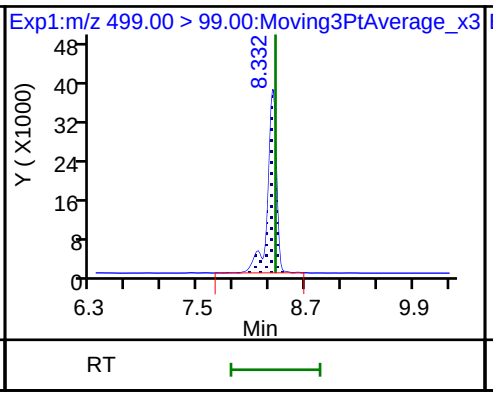
D 25 13C4 PFOA



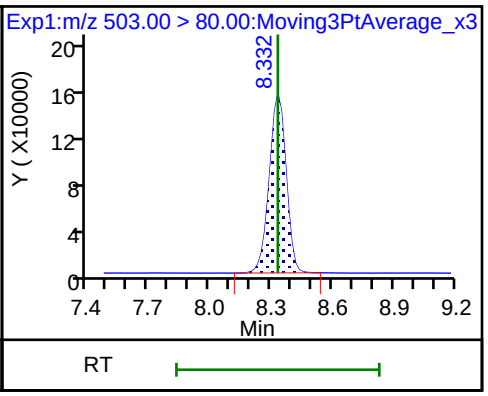
27 Perfluorooctanesulfonic acid



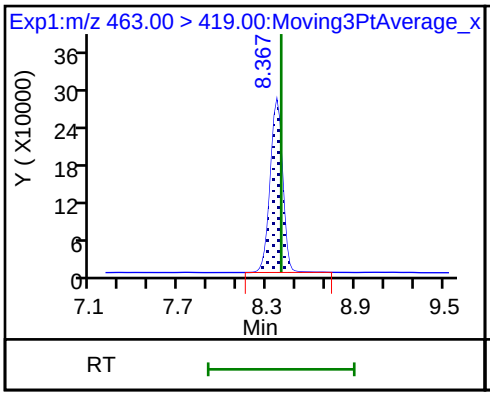
27 Perfluorooctanesulfonic acid



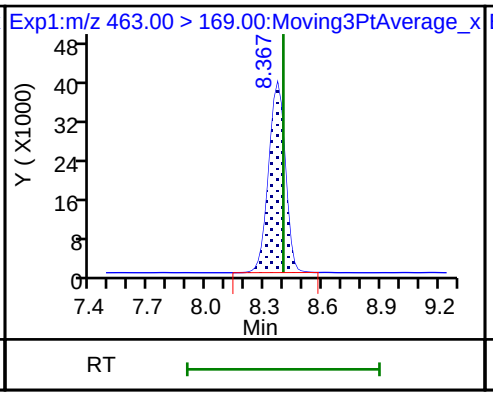
D 26 13C4 PFOS



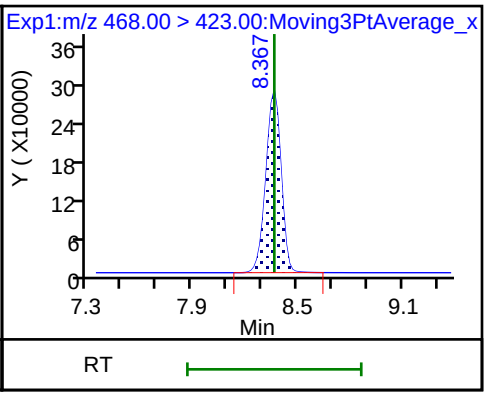
29 Perfluorononanoic acid



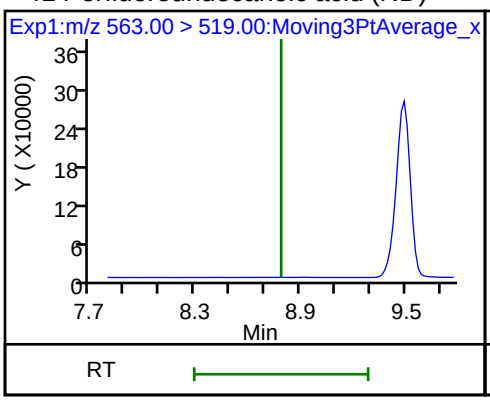
29 Perfluorononanoic acid



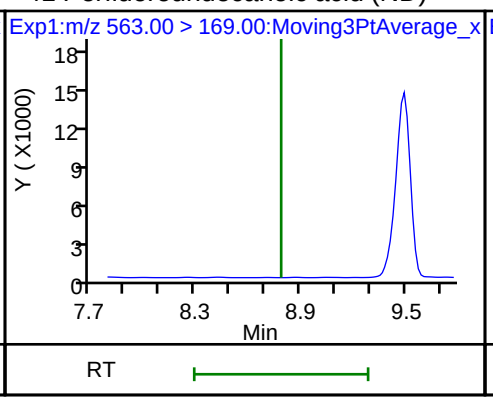
D 28 13C5 PFNA



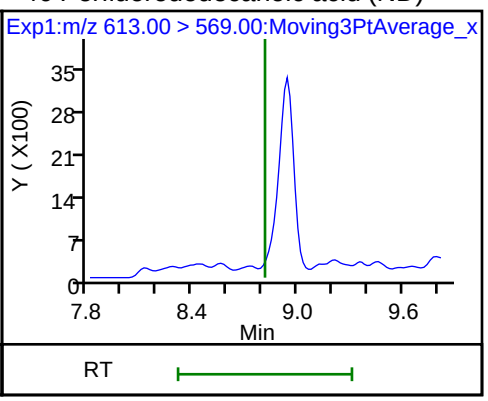
41 Perfluoroundecanoic acid (ND)



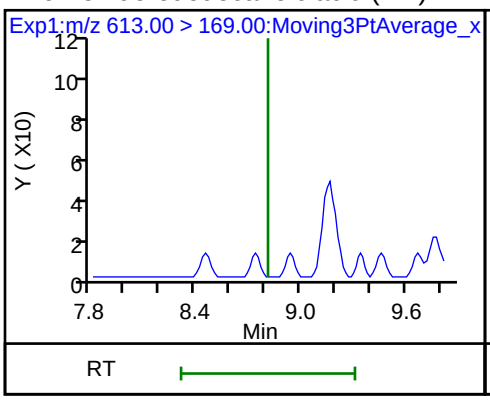
41 Perfluoroundecanoic acid (ND)



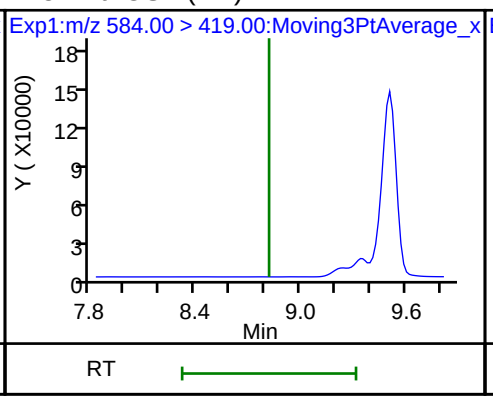
46 Perfluorododecanoic acid (ND)



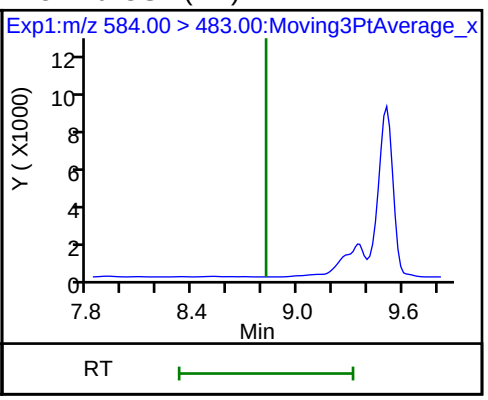
46 Perfluorododecanoic acid (ND)



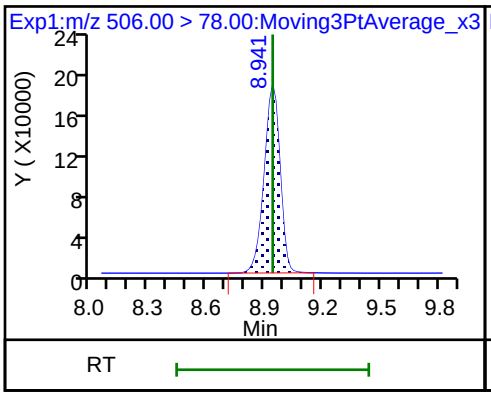
43 NEtFOSA (ND)



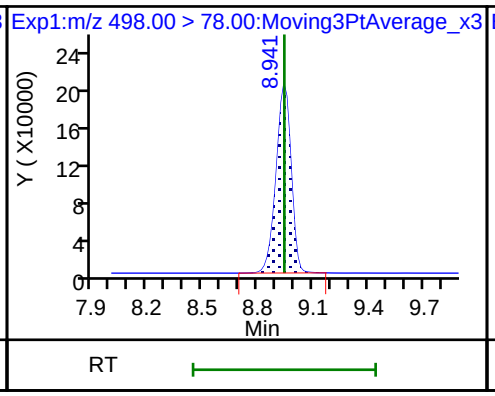
43 NEtFOSA (ND)



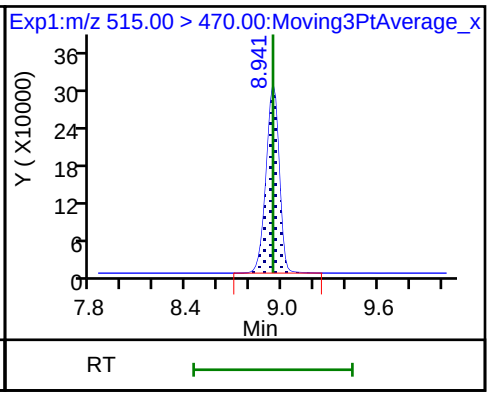
D 30 13C8 FOSA



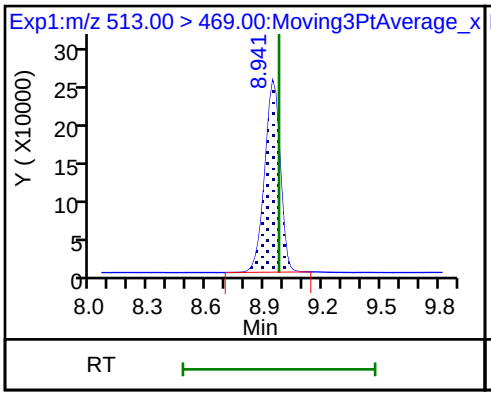
31 Perfluorooctanesulfonamide



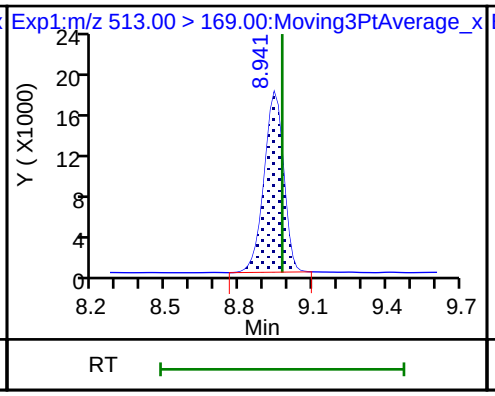
D 33 13C2 PFDA



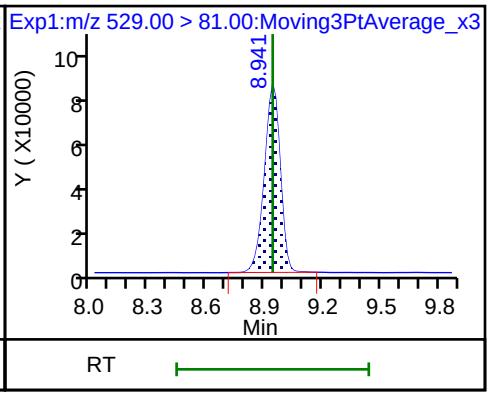
35 Perfluorodecanoic acid



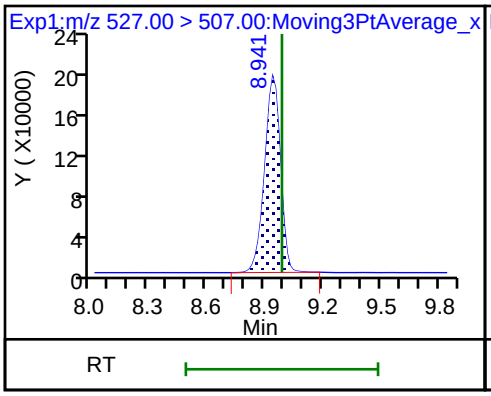
35 Perfluorodecanoic acid



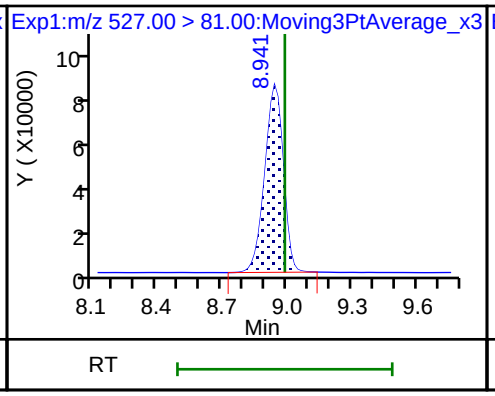
D 34 M2-8:2 FTS



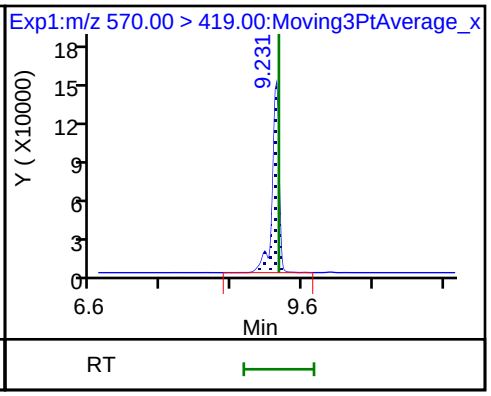
36 8:2 FTS



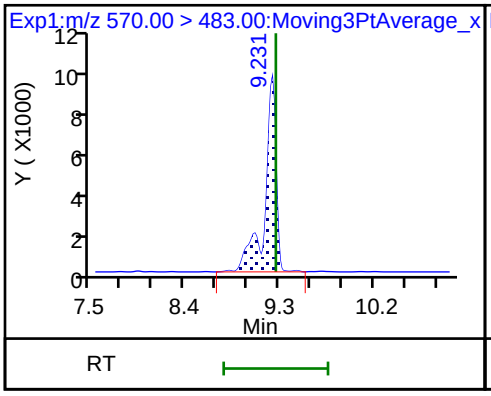
36 8:2 FTS



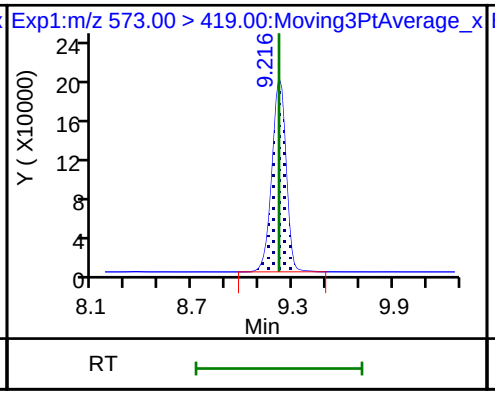
38 NMeFOSAA



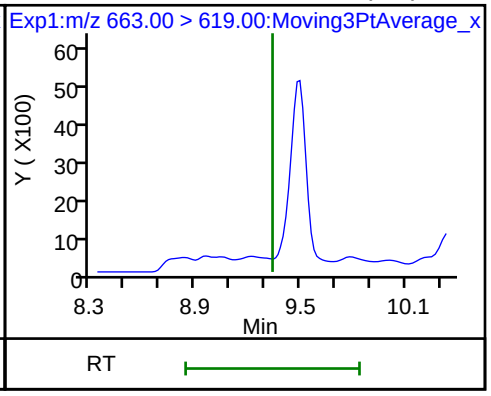
38 NMeFOSAA



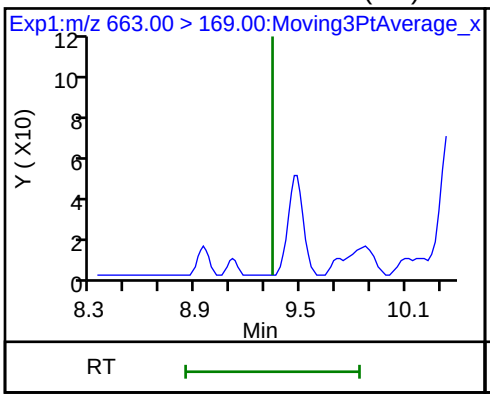
D 37 d3-NMeFOSAA



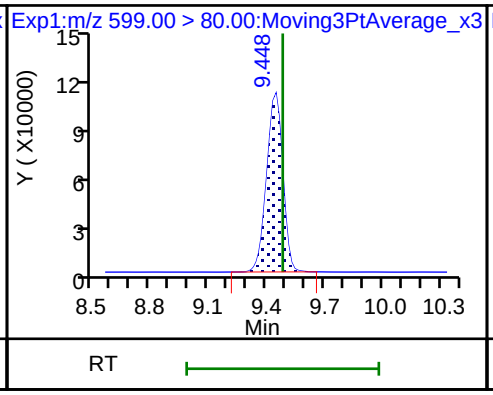
49 Perfluorotridecanoic acid (ND)



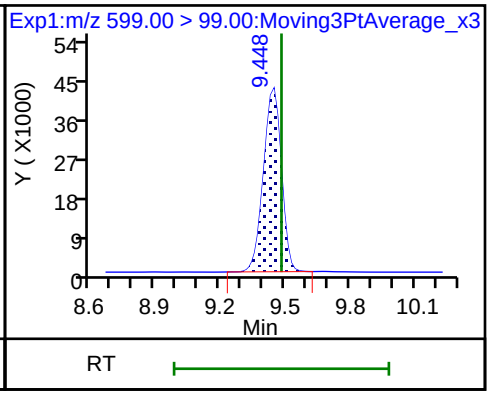
49 Perfluorotridecanoic acid (ND)



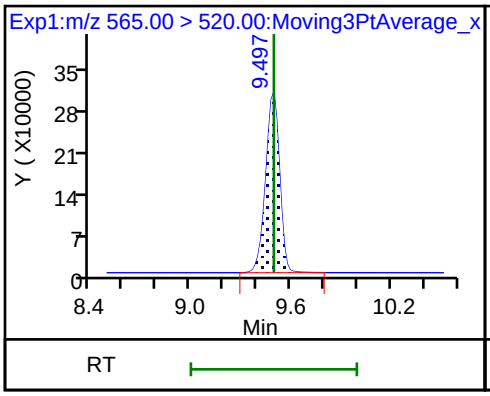
39 Perfluorodecanesulfonic acid



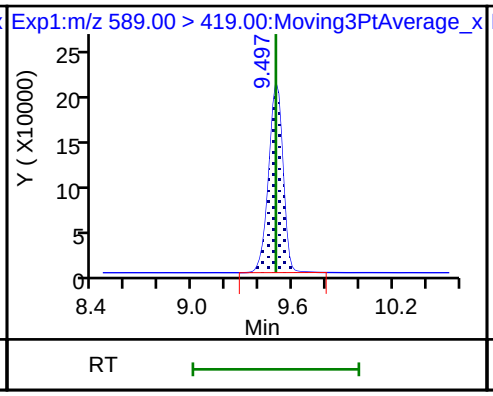
39 Perfluorodecanesulfonic acid



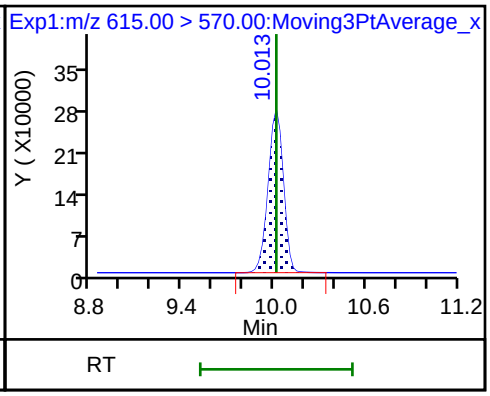
D 42 13C2 PFUnA



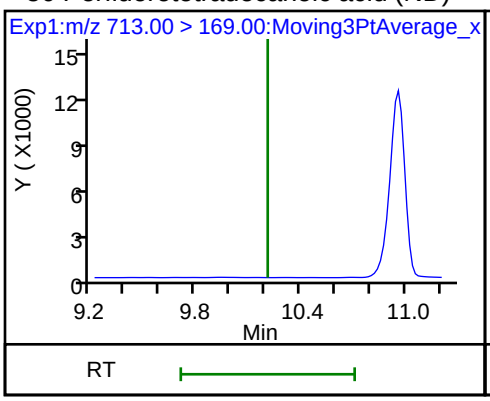
D 40 d5-NEtFOSAA



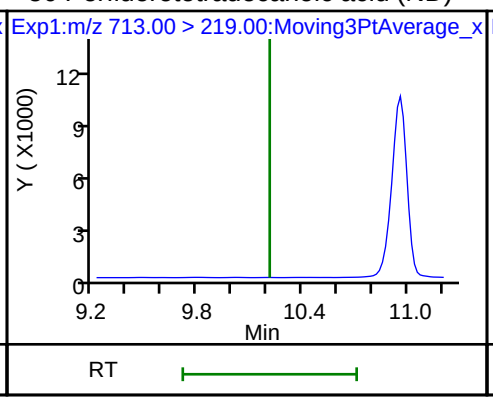
D 45 13C2 PFDoA



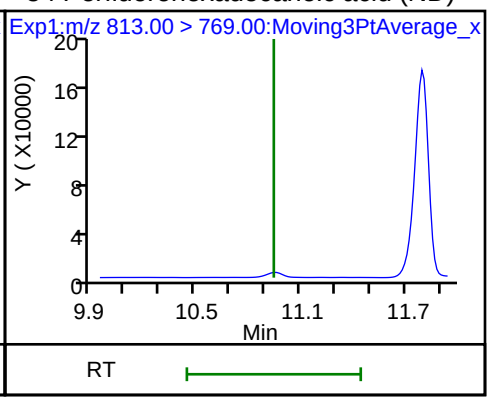
50 Perfluorotetradecanoic acid (ND)



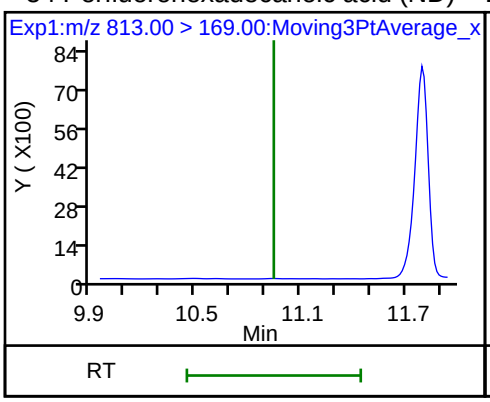
50 Perfluorotetradecanoic acid (ND)



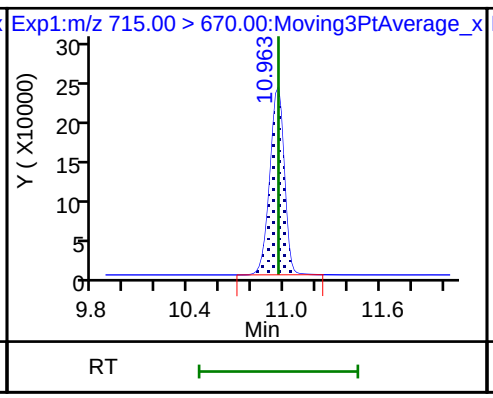
54 Perfluorohexadecanoic acid (ND)



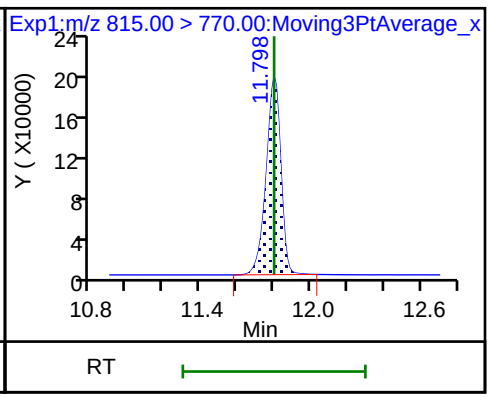
54 Perfluorohexadecanoic acid (ND)



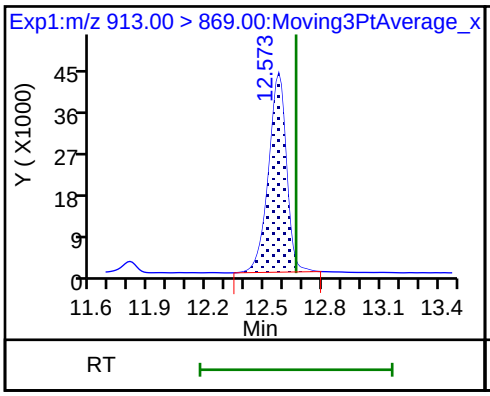
D 51 13C2 PFTeDA



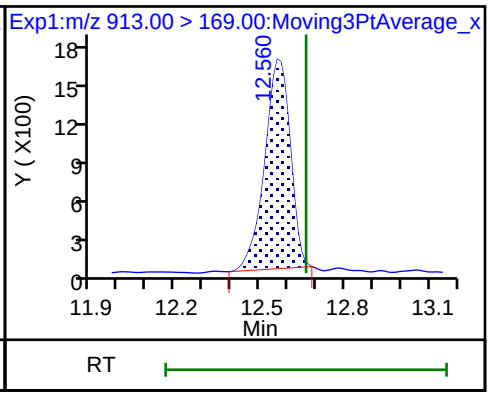
D 52 13C2 PFHxDA



53 Perfluorooctadecanoic acid



53 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

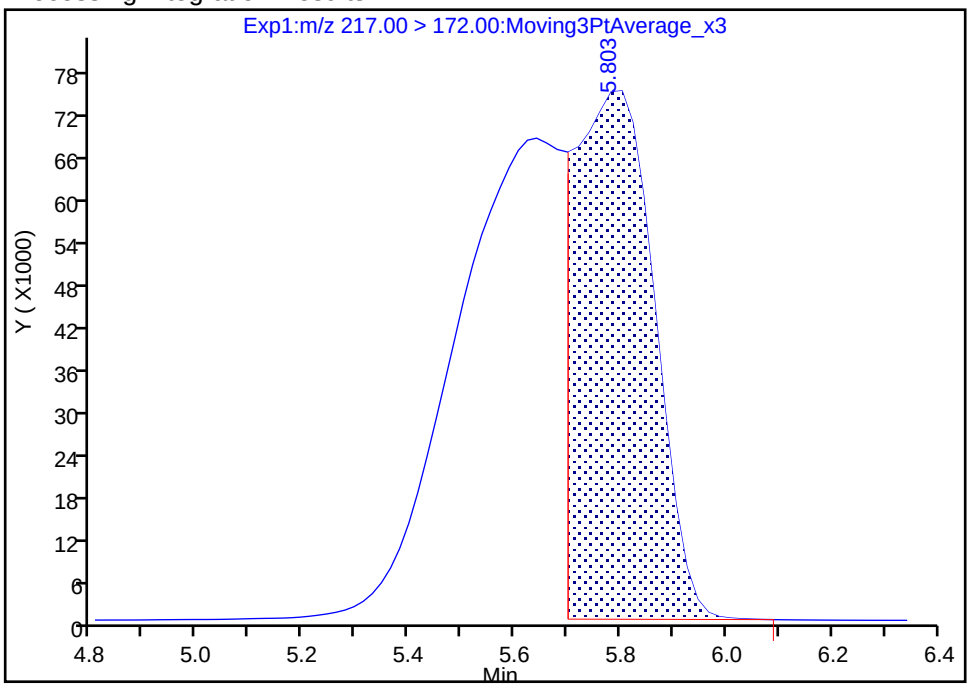
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_017.d
Injection Date: 23-Nov-2020 14:40:07 Instrument ID: A10
Lims ID: CCV L6
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 14
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector EXP1

D 2 13C4 PFBA, CAS: STL00992

Signal: 1

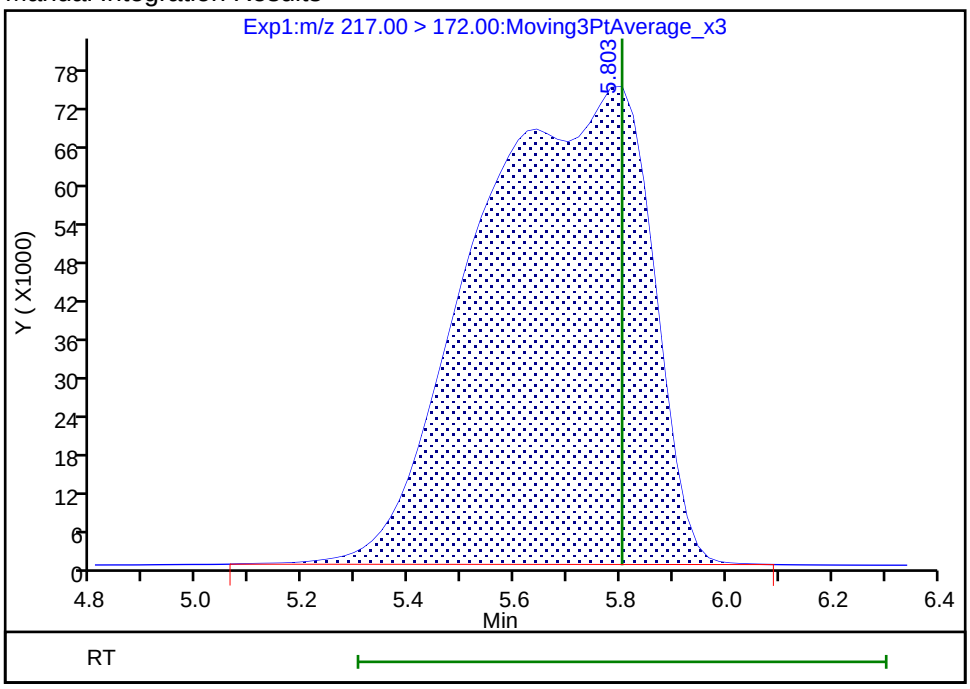
Processing Integration Results

RT: 5.80
Area: 761966
Amount: 0.019216
Amount Units: ng/ml



Manual Integration Results

RT: 5.80
Area: 1717261
Amount: 0.043308
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:30:09
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

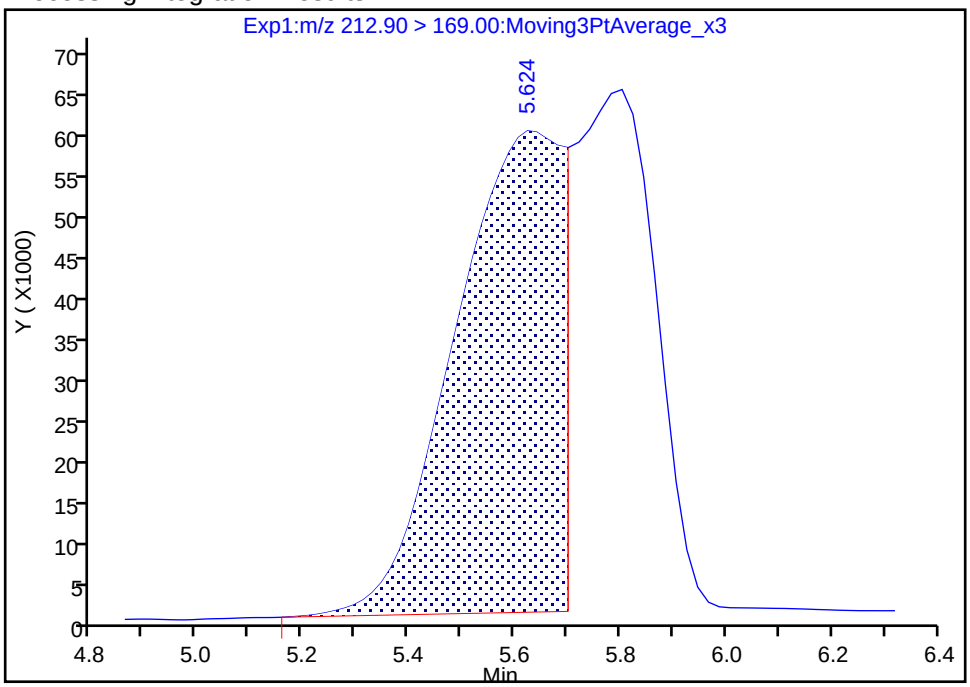
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_017.d
Injection Date: 23-Nov-2020 14:40:07 Instrument ID: A10
Lims ID: CCV L6
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 14
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

1 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

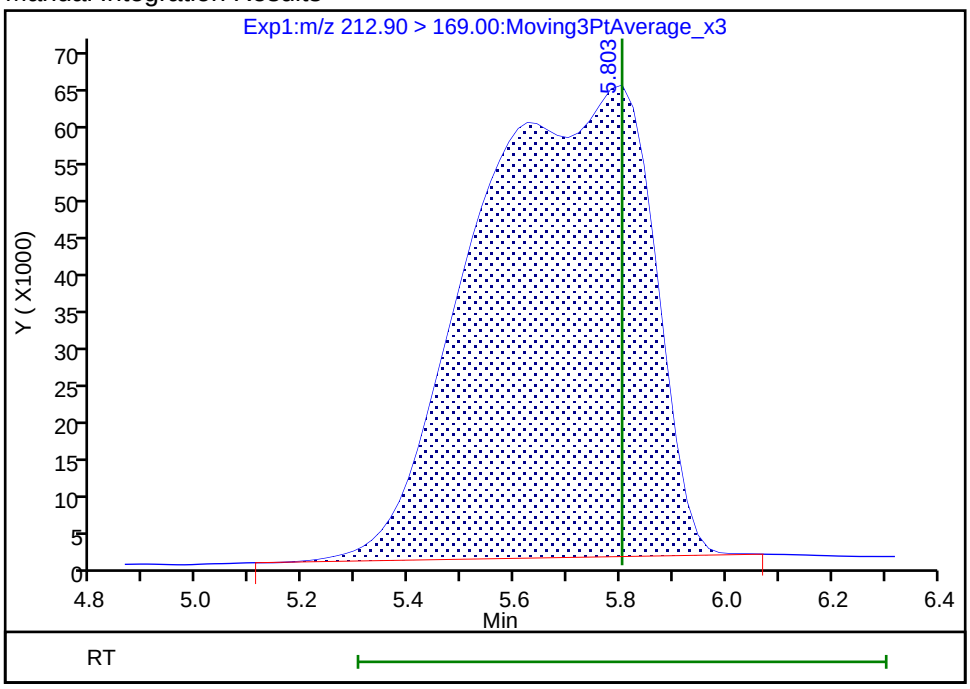
Processing Integration Results

RT: 5.62
Area: 820089
Amount: 0.027147
Amount Units: ng/ml



Manual Integration Results

RT: 5.80
Area: 1482243
Amount: 0.049065
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:30:19
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 320-434591/1-A

Matrix: Water Lab File ID: 2020.11.23_A10_DI_A_007.d

Analysis Method: WS-LC-0025 Att1 Date Collected:

Extraction Method: PFAS Prep Date Extracted: 11/23/2020 05:50

Sample wt/vol: 1.00(mL) Date Analyzed: 11/23/2020 11:35

Con. Extract Vol.: 1.66(mL) Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 434683 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	101		25-150
STL01892	13C4 PFHpA	101		25-150
STL00990	13C4 PFOA	95		70-130
STL00991	13C4 PFOS	99		70-130
STL00995	13C5 PFNA	99		25-150
STL02337	13C3 PFBS	89		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_007.d
Lims ID: MB 320-434591/1-A
Client ID:
Sample Type: MB
Inject. Date: 23-Nov-2020 11:35:45 ALS Bottle#: 7 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-434591/1-A RUSH/RX DUE 11/25 DW
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:26:23 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:26:23
Ratio Calibration: CCV Sample: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										M
217.00 > 172.00	5.587	5.800	-0.213		1841926	0.0465		92.9	11835	M
D 4 13C5 PFPeA										
267.90 > 223.00	6.250	6.250	0.0		1593431	0.0469		93.8	12674	
D 3 13C3 PFBS										
301.90 > 80.00	6.316	6.316	0.0		1742988	0.0415		89.2	4955	
D 7 M2-4:2 FTS										
329.00 > 81.00	6.688	6.688	0.0		376614	NC			785	
D 9 13C2 PFHxA										
315.00 > 270.00	6.734	6.734	0.0		1678450	0.0464		92.8	11918	
D 12 13C3 HFPO-DA										
332.10 > 287.00	6.876	6.876	0.0		96648	NC			431	
D 15 18O2 PFHxS										
403.00 > 84.00	7.244	7.244	0.0		1235880	0.0478		101	10381	
D 17 13C4 PFHpA										
367.00 > 322.00	7.244	7.244	0.0		1852257	0.0506		101	12921	
D 22 M2-6:2 FTS										
429.00 > 81.00	7.770	7.771	-0.001		455479	0.0351		74.0	1065	
23 6:2 FTS										
427.00 > 407.00	7.770	7.771	-0.001	1.000	60953	0.002561	Target=2.58		627	
427.00 > 81.00	7.770	7.771	-0.001	1.000	21987		2.77(1.29-3.87)		57.4	
24 Perfluorooctanoic acid										M
413.00 > 369.00	7.787	7.805	-0.018	0.998	6092	0.000155	Target=1.36		0.9	M
413.00 > 169.00	7.804	7.805	-0.001	1.000	4045		1.51(0.68-2.04)		16.3	M
D 25 13C4 PFOA										
417.00 > 372.00	7.804	7.805	-0.001		2029208	0.0476		95.3	12151	
D 26 13C4 PFOS										
503.00 > 80.00	8.359	8.362	-0.003		872116	0.0473		99.0	2910	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 28 13C5 PFNA										
468.00 > 423.00	8.393	8.397	-0.004		1779174	0.0496		99.3	16754	
D 30 13C8 FOSA										
506.00 > 78.00	8.942	8.943	-0.001		1258563	0.0574		115	7184	
D 33 13C2 PFDA										
515.00 > 470.00	8.972	8.974	-0.002		1812671	0.0513		103	13589	
D 34 M2-8:2 FTS										
529.00 > 81.00	8.972	8.989	-0.017		461048	0.0338		70.5	2721	
D 37 d3-NMeFOSAA										
573.00 > 419.00	9.247	9.264	-0.017		1048699	0.0425		85.0	5979	
D 42 13C2 PFUnA										
565.00 > 520.00	9.530	9.531	-0.001		1681332	0.0462		92.4	12821	
D 40 d5-NEtFOSAA										
589.00 > 419.00	9.530	9.548	-0.018		1275934	0.0462		92.4	5132	
D 45 13C2 PFDoA										
615.00 > 570.00	10.057	10.064	-0.007		1915585	0.0523		105	15514	
D 51 13C2 PFTeDA										
715.00 > 670.00	10.996	11.017	-0.021		1975604	0.0817		163	12382	
D 52 13C2 PFHxDA										
815.00 > 770.00	11.848	11.864	-0.016		2107313	0.1403		281	8389	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Report Date: 24-Nov-2020 08:26:23 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_007.d

Injection Date: 23-Nov-2020 11:35:45 Instrument ID: A10

Lims ID: MB 320-434591/1-A

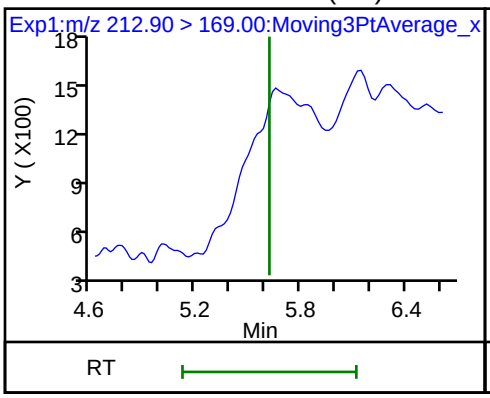
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 4

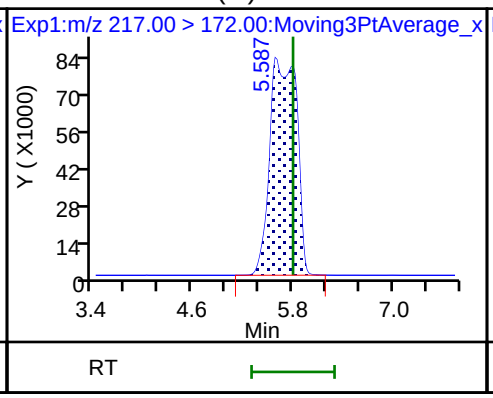
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

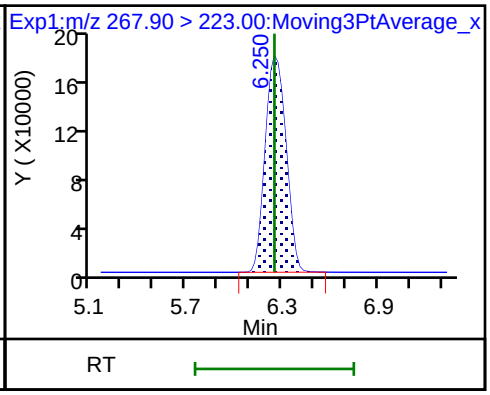
1 Perfluorobutanoic acid (ND)



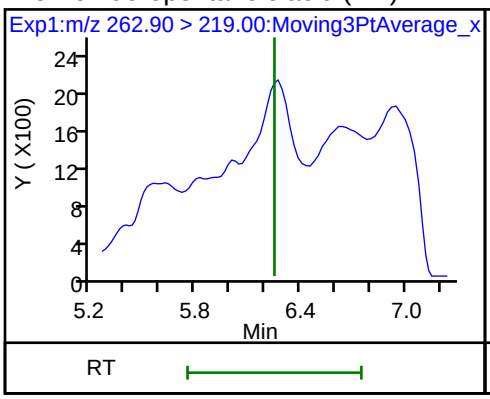
D 2 13C4 PFBA (M)



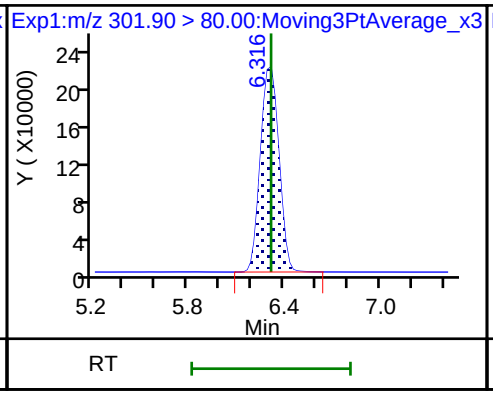
D 4 13C5 PFPeA



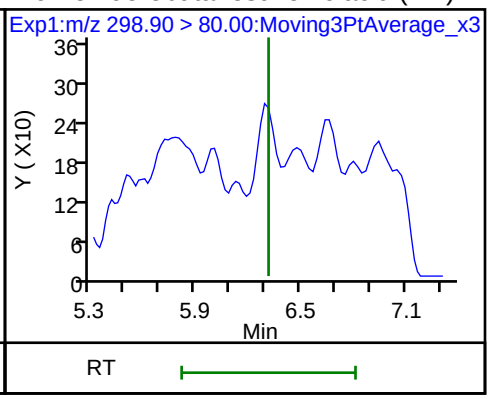
5 Perfluoropentanoic acid (ND)



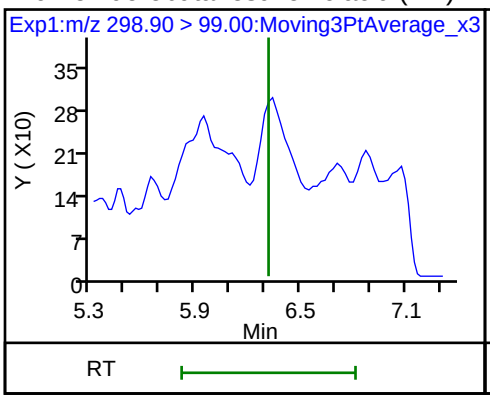
D 3 13C3 PFBS



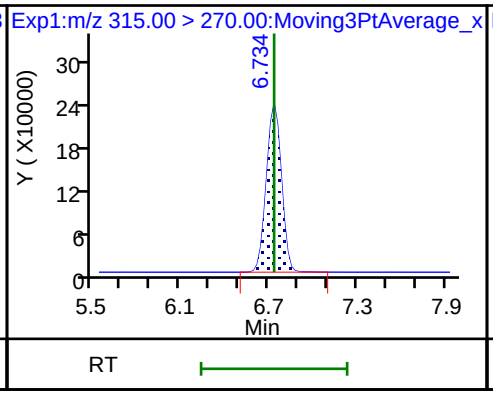
6 Perfluorobutanesulfonic acid (ND)



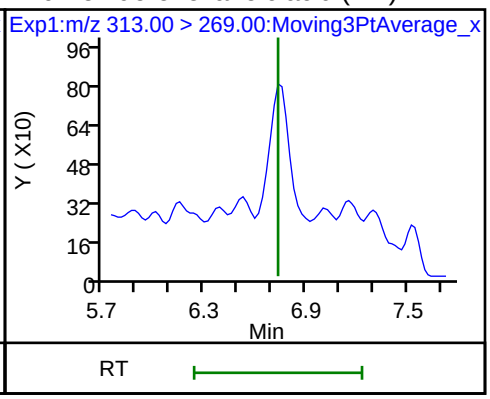
6 Perfluorobutanesulfonic acid (ND)



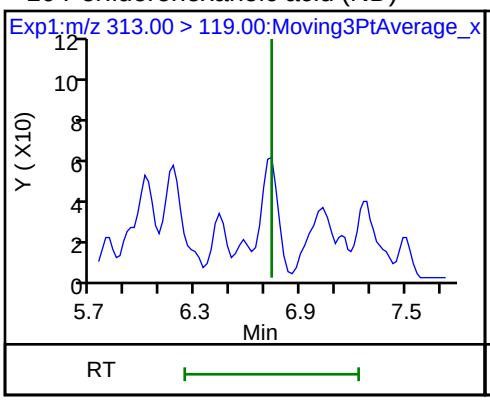
D 9 13C2 PFHxA



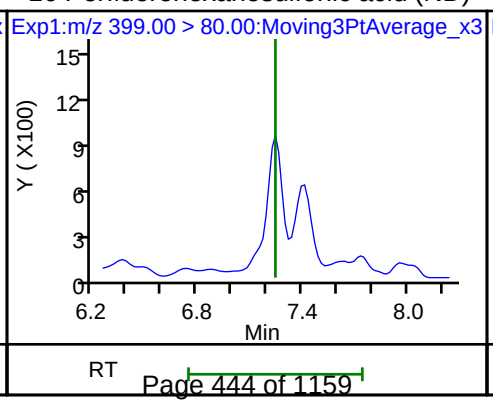
10 Perfluorohexanoic acid (ND)



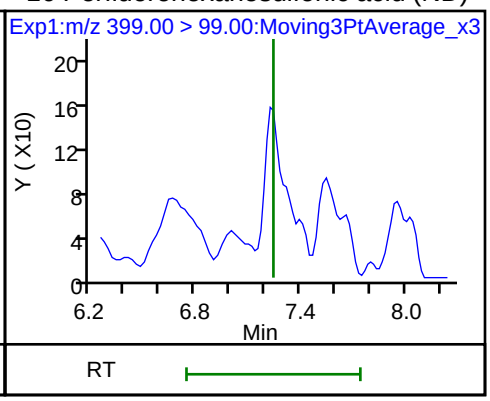
10 Perfluorohexanoic acid (ND)



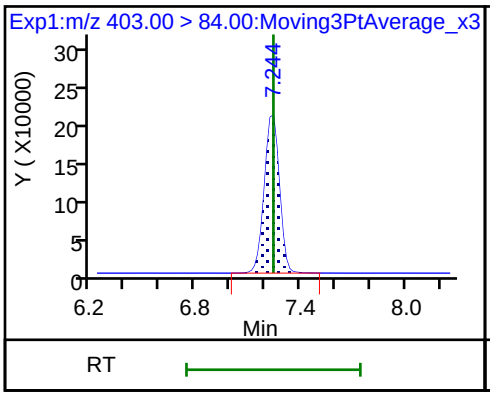
16 Perfluorohexanesulfonic acid (ND)



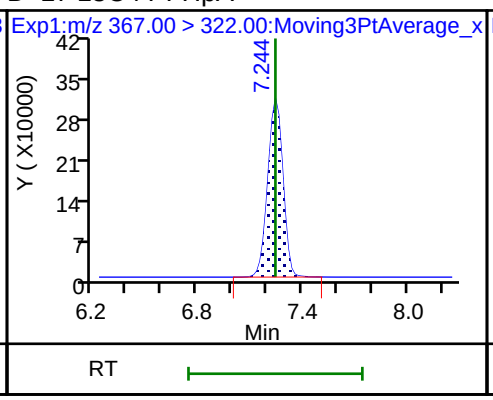
16 Perfluorohexanesulfonic acid (ND)



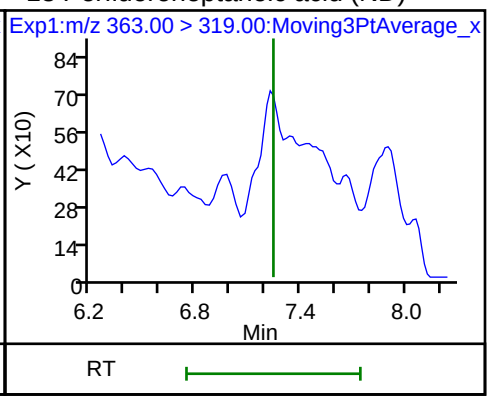
D 15 18O2 PFHxS



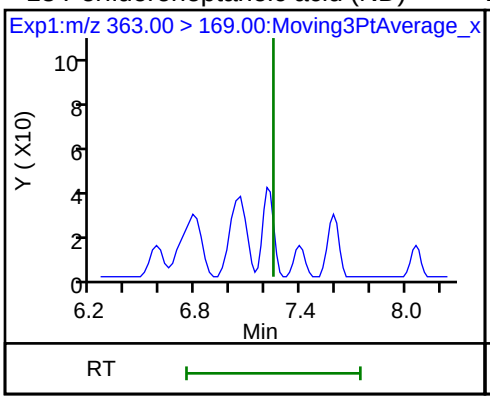
D 17 13C4 PFHpA



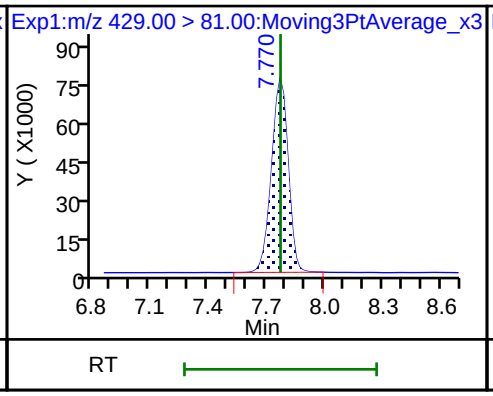
18 Perfluoroheptanoic acid (ND)



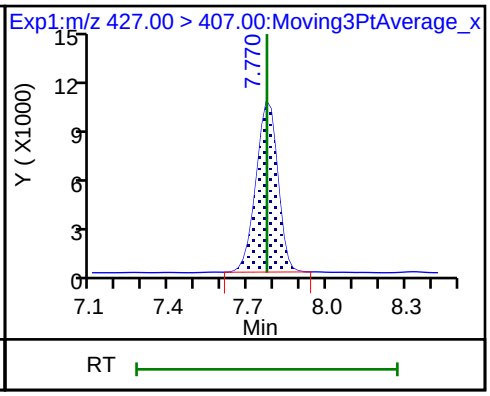
18 Perfluoroheptanoic acid (ND)



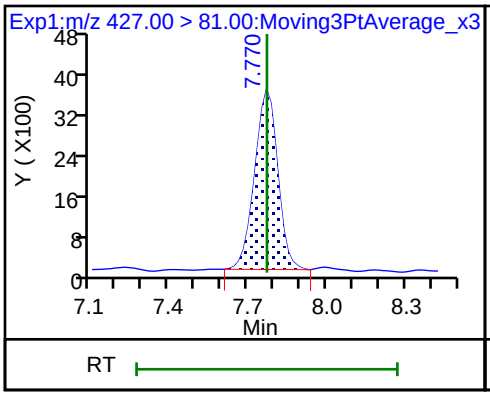
D 22 M2-6:2 FTS



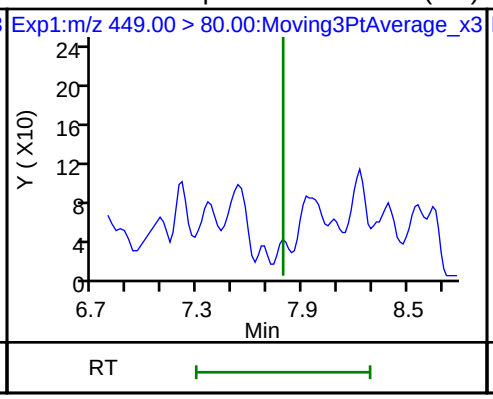
23 6:2 FTS



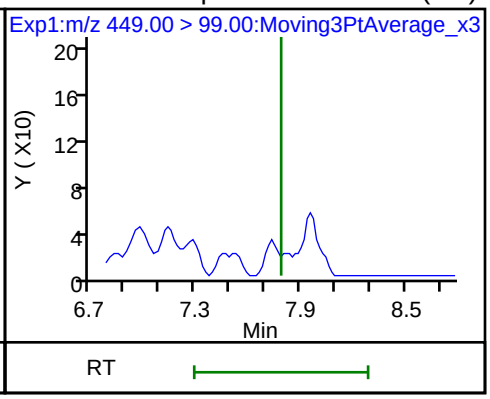
23 6:2 FTS



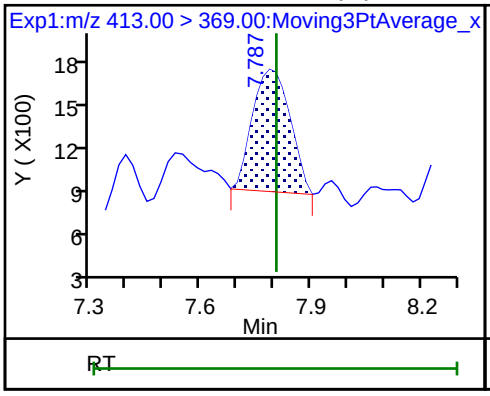
21 Perfluoroheptanesulfonic acid (ND)



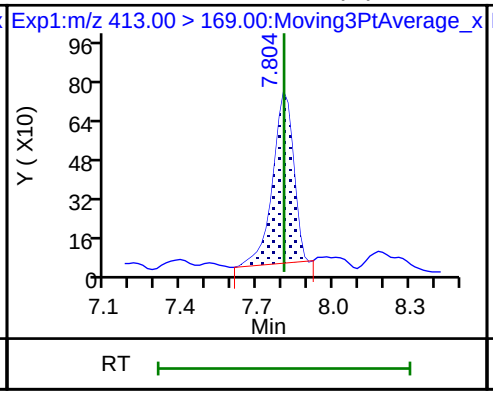
21 Perfluoroheptanesulfonic acid (ND)



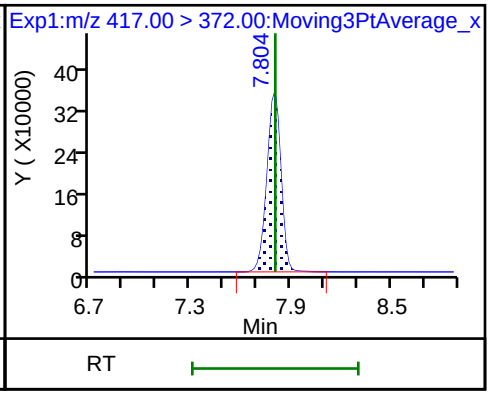
24 Perfluorooctanoic acid (M)



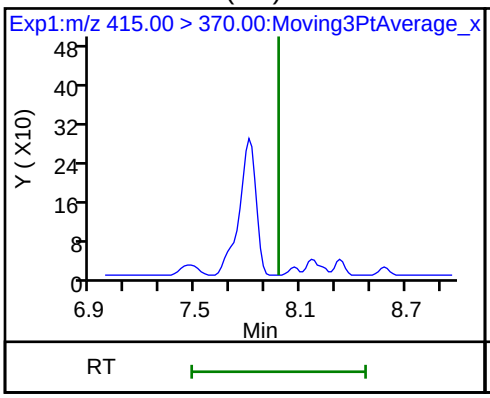
24 Perfluorooctanoic acid (M)



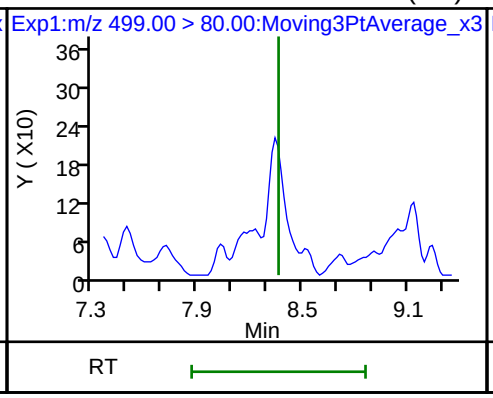
D 25 13C4 PFOA



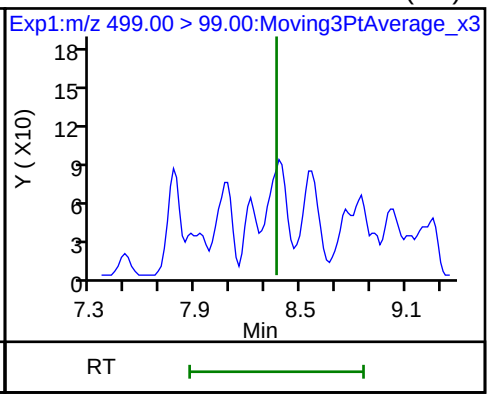
D 20 13C2 PFOA (ND)



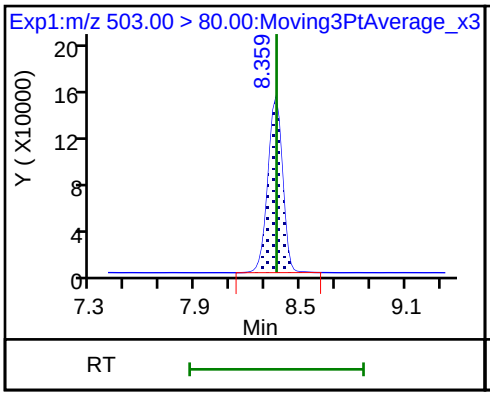
27 Perfluorooctanesulfonic acid (ND)



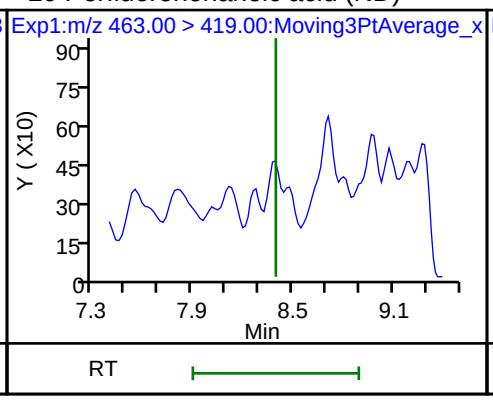
27 Perfluorooctanesulfonic acid (ND)



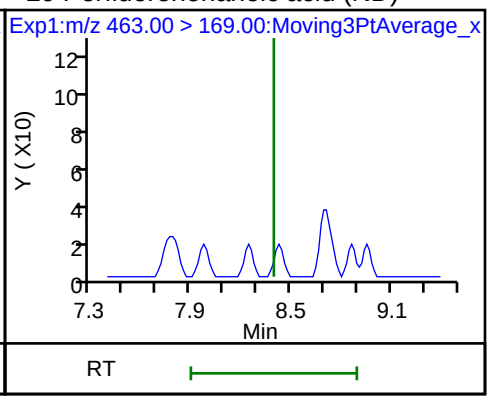
D 26 13C4 PFOS



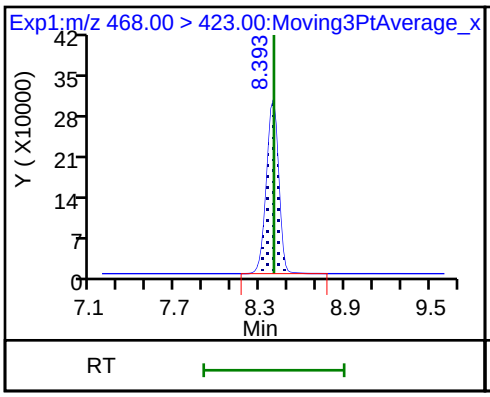
29 Perfluorononanoic acid (ND)



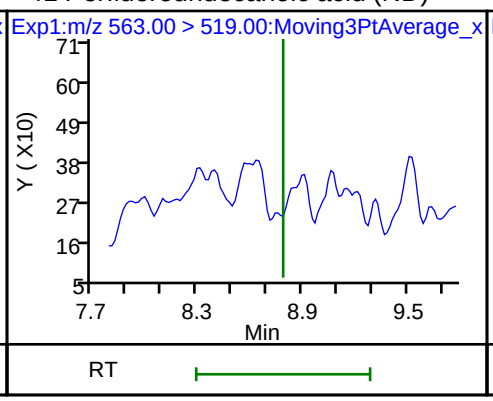
29 Perfluorononanoic acid (ND)



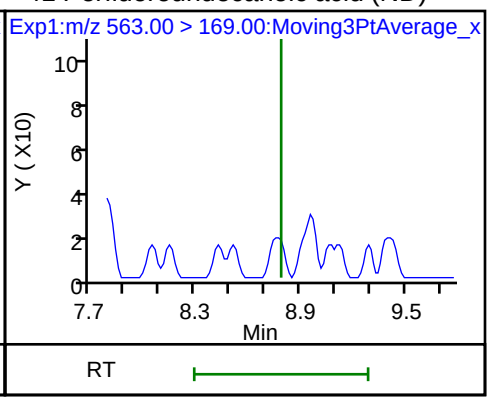
D 28 13C5 PFNA



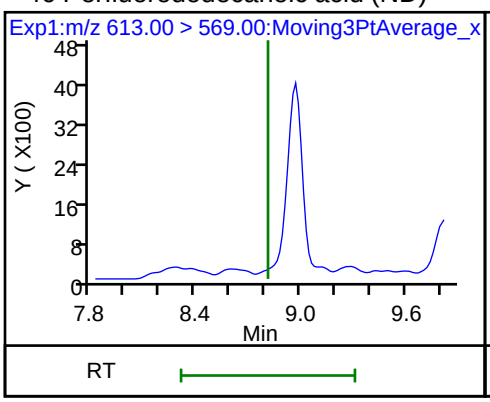
41 Perfluoroundecanoic acid (ND)



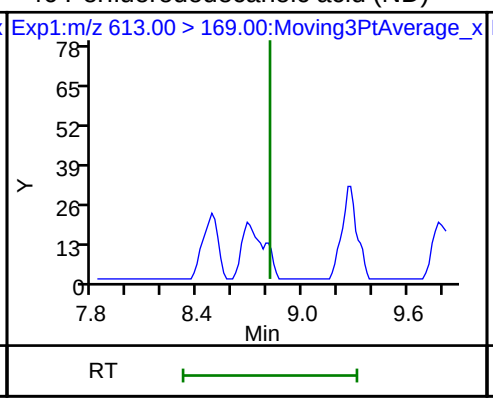
41 Perfluoroundecanoic acid (ND)



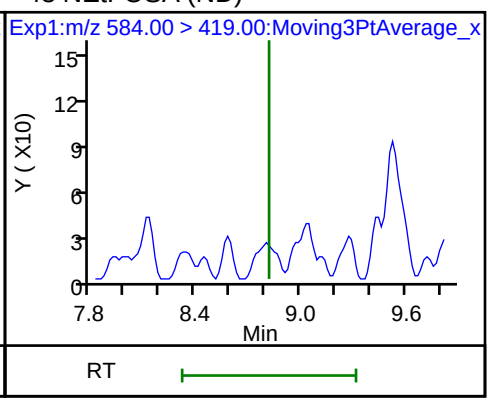
46 Perfluorododecanoic acid (ND)



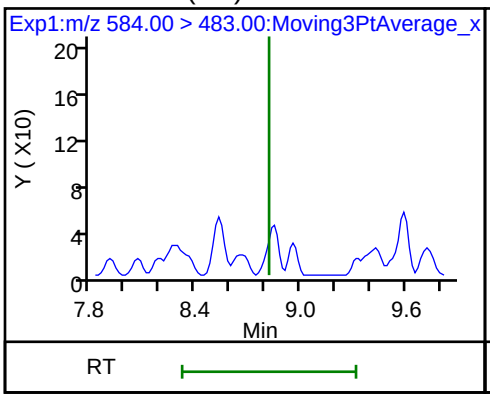
46 Perfluorododecanoic acid (ND)



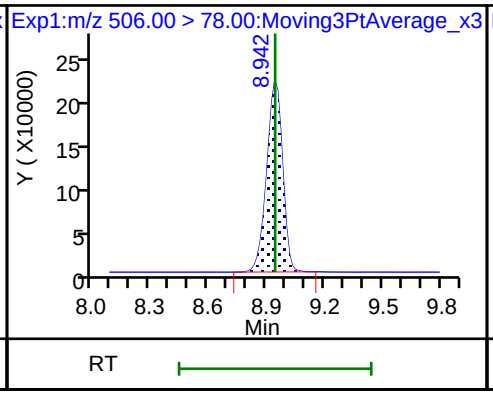
43 NEtFOSA (ND)



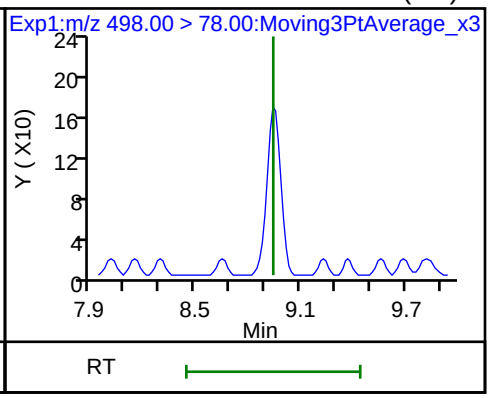
43 NEtFOSA (ND)



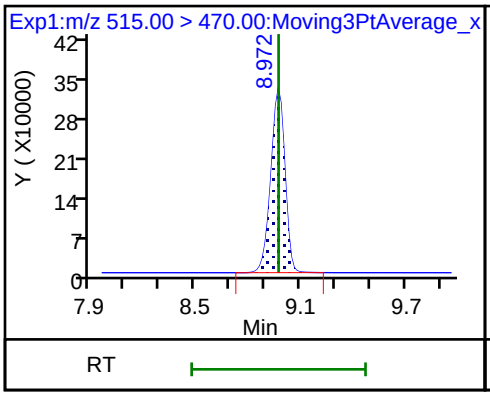
D 30 13C8 FOSA



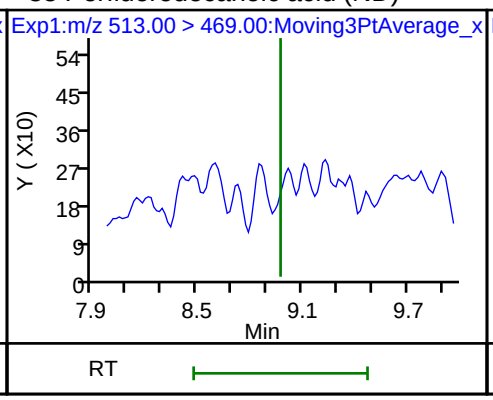
31 Perfluorooctanesulfonamide (ND)



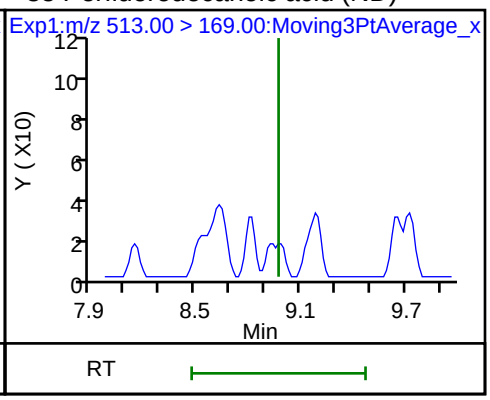
D 33 13C2 PFDA



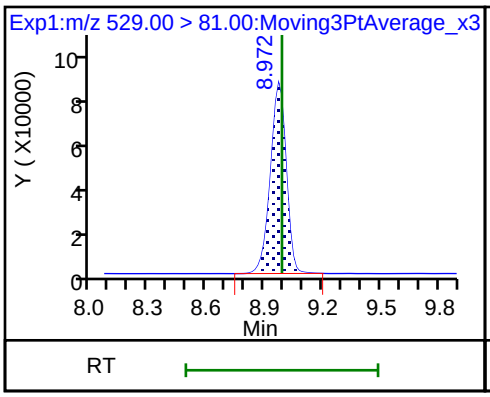
35 Perfluorodecanoic acid (ND)



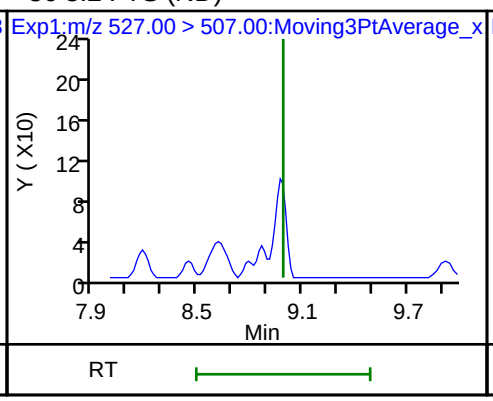
35 Perfluorodecanoic acid (ND)



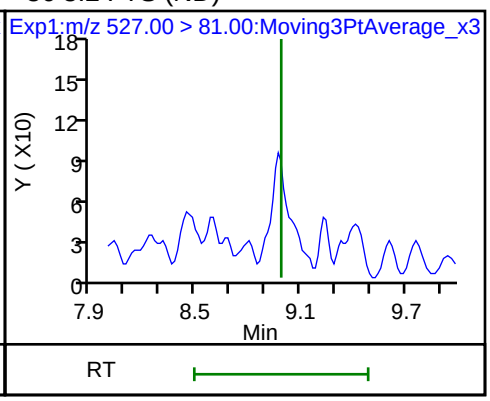
D 34 M2-8:2 FTS



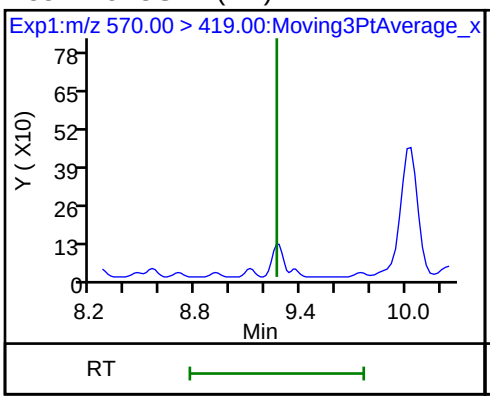
36 8:2 FTS (ND)



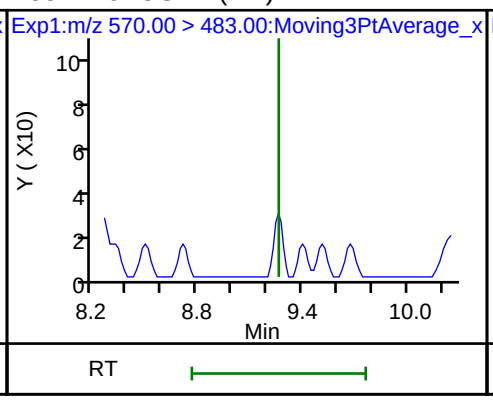
36 8:2 FTS (ND)



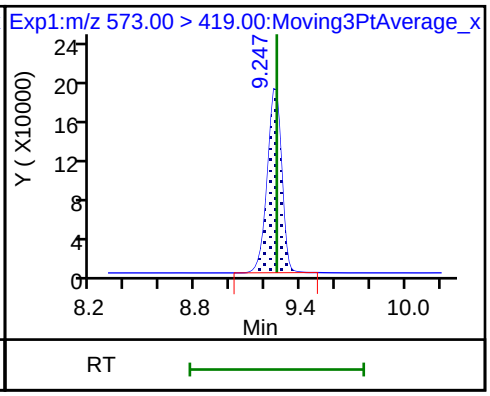
38 NMeFOSAA (ND)



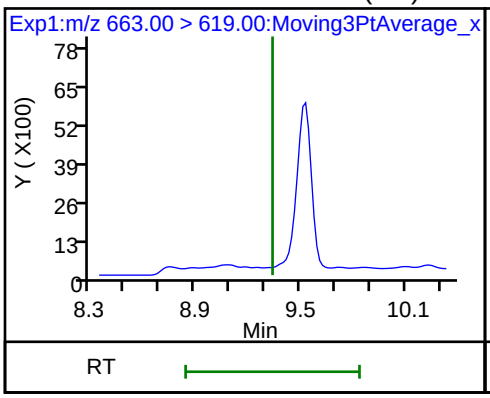
38 NMeFOSAA (ND)



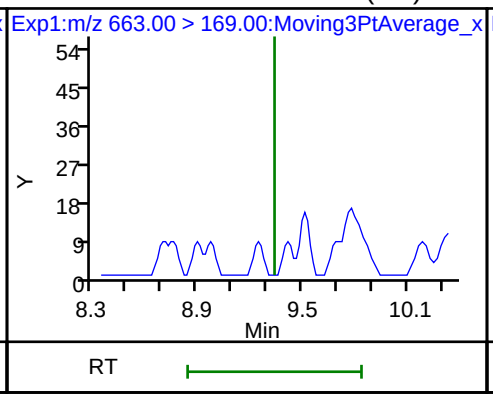
D 37 d3-NMeFOSAA



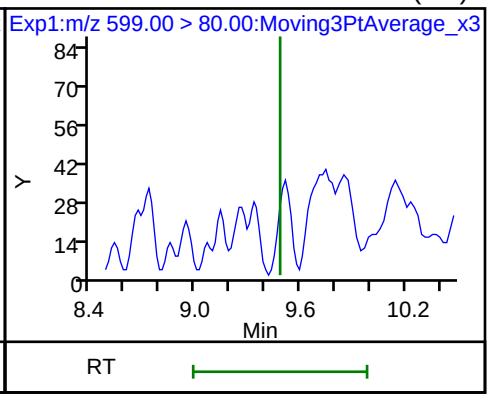
49 Perfluorotridecanoic acid (ND)



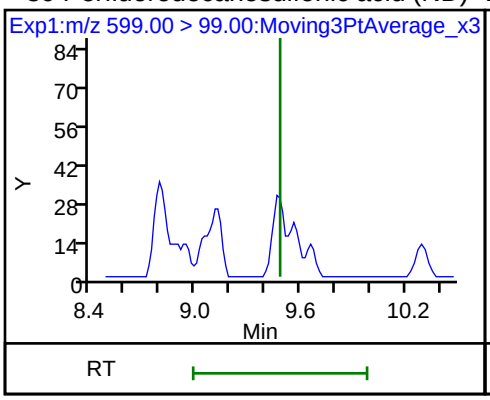
49 Perfluorotridecanoic acid (ND)



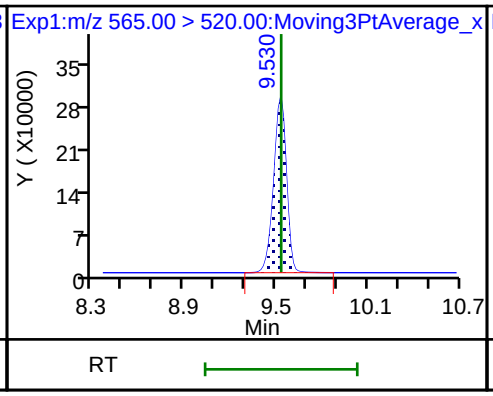
39 Perfluorodecanesulfonic acid (ND)



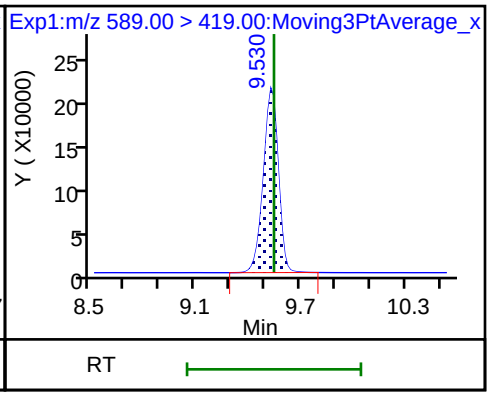
39 Perfluorodecanesulfonic acid (ND)



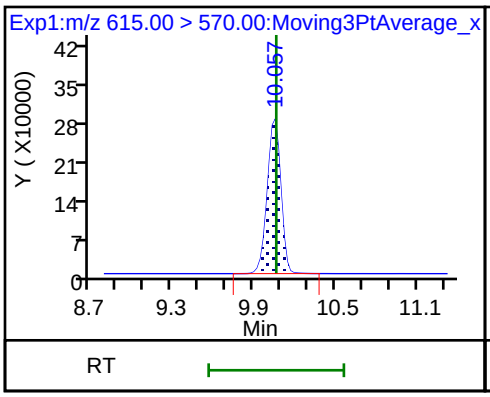
D 42 13C2 PFUnA



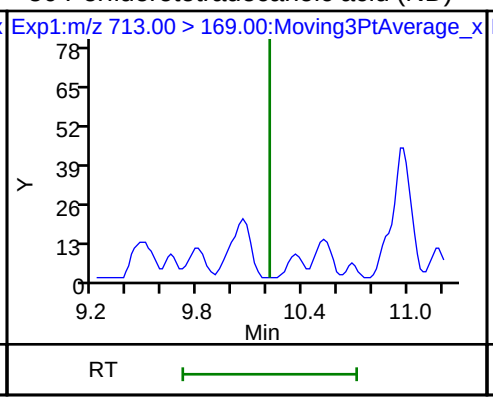
D 40 d5-NEtFOSAA



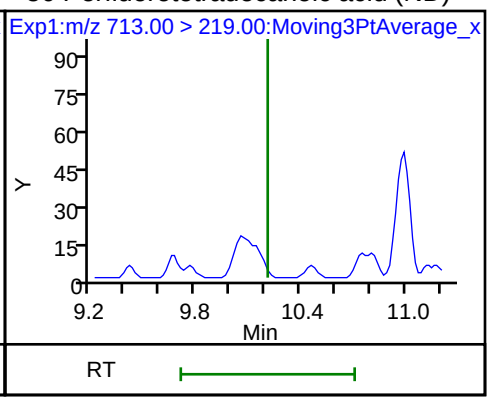
D 45 13C2 PFDoA



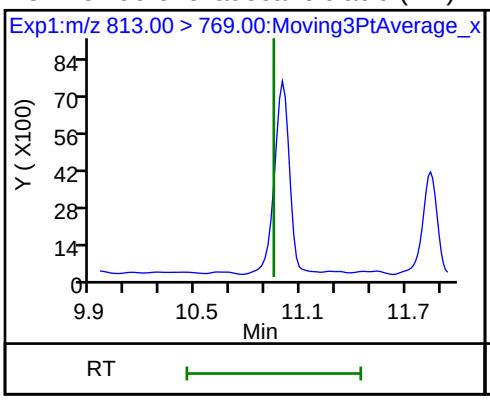
50 Perfluorotetradecanoic acid (ND)



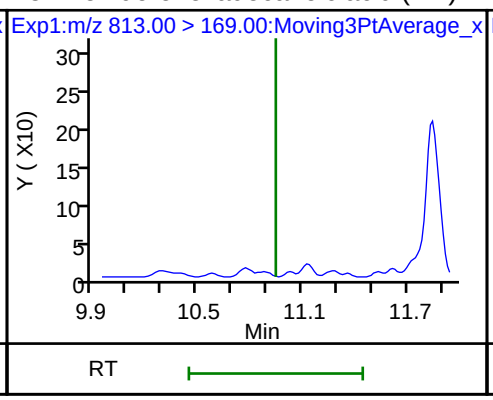
50 Perfluorotetradecanoic acid (ND)



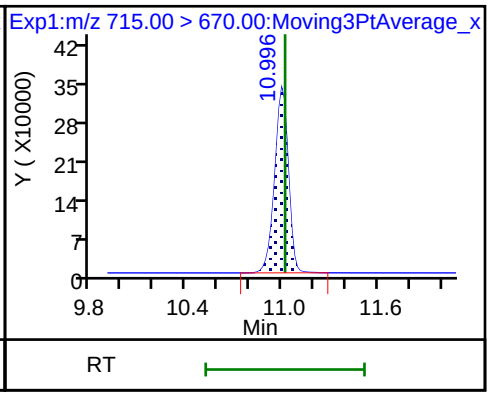
54 Perfluorohexadecanoic acid (ND)



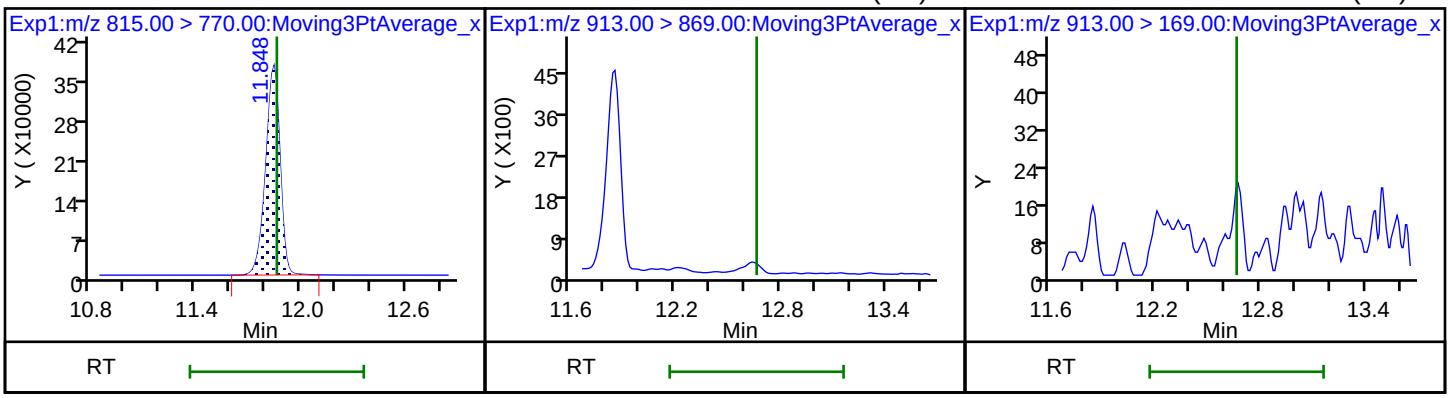
54 Perfluorohexadecanoic acid (ND)



D 51 13C2 PFTeDA



D 52 13C2 PFHxDA 53 Perfluorooctadecanoic acid (ND) 53 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

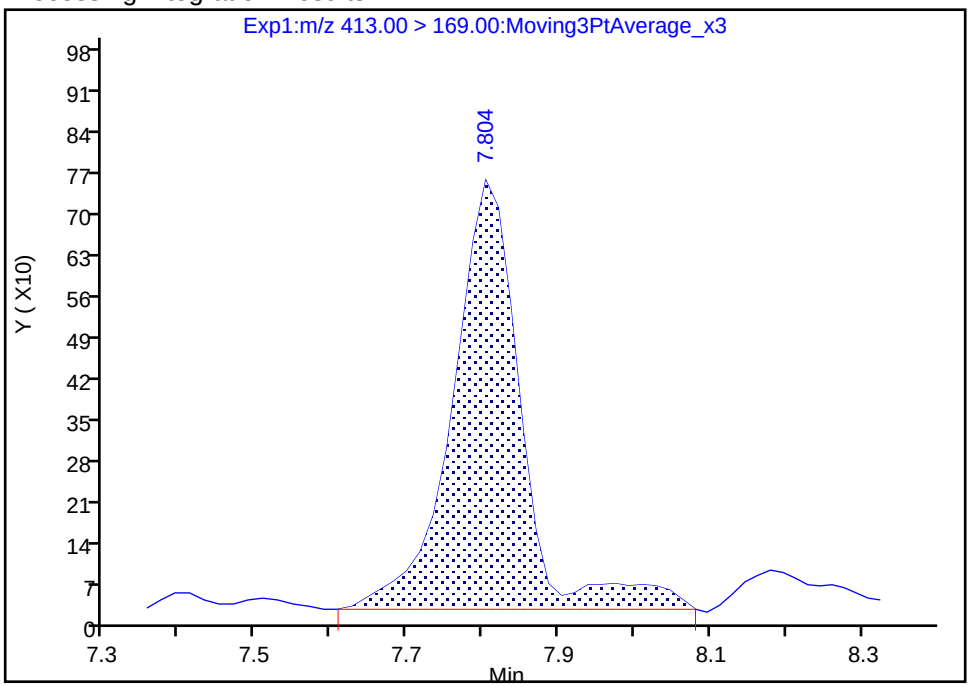
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_007.d
Injection Date: 23-Nov-2020 11:35:45 Instrument ID: A10
Lims ID: MB 320-434591/1-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

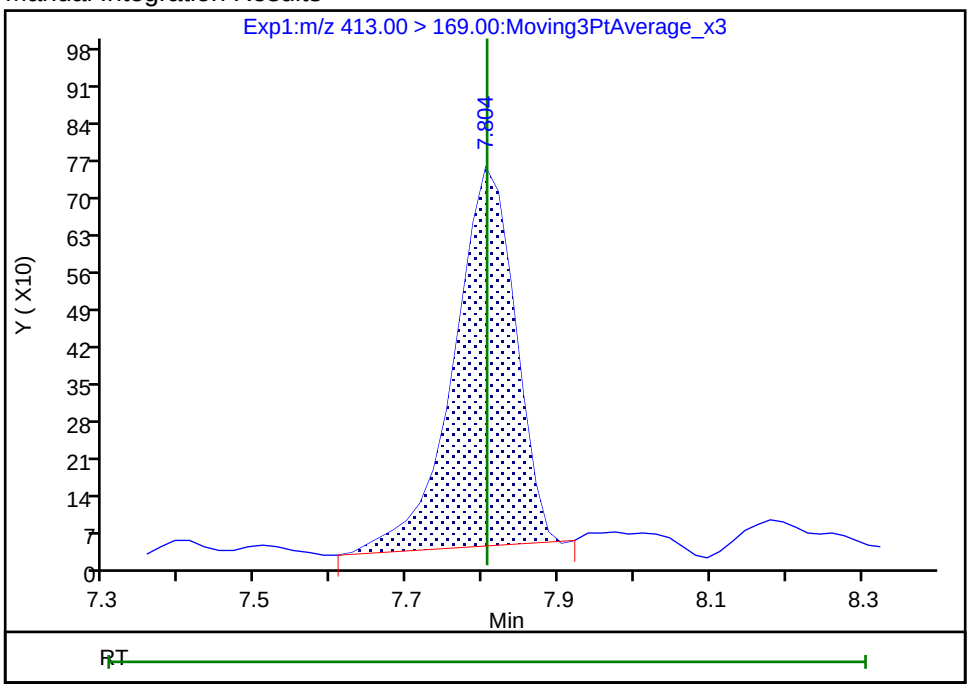
Processing Integration Results

RT: 7.80
Area: 4643
Amount: 0.000300
Amount Units: ng/ml



Manual Integration Results

RT: 7.80
Area: 4045
Amount: 0.000155
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:26:13
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

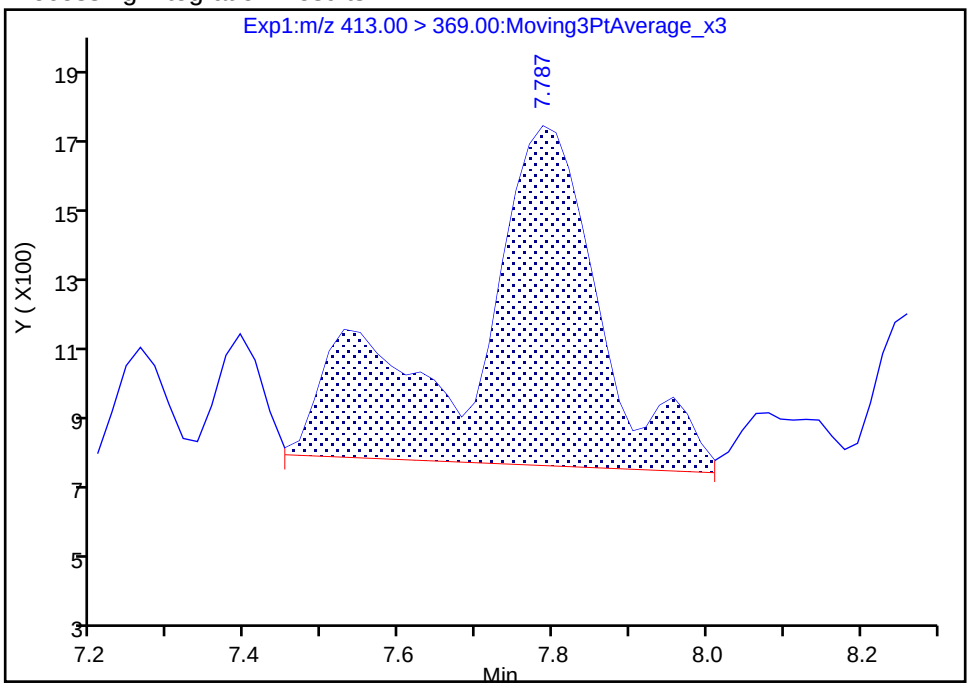
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_007.d
Injection Date: 23-Nov-2020 11:35:45 Instrument ID: A10
Lims ID: MB 320-434591/1-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 4
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

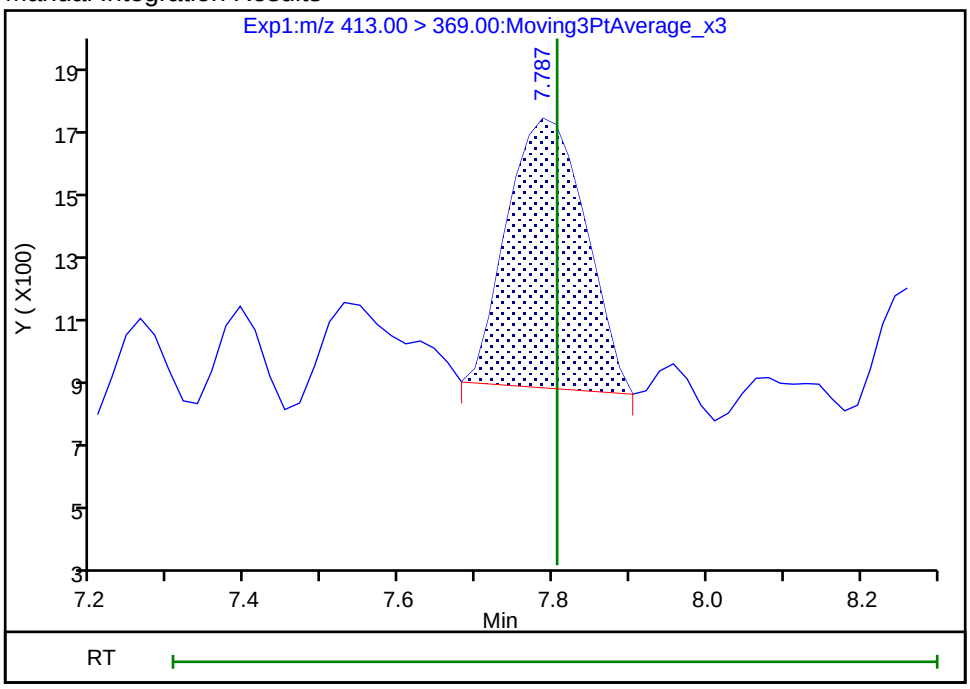
Processing Integration Results

RT: 7.79
Area: 11838
Amount: 0.000300
Amount Units: ng/ml



Manual Integration Results

RT: 7.79
Area: 6092
Amount: 0.000155
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:26:17
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: Lab Sample ID: ICB 320-420930/10

Matrix: Water Lab File ID: 2020.10.12_A10_DI_ICAL_012.d

Analysis Method: WS-LC-0025 Att1 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 10/12/2020 13:58

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 420930 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	104		25-150
STL01892	13C4 PFHpA	109		25-150
STL00990	13C4 PFOA	113		70-130
STL00991	13C4 PFOS	101		70-130
STL00995	13C5 PFNA	104		25-150
STL02337	13C3 PFBS	106		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_012.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 12-Oct-2020 13:58:06 ALS Bottle#: 12 Worklist Smp#: 10
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 12-Oct-2020 15:25:13 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1642

First Level Reviewer: koucharis Date: 12-Oct-2020 14:23:52
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 2 13C4 PFBA										
172	5.652	5.621	0.031		2177008	0.0549		110	12813	
D 4 13C5 PFPeA										
223	6.243	6.230	0.013		1868845	0.0550		110	16636	
5 Perfluoropentanoic acid										
219	6.243	6.230	0.013	1.000	7883	0.000196			1.6	
D 3 13C3 PFBS										
80	6.286	6.293	-0.007		2080510	0.0495		106	5311	
6 Perfluorobutanesulfonic acid										M
80	6.308	6.293	0.015	1.004	5504	0.000124	Target=1.50		9.0	
99	6.286	6.293	-0.007	1.000	2908		1.89(0.75-2.26)		2.8	M
D 7 M2-4:2 FTS										
81	6.680	6.665	0.015		575092	NC			1034	
D 9 13C2 PFHxA										
270	6.726	6.734	-0.008		1979929	0.0547		109	21287	
D 12 13C3 HFPO-DA										
287	6.867	6.876	-0.009		119942	NC			627	
D 15 18O2 PFHxS										
84	7.244	7.237	0.007		1277178	0.0494		104	14158	
D 17 13C4 PFHpA										
322	7.244	7.257	-0.013		1997124	0.0545		109	19645	
D 22 M2-6:2 FTS										
81	7.787	7.792	-0.005		667813	0.0515		108	1658	
23 6:2 FTS										
407	7.787	7.792	-0.005	1.000	134677	0.003859	Target=2.55		1230	
81	7.787	7.792	-0.005	1.000	53828		2.50(1.27-3.82)		136	
D 25 13C4 PFOA										
372	7.820	7.810	0.010		2409323	0.0566		113	12584	

Report Date: 12-Oct-2020 15:26:11 Chrom Revision: 2.3 08-Oct-2020 16:36:14
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_012.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 20 13C2 PFOA										
370	7.820	7.974	-0.154		4144	NC		0.0	77.8	
D 26 13C4 PFOS										
80	8.376	8.379	-0.003		892414	0.0484		101	2939	
D 28 13C5 PFNA										
423	8.410	8.417	-0.007		1869949	0.0522		104	11465	
D 30 13C8 FOSA										
78	8.957	8.953	0.004		1254293	0.0572		114	13227	
D 33 13C2 PFDA										
470	9.002	9.003	-0.001		1727838	0.0489		97.8	16052	
D 34 M2-8:2 FTS										
81	9.002	9.003	-0.001		688959	0.0504		105	3486	
D 37 d3-NMeFOSAA										
419	9.277	9.286	-0.009		1220921	0.0495		98.9	5806	
D 42 13C2 PFUnA										
520	9.562	9.565	-0.003		1510234	0.0415		83.0	13105	
D 40 d5-NEtFOSAA										
419	9.562	9.565	-0.003		1385783	0.0502		100	5470	
D 45 13C2 PFDoA										
570	10.079	10.076	0.003		1364008	0.0372		74.4	12810	
D 51 13C2 PFTeDA										
670	11.028	11.035	-0.007		755259	0.0312		62.5	6508	
D 52 13C2 PFHxDA										
770	11.897	11.907	-0.010		341526	0.0227		45.5	2546	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

LCPFC-LL-L0_00023 Amount Added: 1.00 Units: mL

Report Date: 12-Oct-2020 15:26:11 Chrom Revision: 2.3 08-Oct-2020 16:36:14

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_012.d

Injection Date: 12-Oct-2020 13:58:06 Instrument ID: A10

Lims ID: ICB

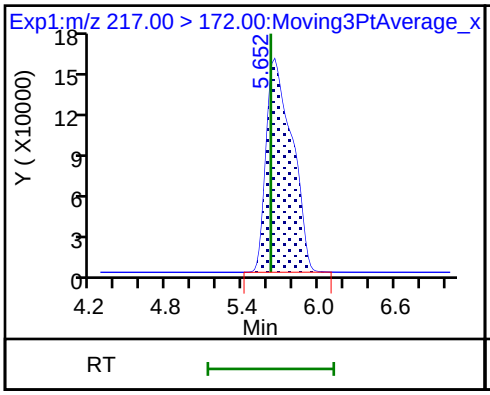
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 12 Worklist Smp#: 10

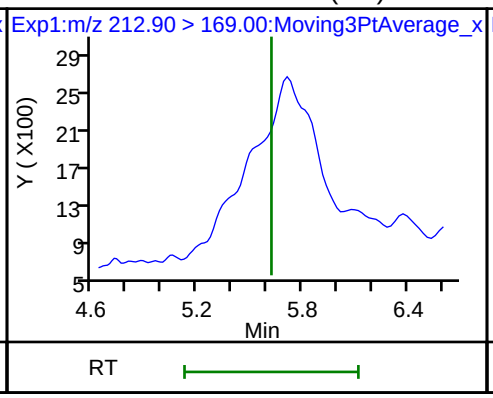
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

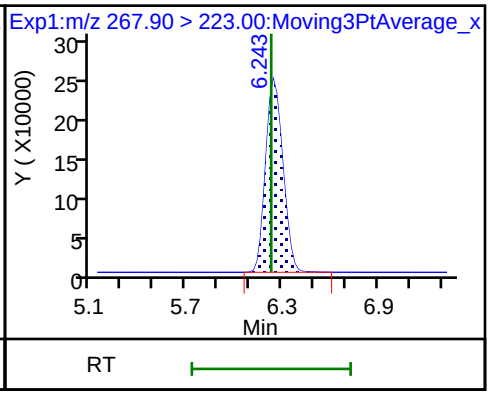
D 2 13C4 PFBA



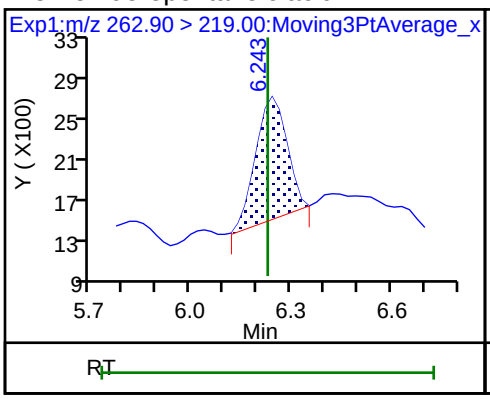
1 Perfluorobutanoic acid (ND)



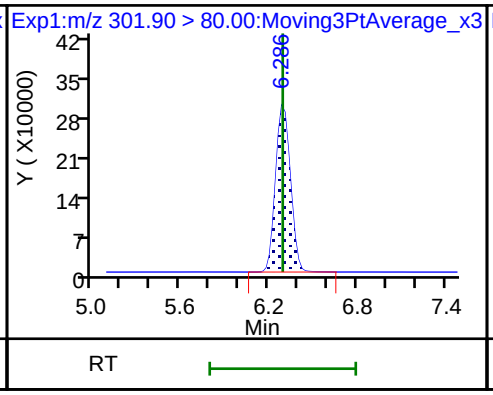
D 4 13C5 PFPeA



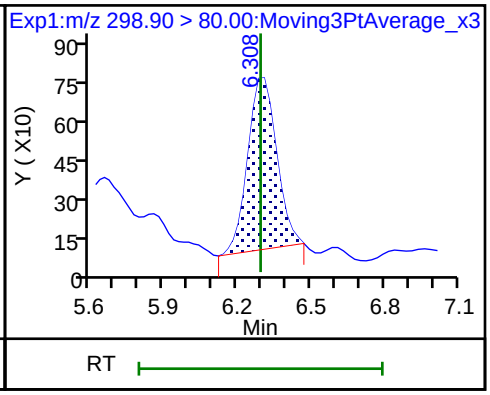
5 Perfluoropentanoic acid



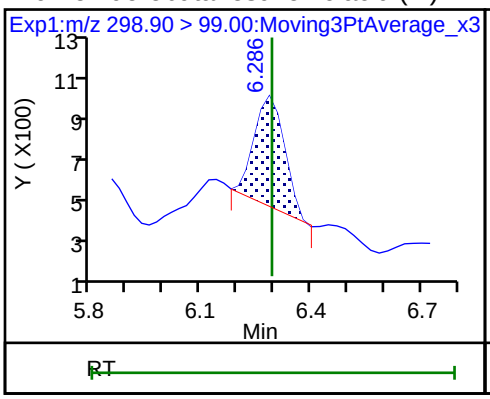
D 3 13C3 PFBS



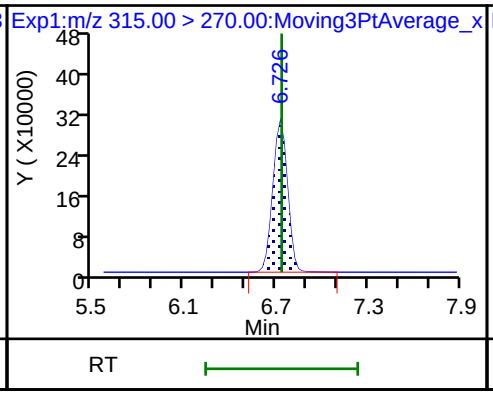
6 Perfluorobutanesulfonic acid



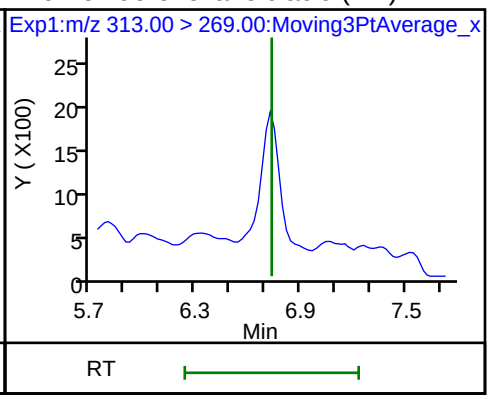
6 Perfluorobutanesulfonic acid (M)



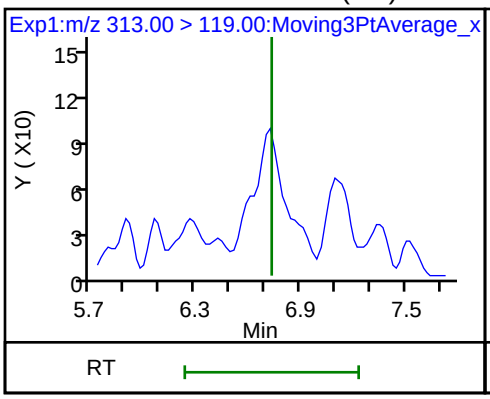
D 9 13C2 PFHxA



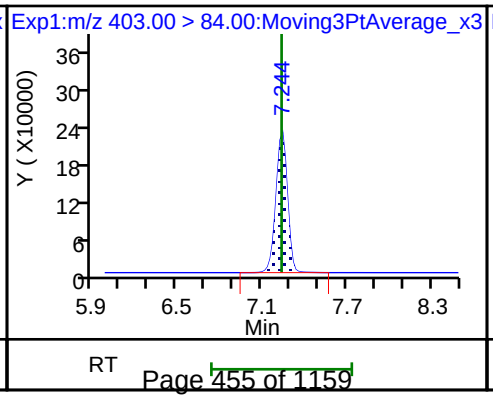
10 Perfluorohexanoic acid (ND)



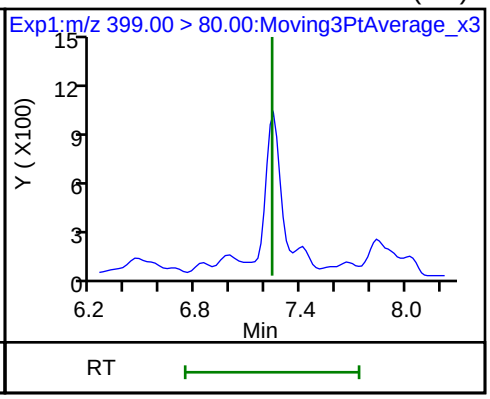
10 Perfluorohexanoic acid (ND)



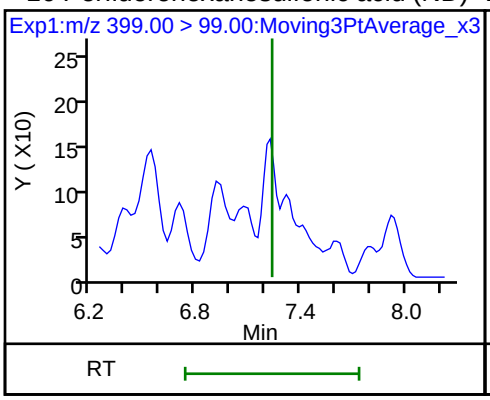
D 15 18O2 PFHxS



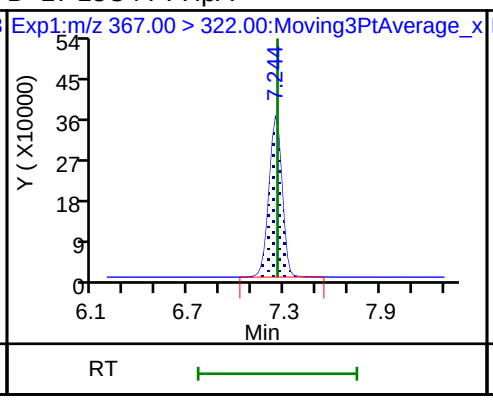
16 Perfluorohexanesulfonic acid (ND)



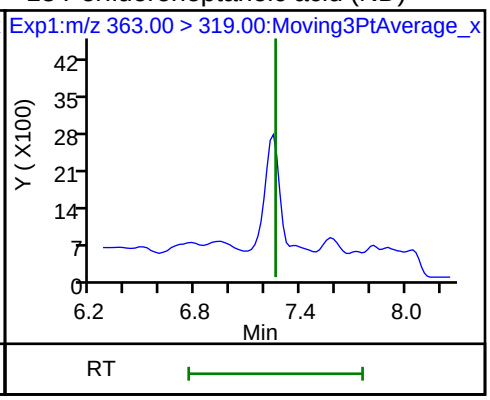
16 Perfluorohexanesulfonic acid (ND)



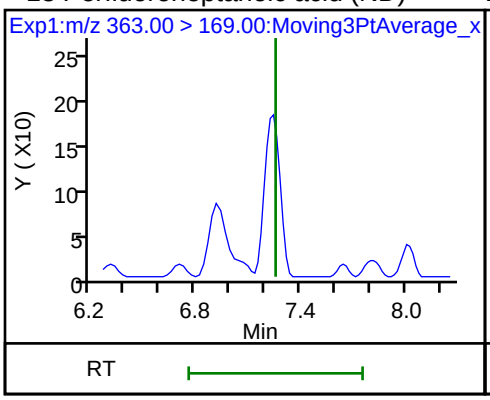
D 17 13C4 PFHpA



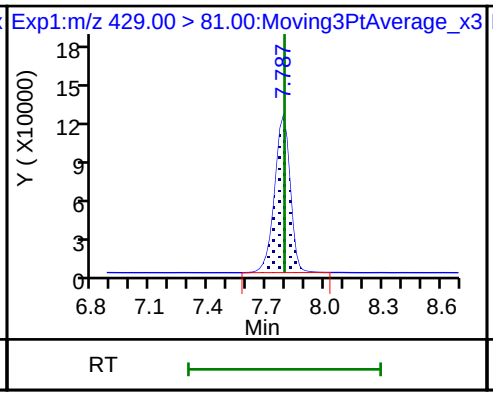
18 Perfluoroheptanoic acid (ND)



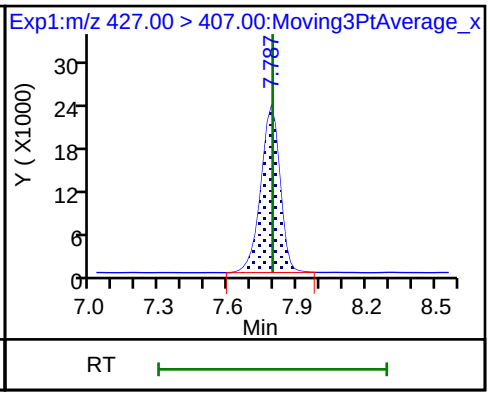
18 Perfluoroheptanoic acid (ND)



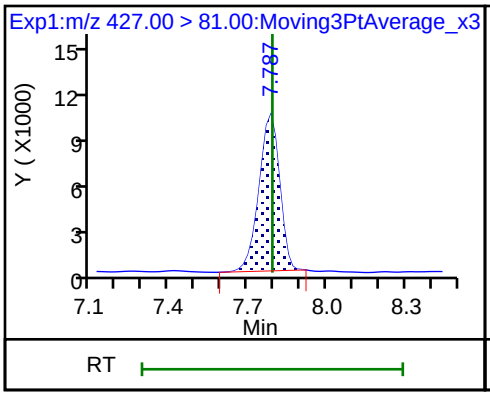
D 22 M2-6:2 FTS



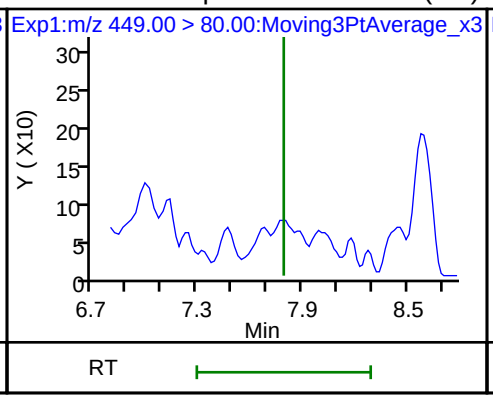
23 6:2 FTS



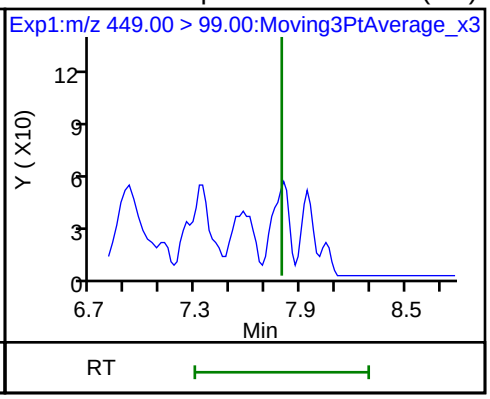
23 6:2 FTS



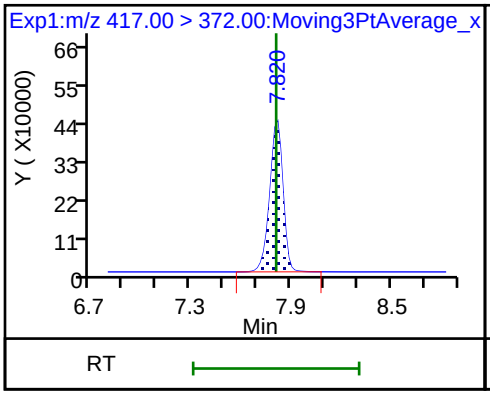
21 Perfluoroheptanesulfonic acid (ND)



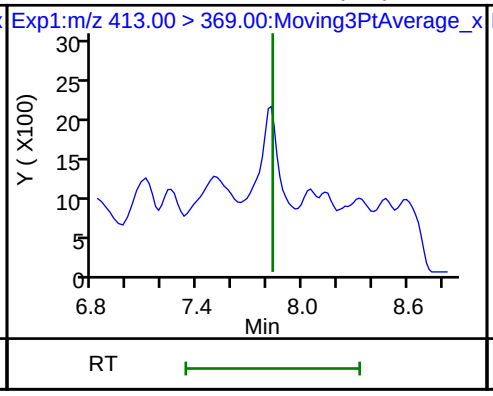
21 Perfluoroheptanesulfonic acid (ND)



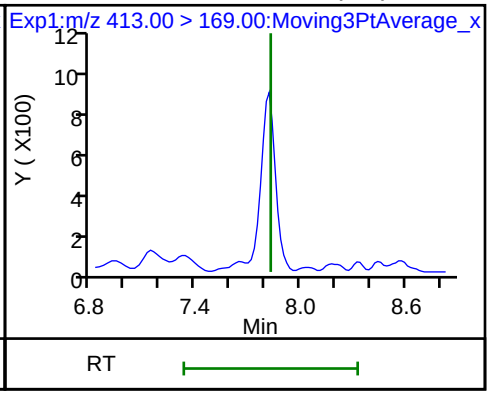
D 25 13C4 PFOA



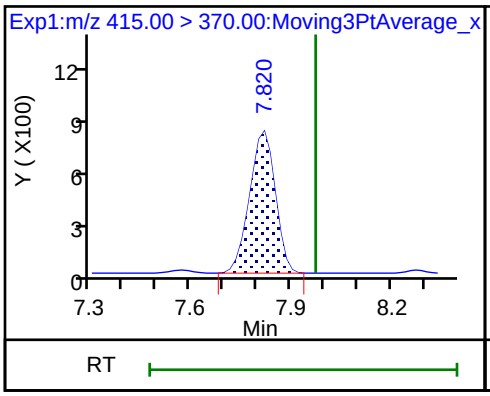
24 Perfluorooctanoic acid (ND)



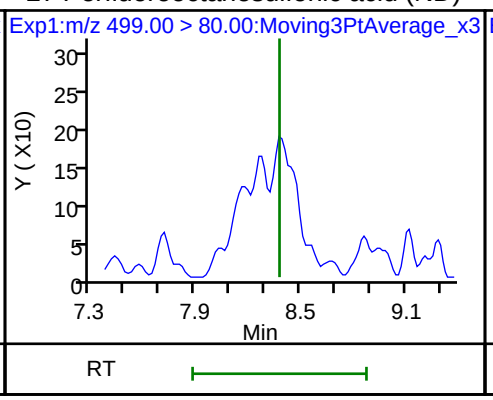
24 Perfluorooctanoic acid (ND)



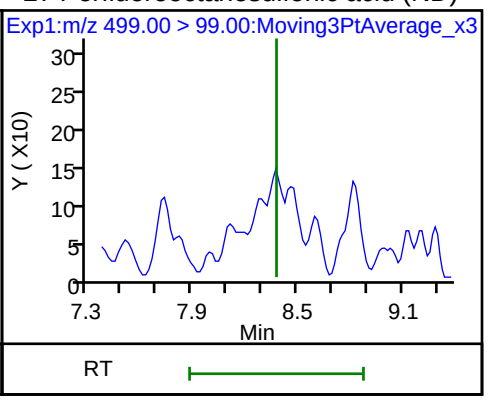
D 20 13C2 PFOA



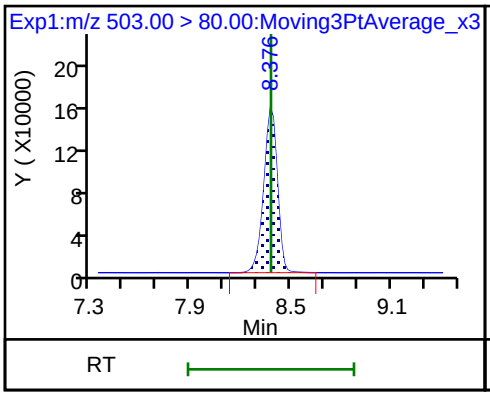
27 Perfluorooctanesulfonic acid (ND)



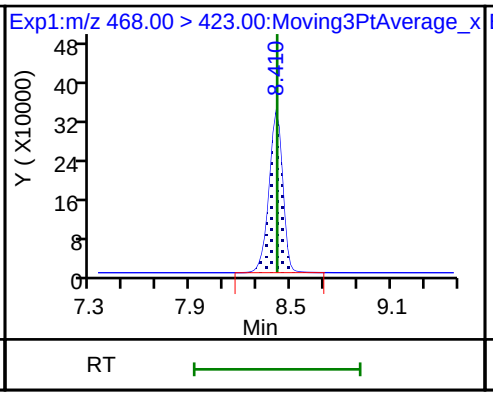
27 Perfluorooctanesulfonic acid (ND)



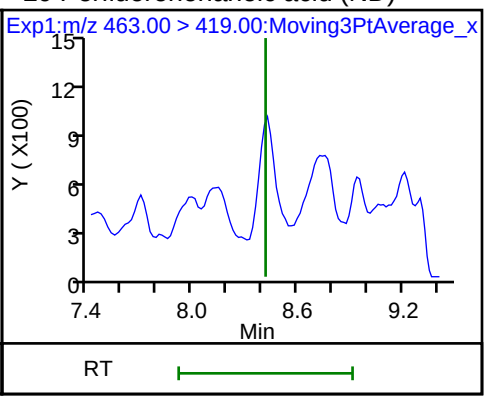
D 26 13C4 PFOS



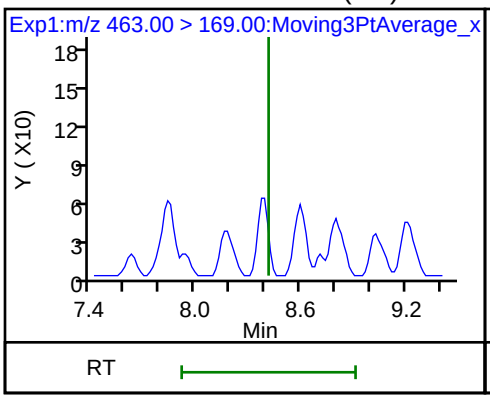
D 28 13C5 PFNA



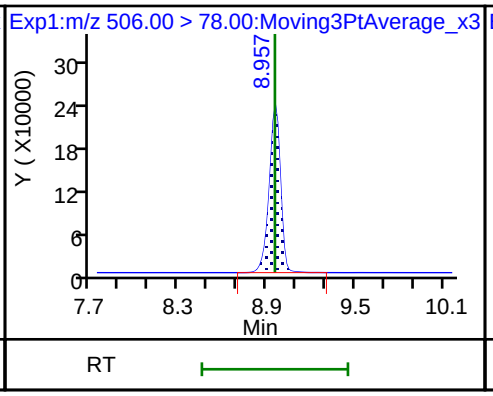
29 Perfluorononanoic acid (ND)



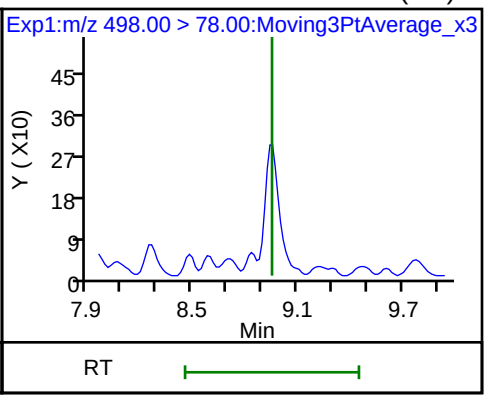
29 Perfluorononanoic acid (ND)



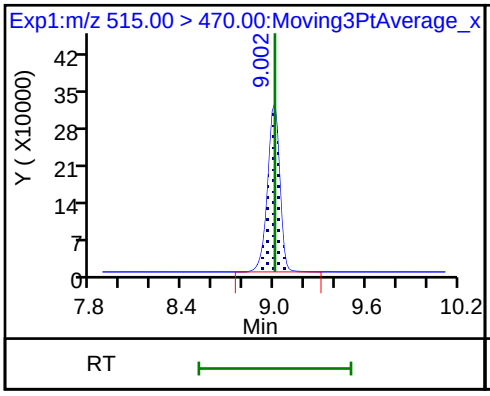
D 30 13C8 FOSA



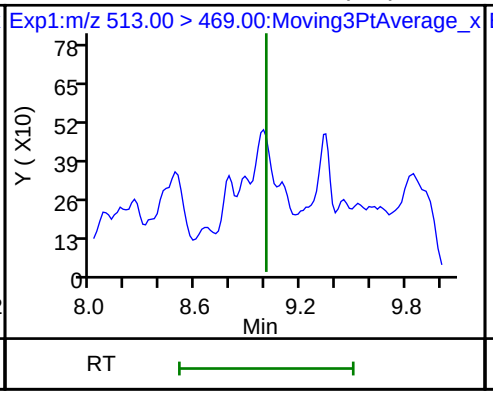
31 Perfluorooctanesulfonamide (ND)



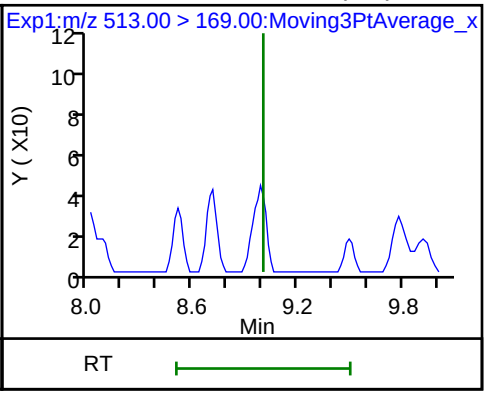
D 33 13C2 PFDA



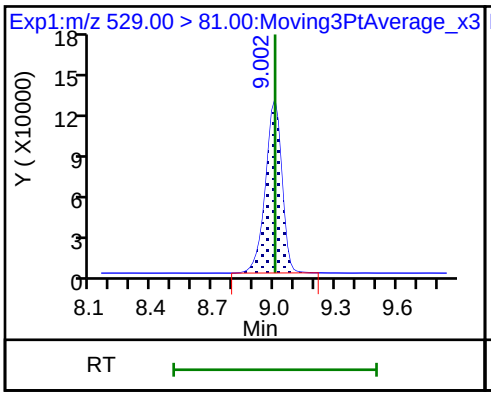
35 Perfluorodecanoic acid (ND)



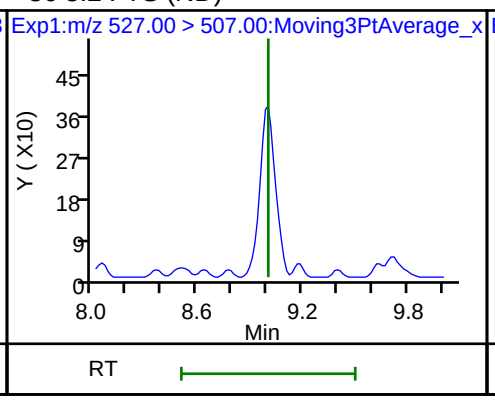
35 Perfluorodecanoic acid (ND)



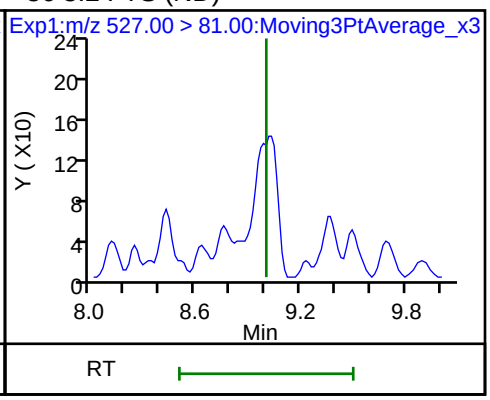
D 34 M2-8:2 FTS



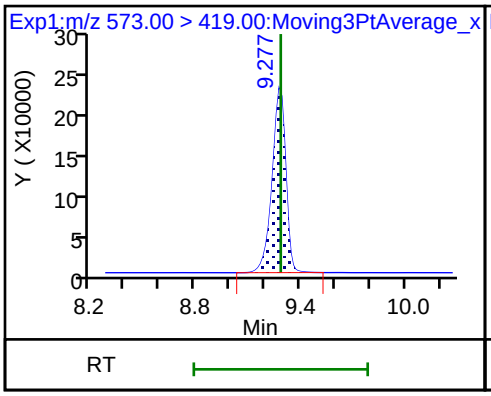
36 8:2 FTS (ND)



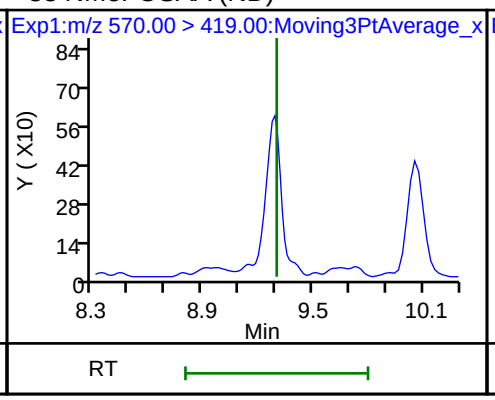
36 8:2 FTS (ND)



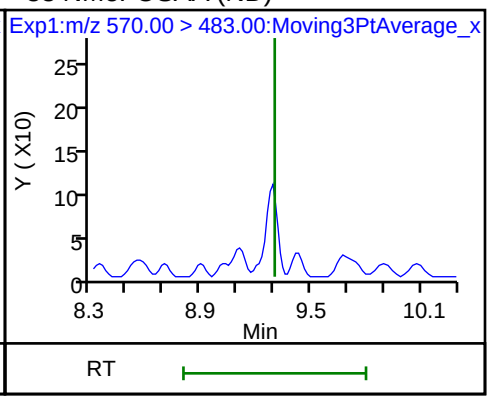
D 37 d3-NMeFOSAA



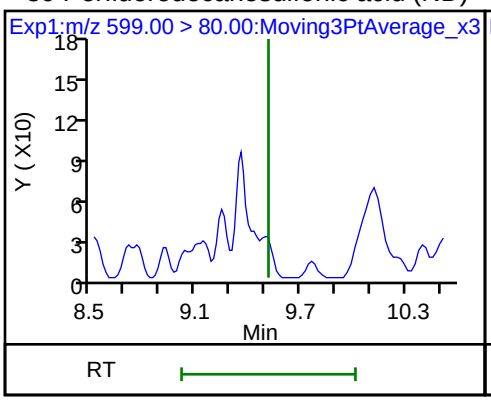
38 NMeFOSAA (ND)



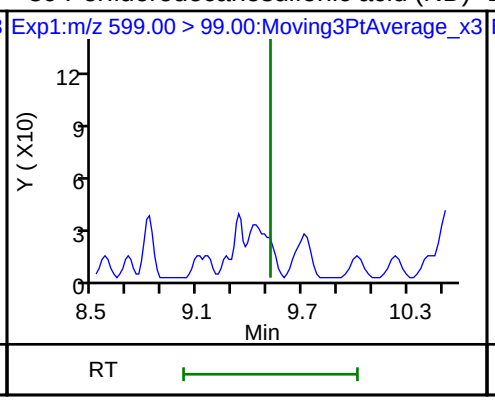
38 NMeFOSAA (ND)



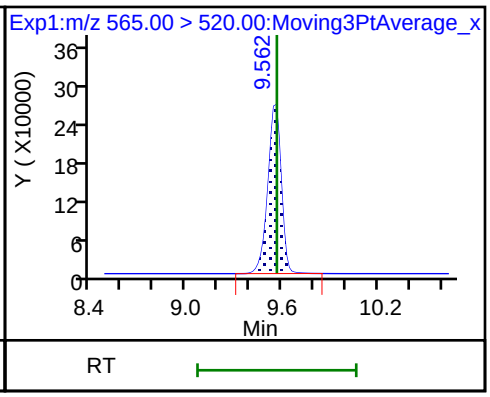
39 Perfluorodecanesulfonic acid (ND)



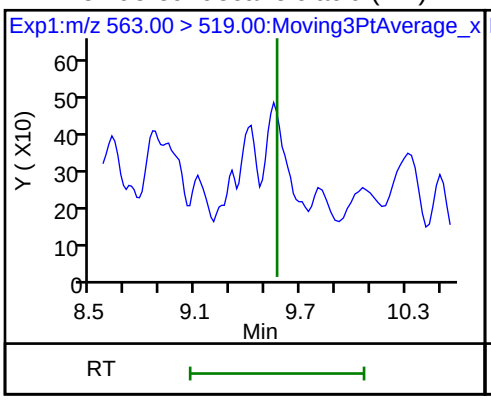
39 Perfluorodecanesulfonic acid (ND)



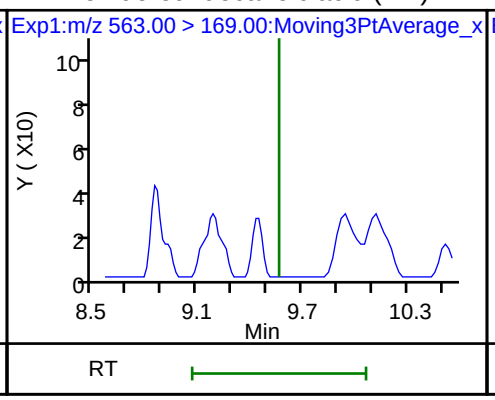
D 42 13C2 PFUnA



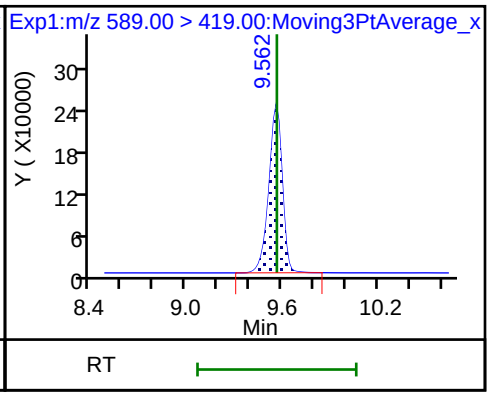
41 Perfluoroundecanoic acid (ND)



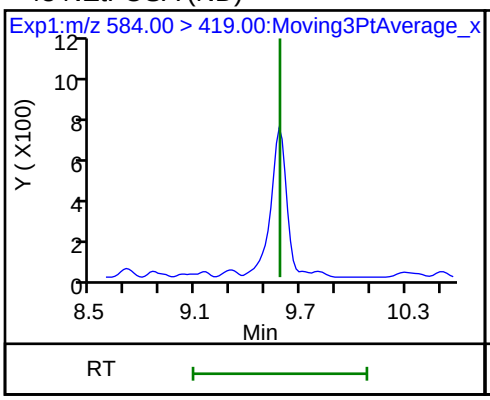
41 Perfluoroundecanoic acid (ND)



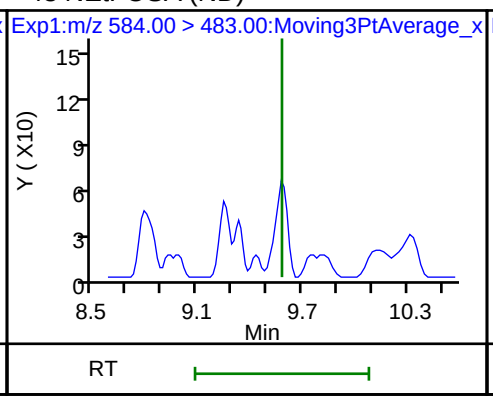
D 40 d5-NEtFOSAA



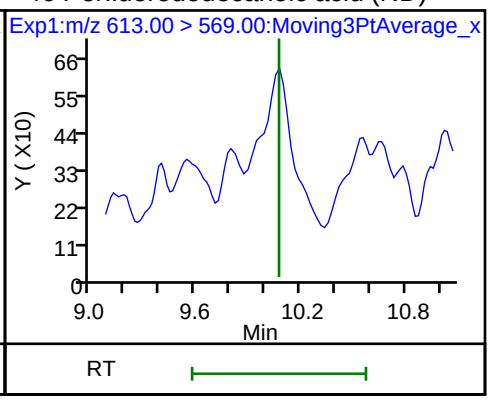
43 NEtFOSA (ND)



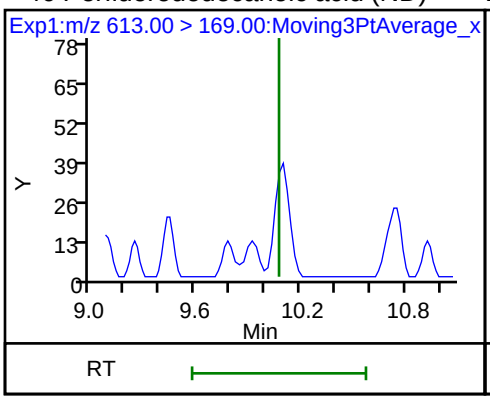
43 NEtFOSA (ND)



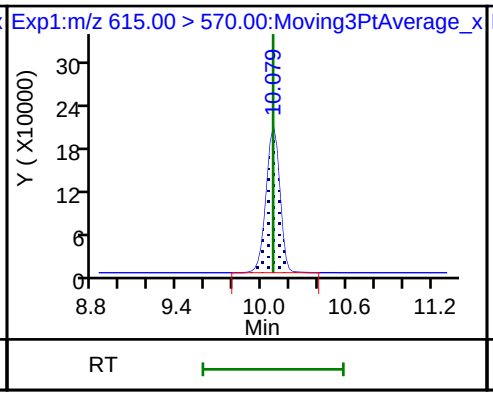
46 Perfluorododecanoic acid (ND)



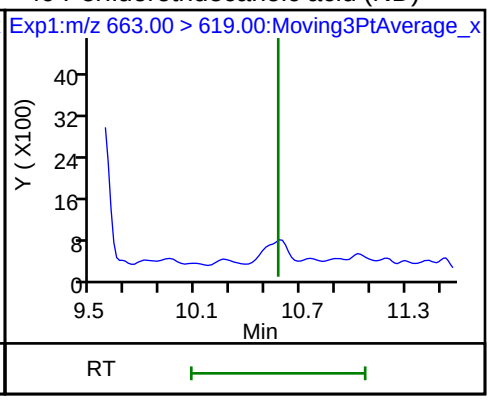
46 Perfluorododecanoic acid (ND)



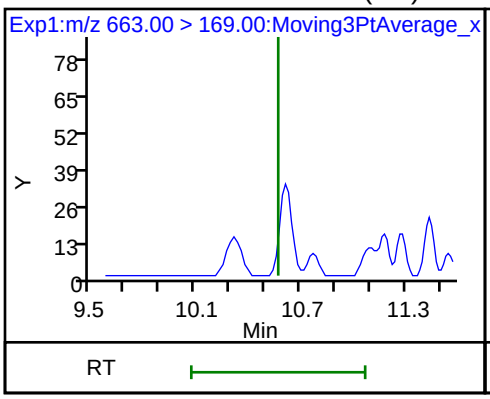
D 45 13C2 PFDoA



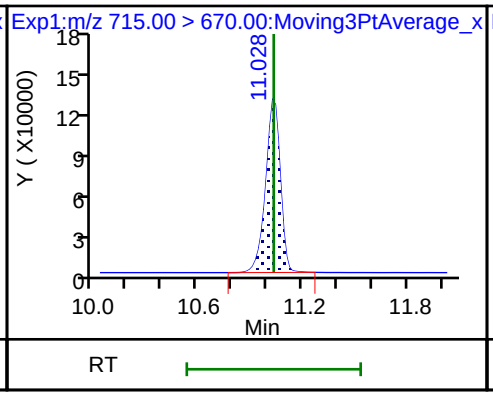
49 Perfluorotridecanoic acid (ND)



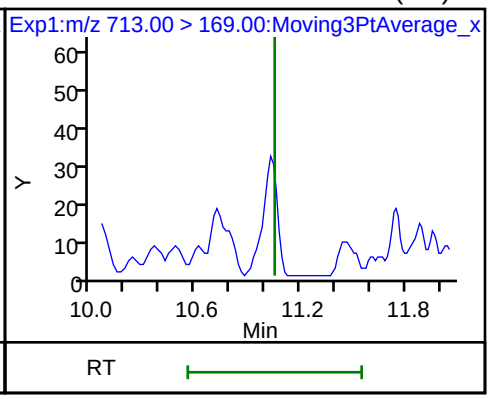
49 Perfluorotridecanoic acid (ND)



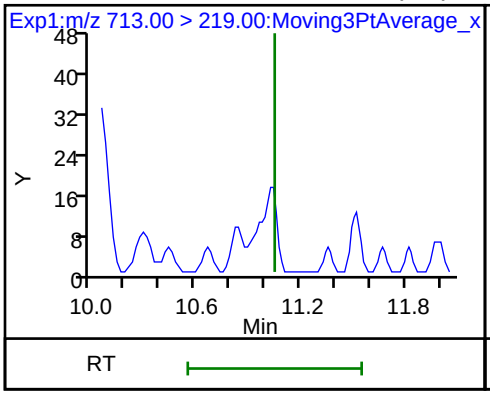
D 51 13C2 PFTeDA



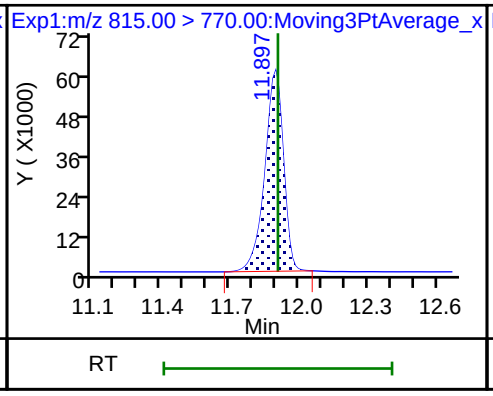
50 Perfluorotetradecanoic acid (ND)



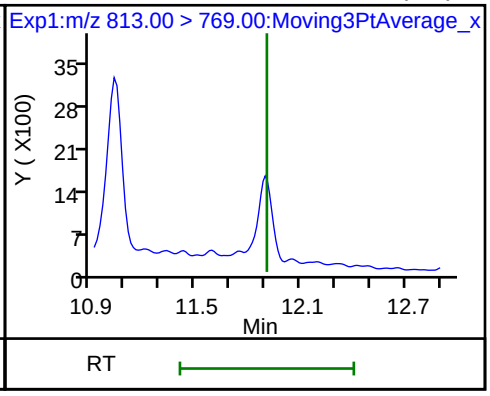
50 Perfluorotetradecanoic acid (ND)



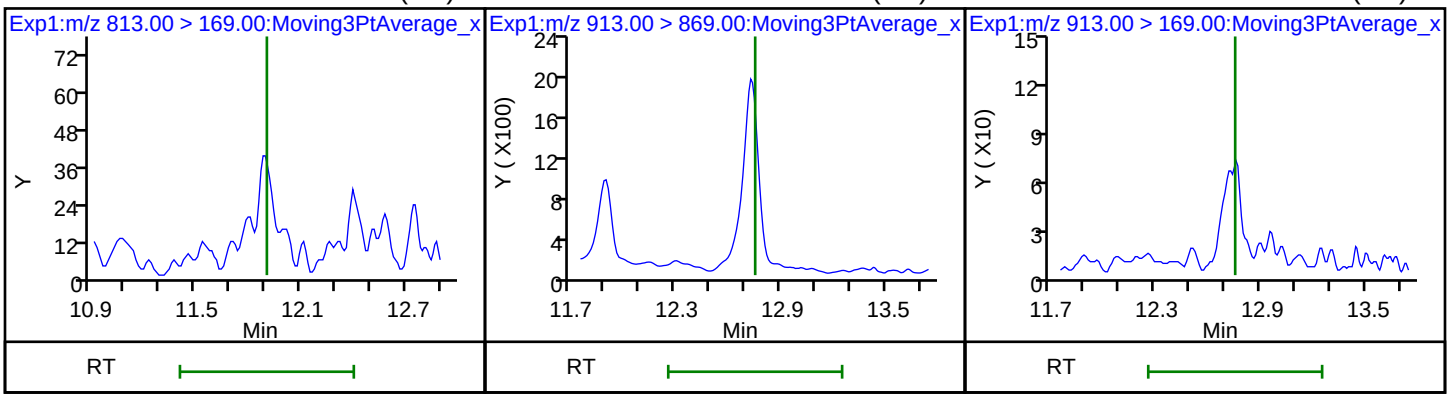
D 52 13C2 PFHxDA



54 Perfluorohexadecanoic acid (ND)



54 Perfluorohexadecanoic acid (ND) 53 Perfluorooctadecanoic acid (ND) 53 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

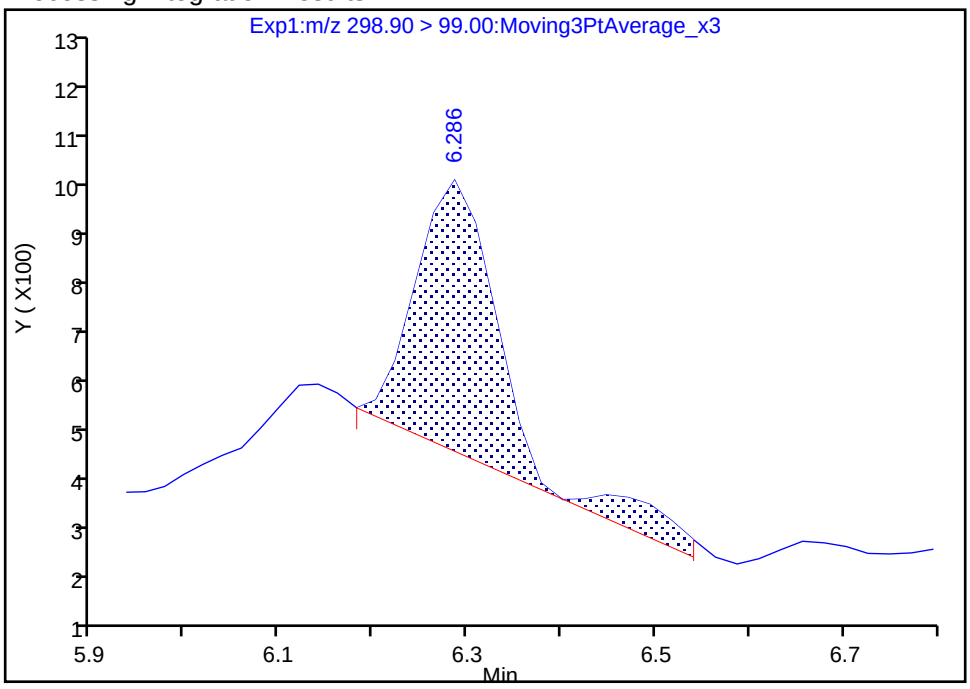
Data File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_012.d
Injection Date: 12-Oct-2020 13:58:06 Instrument ID: A10
Lims ID: ICB
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 12 Worklist Smp#: 10
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

6 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

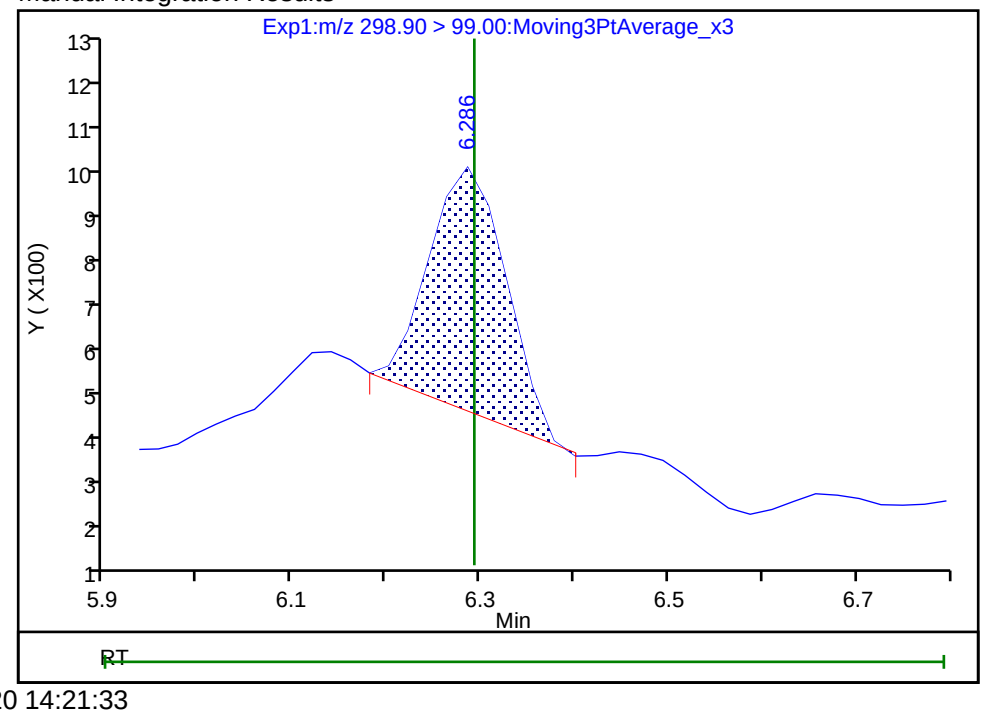
Processing Integration Results

RT: 6.29
Area: 3298
Amount: 0.000124
Amount Units: ng/ml



Manual Integration Results

RT: 6.29
Area: 2908
Amount: 0.000124
Amount Units: ng/ml



Reviewer: koucharis, 12-Oct-2020 14:21:33
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 320-434591/2-A

Matrix: Water Lab File ID: 2020.11.23_A10_DI_A_008.d

Analysis Method: WS-LC-0025 Att1 Date Collected:

Extraction Method: PFAS Prep Date Extracted: 11/23/2020 05:50

Sample wt/vol: 1.00(mL) Date Analyzed: 11/23/2020 11:54

Con. Extract Vol.: 1.66(mL) Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 434683 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	16.8		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	16.7		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	17.0		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	16.6		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	16.5		2.0	
375-95-1	Perfluorononanoic acid (PFNA)	18.0		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	112		25-150
STL01892	13C4 PFHpA	106		25-150
STL00990	13C4 PFOA	107		70-130
STL00991	13C4 PFOS	107		70-130
STL00995	13C5 PFNA	108		25-150
STL02337	13C3 PFBS	97		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_008.d
Lims ID: LCS 320-434591/2-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Nov-2020 11:54:11 ALS Bottle#: 8 Worklist Smp#: 5
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-434591/2-a
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:27:03 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:27:03
Ratio Calibration: CCV Sample: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 Perfluorobutanoic acid										M
212.90 > 169.00	5.621	5.621	0.0	1.000	386010	0.0111		92.3	33.2	M
D 2 13C4 PFBA										M
217.00 > 172.00	5.621	5.800	-0.179		1972278	0.0497		99.5	11434	M
D 4 13C5 PFPeA										
267.90 > 223.00	6.250	6.250	0.0		1662173	0.0489		97.9	14289	
5 Perfluoropentanoic acid										
262.90 > 219.00	6.271	6.250	0.021	1.003	379773	0.0106		88.0	81.6	
D 3 13C3 PFBS										
301.90 > 80.00	6.316	6.316	0.0		1901712	0.0453		97.3	6315	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	6.316	6.316	0.0	1.000	409528	0.0101	Target=1.49	95.0	726	
298.90 > 99.00	6.316	6.316	0.0	1.000	274638		1.49(0.74-2.23)		320	
D 7 M2-4:2 FTS										
329.00 > 81.00	6.688	6.688	0.0		387824	NC			811	
8 4:2 FTS										
327.00 > 307.00	6.688	6.688	0.0	1.000	217021	NC	Target=2.37		2192	
327.00 > 81.00	6.688	6.688	0.0	1.000	84308		2.57(1.19-3.56)		249	
D 9 13C2 PFHxA										
315.00 > 270.00	6.734	6.734	0.0		1761258	0.0487		97.4	21049	
10 Perfluorohexanoic acid										
313.00 > 269.00	6.734	6.734	0.0	1.000	371487	0.0114	Target=21.98	94.3	256	
313.00 > 119.00	6.734	6.734	0.0	1.000	19173		19.38(10.99-32.97)		155	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	6.757	6.757	0.0	0.935	343707	NC	Target=1.45		678	
349.00 > 99.00	6.757	6.757	0.0	0.935	237741		1.45(0.73-2.18)		499	
13 HPFO-DA										
329.10 > 285.00	6.876	6.876	0.0	1.000	61303	NC			73.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
332.10 > 287.00	6.876	6.876	0.0		121597	NC			680	
16 Perfluorohexanesulfonic acid										
399.00 > 80.00	7.244	7.244	0.0	1.003	332778	0.0101	Target=5.50	92.0	576	
399.00 > 99.00	7.244	7.244	0.0	1.003	55159		6.03(2.75-8.25)		255	
D 15 18O2 PFHxS										
403.00 > 84.00	7.226	7.244	-0.018		1375168	0.0531		112	13588	
D 17 13C4 PFHpA										
367.00 > 322.00	7.244	7.244	0.0		1932270	0.0528		106	21548	
18 Perfluoroheptanoic acid										
363.00 > 319.00	7.244	7.244	0.0	1.000	403912	0.0102	Target=7.99	84.8	223	
363.00 > 169.00	7.244	7.244	0.0	1.000	44612		9.05(4.00-11.99)		566	
19 DONA										
377.00 > 251.00	7.300	7.300	0.0	0.873	1709835	NC	Target=2.55		6966	
377.00 > 85.00	7.300	7.300	0.0	0.873	704231		2.43(1.27-3.82)		2958	
D 22 M2-6:2 FTS										
429.00 > 81.00	7.769	7.771	-0.002		501455	0.0387		81.4	1260	
23 6:2 FTS										
427.00 > 407.00	7.769	7.771	-0.002	1.000	344156	0.0131	Target=2.58	115	2265	
427.00 > 81.00	7.769	7.771	-0.002	1.000	124554		2.76(1.29-3.87)		329	
21 Perfluoroheptanesulfonic acid										
449.00 > 80.00	7.787	7.789	-0.002	0.932	235790	0.0100	Target=6.72	86.8	664	
449.00 > 99.00	7.787	7.789	-0.002	0.932	40661		5.80(3.36-10.08)		213	
24 Perfluorooctanoic acid										M
413.00 > 369.00	7.803	7.805	-0.002	1.000	441220	0.0100	Target=1.36	83.1	78.4	M
413.00 > 169.00	7.803	7.805	-0.002	1.000	316867		1.39(0.68-2.04)		1334	
D 25 13C4 PFOA										
417.00 > 372.00	7.803	7.805	-0.002		2269916	0.0533		107	18050	
27 Perfluorooctanesulfonic acid										
499.00 > 80.00	8.359	8.362	-0.003	1.000	200188	0.0100	Target=3.30	89.1	672	
499.00 > 99.00	8.359	8.362	-0.003	1.000	55446		3.61(1.65-4.96)		252	
D 26 13C4 PFOS										
503.00 > 80.00	8.359	8.362	-0.003		938031	0.0509		107	2573	
29 Perfluorononanoic acid										
463.00 > 419.00	8.393	8.397	-0.004	1.000	369505	0.0108	Target=6.56	89.9	202	
463.00 > 169.00	8.393	8.397	-0.004	1.000	58229		6.35(3.28-9.84)		573	
D 28 13C5 PFNA										
468.00 > 423.00	8.393	8.397	-0.004		1928454	0.0538		108	14803	
D 30 13C8 FOSA										
506.00 > 78.00	8.941	8.943	-0.002		1300858	0.0593		119	7037	
31 Perfluorooctanesulfonamide										
498.00 > 78.00	8.941	8.943	-0.002	1.000	237720	0.009121		75.7	2315	
32 Perfluorononanesulfonic acid										
549.00 > 80.00	8.926	8.943	-0.017	1.068	165369	NC	Target=5.15		897	
549.00 > 99.00	8.926	8.943	-0.017	1.068	30282		5.46(2.58-7.73)		151	
D 33 13C2 PFDA										
515.00 > 470.00	8.972	8.974	-0.002		1921727	0.0544		109	11009	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
35 Perfluorodecanoic acid										
513.00 > 469.00	8.972	8.974	-0.002	1.000	298091	0.009653	Target=13.96	80.1	253	
513.00 > 169.00	8.972	8.974	-0.002	1.000	22557		13.22(6.98-20.93)		209	
D 34 M2-8:2 FTS										
529.00 > 81.00	8.972	8.989	-0.017		479979	0.0351		73.4	2668	
36 8:2 FTS										
527.00 > 507.00	8.972	8.989	-0.017	1.000	205266	0.009231	Target=2.08	80.0	2411	
527.00 > 81.00	8.972	8.989	-0.017	1.000	96221		2.13(1.04-3.12)		471	
38 NMeFOSAA										
570.00 > 419.00	9.246	9.264	-0.018	1.000	179969	0.009328	Target=14.39	77.4	706	
570.00 > 483.00	9.246	9.264	-0.018	1.000	14063		12.80(7.19-21.58)		109	
D 37 d3-NMeFOSAA										
573.00 > 419.00	9.246	9.264	-0.018		1160350	0.0470		94.0	6158	
39 Perfluorodecanesulfonic acid										
599.00 > 80.00	9.465	9.483	-0.018	1.132	131680	0.008986	Target=2.63	77.4	908	
599.00 > 99.00	9.465	9.483	-0.018	1.132	52184		2.52(1.31-3.94)		813	
D 42 13C2 PFUnA										
565.00 > 520.00	9.513	9.531	-0.018		1898447	0.0521		104	14871	
D 40 d5-NEtFOSAA										
589.00 > 419.00	9.529	9.548	-0.019		1346368	0.0488		97.5	5193	
D 45 13C2 PFDoA										
615.00 > 570.00	10.035	10.064	-0.029		2089601	0.0570		114	11323	
D 51 13C2 PFTeDA										
715.00 > 670.00	10.996	11.017	-0.021		2141323	0.0886		177	11511	
D 52 13C2 PFHxDA										
815.00 > 770.00	11.836	11.864	-0.028		2326274	0.1548		310	10791	
53 Perfluorooctadecanoic acid										
913.00 > 869.00	12.622	12.663	-0.041	1.066	229531	0.0225	Target=29.86	187	164	
913.00 > 169.00	12.622	12.663	-0.041	1.066	7707		29.78(14.93-44.79)		198	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Report Date: 24-Nov-2020 08:27:03 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_008.d

Injection Date: 23-Nov-2020 11:54:11 Instrument ID: A10

Lims ID: LCS 320-434591/2-A

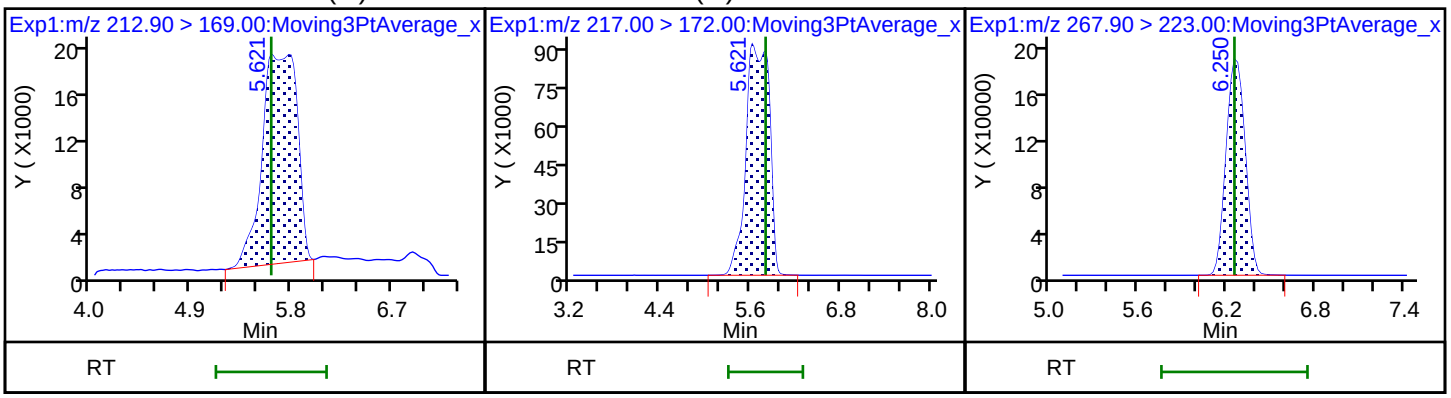
Client ID:

Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 5

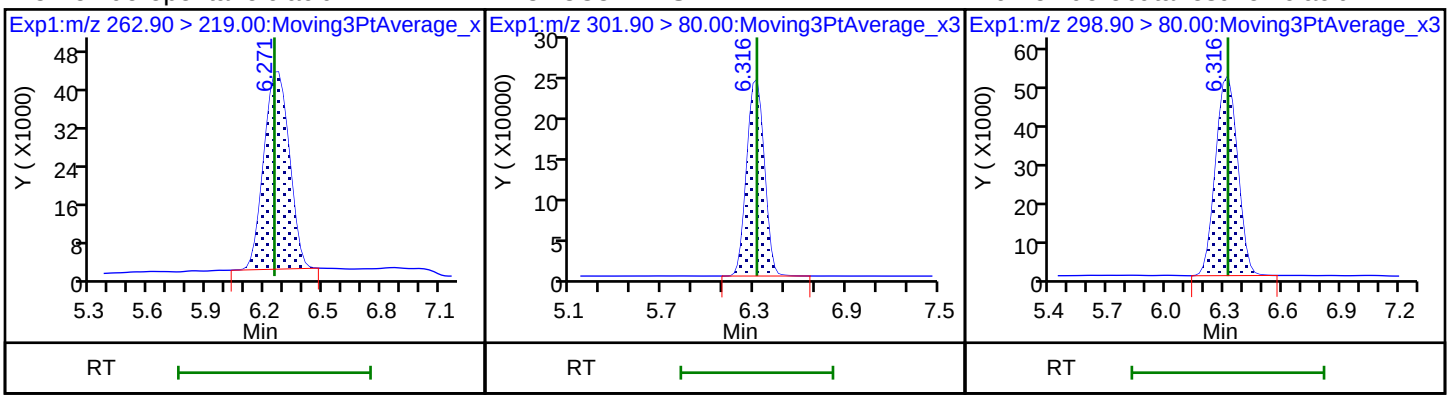
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

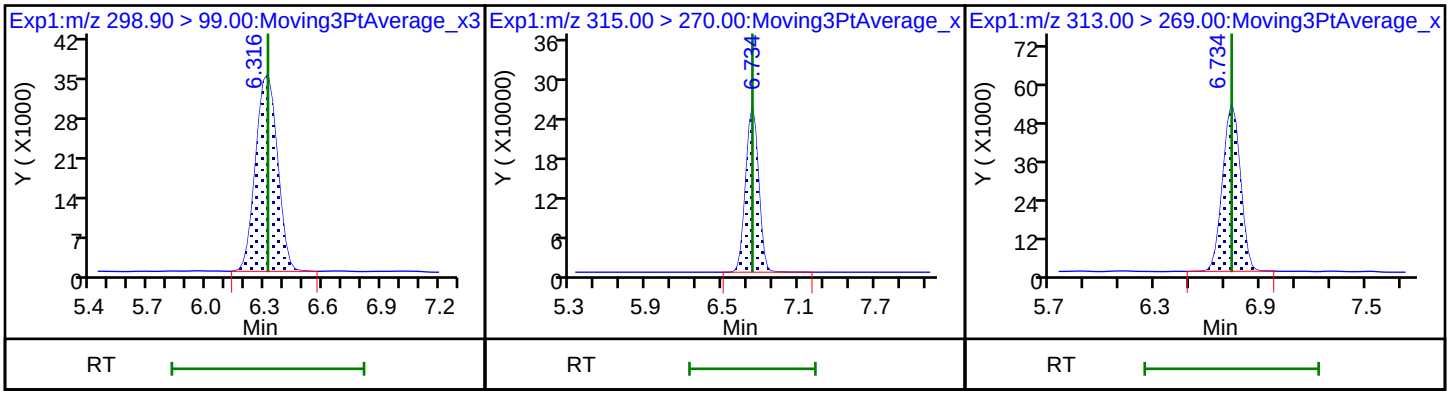
1 Perfluorobutanoic acid (M) D 2 13C4 PFBA (M) D 4 13C5 PFPeA



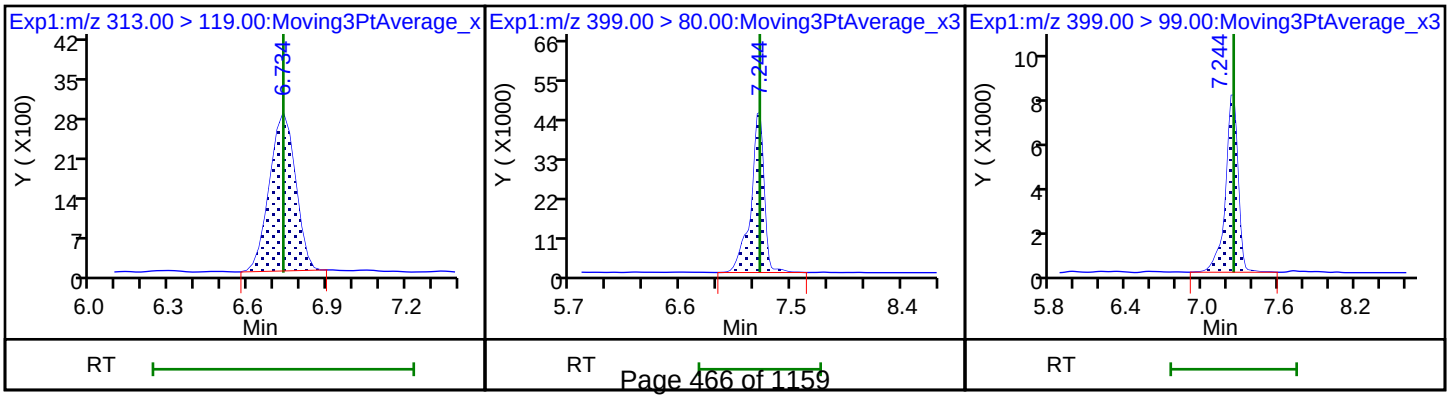
5 Perfluoropentanoic acid D 3 13C3 PFBS 6 Perfluorobutanesulfonic acid



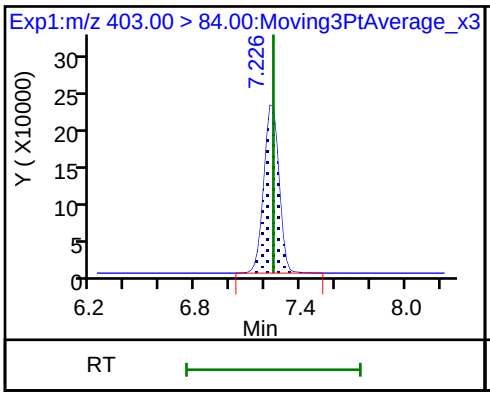
6 Perfluorobutanesulfonic acid D 9 13C2 PFHxA 10 Perfluorohexanoic acid



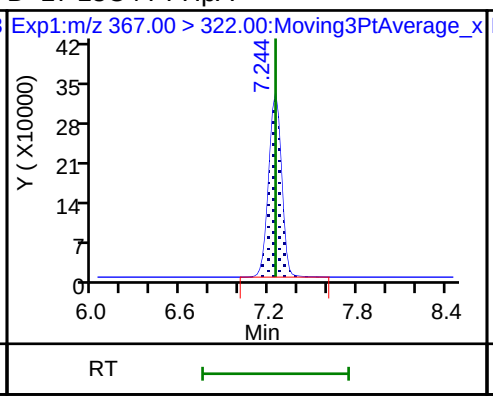
10 Perfluorohexanoic acid 16 Perfluorohexanesulfonic acid 16 Perfluorohexanesulfonic acid



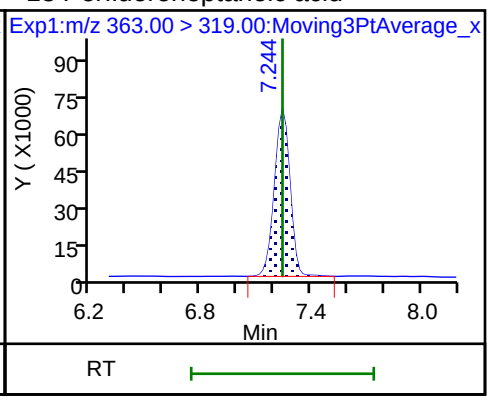
D 15 18O2 PFHxS



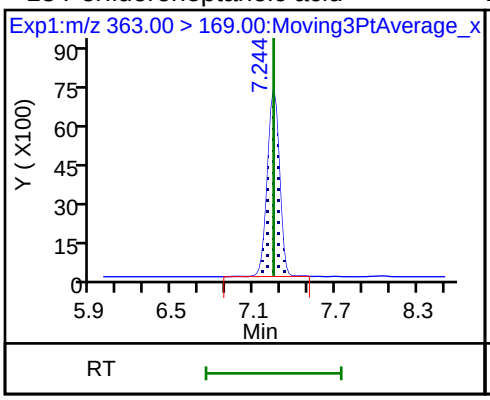
D 17 13C4 PFHpA



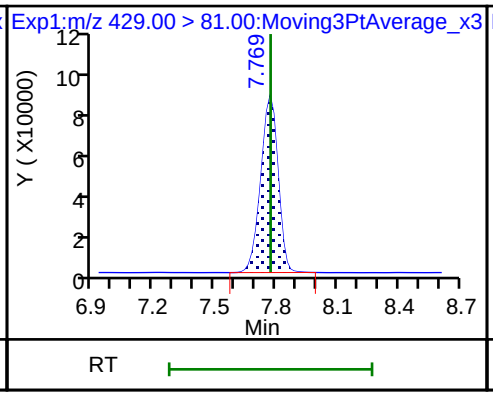
18 Perfluoroheptanoic acid



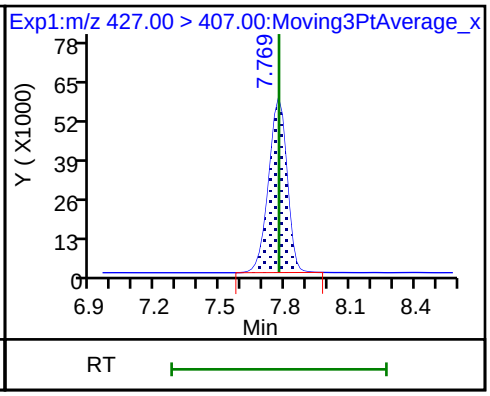
18 Perfluoroheptanoic acid



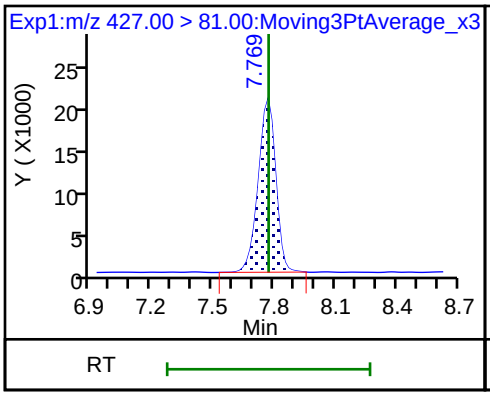
D 22 M2-6:2 FTS



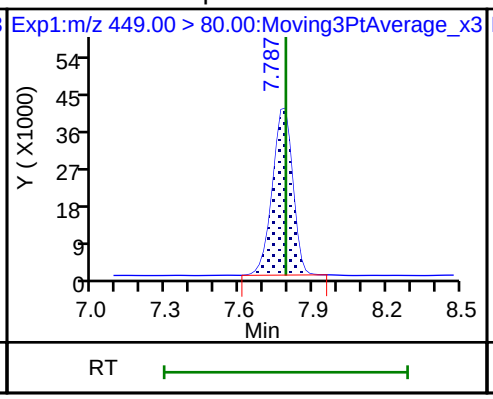
23 6:2 FTS



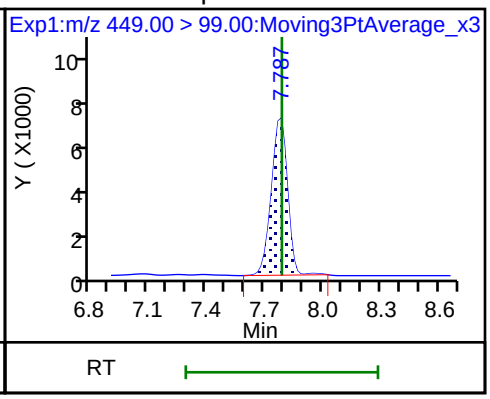
23 6:2 FTS



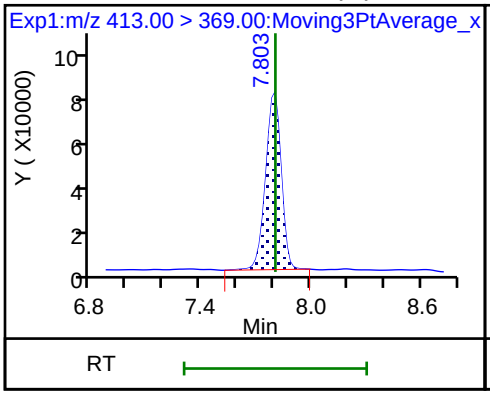
21 Perfluoroheptanesulfonic acid



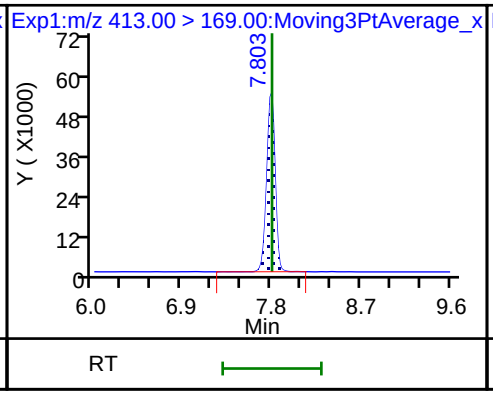
21 Perfluoroheptanesulfonic acid



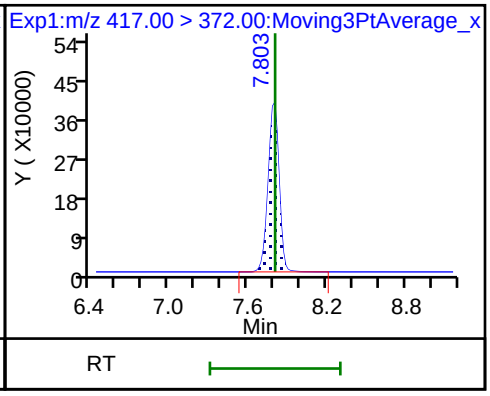
24 Perfluorooctanoic acid (M)



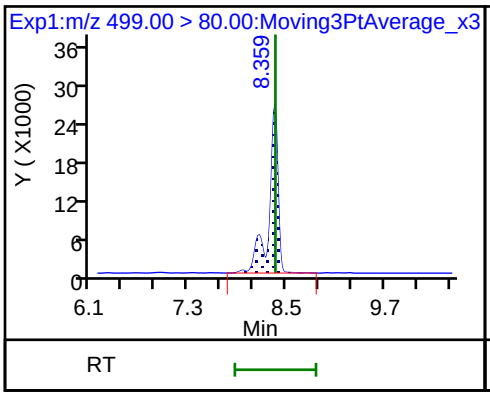
24 Perfluorooctanoic acid



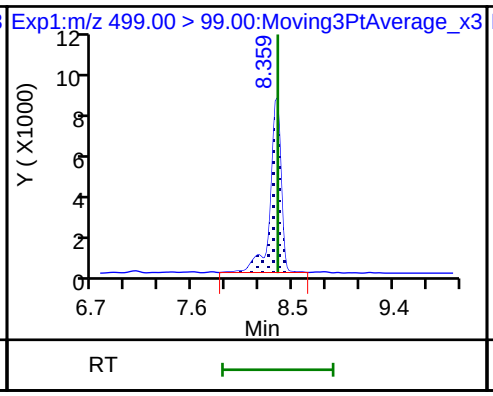
D 25 13C4 PFOA



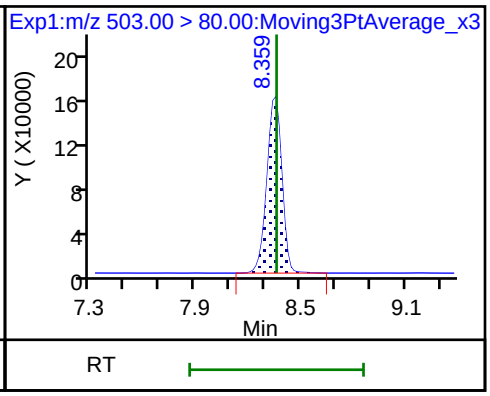
27 Perfluorooctanesulfonic acid



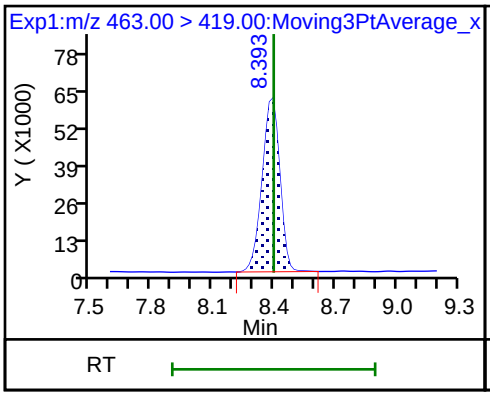
27 Perfluorooctanesulfonic acid



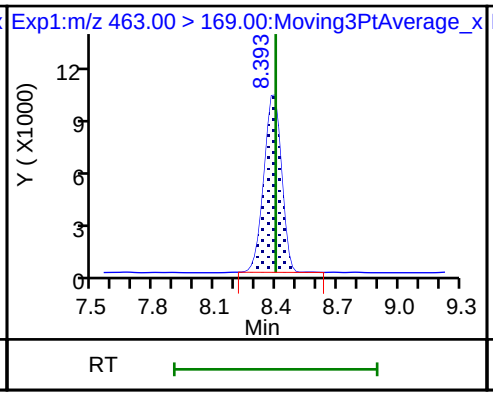
D 26 13C4 PFOS



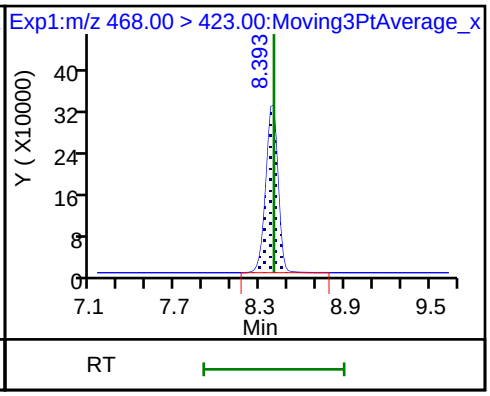
29 Perfluorononanoic acid



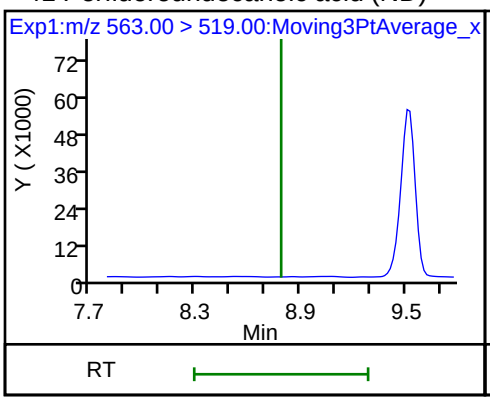
29 Perfluorononanoic acid



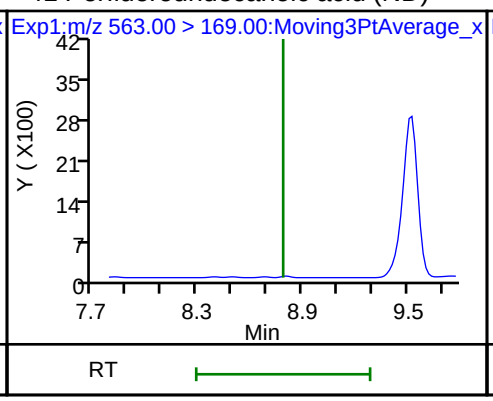
D 28 13C5 PFNA



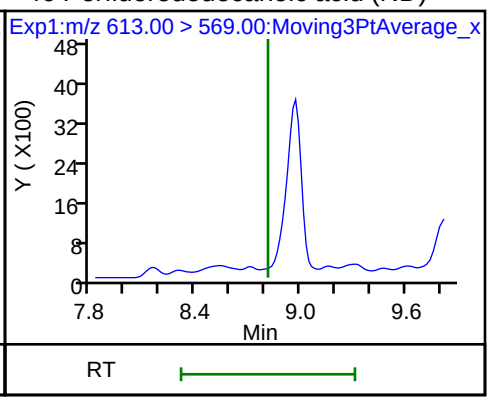
41 Perfluoroundecanoic acid (ND)



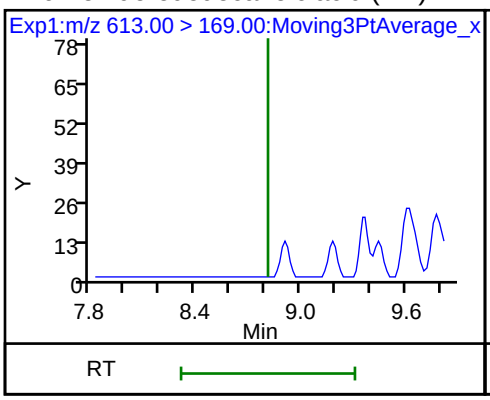
41 Perfluoroundecanoic acid (ND)



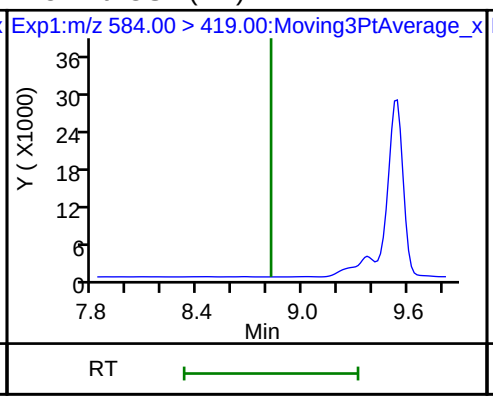
46 Perfluorododecanoic acid (ND)



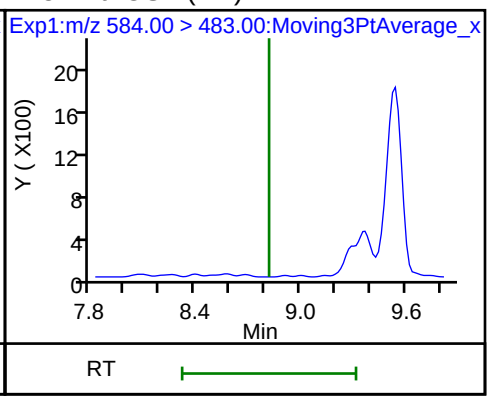
46 Perfluorododecanoic acid (ND)



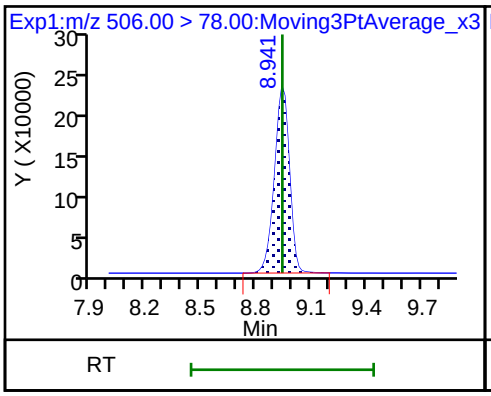
43 NEtFOSA (ND)



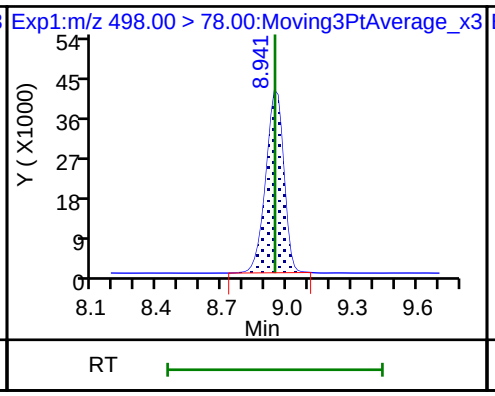
43 NEtFOSA (ND)



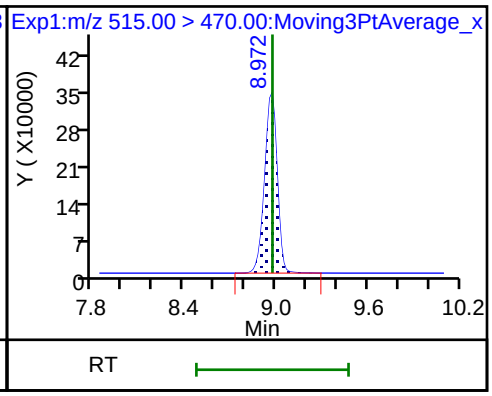
D 30 13C8 FOSA



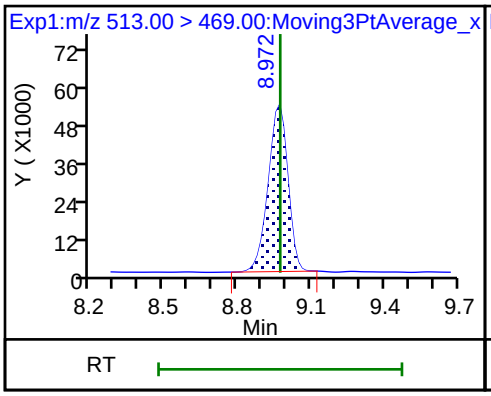
31 Perfluorooctanesulfonamide



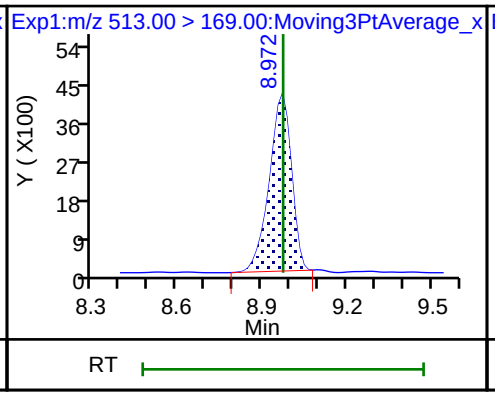
D 33 13C2 PFDA



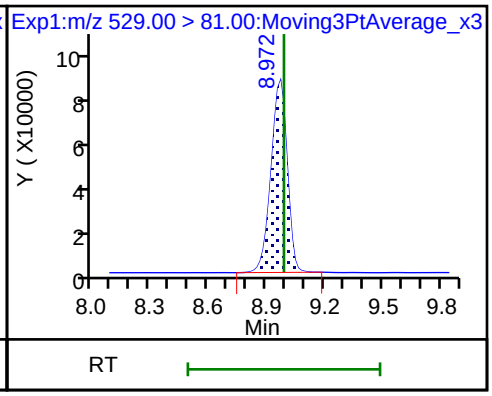
35 Perfluorodecanoic acid



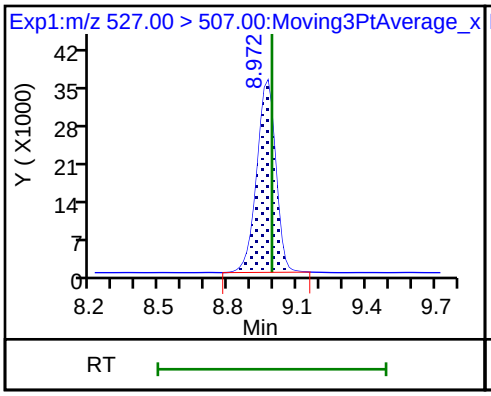
35 Perfluorodecanoic acid



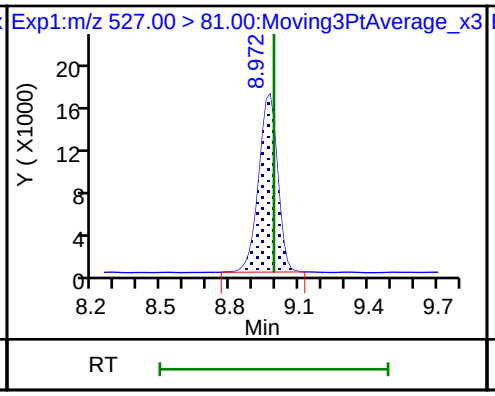
D 34 M2-8:2 FTS



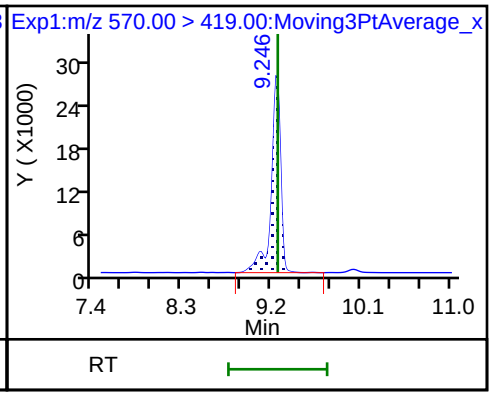
36 8:2 FTS



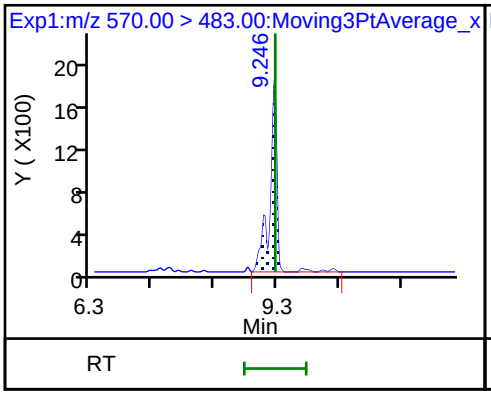
36 8:2 FTS



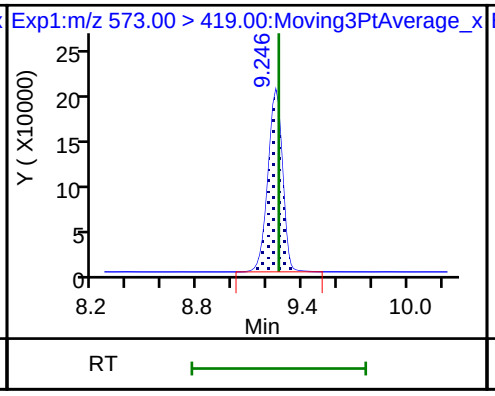
38 NMeFOSAA



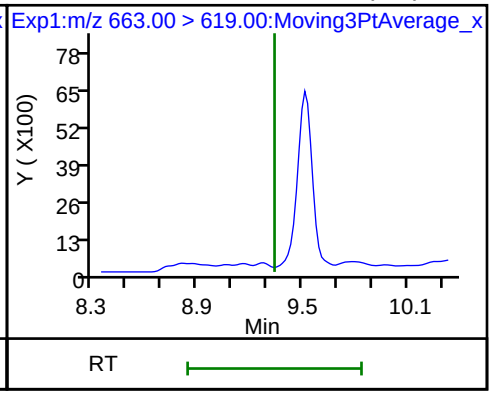
38 NMeFOSAA



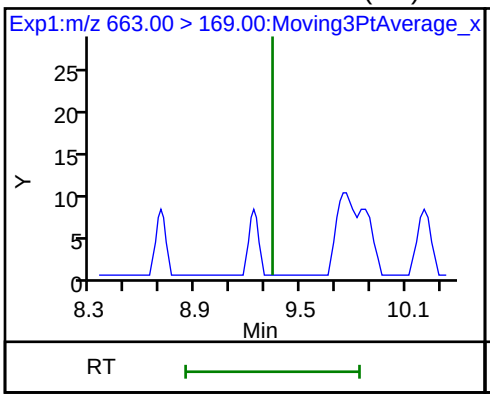
D 37 d3-NMeFOSAA



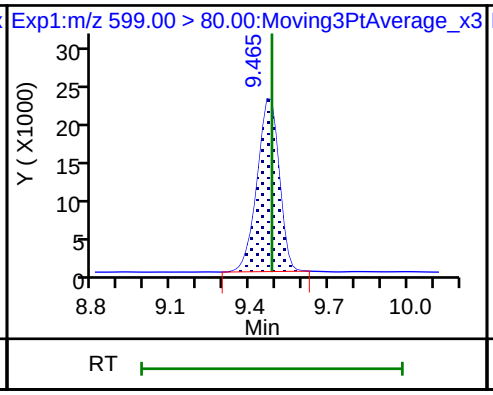
49 Perfluorotridecanoic acid (ND)



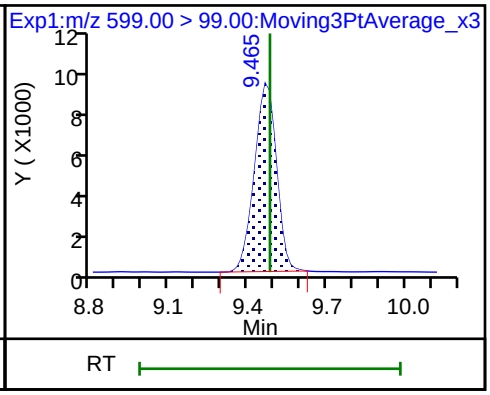
49 Perfluorotridecanoic acid (ND)



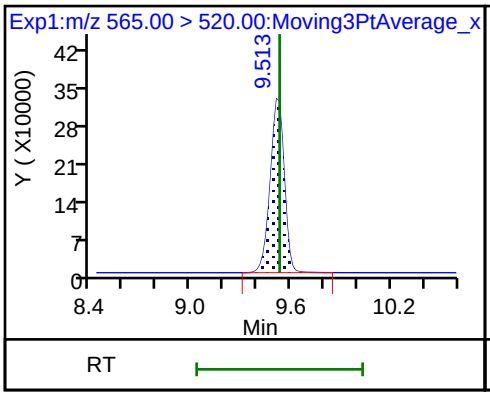
39 Perfluorodecanesulfonic acid



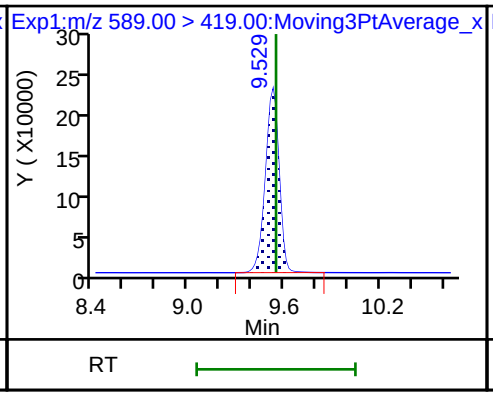
39 Perfluorodecanesulfonic acid



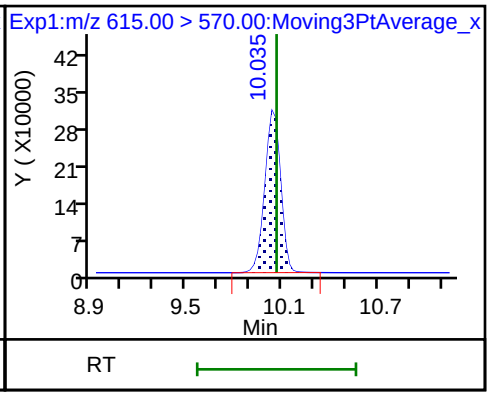
D 42 13C2 PFUnA



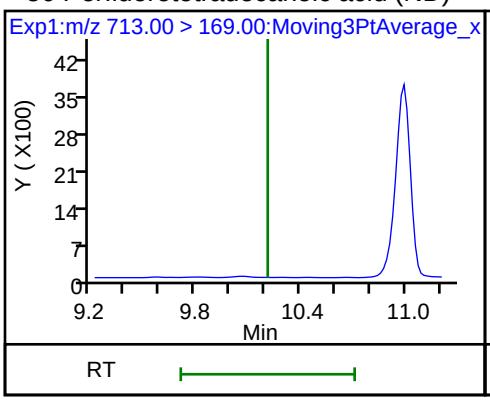
D 40 d5-NEtFOSAA



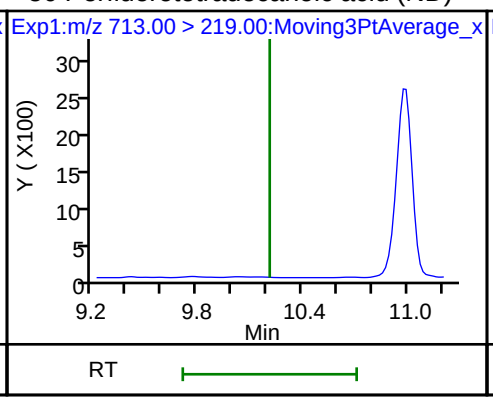
D 45 13C2 PFDoA



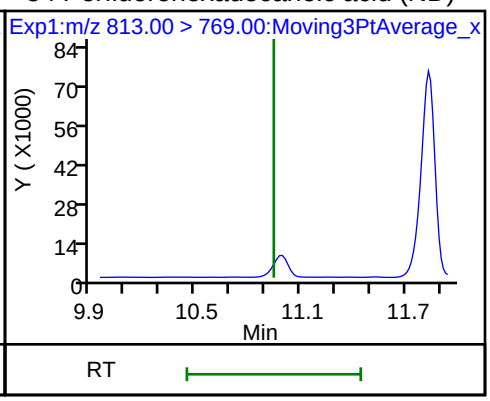
50 Perfluorotetradecanoic acid (ND)



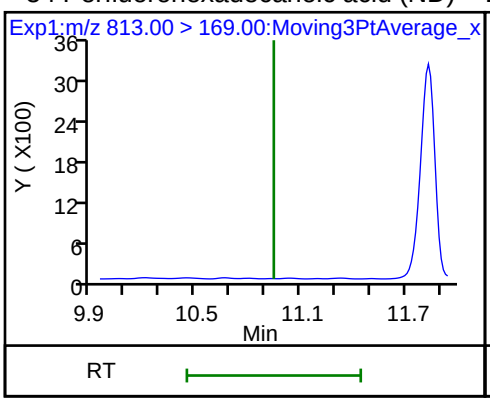
50 Perfluorotetradecanoic acid (ND)



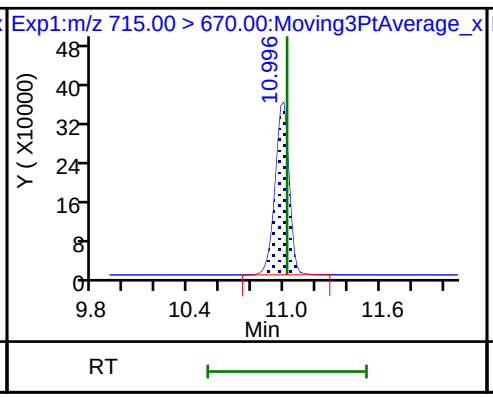
54 Perfluorohexadecanoic acid (ND)



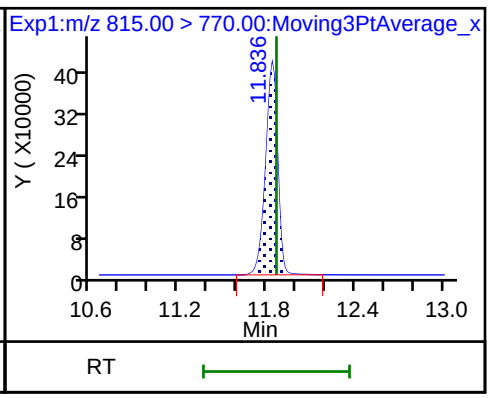
54 Perfluorohexadecanoic acid (ND)



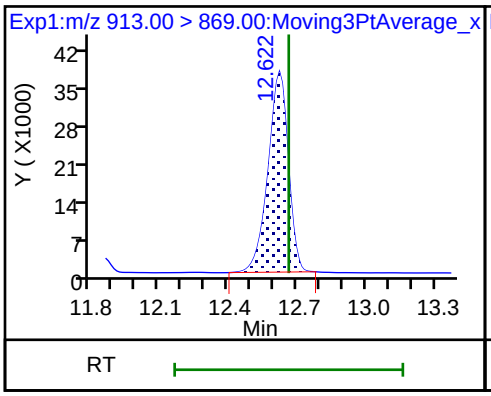
D 51 13C2 PFTeDA



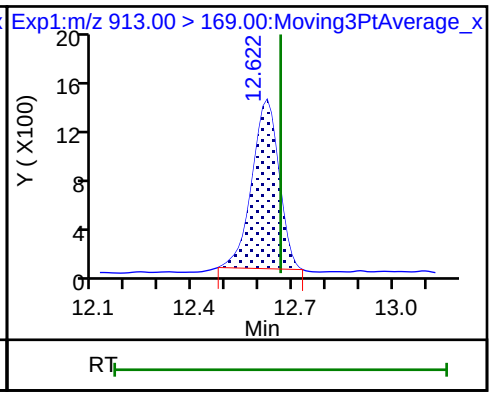
D 52 13C2 PFHxDA



53 Perfluorooctadecanoic acid



53 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Sacramento

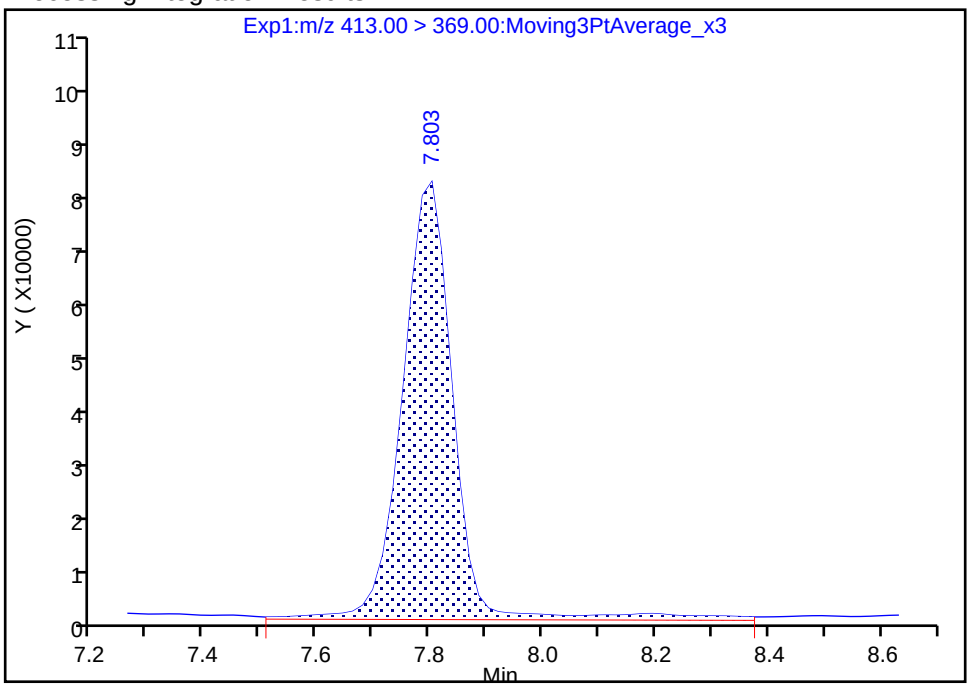
Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_008.d
Injection Date: 23-Nov-2020 11:54:11 Instrument ID: A10
Lims ID: LCS 320-434591/2-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 5
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector EXP1

24 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

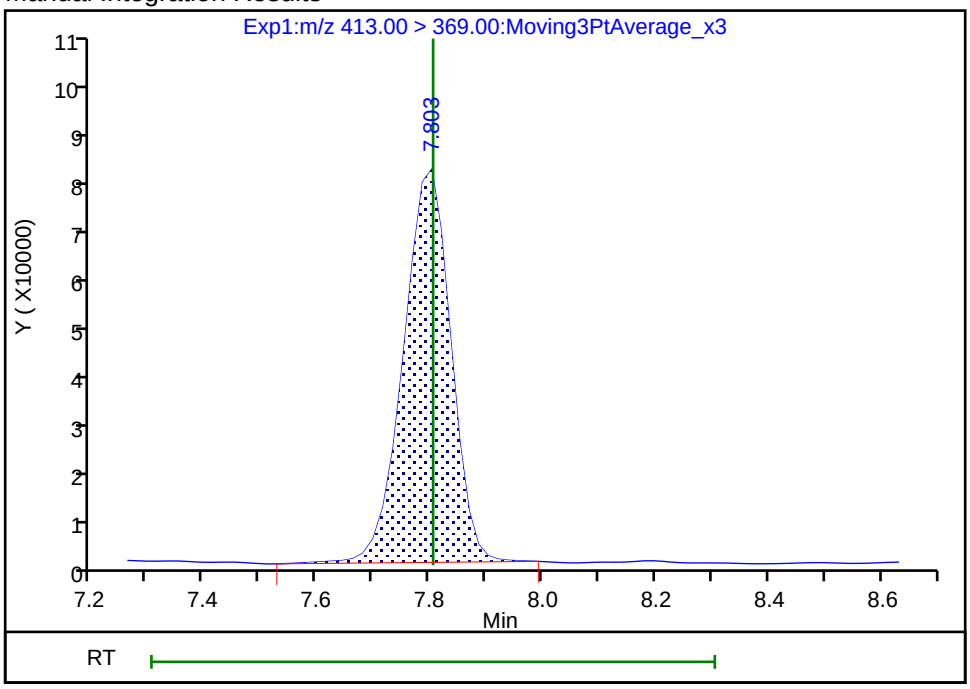
Processing Integration Results

RT: 7.80
Area: 479157
Amount: 0.010873
Amount Units: ng/ml



Manual Integration Results

RT: 7.80
Area: 441220
Amount: 0.010012
Amount Units: ng/ml



Reviewer: sorndeek, 24-Nov-2020 08:26:58
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent MS Lab Sample ID: 480-178459-3 MS

Matrix: Water Lab File ID: 2020.11.23_A10_DI_A_012.d

Analysis Method: WS-LC-0025 Att1 Date Collected: 11/19/2020 09:10

Extraction Method: PFAS Prep Date Extracted: 11/23/2020 05:50

Sample wt/vol: 1.00(mL) Date Analyzed: 11/23/2020 13:07

Con. Extract Vol.: 1.66(mL) Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 434683 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	14.7		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	13.8		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	14.3		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	15.9		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14.4		2.0	
375-95-1	Perfluorononanoic acid (PFNA)	15.2		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	114		25-150
STL01892	13C4 PFHpA	113		25-150
STL00990	13C4 PFOA	107		70-130
STL00991	13C4 PFOS	106		70-130
STL00995	13C5 PFNA	116		25-150
STL02337	13C3 PFBS	94		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_012.d
Lims ID: 480-178459-A-3-B MS
Client ID: Effluent
Sample Type: MS
Inject. Date: 23-Nov-2020 13:07:56 ALS Bottle#: 12 Worklist Smp#: 9
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: 480-178459-a-3-b ms
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:28:35 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:28:35
Ratio Calibration: CCV Sample: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 Perfluorobutanoic acid										
212.90 > 169.00	5.804	5.621	0.183	1.000	215282	0.009299		88.9	24.1	
D 2 13C4 PFBA										
217.00 > 172.00	5.804	5.800	0.004		1316036	0.0332		66.4	152	
D 4 13C5 PFPeA										
267.90 > 223.00	6.275	6.250	0.025		1638852	0.0483		96.5	11937	
5 Perfluoropentanoic acid										
262.90 > 219.00	6.275	6.250	0.025	1.000	332825	0.009425		90.1	88.2	
D 3 13C3 PFBS										
301.90 > 80.00	6.297	6.316	-0.019		1834299	0.0436		93.9	8052	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	6.297	6.316	-0.019	1.000	345710	0.008853	Target=1.49	95.7	794	
298.90 > 99.00	6.297	6.316	-0.019	1.000	224273		1.54(0.74-2.23)		249	
D 7 M2-4:2 FTS										
329.00 > 81.00	6.668	6.688	-0.020		368801	NC			811	
8 4:2 FTS										
327.00 > 307.00	6.668	6.688	-0.020	1.000	170577	NC	Target=2.37		1387	
327.00 > 81.00	6.668	6.688	-0.020	1.000	68383		2.49(1.19-3.56)		244	
D 9 13C2 PFHxA										
315.00 > 270.00	6.715	6.734	-0.019		1749704	0.0484		96.7	18710	
10 Perfluorohexanoic acid										
313.00 > 269.00	6.715	6.734	-0.019	1.000	327490	0.0101	Target=21.98	96.4	207	
313.00 > 119.00	6.715	6.734	-0.019	1.000	15989		20.48(10.99-32.97)		98.7	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	6.738	6.757	-0.019	0.932	282645	NC	Target=1.45		515	
349.00 > 99.00	6.738	6.757	-0.019	0.932	203769		1.39(0.73-2.18)		510	
13 HPFO-DA										
329.10 > 285.00	6.856	6.876	-0.020	0.997	55902	NC			25.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
332.10 > 287.00	6.879	6.876	0.003		110660	NC			903	
16 Perfluorohexanesulfonic acid										
399.00 > 80.00	7.229	7.244	-0.015	1.000	278424	0.008331	Target=5.50	87.5	1218	
399.00 > 99.00	7.229	7.244	-0.015	1.000	48722		5.71(2.75-8.25)		273	
D 15 18O2 PFHxS										
403.00 > 84.00	7.229	7.244	-0.015		1393176	0.0538		114	10952	
D 17 13C4 PFHpA										
367.00 > 322.00	7.229	7.244	-0.015		2073352	0.0566		113	21027	
18 Perfluoroheptanoic acid										
363.00 > 319.00	7.229	7.244	-0.015	1.000	364669	0.008600	Target=7.99	82.2	152	
363.00 > 169.00	7.229	7.244	-0.015	1.000	40841		8.93(4.00-11.99)		685	
19 DONA										
377.00 > 251.00	7.285	7.300	-0.015	0.873	1568349	NC	Target=2.55		7761	
377.00 > 85.00	7.285	7.300	-0.015	0.873	587112		2.67(1.27-3.82)		4112	
D 22 M2-6:2 FTS										
429.00 > 81.00	7.773	7.771	0.002		497989	0.0384		80.9	1632	
23 6:2 FTS										
427.00 > 407.00	7.773	7.771	0.002	1.000	309936	0.0119	Target=2.58	120	2082	
427.00 > 81.00	7.773	7.771	0.002	1.000	118476		2.62(1.29-3.87)		454	
21 Perfluoroheptanesulfonic acid										
449.00 > 80.00	7.773	7.789	-0.016	0.931	220809	0.009357	Target=6.72	93.9	1078	
449.00 > 99.00	7.773	7.789	-0.016	0.931	30510		7.24(3.36-10.08)		385	
24 Perfluorooctanoic acid										
413.00 > 369.00	7.790	7.805	-0.015	1.000	421389	0.009551	Target=1.36	91.3	157	
413.00 > 169.00	7.790	7.805	-0.015	1.000	287341		1.47(0.68-2.04)		1590	
D 25 13C4 PFOA										
417.00 > 372.00	7.790	7.805	-0.015		2272498	0.0533		107	10552	
D 20 13C2 PFOA										
415.00 > 370.00	7.790	7.974	-0.184		2600	NC		0.0	41.1	
27 Perfluorooctanesulfonic acid										
499.00 > 80.00	8.346	8.362	-0.016	1.000	173343	0.008660	Target=3.30	89.2	875	
499.00 > 99.00	8.346	8.362	-0.016	1.000	51647		3.36(1.65-4.96)		279	
D 26 13C4 PFOS										
503.00 > 80.00	8.346	8.362	-0.016		934769	0.0507		106	3696	
29 Perfluorononanoic acid										
463.00 > 419.00	8.380	8.397	-0.017	1.000	336027	0.009167	Target=6.56	87.6	137	
463.00 > 169.00	8.380	8.397	-0.017	1.000	50284		6.68(3.28-9.84)		524	
D 28 13C5 PFNA										
468.00 > 423.00	8.380	8.397	-0.017		2071887	0.0578		116	13101	
D 30 13C8 FOSA										
506.00 > 78.00	8.944	8.943	0.001		1346714	0.0614		123	9019	
31 Perfluorooctanesulfonamide										
498.00 > 78.00	8.944	8.943	0.001	1.000	229822	0.008518		81.4	1658	
32 Perfluorononanesulfonic acid										
549.00 > 80.00	8.929	8.943	-0.014	1.070	148026	NC	Target=5.15		863	
549.00 > 99.00	8.914	8.943	-0.029	1.068	26555		5.57(2.58-7.73)		218	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 33 13C2 PFDA										
515.00 > 470.00	8.959	8.974	-0.015		2037463	0.0577		115	17382	
35 Perfluorodecanoic acid										
513.00 > 469.00	8.959	8.974	-0.015	1.000	293860	0.008976	Target=13.96	85.8	175	
513.00 > 169.00	8.959	8.974	-0.015	1.000	20170		14.57(6.98-20.93)		183	
D 34 M2-8:2 FTS										
529.00 > 81.00	8.959	8.989	-0.030		589682	0.0432		90.1	2938	
36 8:2 FTS										
527.00 > 507.00	8.959	8.989	-0.030	1.000	239191	0.008755	Target=2.08	87.4	2158	
527.00 > 81.00	8.959	8.989	-0.030	1.000	110984		2.16(1.04-3.12)		675	
38 NMeFOSAA										
570.00 > 419.00	9.249	9.264	-0.015	1.002	136898	0.008598	Target=14.39	82.2	428	
570.00 > 483.00	9.249	9.264	-0.015	1.002	12781		10.71(7.19-21.58)		57.4	
D 37 d3-NMeFOSAA										
573.00 > 419.00	9.234	9.264	-0.030		957556	0.0388		77.6	4923	
39 Perfluorodecanesulfonic acid										
599.00 > 80.00	9.467	9.483	-0.016	1.134	109972	0.007531	Target=2.63	74.7	707	
599.00 > 99.00	9.467	9.483	-0.016	1.134	48166		2.28(1.31-3.94)		815	
D 42 13C2 PFUnA										
565.00 > 520.00	9.516	9.531	-0.015		1890326	0.0519		104	17473	
D 40 d5-NEtFOSAA										
589.00 > 419.00	9.516	9.548	-0.032		1157228	0.0419		83.8	4122	
D 45 13C2 PFDoA										
615.00 > 570.00	10.042	10.064	-0.022		2136696	0.0583		117	18580	
D 51 13C2 PFTeDA										
715.00 > 670.00	10.985	11.017	-0.032		1768360	0.0731		146	10734	
D 52 13C2 PFHxDA										
815.00 > 770.00	11.828	11.864	-0.036		1150314	0.0766		153	5479	
53 Perfluorooctadecanoic acid										
913.00 > 869.00	12.602	12.663	-0.061	1.065	125140	0.0248	Target=29.86	237	119	
913.00 > 169.00	12.602	12.663	-0.061	1.065	4441		28.18(14.93-44.79)		111	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 24-Nov-2020 08:28:36 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_012.d

Injection Date: 23-Nov-2020 13:07:56 Instrument ID: A10

Lims ID: 480-178459-A-3-B MS

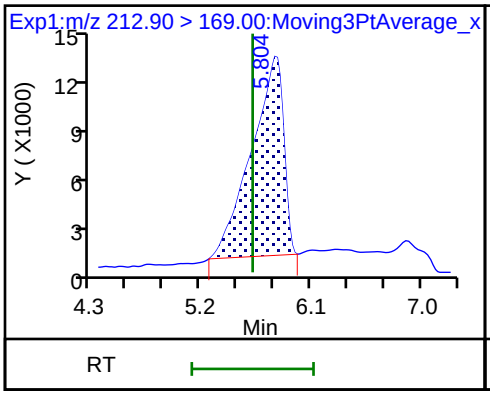
Client ID: Effluent

Operator ID: Sac_inst_A10 ALS Bottle#: 12 Worklist Smp#: 9

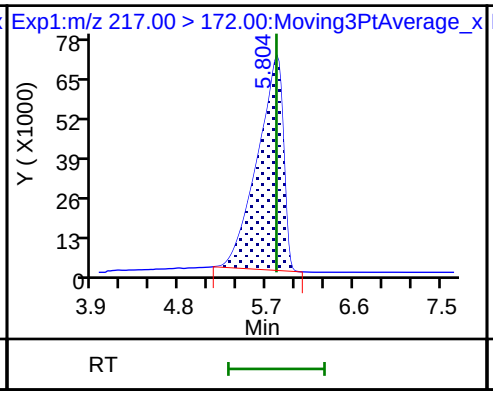
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

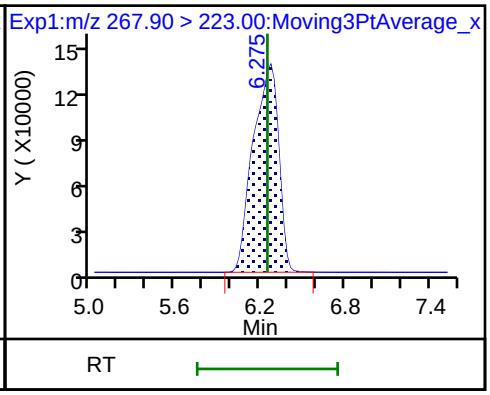
1 Perfluorobutanoic acid



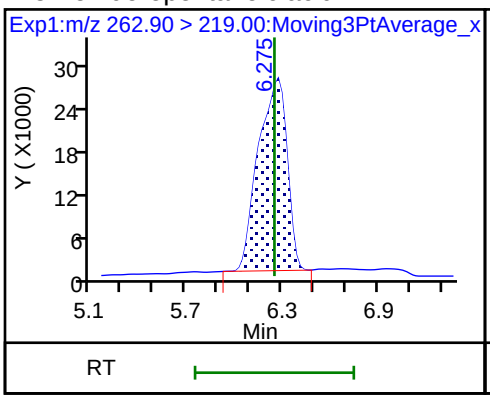
D 2 13C4 PFBA



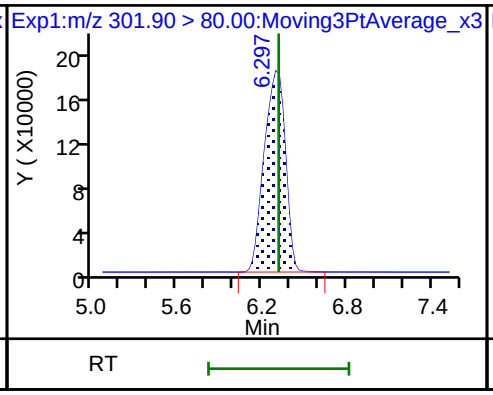
D 4 13C5 PFPeA



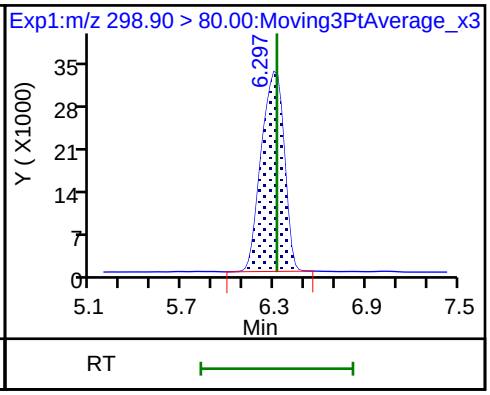
5 Perfluoropentanoic acid



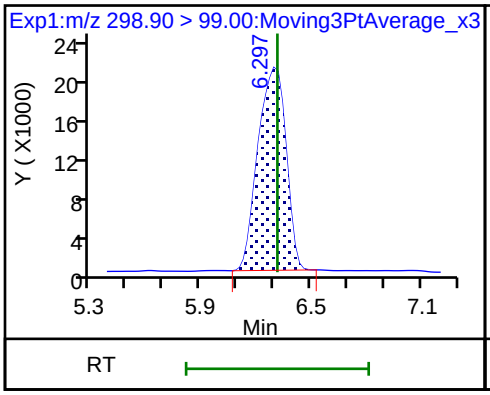
D 3 13C3 PFBS



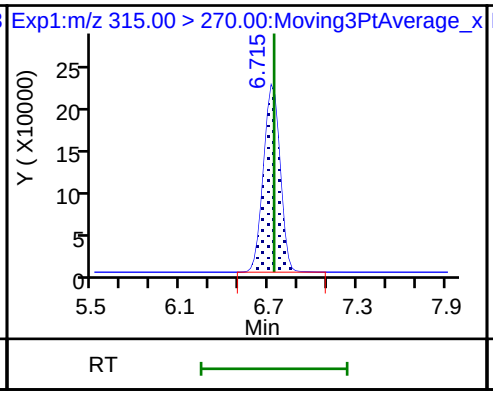
6 Perfluorobutanesulfonic acid



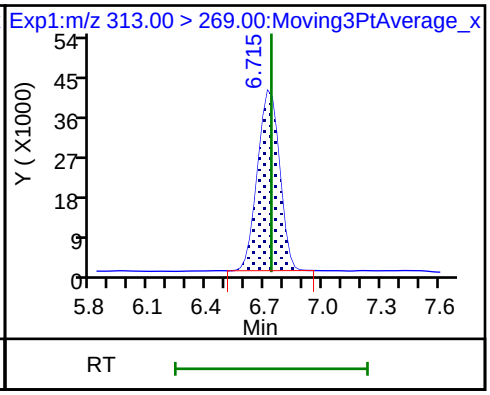
6 Perfluorobutanesulfonic acid



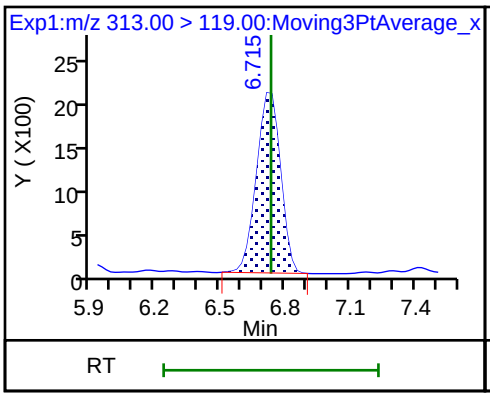
D 9 13C2 PFHxA



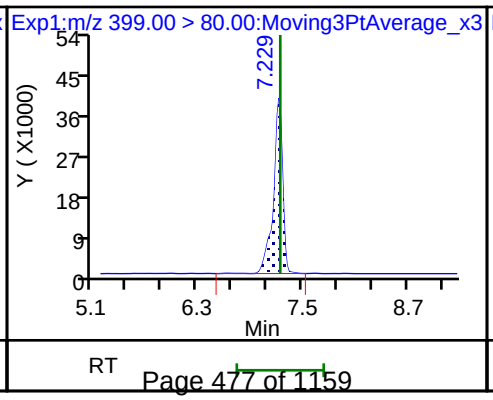
10 Perfluorohexanoic acid



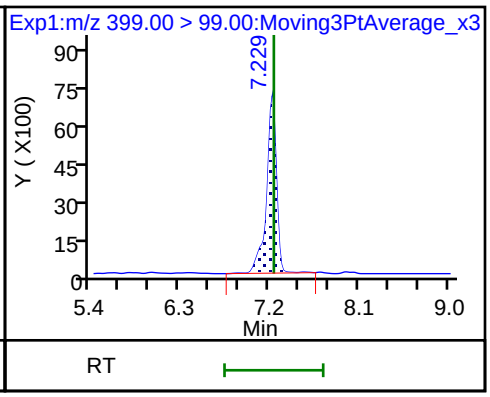
10 Perfluorohexanoic acid



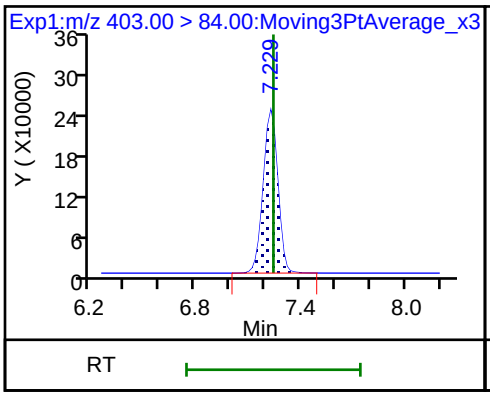
16 Perfluorohexanesulfonic acid



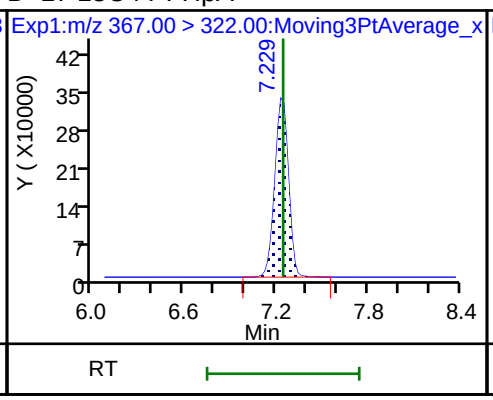
16 Perfluorohexanesulfonic acid



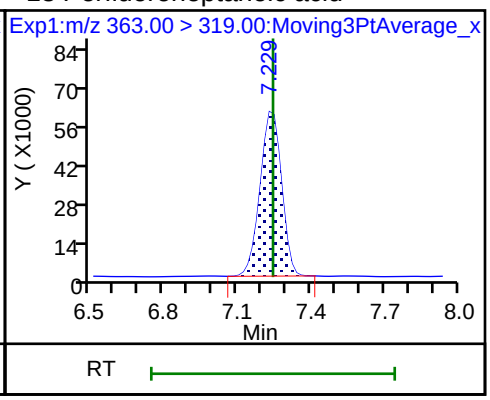
D 15 18O2 PFHxS



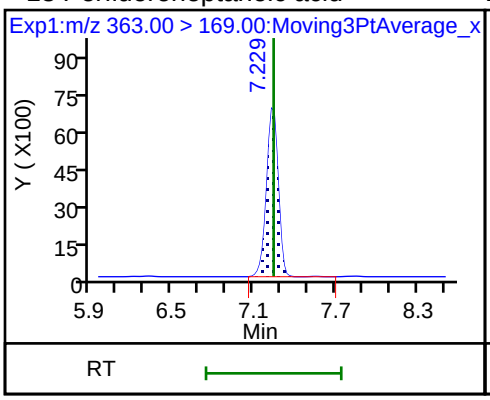
D 17 13C4 PFHpA



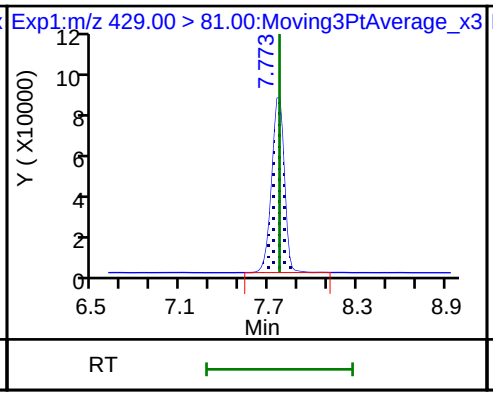
18 Perfluoroheptanoic acid



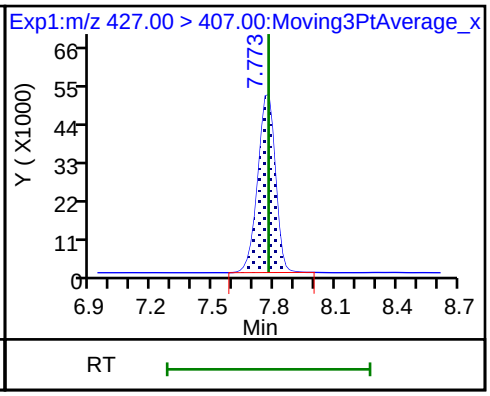
18 Perfluoroheptanoic acid



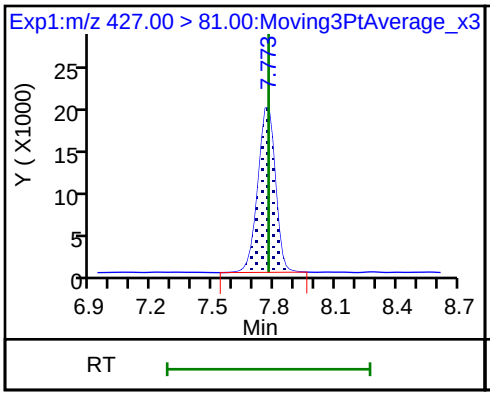
D 22 M2-6:2 FTS



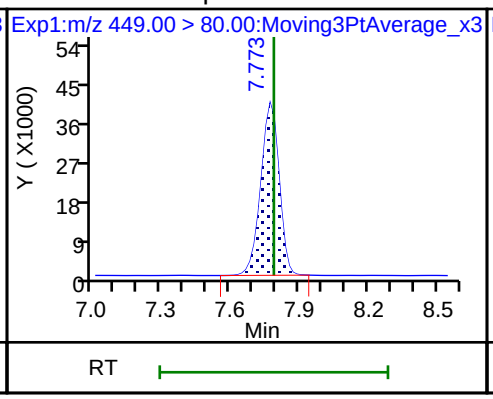
23 6:2 FTS



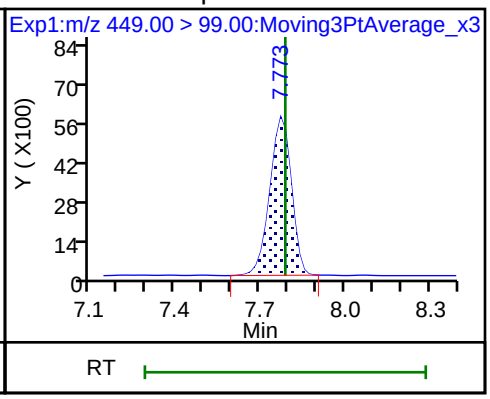
23 6:2 FTS



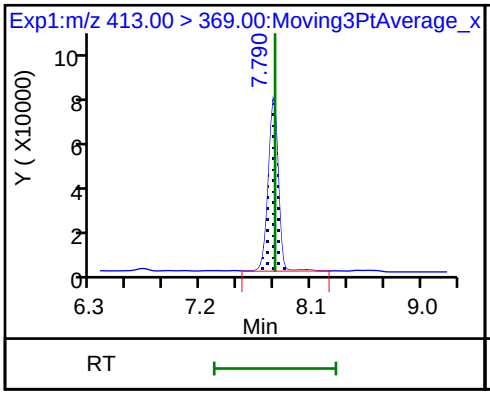
21 Perfluoroheptanesulfonic acid



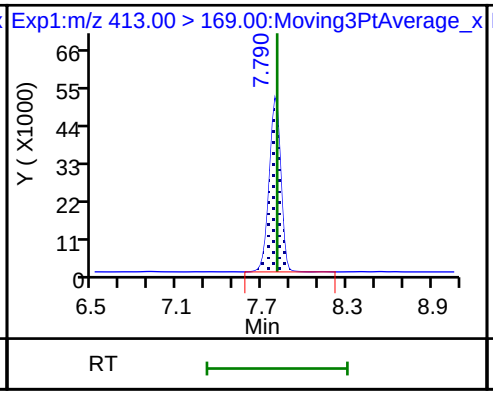
21 Perfluoroheptanesulfonic acid



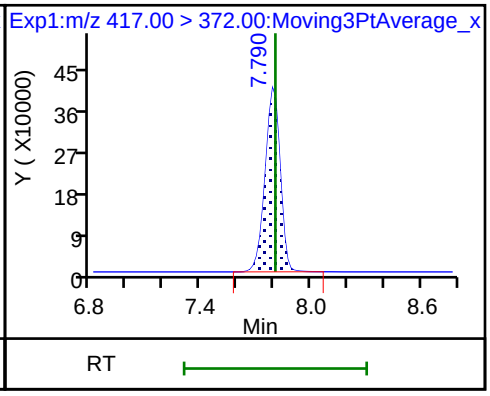
24 Perfluorooctanoic acid



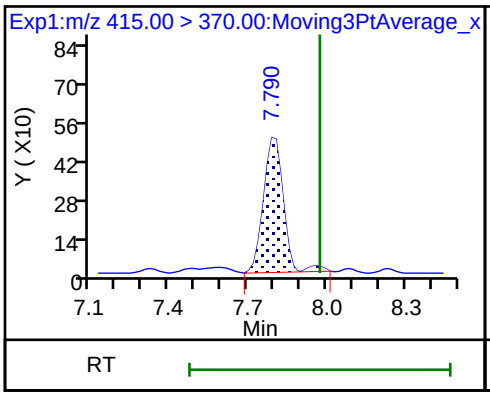
24 Perfluorooctanoic acid



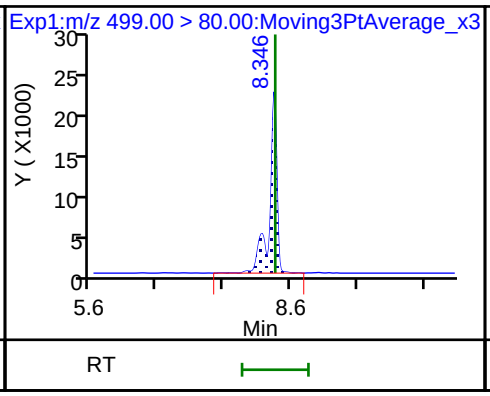
D 25 13C4 PFOA



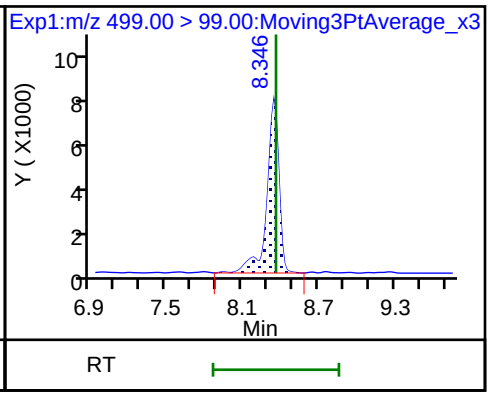
D 20 13C2 PFOA



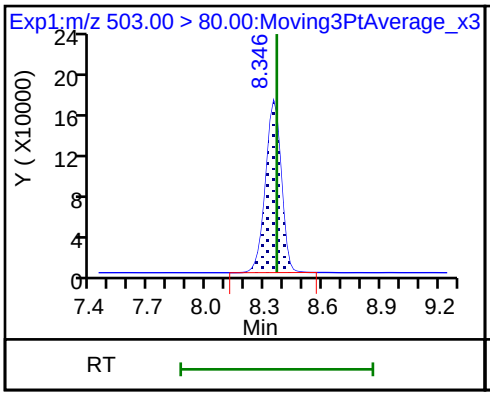
27 Perfluorooctanesulfonic acid



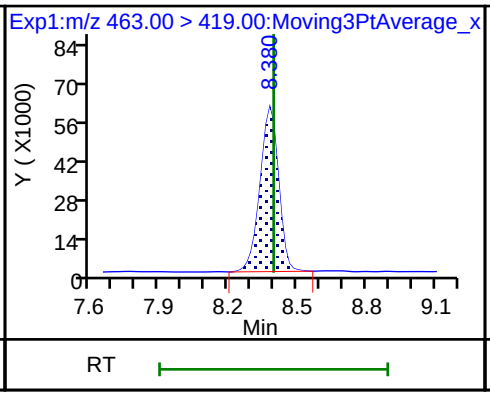
27 Perfluorooctanesulfonic acid



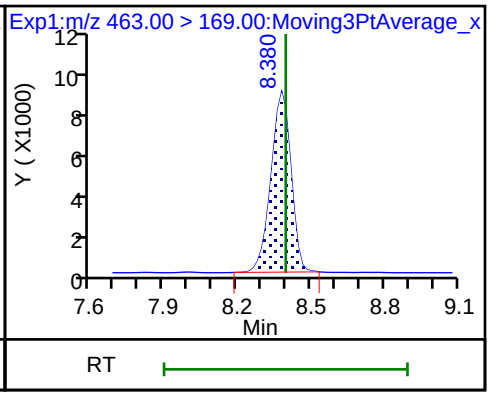
D 26 13C4 PFOS



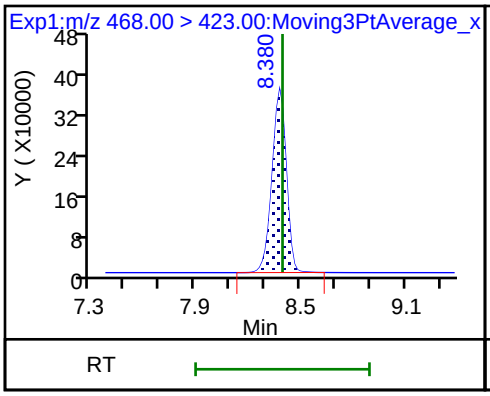
29 Perfluorononanoic acid



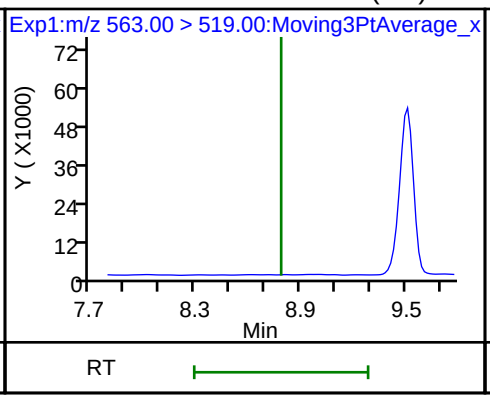
29 Perfluorononanoic acid



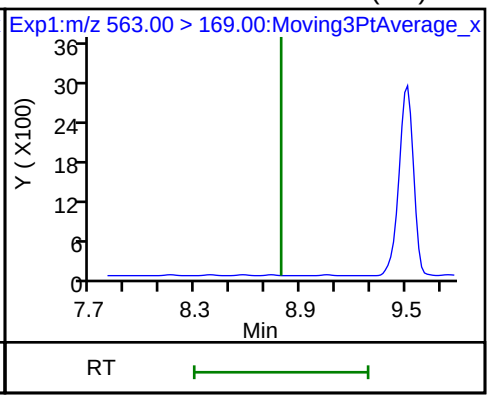
D 28 13C5 PFNA



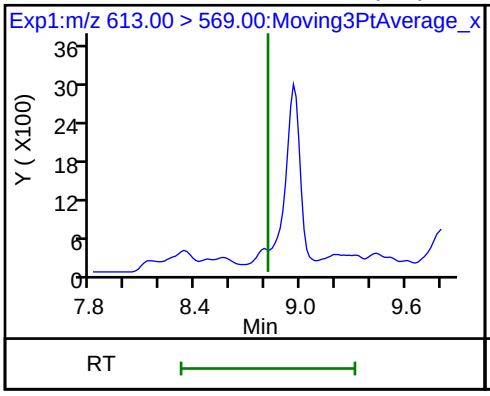
41 Perfluoroundecanoic acid (ND)



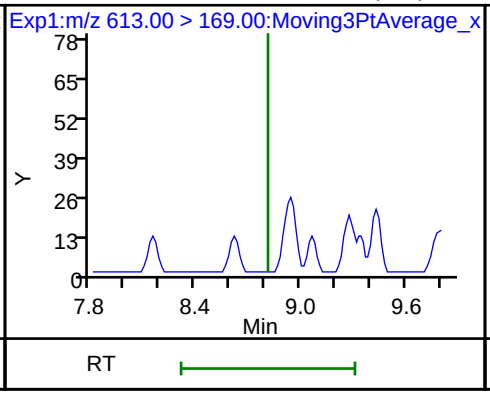
41 Perfluoroundecanoic acid (ND)



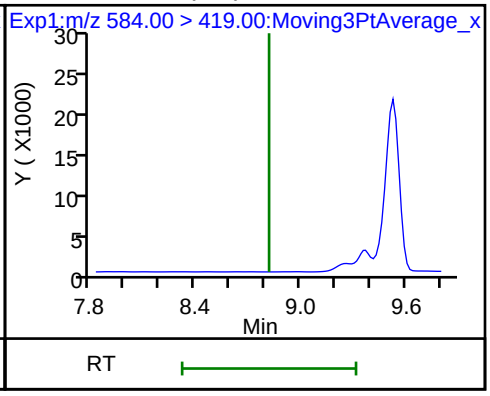
46 Perfluorododecanoic acid (ND)



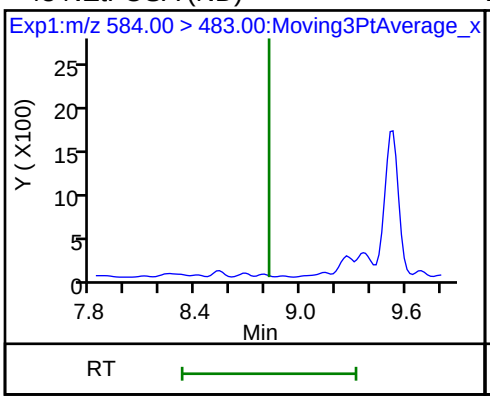
46 Perfluorododecanoic acid (ND)



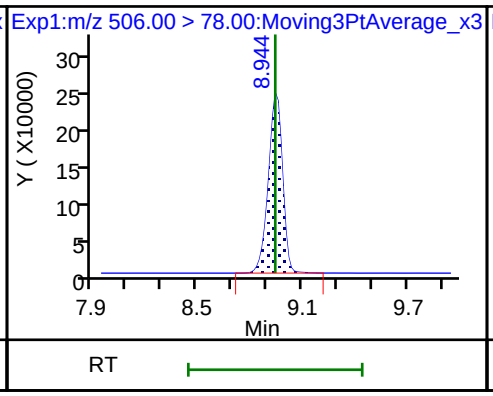
43 NEtFOSA (ND)



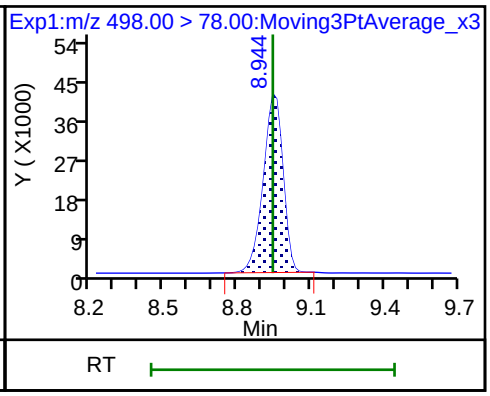
43 NEtFOSA (ND)



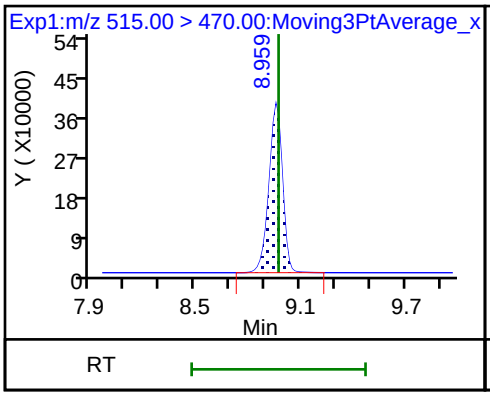
D 30 13C8 FOSA



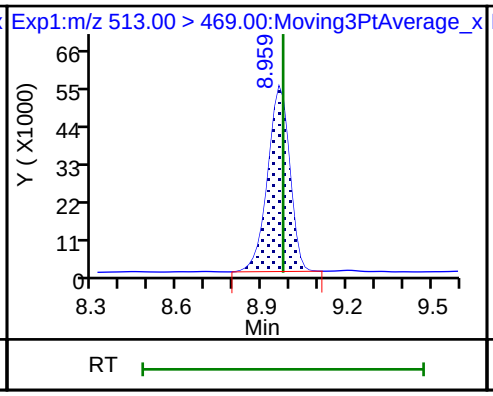
31 Perfluorooctanesulfonamide



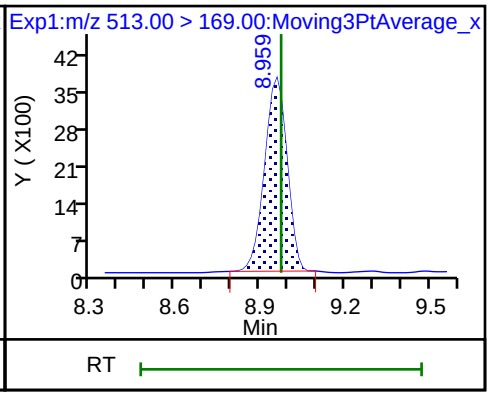
D 33 13C2 PFDA



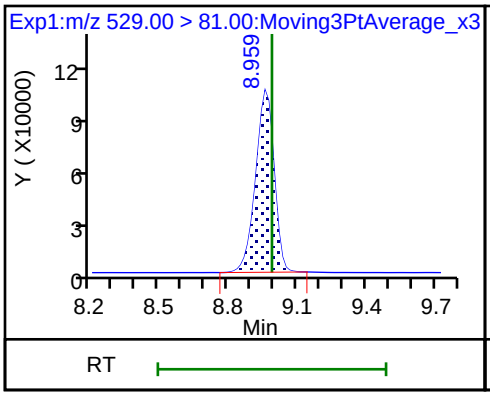
35 Perfluorodecanoic acid



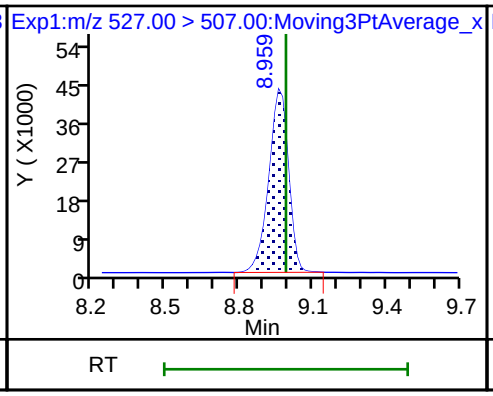
35 Perfluorodecanoic acid



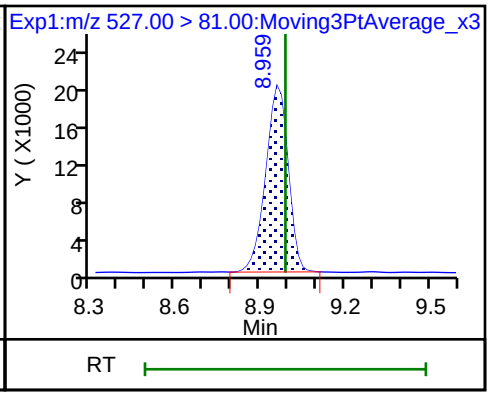
D 34 M2-8:2 FTS



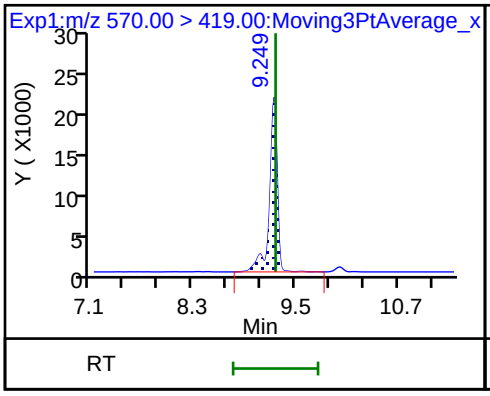
36 8:2 FTS



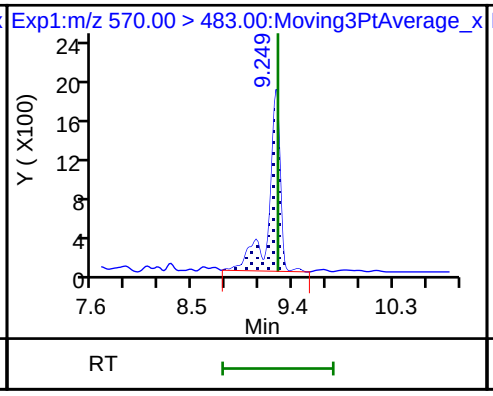
36 8:2 FTS



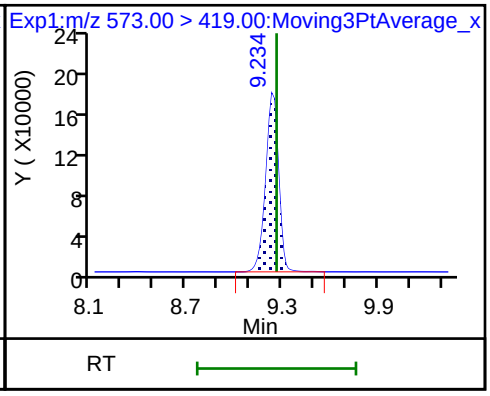
38 NMeFOSAA



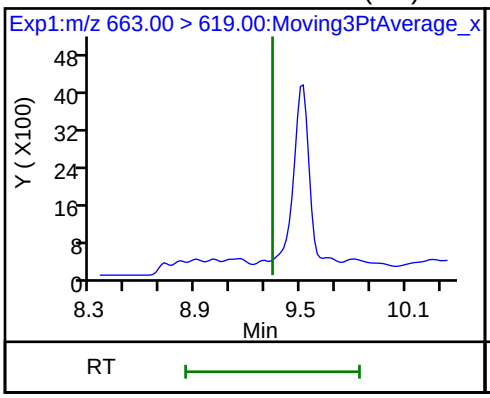
38 NMeFOSAA



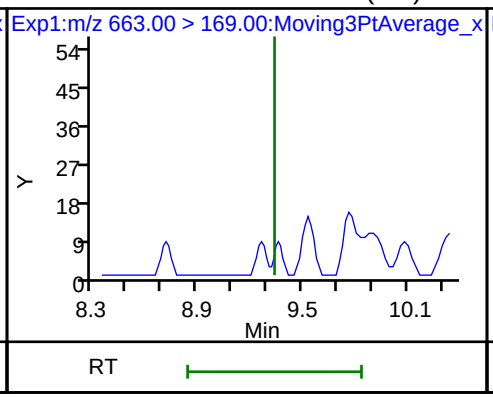
D 37 d3-NMeFOSAA



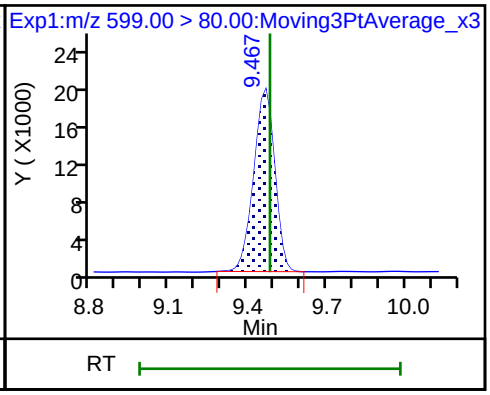
49 Perfluorotridecanoic acid (ND)



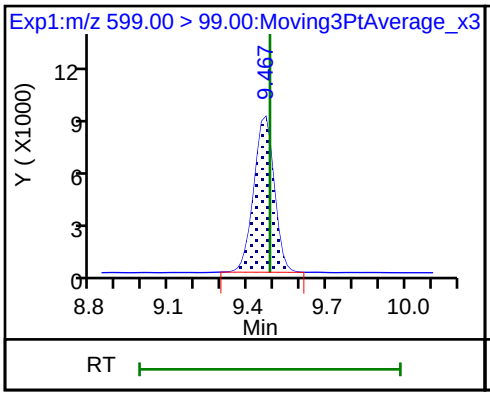
49 Perfluorotridecanoic acid (ND)



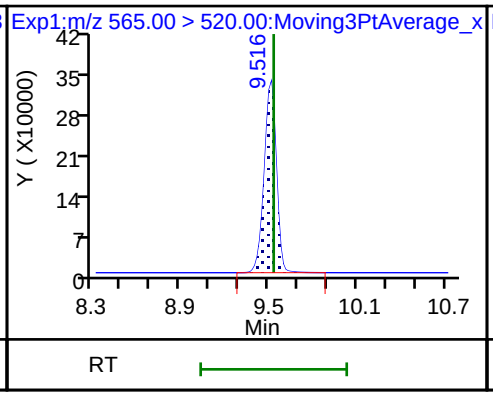
39 Perfluorodecanesulfonic acid



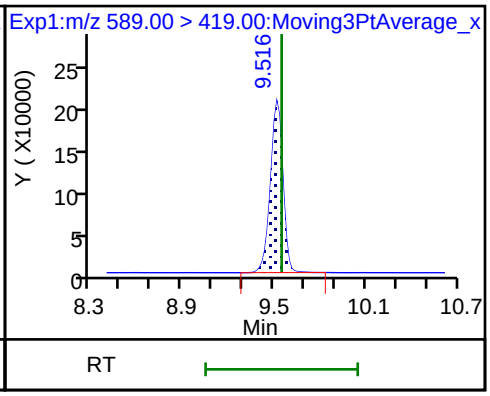
39 Perfluorodecanesulfonic acid



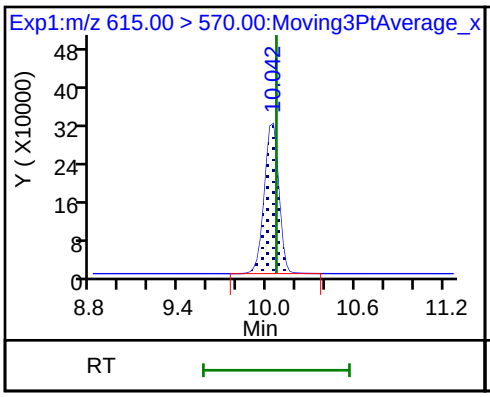
D 42 13C2 PFUnA



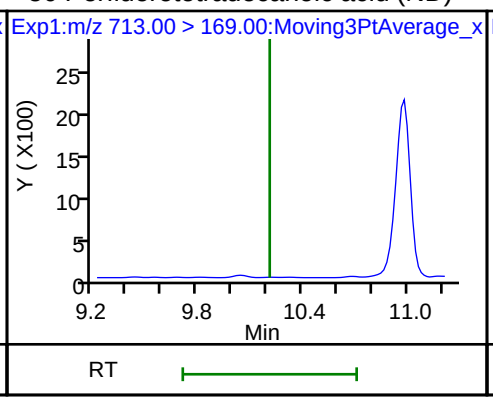
D 40 d5-NEtFOSAA



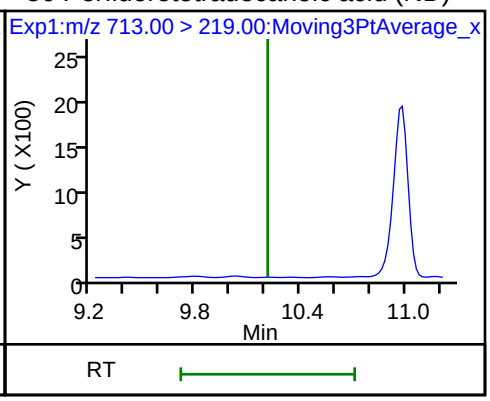
D 45 13C2 PFDoA



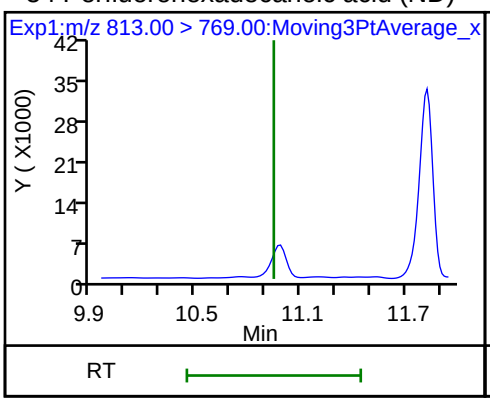
50 Perfluorotetradecanoic acid (ND)



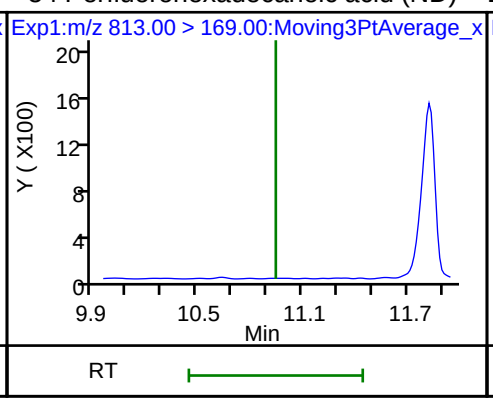
50 Perfluorotetradecanoic acid (ND)



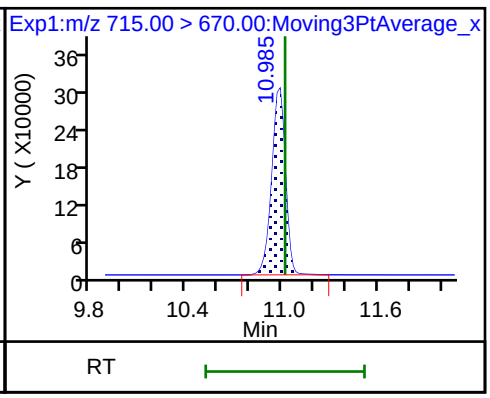
54 Perfluorohexadecanoic acid (ND)



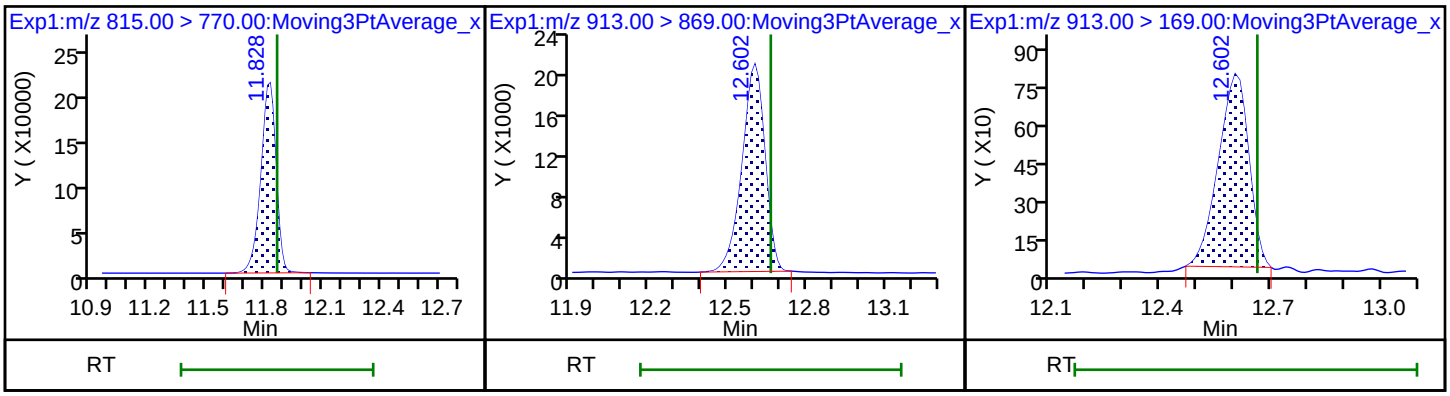
54 Perfluorohexadecanoic acid (ND)



D 51 13C2 PFTeDA



D 52 13C2 PFHxDA | 53 Perfluorooctadecanoic acid | 53 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Client Sample ID: Effluent MSD Lab Sample ID: 480-178459-3 MSD

Matrix: Water Lab File ID: 2020.11.23_A10_DI_A_013.d

Analysis Method: WS-LC-0025 Att1 Date Collected: 11/19/2020 09:10

Extraction Method: PFAS Prep Date Extracted: 11/23/2020 05:50

Sample wt/vol: 1.00(mL) Date Analyzed: 11/23/2020 13:26

Con. Extract Vol.: 1.66(mL) Dilution Factor: 1

Injection Volume: 950(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 434683 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	15.4		2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	15.8		2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	15.5		2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	16.7		2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	18.4		2.0	
375-95-1	Perfluorononanoic acid (PFNA)	19.0		2.0	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	105		25-150
STL01892	13C4 PFHpA	111		25-150
STL00990	13C4 PFOA	110		70-130
STL00991	13C4 PFOS	105		70-130
STL00995	13C5 PFNA	111		25-150
STL02337	13C3 PFBS	91		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_013.d
Lims ID: 480-178459-A-3-C MSD
Client ID: Effluent
Sample Type: MSD
Inject. Date: 23-Nov-2020 13:26:22 ALS Bottle#: 13 Worklist Smp#: 10
Injection Vol: 950.0 ul Dil. Factor: 1.0000
Sample Info: 480-178459-a-3-c msd
Misc. Info.: Plate: 1 Rack: 1
Operator ID: Sac_inst_A10 Instrument ID: A10

Method: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\A10_In_Line_SPE.m
Limit Group: LC PFAS_DW ICAL
Last Update: 24-Nov-2020 08:28:55 Calib Date: 12-Oct-2020 13:39:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Sacramento\ChromData\A10\20201012-105202.b\2020.10.12_A10_DI_ICAL_011.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
Process Host: CTX1604

First Level Reviewer: sorndeek Date: 24-Nov-2020 08:28:55
Ratio Calibration: CCV Sample: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_006.d

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 Perfluorobutanoic acid										
212.90 > 169.00	5.800	5.621	0.179	1.000	211561	0.009794		91.3	27.2	
D 2 13C4 PFBA										
217.00 > 172.00	5.800	5.800	0.0		1227939	0.0310		61.9	177	
D 4 13C5 PFPeA										
267.90 > 223.00	6.271	6.250	0.021		1604392	0.0472		94.5	11754	
5 Perfluoropentanoic acid										
262.90 > 219.00	6.271	6.250	0.021	1.000	338077	0.009779		91.2	94.6	
D 3 13C3 PFBS										
301.90 > 80.00	6.293	6.316	-0.023		1777373	0.0423		91.0	10000	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	6.293	6.316	-0.023	1.000	350680	0.009268	Target=1.49	97.8	1071	
298.90 > 99.00	6.293	6.316	-0.023	1.000	236185		1.48(0.74-2.23)		297	
D 7 M2-4:2 FTS										
329.00 > 81.00	6.665	6.688	-0.023		318904	NC			773	
8 4:2 FTS										
327.00 > 307.00	6.665	6.688	-0.023	1.000	170455	NC	Target=2.37		1612	
327.00 > 81.00	6.665	6.688	-0.023	1.000	70426		2.42(1.19-3.56)		260	
D 9 13C2 PFHxA										
315.00 > 270.00	6.711	6.734	-0.023		1661950	0.0459		91.9	13884	
10 Perfluorohexanoic acid										
313.00 > 269.00	6.711	6.734	-0.023	1.000	338405	0.0110	Target=21.98	102	224	
313.00 > 119.00	6.711	6.734	-0.023	1.000	16982		19.93(10.99-32.97)		208	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	6.734	6.757	-0.023	0.932	305426	NC	Target=1.45		729	
349.00 > 99.00	6.734	6.757	-0.023	0.932	210342		1.45(0.73-2.18)		471	
13 HPFO-DA										
329.10 > 285.00	6.852	6.876	-0.024	1.000	46477	NC			22.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C3 HFPO-DA										
332.10 > 287.00	6.852	6.876	-0.024		101233	NC			784	
16 Perfluorohexanesulfonic acid										
399.00 > 80.00	7.226	7.244	-0.018	1.000	293462	0.009501	Target=5.50	97.4	1215	
399.00 > 99.00	7.226	7.244	-0.018	1.000	53471		5.49(2.75-8.25)		307	
D 15 18O2 PFHxS										
403.00 > 84.00	7.226	7.244	-0.018		1287541	0.0498		105	13492	
D 17 13C4 PFHpA										
367.00 > 322.00	7.226	7.244	-0.018		2029348	0.0554		111	19748	
18 Perfluoroheptanoic acid										
363.00 > 319.00	7.226	7.244	-0.018	1.000	386472	0.009312	Target=7.99	86.9	165	
363.00 > 169.00	7.226	7.244	-0.018	1.000	45172		8.56(4.00-11.99)		680	
19 DONA										
377.00 > 251.00	7.281	7.300	-0.019	0.873	1549293	NC	Target=2.55		7902	
377.00 > 85.00	7.281	7.300	-0.019	0.873	628479		2.47(1.27-3.82)		4112	
D 22 M2-6:2 FTS										
429.00 > 81.00	7.752	7.771	-0.019		479279	0.0370		77.8	1939	
23 6:2 FTS										
427.00 > 407.00	7.752	7.771	-0.019	1.000	320906	0.0128	Target=2.58	126	1835	
427.00 > 81.00	7.752	7.771	-0.019	1.000	131569		2.44(1.29-3.87)		529	
21 Perfluoroheptanesulfonic acid										
449.00 > 80.00	7.769	7.789	-0.020	0.931	257189	0.0110	Target=6.72	108	1170	
449.00 > 99.00	7.769	7.789	-0.020	0.931	34728		7.41(3.36-10.08)		297	
24 Perfluorooctanoic acid										
413.00 > 369.00	7.787	7.805	-0.018	1.000	457575	0.0100	Target=1.36	93.7	177	
413.00 > 169.00	7.787	7.805	-0.018	1.000	338528		1.35(0.68-2.04)		1970	
D 25 13C4 PFOA										
417.00 > 372.00	7.787	7.805	-0.018		2346396	0.0551		110	16217	
D 20 13C2 PFOA										
415.00 > 370.00	7.787	7.974	-0.187		2089	NC		0.0	34.5	
27 Perfluorooctanesulfonic acid										
499.00 > 80.00	8.342	8.362	-0.020	1.000	219778	0.0111	Target=3.30	111	1069	
499.00 > 99.00	8.342	8.362	-0.020	1.000	67853		3.24(1.65-4.96)		383	
D 26 13C4 PFOS										
503.00 > 80.00	8.342	8.362	-0.020		927033	0.0503		105	5690	
29 Perfluorononanoic acid										
463.00 > 419.00	8.376	8.397	-0.021	1.000	403360	0.0114	Target=6.56	107	164	
463.00 > 169.00	8.376	8.397	-0.021	1.000	62906		6.41(3.28-9.84)		589	
D 28 13C5 PFNA										
468.00 > 423.00	8.376	8.397	-0.021		1995673	0.0557		111	12522	
D 30 13C8 FOSA										
506.00 > 78.00	8.941	8.943	-0.002		1270285	0.0579		116	7459	
31 Perfluorooctanesulfonamide										
498.00 > 78.00	8.941	8.943	-0.002	1.000	316005	0.0124		116	3394	
32 Perfluorononanesulfonic acid										
549.00 > 80.00	8.911	8.943	-0.032	1.068	215370	NC	Target=5.15		1175	
549.00 > 99.00	8.911	8.943	-0.032	1.068	40919		5.26(2.58-7.73)		289	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 33 13C2 PFDA										
515.00 > 470.00	8.956	8.974	-0.018		1948635	0.0552		110	14351	
35 Perfluorodecanoic acid										
513.00 > 469.00	8.956	8.974	-0.018	1.000	409298	0.0131	Target=13.96	122	282	
513.00 > 169.00	8.956	8.974	-0.018	1.000	26130		15.66(6.98-20.93)		193	
D 34 M2-8:2 FTS										
529.00 > 81.00	8.956	8.989	-0.033		571423	0.0418		87.3	2566	
36 8:2 FTS										
527.00 > 507.00	8.956	8.989	-0.033	1.000	333661	0.0126	Target=2.08	123	2887	
527.00 > 81.00	8.956	8.989	-0.033	1.000	150842		2.21(1.04-3.12)		1027	
38 NMeFOSAA										
570.00 > 419.00	9.246	9.264	-0.018	1.002	184730	0.0123	Target=14.39	115	467	
570.00 > 483.00	9.246	9.264	-0.018	1.002	15176		12.17(7.19-21.58)		66.4	
D 37 d3-NMeFOSAA										
573.00 > 419.00	9.231	9.264	-0.033		904237	0.0366		73.3	4502	
39 Perfluorodecanesulfonic acid										
599.00 > 80.00	9.448	9.483	-0.035	1.133	181223	0.0125	Target=2.63	121	1141	
599.00 > 99.00	9.448	9.483	-0.035	1.133	72832		2.49(1.31-3.94)		1319	
D 42 13C2 PFUnA										
565.00 > 520.00	9.513	9.531	-0.018		1911885	0.0525		105	24046	
D 40 d5-NEtFOSAA										
589.00 > 419.00	9.513	9.548	-0.035		1061469	0.0384		76.9	3286	
D 45 13C2 PFDoA										
615.00 > 570.00	10.013	10.064	-0.051		2034475	0.0555		111	19752	
D 51 13C2 PFTeDA										
715.00 > 670.00	10.979	11.017	-0.038		1657283	0.0685		137	11168	
D 52 13C2 PFHxDA										
815.00 > 770.00	11.811	11.864	-0.053		1154635	0.0769		154	5961	
53 Perfluorooctadecanoic acid										
913.00 > 869.00	12.597	12.663	-0.066	1.067	142221	0.0281	Target=29.86	262	129	
913.00 > 169.00	12.597	12.663	-0.066	1.067	4487		31.70(14.93-44.79)		101	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 24-Nov-2020 08:28:55 Chrom Revision: 2.3 12-Nov-2020 21:52:08

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20201123-108058.b\2020.11.23_A10_DI_A_013.d

Injection Date: 23-Nov-2020 13:26:22 Instrument ID: A10

Lims ID: 480-178459-A-3-C MSD

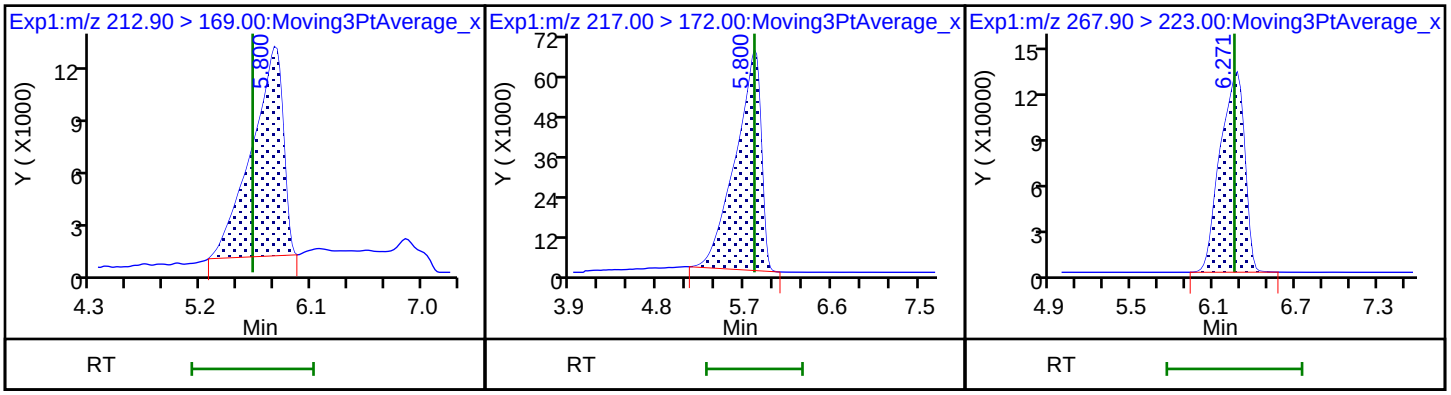
Client ID: Effluent

Operator ID: Sac_inst_A10 ALS Bottle#: 13 Worklist Smp#: 10

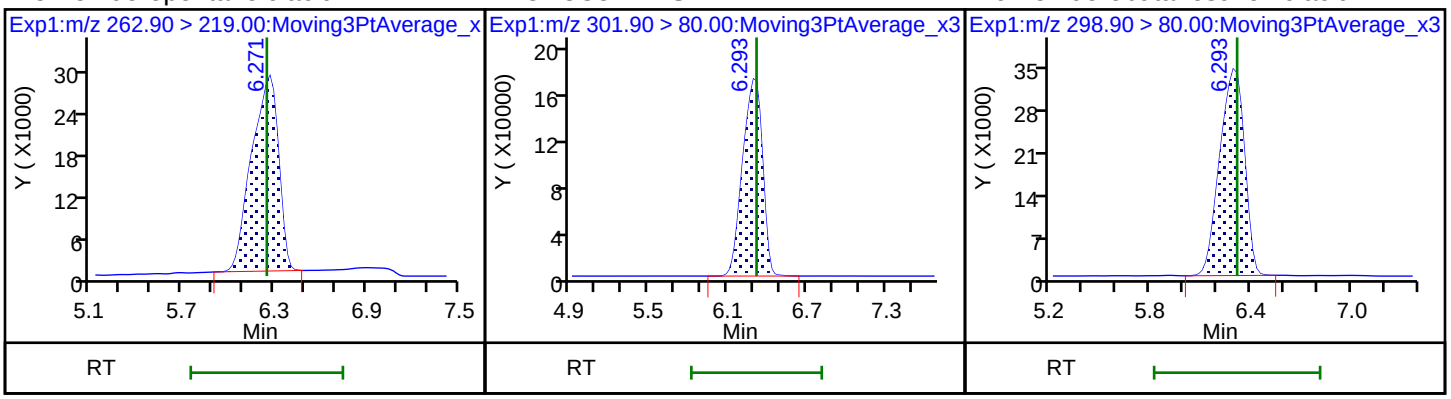
Injection Vol: 950.0 ul Dil. Factor: 1.0000

Method: A10_In_Line_SPE Limit Group: LC PFAS_DW ICAL

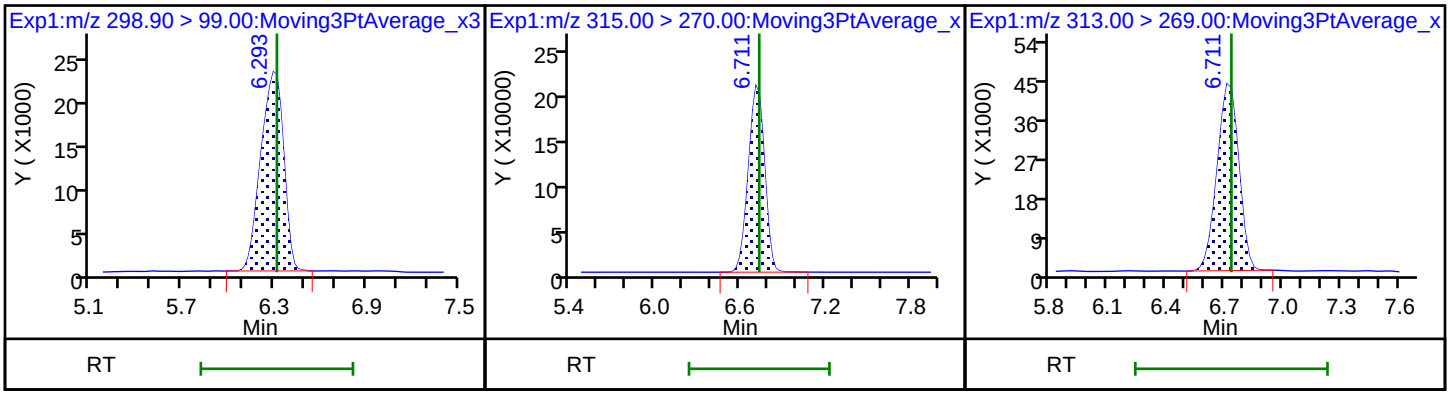
1 Perfluorobutanoic acid D 2 13C4 PFBA D 4 13C5 PFPeA



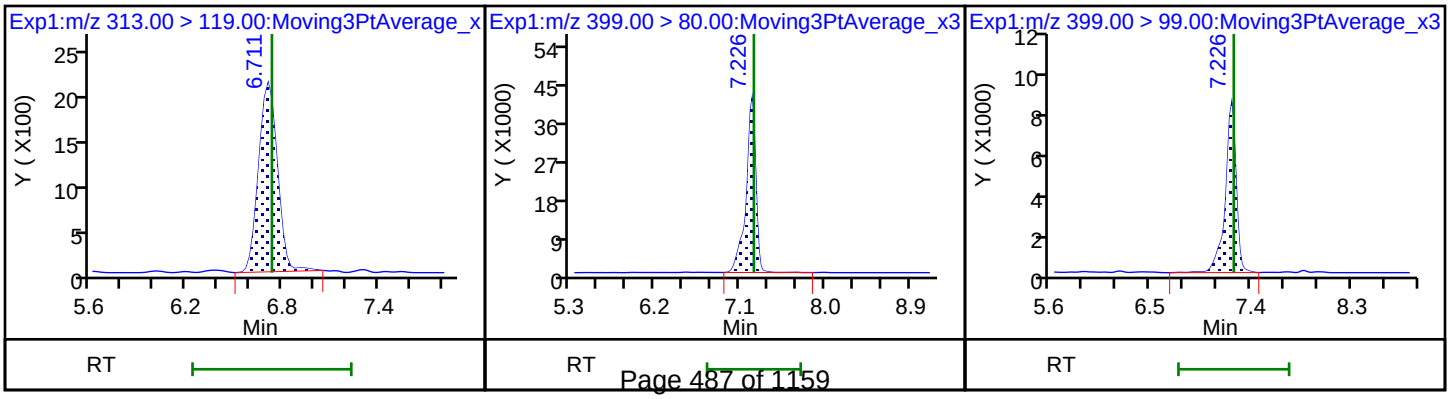
5 Perfluoropentanoic acid D 3 13C3 PFBS 6 Perfluorobutanesulfonic acid



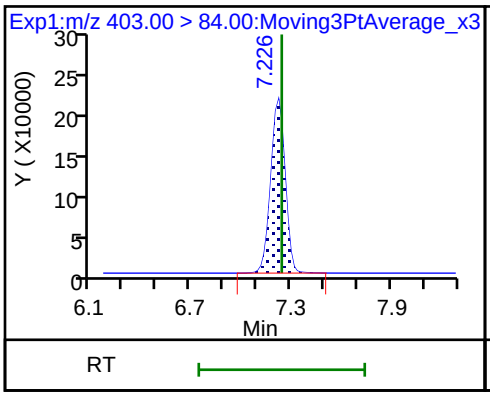
6 Perfluorobutanesulfonic acid D 9 13C2 PFHxA 10 Perfluorohexanoic acid



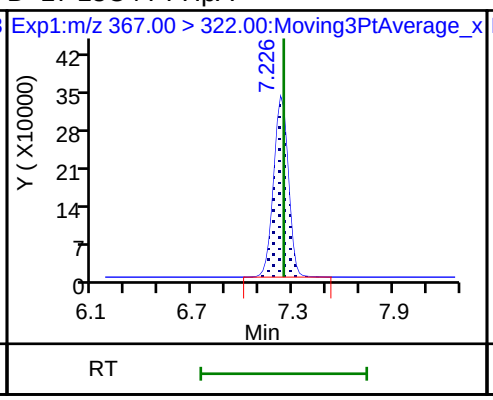
10 Perfluorohexanoic acid 16 Perfluorohexanesulfonic acid 16 Perfluorohexanesulfonic acid



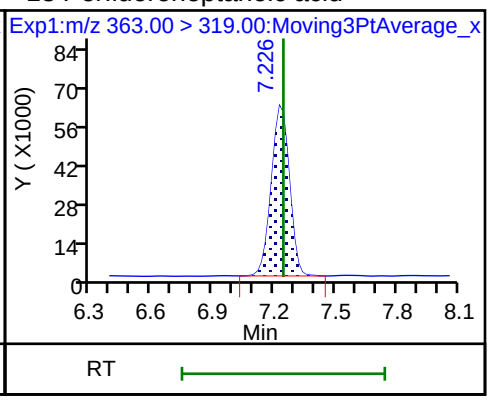
D 15 18O2 PFHxS



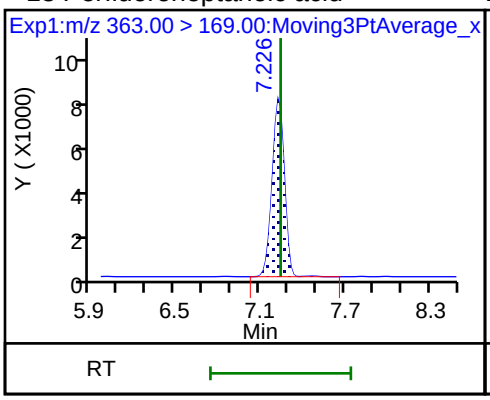
D 17 13C4 PFHpA



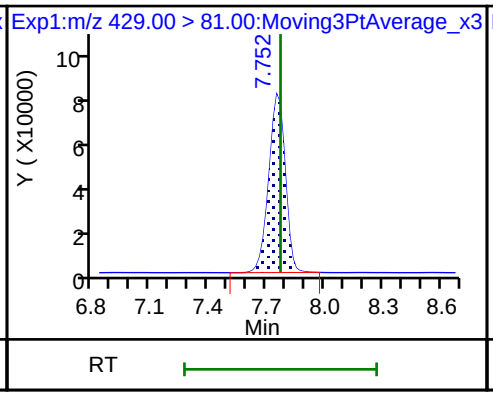
18 Perfluoroheptanoic acid



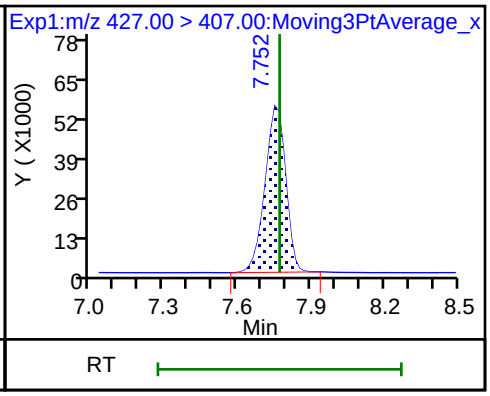
18 Perfluoroheptanoic acid



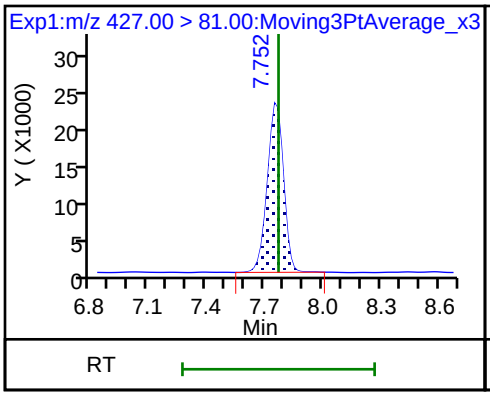
D 22 M2-6:2 FTS



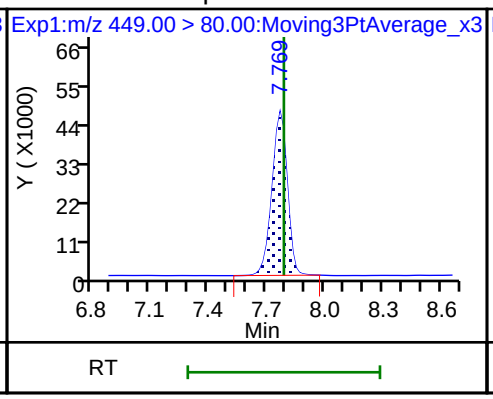
23 6:2 FTS



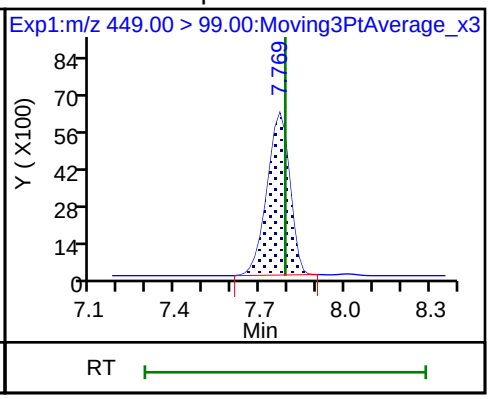
23 6:2 FTS



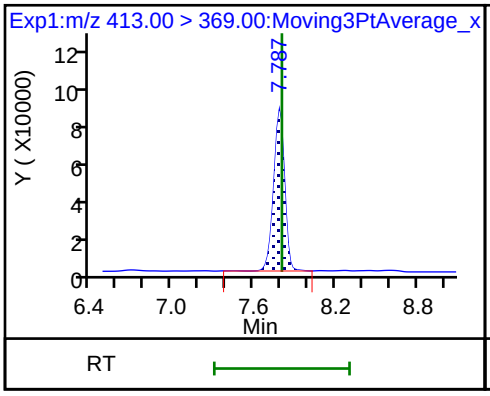
21 Perfluoroheptanesulfonic acid



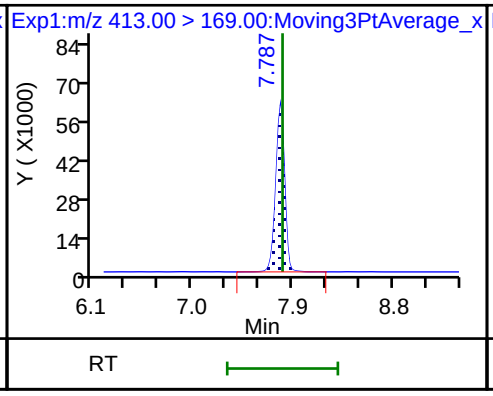
21 Perfluoroheptanesulfonic acid



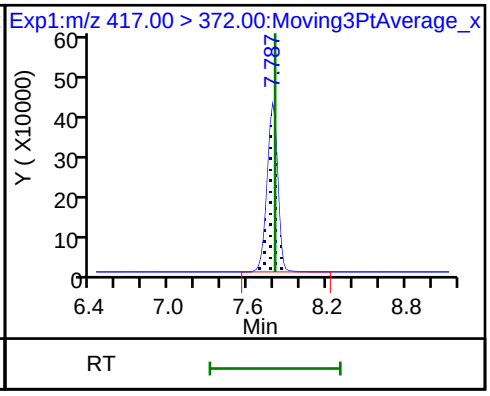
24 Perfluorooctanoic acid



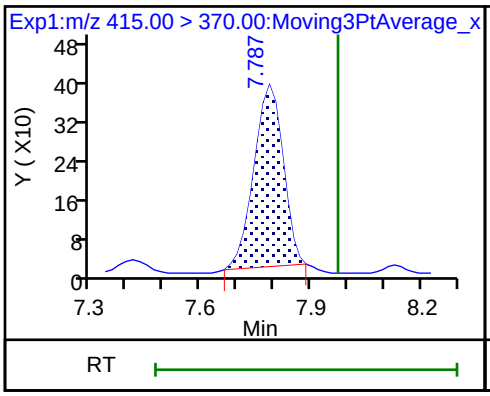
24 Perfluorooctanoic acid



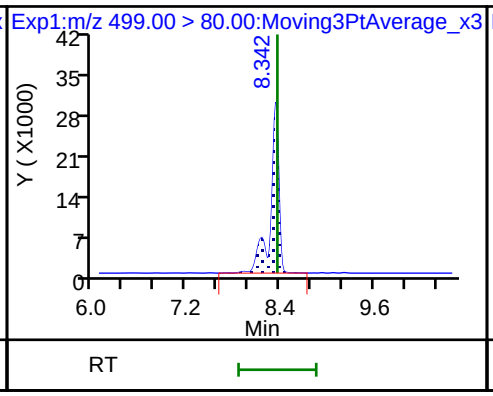
D 25 13C4 PFOA



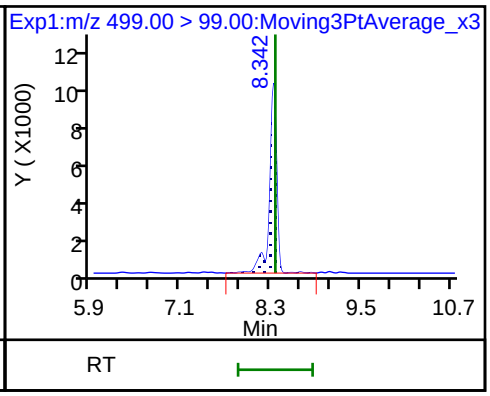
D 20 13C2 PFOA



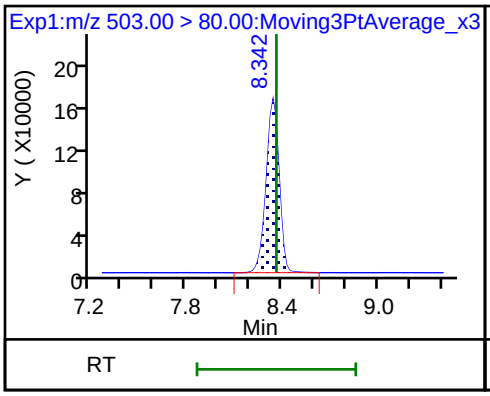
27 Perfluorooctanesulfonic acid



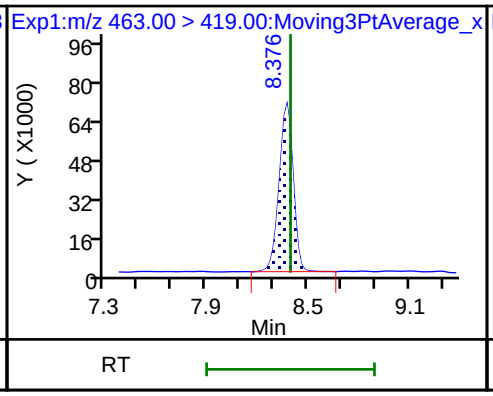
27 Perfluorooctanesulfonic acid



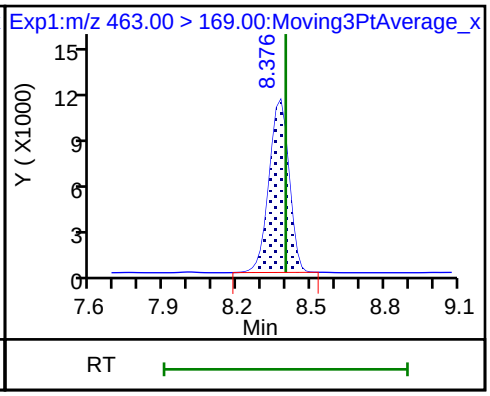
D 26 13C4 PFOS



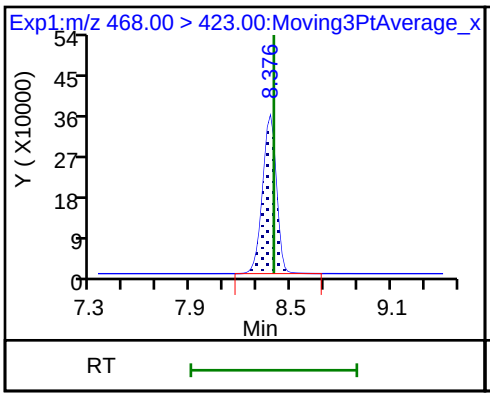
29 Perfluorononanoic acid



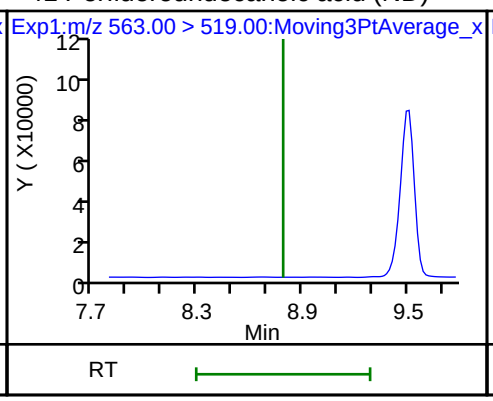
29 Perfluorononanoic acid



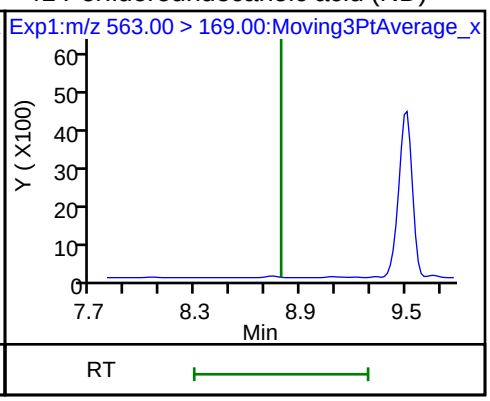
D 28 13C5 PFNA



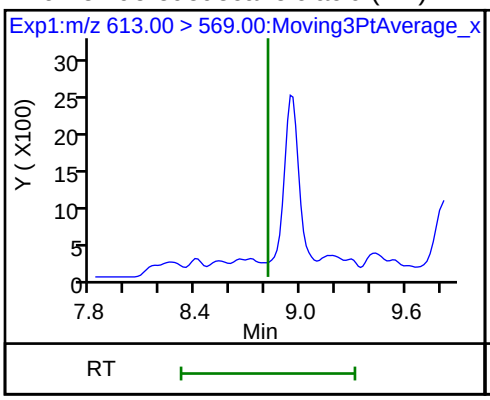
41 Perfluoroundecanoic acid (ND)



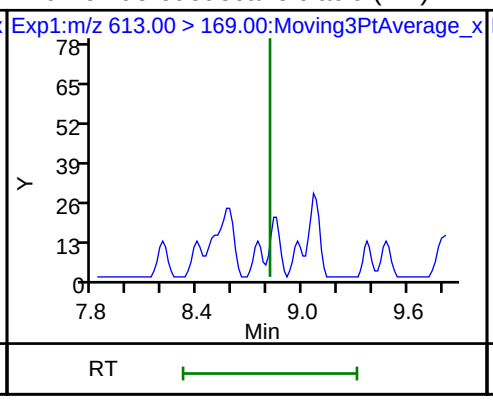
41 Perfluoroundecanoic acid (ND)



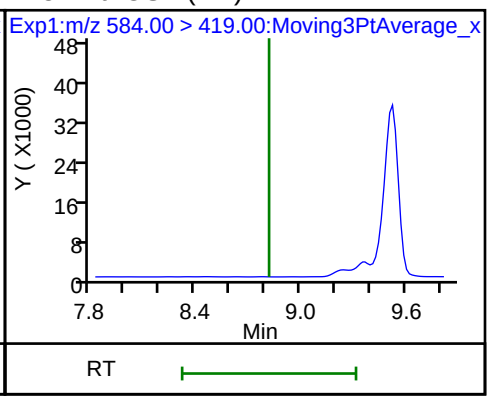
46 Perfluorododecanoic acid (ND)



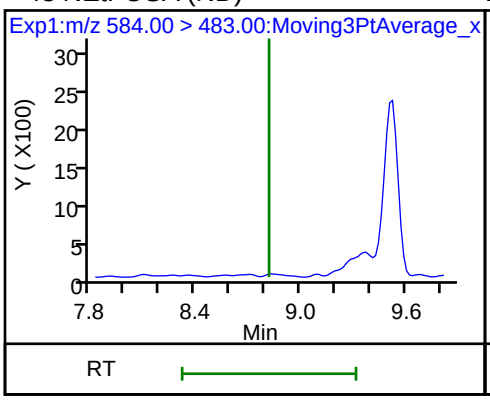
46 Perfluorododecanoic acid (ND)



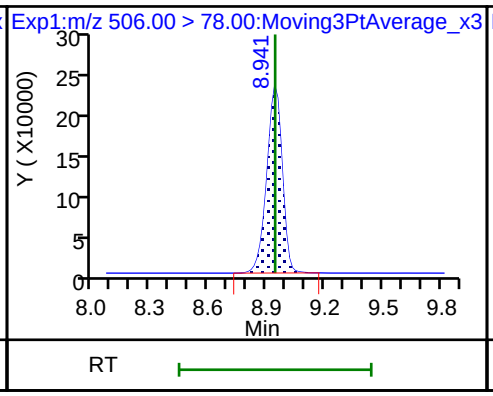
43 NEtFOSA (ND)



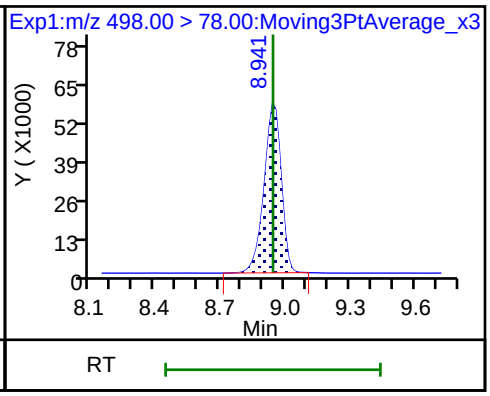
43 NEtFOSA (ND)



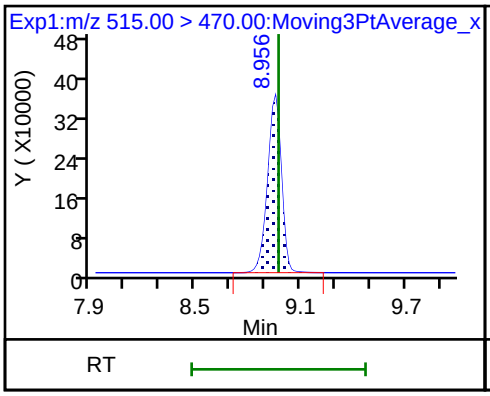
D 30 13C8 FOSA



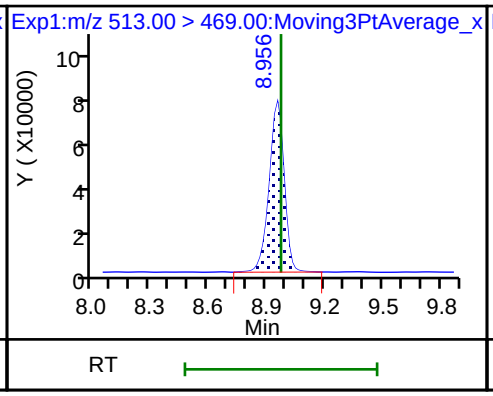
31 Perfluorooctanesulfonamide



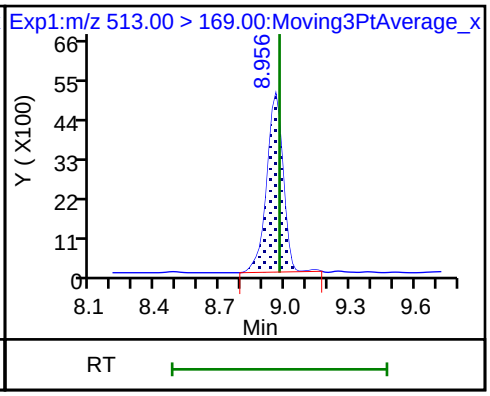
D 33 13C2 PFDA



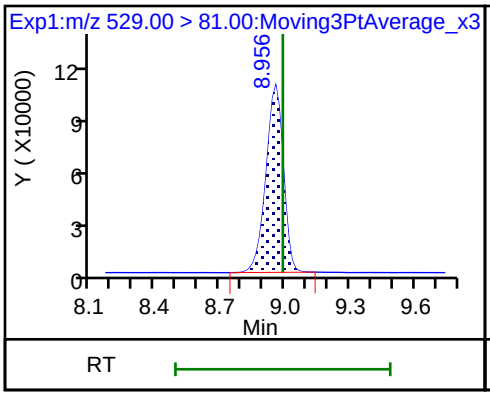
35 Perfluorodecanoic acid



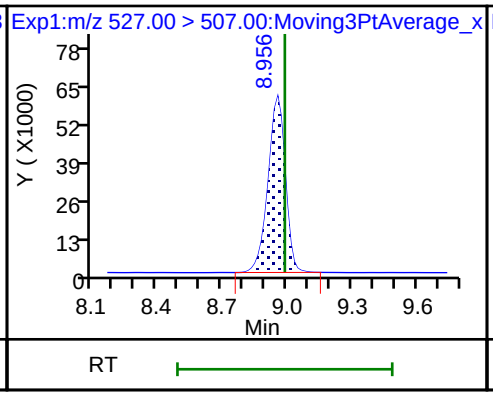
35 Perfluorodecanoic acid



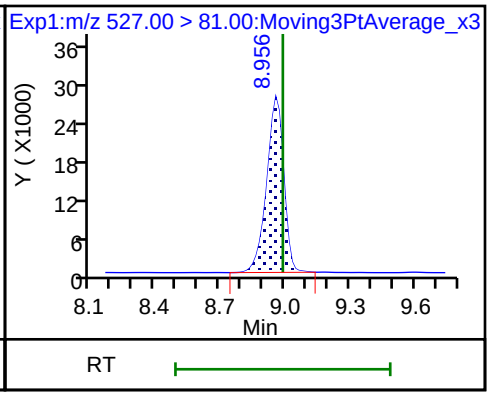
D 34 M2-8:2 FTS



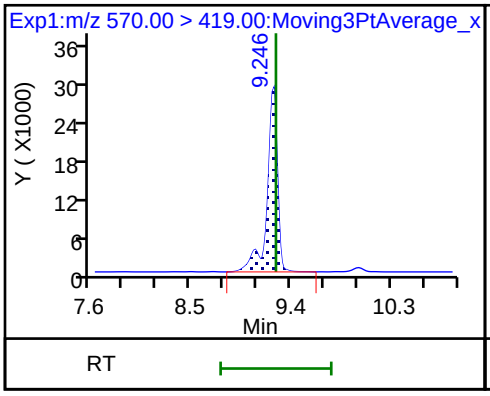
36 8:2 FTS



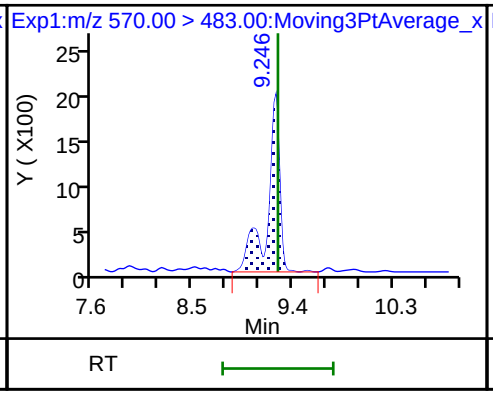
36 8:2 FTS



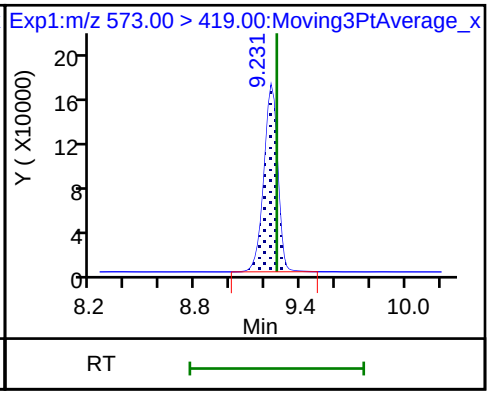
38 NMeFOSAA



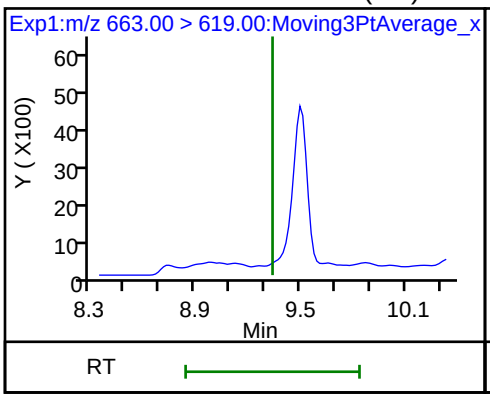
38 NMeFOSAA



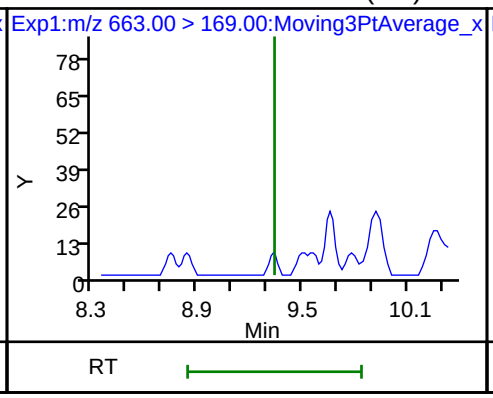
D 37 d3-NMeFOSAA



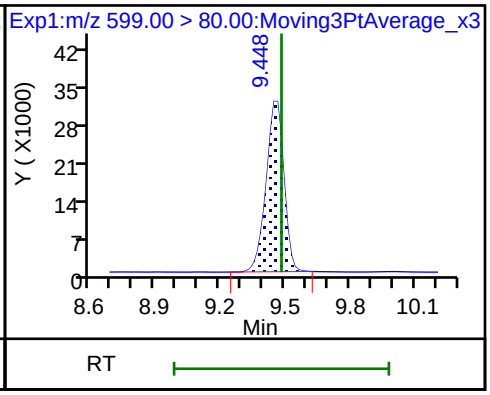
49 Perfluorotridecanoic acid (ND)



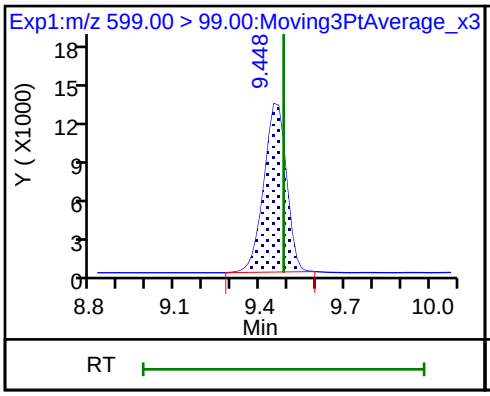
49 Perfluorotridecanoic acid (ND)



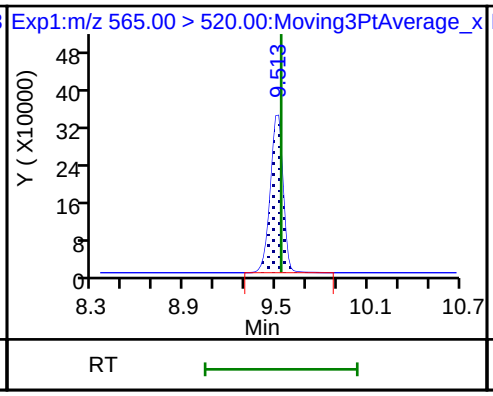
39 Perfluorodecanesulfonic acid



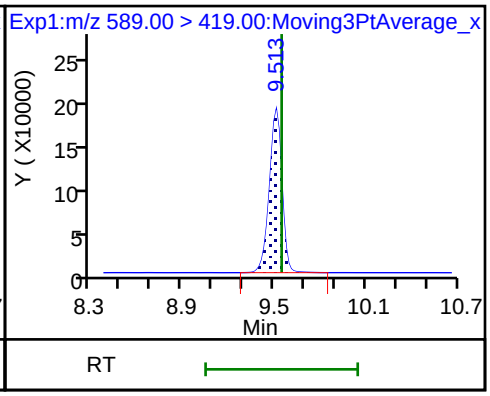
39 Perfluorodecanesulfonic acid



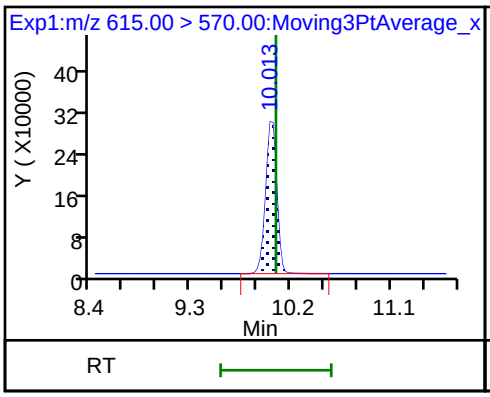
D 42 13C2 PFUnA



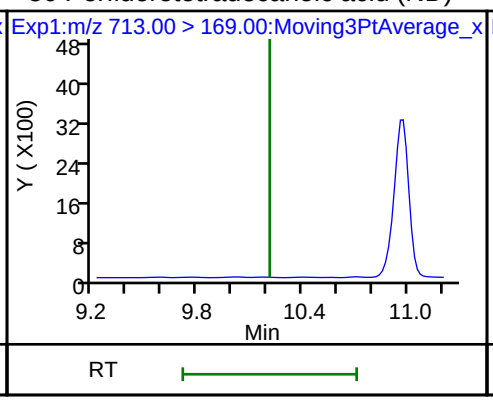
D 40 d5-NEtFOSAA



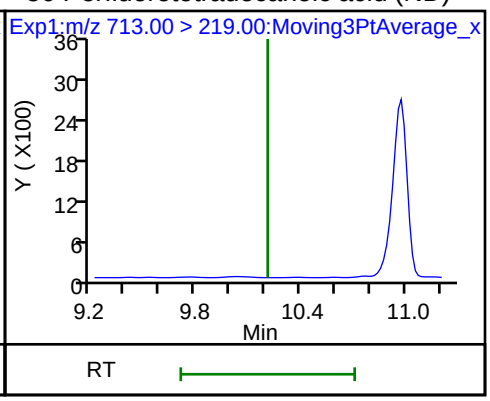
D 45 13C2 PFDoA



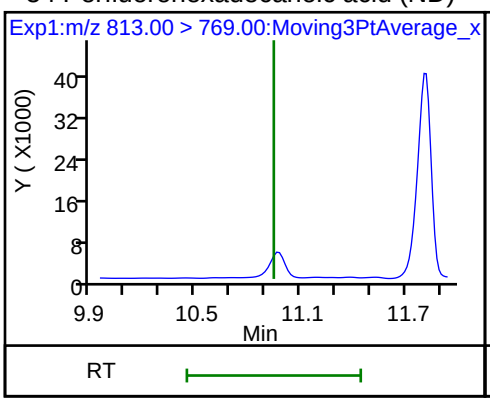
50 Perfluorotetradecanoic acid (ND)



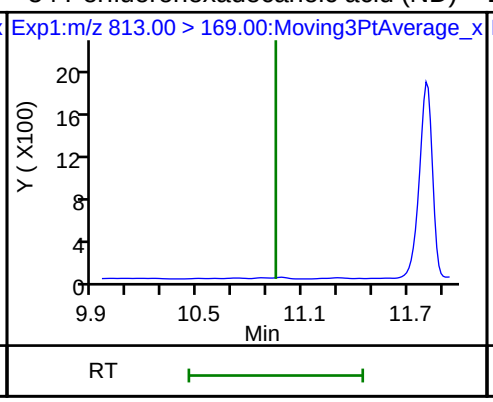
50 Perfluorotetradecanoic acid (ND)



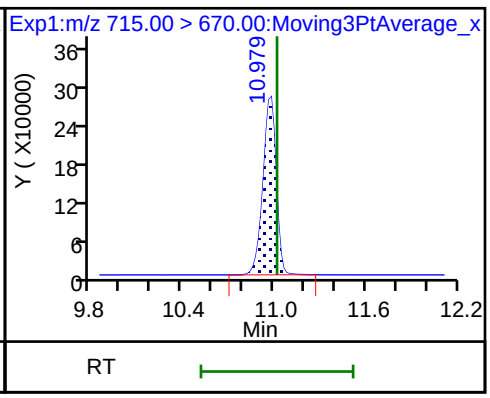
54 Perfluorohexadecanoic acid (ND)



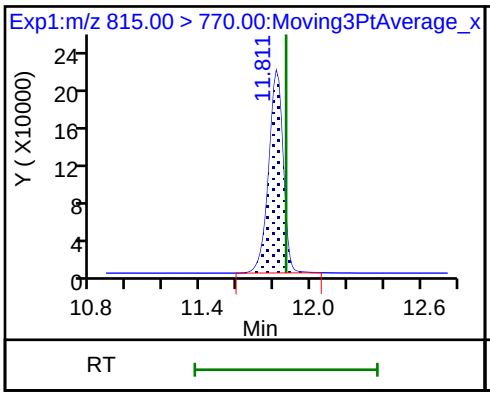
54 Perfluorohexadecanoic acid (ND)



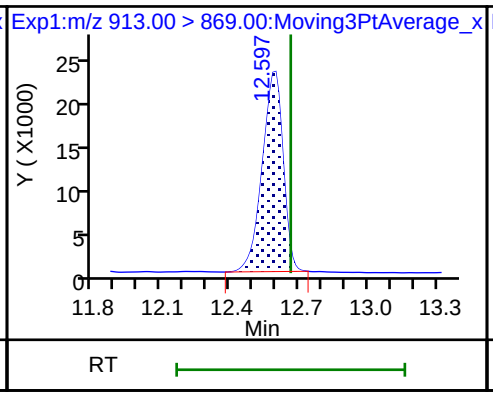
D 51 13C2 PFTeDA



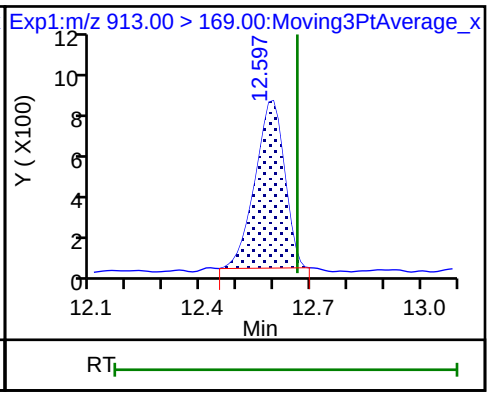
D 52 13C2 PFHxDA



53 Perfluorooctadecanoic acid



53 Perfluorooctadecanoic acid



LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Instrument ID: A10 Start Date: 10/12/2020 11:30

Analysis Batch Number: 420930 End Date: 10/12/2020 14:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-420930/2		10/12/2020 11:30	1	2020.10.12_A10_DI_ICAL_004.d	GeminiC18 3x100 3(mm)
IC 320-420930/3		10/12/2020 11:49	1	2020.10.12_A10_DI_ICAL_005.d	GeminiC18 3x100 3(mm)
IC 320-420930/4		10/12/2020 12:07	1	2020.10.12_A10_DI_ICAL_006.d	GeminiC18 3x100 3(mm)
IC 320-420930/5		10/12/2020 12:25	1	2020.10.12_A10_DI_ICAL_007.d	GeminiC18 3x100 3(mm)
IC 320-420930/6		10/12/2020 12:44	1	2020.10.12_A10_DI_ICAL_008.d	GeminiC18 3x100 3(mm)
IC 320-420930/7		10/12/2020 13:02	1	2020.10.12_A10_DI_ICAL_009.d	GeminiC18 3x100 3(mm)
IC 320-420930/8		10/12/2020 13:21	1	2020.10.12_A10_DI_ICAL_010.d	GeminiC18 3x100 3(mm)
IC 320-420930/9		10/12/2020 13:39	1	2020.10.12_A10_DI_ICAL_011.d	GeminiC18 3x100 3(mm)
ICB 320-420930/10		10/12/2020 13:58	1	2020.10.12_A10_DI_ICAL_012.d	GeminiC18 3x100 3(mm)
ICV 320-420930/11		10/12/2020 14:16	1	2020.10.12_A10_DI_ICAL_013.d	GeminiC18 3x100 3(mm)
ZZZZZ		10/12/2020 14:35	1		GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-178459-1

SDG No.:

Instrument ID: A10 Start Date: 11/23/2020 10:40

Analysis Batch Number: 434683 End Date: 11/23/2020 14:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVL 320-434683/1		11/23/2020 10:40	1	2020.11.23_A10_DI_A_004.d	GeminiC18 3x100 3(mm)
ZZZZZ		11/23/2020 10:58	1		GeminiC18 3x100 3(mm)
CCV 320-434683/3		11/23/2020 11:17	1	2020.11.23_A10_DI_A_006.d	GeminiC18 3x100 3(mm)
MB 320-434591/1-A		11/23/2020 11:35	1	2020.11.23_A10_DI_A_007.d	GeminiC18 3x100 3(mm)
LCS 320-434591/2-A		11/23/2020 11:54	1	2020.11.23_A10_DI_A_008.d	GeminiC18 3x100 3(mm)
480-178459-1	Influent	11/23/2020 12:12	1	2020.11.23_A10_DI_A_009.d	GeminiC18 3x100 3(mm)
480-178459-2	Mid	11/23/2020 12:31	1	2020.11.23_A10_DI_A_010.d	GeminiC18 3x100 3(mm)
480-178459-3	Effluent	11/23/2020 12:49	1	2020.11.23_A10_DI_A_011.d	GeminiC18 3x100 3(mm)
480-178459-3 MS	Effluent MS	11/23/2020 13:07	1	2020.11.23_A10_DI_A_012.d	GeminiC18 3x100 3(mm)
480-178459-3 MSD	Effluent MSD	11/23/2020 13:26	1	2020.11.23_A10_DI_A_013.d	GeminiC18 3x100 3(mm)
480-178459-4	DUP	11/23/2020 13:44	1	2020.11.23_A10_DI_A_014.d	GeminiC18 3x100 3(mm)
ZZZZZ		11/23/2020 14:03	1		GeminiC18 3x100 3(mm)
ZZZZZ		11/23/2020 14:21	1		GeminiC18 3x100 3(mm)
CCV 320-434683/14		11/23/2020 14:40	1	2020.11.23_A10_DI_A_017.d	GeminiC18 3x100 3(mm)

LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Sacramen Job No.: 480-178459-1

SDG No.:

Batch Number: 434591 Batch Start Date: 11/23/20 05:49 Batch Analyst: Maxwell, Madelyne

Batch Method: PFAS Prep Batch End Date: 11/23/20 07:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	LCMPFCLLSU 00195	LCPFCSP 00345	AnalysisComment	
MB 320-434591/1		PFAS Prep, WS-LC-0025 Att1		1.00 mL	1.66 mL	83 uL			
LCS 320-434591/2		PFAS Prep, WS-LC-0025 Att1		1.00 mL	1.66 mL	83 uL	1 uL	Spiked with 250 uL of 0.02 ppm into 250 mL. Aliquot of 1 mL taken.	
480-178459-A-1	Influent	PFAS Prep, WS-LC-0025 Att1	T	1.00 mL	1.66 mL	83 uL			
480-178459-A-2	Mid	PFAS Prep, WS-LC-0025 Att1	T	1.00 mL	1.66 mL	83 uL			
480-178459-A-3	Effluent	PFAS Prep, WS-LC-0025 Att1	T	1.00 mL	1.66 mL	83 uL			
480-178459-A-3 MS	Effluent	PFAS Prep, WS-LC-0025 Att1	T	1.00 mL	1.66 mL	83 uL	0.8684 uL	Spiked with 250 uL of 0.02 ppm into 287.90 mL. Aliquot of 1 mL taken.	
480-178459-A-3 MSD	Effluent	PFAS Prep, WS-LC-0025 Att1	T	1.00 mL	1.66 mL	83 uL	0.8899 uL	Spiked with 250 uL of 0.02 ppm into 280.92 mL. Aliquot of 1 mL taken.	
480-178459-A-4	DUP	PFAS Prep, WS-LC-0025 Att1	T	1.00 mL	1.66 mL	83 uL			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-178459-1

SDG No.:

Project: Easton PFAS Spill #1900266 PIN H7140

Client Sample ID	Lab Sample ID
Influent	480-178459-1
Mid	480-178459-2
Effluent	480-178459-3
DUP	480-178459-4

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: Influent
Lab Sample ID: 480-178459-1
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-178459-1
SDG ID.:
Matrix: Water
Date Sampled: 11/19/2020 09:45
Reporting Basis: WET
Date Received: 11/20/2020 08:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.14	0.0020		mg/L		^	1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	127	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	0.058	0.010		mg/L			1	6010C
7439-89-6	Iron	ND	0.050		mg/L			1	6010C
7439-92-1	Lead	0.013	0.010		mg/L			1	6010C
7439-95-4	Magnesium	15.6	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.54	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	2.9	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	13.3	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.40	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: Mid
Lab Sample ID: 480-178459-2
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-178459-1
SDG ID.:
Matrix: Water
Date Sampled: 11/19/2020 09:35
Reporting Basis: WET
Date Received: 11/20/2020 08:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.14	0.0020		mg/L		^	1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	130	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	0.036	0.010		mg/L			1	6010C
7439-89-6	Iron	ND	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	16.1	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.62	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	2.8	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	13.6	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.15	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: Effluent
Lab Sample ID: 480-178459-3
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-178459-1
SDG ID.:
Matrix: Water
Date Sampled: 11/19/2020 09:10
Reporting Basis: WET
Date Received: 11/20/2020 08:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.14	0.0020		mg/L		^	1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	131	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	0.015	0.010		mg/L			1	6010C
7439-89-6	Iron	ND	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	16.2	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.65	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	3.0	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	13.7	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.30	0.010		mg/L		F1 F2	1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DUP
Lab Sample ID: 480-178459-4
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-178459-1
SDG ID.:
Matrix: Water
Date Sampled: 11/19/2020 00:00
Reporting Basis: WET
Date Received: 11/20/2020 08:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.14	0.0020		mg/L		^	1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	130	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	0.024	0.010		mg/L			1	6010C
7439-89-6	Iron	ND	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	16.1	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.65	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	3.0	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	13.6	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.34	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

ICV Source: MEI_MSS_ICV_00056 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00133

Analyte	ICV 480-560898/5 11/24/2020 12:21				CCV 480-560898/15 11/24/2020 12:58				CCV 480-560898/26 11/24/2020 13:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	37.11		37.5	99	51.83		50.0	104	50.66		50.0	101
Antimony	0.740		0.750	99	1.02		1.00	102	1.02		1.00	102
Arsenic	0.740		0.750	99	1.01		1.00	101	1.02		1.00	102
Barium	0.737		0.750	98	1.01		1.00	101	1.02		1.00	102
Beryllium	0.741		0.750	99	1.03		1.00	103	1.03		1.00	103
Cadmium	0.740		0.750	99	1.02		1.00	102	1.02		1.00	102
Calcium	36.98		37.5	99	51.57		50.0	103	50.45		50.0	101
Chromium	0.752		0.750	100	1.03		1.00	103	1.03		1.00	103
Cobalt	0.724		0.750	97	0.998		1.00	100	1.00		1.00	100
Copper	0.719		0.750	96	1.01		1.00	101	1.01		1.00	101
Iron	37.54		37.5	100	51.19		50.0	102	50.28		50.0	101
Lead	0.736		0.750	98	1.01		1.00	101	1.00		1.00	100
Magnesium	37.15		37.5	99	49.86		50.0	100	50.31		50.0	101
Manganese	0.761		0.750	101	1.01		1.00	101	1.02		1.00	102
Nickel	0.725		0.750	97	1.00		1.00	100	1.01		1.00	101
Potassium	37.54		37.5	100	50.31		50.0	101	50.77		50.0	102
Selenium	0.750		0.750	100	1.02		1.00	102	1.03		1.00	103
Silver	0.743		0.750	99	1.00		1.00	100	0.999		1.00	100
Sodium	37.59		37.5	100	51.05		50.0	102	50.83		50.0	102
Thallium	0.749		0.750	100	1.01		1.00	101	1.02		1.00	102
Vanadium	0.747		0.750	100	1.02		1.00	102	1.03		1.00	103
Zinc	0.725		0.750	97	1.03		1.00	103	1.02		1.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

ICV Source: MEI_MSS_ICV_00056 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00133

Analyte	CCV 480-560898/38 11/24/2020 14:37											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	50.87		50.0	102								
Antimony	1.03		1.00	103								
Arsenic	1.02		1.00	102								
Barium	1.01		1.00	101								
Beryllium	1.03		1.00	103								
Cadmium	1.02		1.00	102								
Calcium	50.67		50.0	101								
Chromium	1.02		1.00	102								
Cobalt	0.998		1.00	100								
Copper	1.02		1.00	102								
Iron	50.50		50.0	101								
Lead	1.00		1.00	100								
Magnesium	49.90		50.0	100								
Manganese	1.01		1.00	101								
Nickel	1.00		1.00	100								
Potassium	50.42		50.0	101								
Selenium	1.02		1.00	102								
Silver	1.00		1.00	100								
Sodium	50.77		50.0	102								
Thallium	1.03		1.00	103								
Vanadium	1.02		1.00	102								
Zinc	1.01		1.00	101								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

ICV Source: MEI_10_CCVL_00349 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00349

Analyte	ICVL 480-560898/7 11/24/2020 12:28				CCVL 480-560898/17 11/24/2020 13:16				CCVL 480-560898/28 11/24/2020 14:00			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.218		0.200	109	0.200		0.200	100	0.179	J	0.200	90
Antimony	ND		0.0200	86	0.0184	J	0.0200	92	0.0175	J	0.0200	87
Arsenic	ND		0.0150	97	0.0144	J	0.0150	96	0.0154		0.0150	102
Barium	0.00212		0.00200	106	0.00209		0.00200	105	0.00209		0.00200	105
Beryllium	0.00203		0.00200	102	0.00208		0.00200	104	0.00215		0.00200	108
Cadmium	0.00207		0.00200	104	0.00191	J	0.00200	96	0.00192	J	0.00200	96
Calcium	0.517		0.500	103	0.512		0.500	102	0.528		0.500	106
Chromium	ND		0.00400	96	0.00391	J	0.00400	98	0.00383	J	0.00400	96
Cobalt	ND		0.00400	91	0.00365	J	0.00400	91	0.00352	J	0.00400	88
Copper	ND		0.0100	98	0.0103		0.0100	103	0.00959	J	0.0100	96
Iron	0.0515		0.0500	103	0.0541		0.0500	108	0.0537		0.0500	107
Lead	0.0101		0.0100	101	0.00976	J	0.0100	98	0.00951	J	0.0100	95
Magnesium	0.209		0.200	104	0.205		0.200	102	0.203		0.200	101
Manganese	0.00327		0.00300	109	0.00318		0.00300	106	0.00313		0.00300	104
Nickel	ND		0.0100	93	0.00940	J	0.0100	94	0.00939	J	0.0100	94
Potassium	0.540		0.500	108	0.474	J	0.500	95	0.468	J	0.500	94
Selenium	ND		0.0250	93	0.0238	J	0.0250	95	0.0224	J	0.0250	90
Silver	0.00608		0.00600	101	0.00584	J	0.00600	97	0.00616		0.00600	103
Sodium	1.01		1.01	101	0.992	J	1.01	99	1.01		1.01	100
Thallium	ND		0.0200	99	0.0183	J	0.0200	92	0.0198	J	0.0200	99
Vanadium	ND		0.00500	93	0.00474	J	0.00500	95	0.00451	J	0.00500	90
Zinc	0.0104		0.0100	104	0.00994	J	0.0100	99	0.00999	J	0.0100	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

ICV Source: MEI_10_CCVL_00349 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00349

Analyte	CCVL 480-560898/40 11/24/2020 14:45											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.204		0.200	102								
Antimony	0.0161	J	0.0200	80								
Arsenic	0.0150		0.0150	100								
Barium	0.00210		0.00200	105								
Beryllium	0.00205		0.00200	103								
Cadmium	0.00189	J	0.00200	95								
Calcium	0.511		0.500	102								
Chromium	0.00437		0.00400	109								
Cobalt	0.00355	J	0.00400	89								
Copper	0.0105		0.0100	105								
Iron	0.0481	J	0.0500	96								
Lead	0.0101		0.0100	101								
Magnesium	0.204		0.200	102								
Manganese	0.00309		0.00300	103								
Nickel	0.00913	J	0.0100	91								
Potassium	0.471	J	0.500	94								
Selenium	0.0247	J	0.0250	99								
Silver	0.00545	J	0.00600	91								
Sodium	1.00		1.01	99								
Thallium	0.0197	J	0.0200	99								
Vanadium	0.00473	J	0.00500	95								
Zinc	0.00968	J	0.0100	97								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

ICV Source: MEH_HG1_WKG_02420 Concentration Units: mg/L

CCV Source: MEH_HG1_WKG_02420

Analyte	ICV 480-560597/7 11/23/2020 16:13				ICVL 480-560597/9 11/23/2020 16:16				CCV 480-560597/10 11/23/2020 16:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00314		0.00300	105	ND		0.000200	95	0.00209		0.00200	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

ICV Source: MEH_HG1_WKG_02420 Concentration Units: mg/L

CCV Source: MEH_HG1_WKG_02420

Analyte	CCV 480-560597/22 11/23/2020 16:36				CCV 480-560597/34 11/23/2020 16:55				CCVL 480-560597/103 11/23/2020 18:41			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00214		0.00200	107	0.00212		0.00200	106	0.000190	J	0.000200	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-560898/6 11/24/2020 12:24		CCB 480-560898/16 11/24/2020 13:02		CCB 480-560898/27 11/24/2020 13:56		CCB 480-560898/39 11/24/2020 14:41	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-560597/8 11/23/2020 16:15		CCB 480-560597/11 11/23/2020 16:19		CCB 480-560597/23 11/23/2020 16:38		CCB 480-560597/35 11/23/2020 16:56	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-560468/1-A

Instrument Code: ICAP2 Batch No.: 560898

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND		^	6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-560510/1-A

Instrument Code: LEEMAN4 Batch No.: 560597

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7470A

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab Sample ID: ICSA 480-560898/8 Instrument ID: ICAP2

Lab File ID: I2112420A-1.asc ICS Source: MEI_MSS_ICSA_00022

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**512**	**102**
Antimony		**0.0103**	
Arsenic		**-0.0007**	
Barium		**0.0069**	
Beryllium		**-0.0001**	
Cadmium		**-0.0016**	
Calcium	**500**	**478**	**96**
Chromium		**-0.0014**	
Cobalt		**0.0003**	
Copper		**0.0007**	
Iron	**200**	**188**	**94**
Lead		**0.0079**	
Magnesium	**500**	**501**	**100**
Manganese		**-0.0009**	
Nickel		**-0.0009**	
Potassium		**0.104**	
Selenium		**-0.0003**	
Silver		**0.0010**	
Sodium		**0.0913**	
Thallium		**-0.0043**	
Vanadium		**0.0005**	
Zinc		**0.0013**	
Boron		*-0.0012*	
Lithium		*0.0018*	
Molybdenum		*-0.0011*	
Silicon		*-0.0131*	
Sulfur		*-0.0586*	
Tin		*0.0011*	
Titanium		*0.0033*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Lab Sample ID: ICSAB 480-560898/9 Instrument ID: ICAP2

Lab File ID: I2112420A-1.asc ICS Source: MEI_MSS_ICSAB_00020

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**500**	**508**	**102**
Antimony	**0.500**	**0.492**	**98**
Arsenic	**0.500**	**0.509**	**102**
Barium	**0.501**	**0.517**	**103**
Beryllium	**0.250**	**0.250**	**100**
Cadmium	**0.500**	**0.516**	**103**
Calcium	**500**	**477**	**95**
Chromium	**0.500**	**0.494**	**99**
Cobalt	**0.500**	**0.499**	**100**
Copper	**0.500**	**0.516**	**103**
Iron	**200**	**188**	**94**
Lead	**0.500**	**0.505**	**101**
Magnesium	**500**	**498**	**100**
Manganese	**0.501**	**0.493**	**98**
Nickel	**0.501**	**0.489**	**98**
Potassium	**5.00**	**5.15**	**103**
Selenium	**0.500**	**0.511**	**102**
Silver	**0.500**	**0.542**	**108**
Sodium	**5.00**	**5.32**	**106**
Thallium	**0.500**	**0.483**	**97**
Vanadium	**0.500**	**0.498**	**100**
Zinc	**0.501**	**0.466**	**93**
Boron	*5.00*	*4.89*	*98*
Lithium		*0.0006*	
Molybdenum	*0.500*	*0.498*	*100*
Silicon	*5.00*	*4.90*	*98*
Strontium	*0.500*	*0.509*	*102*
Sulfur		*-0.0583*	
Tin	*0.500*	*0.503*	*101*
Titanium	*0.500*	*0.508*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: Effluent MS | Lab ID: 480-178459-3 MS

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-178459-1

SDG No.:

Matrix: Water | Concentration Units: mg/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	9.87		ND		10.0	99	75-125		6010C
Antimony	0.202		ND		0.200	101	75-125		6010C
Arsenic	0.206		ND		0.200	103	75-125		6010C
Barium	0.352		0.14		0.200	104	75-125	^	6010C
Beryllium	0.209		ND		0.200	105	75-125		6010C
Cadmium	0.201		ND		0.200	100	75-125		6010C
Calcium	135.1		131		10.0	44	75-125	4	6010C
Chromium	0.197		ND		0.200	98	75-125		6010C
Cobalt	0.191		ND		0.200	95	75-125		6010C
Copper	0.223		0.015		0.200	104	75-125		6010C
Iron	9.58		ND		10.0	96	75-125		6010C
Lead	0.196		ND		0.200	98	75-125		6010C
Magnesium	25.49		16.2		10.0	93	75-125		6010C
Manganese	0.838		0.65		0.200	93	75-125		6010C
Nickel	0.192		ND		0.200	96	75-125		6010C
Potassium	13.05		3.0		10.0	101	75-125		6010C
Selenium	0.203		ND		0.200	102	75-125		6010C
Silver	0.0496		ND		0.0500	99	75-125		6010C
Sodium	23.25		13.7		10.0	96	75-125		6010C
Thallium	0.201		ND		0.200	100	75-125		6010C
Vanadium	0.200		ND		0.200	100	75-125		6010C
Zinc	0.372		0.30		0.200	35	75-125	F1	6010C
Mercury	0.00717		ND		0.00667	107	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: Effluent MSD
Lab ID: 480-178459-3 MSD
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-178459-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	10.15		10.0	102	75-125	3	20		6010C
Antimony	0.203		0.200	102	75-125	0	20		6010C
Arsenic	0.206		0.200	103	75-125	0	20		6010C
Barium	0.351		0.200	103	75-125	0	20	^	6010C
Beryllium	0.212		0.200	106	75-125	1	20		6010C
Cadmium	0.202		0.200	101	75-125	0	20		6010C
Calcium	140.4		10.0	97	75-125	4	20	4	6010C
Chromium	0.198		0.200	99	75-125	1	20		6010C
Cobalt	0.191		0.200	96	75-125	0	20		6010C
Copper	0.222		0.200	104	75-125	1	20		6010C
Iron	9.65		10.0	96	75-125	1	20		6010C
Lead	0.199		0.200	100	75-125	2	20		6010C
Magnesium	25.71		10.0	95	75-125	1	20		6010C
Manganese	0.843		0.200	95	75-125	1	20		6010C
Nickel	0.191		0.200	96	75-125	0	20		6010C
Potassium	12.98		10.0	100	75-125	1	20		6010C
Selenium	0.204		0.200	102	75-125	0	20		6010C
Silver	0.0498		0.0500	100	75-125	0	20		6010C
Sodium	23.66		10.0	100	75-125	2	20		6010C
Thallium	0.197		0.200	99	75-125	2	20		6010C
Vanadium	0.199		0.200	100	75-125	0	20		6010C
Zinc	0.767		0.200	232	75-125	69	20	F1 F2	6010C
Mercury	0.00718		0.00667	108	80-120	0	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: Effluent PDS | Lab ID: 480-178459-3 PDS

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-178459-1

SDG No.:

Matrix: Water | Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	10.15		ND		10.0	102	80-120		6010C
Antimony	0.205		ND		0.200	103	80-120		6010C
Arsenic	0.212		ND		0.200	106	80-120		6010C
Barium	0.350		0.14		0.200	103	80-120	^	6010C
Beryllium	0.214		ND		0.200	107	80-120		6010C
Cadmium	0.207		ND		0.200	103	80-120		6010C
Calcium	134.7		131		10.0	NC	80-120		6010C
Chromium	0.201		ND		0.200	101	80-120		6010C
Cobalt	0.196		ND		0.200	98	80-120		6010C
Copper	0.220		0.015		0.200	102	80-120		6010C
Iron	9.82		ND		10.0	98	80-120		6010C
Lead	0.203		ND		0.200	101	80-120		6010C
Magnesium	25.69		16.2		10.0	95	80-120		6010C
Manganese	0.839		0.65		0.200	93	80-120		6010C
Nickel	0.197		ND		0.200	98	80-120		6010C
Potassium	13.23		3.0		10.0	102	80-120		6010C
Selenium	0.209		ND		0.200	105	80-120		6010C
Silver	0.0510		ND		0.0500	102	80-120		6010C
Sodium	23.46		13.7		10.0	98	80-120		6010C
Thallium	0.205		ND		0.200	102	80-120		6010C
Vanadium	0.205		ND		0.200	102	80-120		6010C
Zinc	0.489		0.30		0.200	93	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 480-560468/2-A

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

Sample Matrix: Water LCS Source: MED_02_W2_00064

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	10.0	10.29		103	80	120		6010C
Antimony	0.200	0.202		101	80	120		6010C
Arsenic	0.200	0.203		101	80	120		6010C
Barium	0.200	0.211		105	80	120	^	6010C
Beryllium	0.200	0.211		105	80	120		6010C
Cadmium	0.200	0.200		100	80	120		6010C
Calcium	10.0	10.18		102	80	120		6010C
Chromium	0.200	0.197		99	80	120		6010C
Cobalt	0.200	0.188		94	80	120		6010C
Copper	0.200	0.200		100	80	120		6010C
Iron	10.0	9.82		98	80	120		6010C
Lead	0.200	0.194		97	80	120		6010C
Magnesium	10.0	9.76		98	80	120		6010C
Manganese	0.200	0.200		100	80	120		6010C
Nickel	0.200	0.188		94	80	120		6010C
Potassium	10.0	9.95		99	80	120		6010C
Selenium	0.200	0.199		100	80	120		6010C
Silver	0.0500	0.0491		98	80	120		6010C
Sodium	10.0	10.04		100	80	120		6010C
Thallium	0.200	0.198		99	80	120		6010C
Vanadium	0.200	0.196		98	80	120		6010C
Zinc	0.200	0.202		101	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 480-560510/2-A

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

Sample Matrix: Water LCS Source: MEH_HG1_WKG_02420

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.00667	0.00692		104	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-178459-3

SDG No:

Lab Name: Eurofins TestAmerica, Buffalo Job No: 480-178459-1

Matrix: Water Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	ND		ND		NC		6010C
Antimony	ND		ND		NC		6010C
Arsenic	ND		ND		NC		6010C
Barium	0.14		0.148		2.6	^	6010C
Beryllium	ND		ND		NC		6010C
Cadmium	ND		ND		NC		6010C
Calcium	131		130.5		0.19		6010C
Chromium	ND		ND		NC		6010C
Cobalt	ND		ND		NC		6010C
Copper	0.015		ND		NC		6010C
Iron	ND		ND		NC		6010C
Lead	ND		ND		NC		6010C
Magnesium	16.2		16.80		3.5		6010C
Manganese	0.65		0.675		3.4		6010C
Nickel	ND		ND		NC		6010C
Potassium	3.0		3.04		1.9		6010C
Selenium	ND		ND		NC		6010C
Silver	ND		ND		NC		6010C
Sodium	13.7		13.79		0.80		6010C
Thallium	ND		ND		NC		6010C
Vanadium	ND		ND		NC		6010C
Zinc	0.30		0.311		2.7		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-178459-3

SDG No:

Lab Name: Eurofins TestAmerica, Buffalo Job No: 480-178459-1

Matrix: Water Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Mercury	ND		ND		NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-178459-1

SDG Number:

Matrix: Water Instrument ID: ICAP2

Method: 6010C MDL Date: 07/17/2013 11:47

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Aluminum	308.215	0.2	0.06
Antimony	206.833	0.02	0.00679
Arsenic	189.042	0.015	0.00555
Barium	455.403	0.002	0.0007
Beryllium	313.042	0.002	0.0003
Cadmium	228.802	0.002	0.0005
Calcium	317.933	0.5	0.1
Chromium	267.716	0.004	0.001
Cobalt	228.616	0.004	0.00063
Copper	327.396	0.01	0.0016
Iron	259.940	0.05	0.0193
Lead	220.353	0.01	0.003
Magnesium	279.079	0.2	0.0434
Manganese	257.610	0.003	0.0004
Nickel	231.604	0.01	0.00126
Potassium	766.490	0.5	0.1
Selenium	196.090	0.025	0.0087
Silver	328.068	0.006	0.0017
Sodium	589.592	1	0.324
Thallium	190.856	0.02	0.01024
Vanadium	292.402	0.005	0.0015
Zinc	206.200	0.01	0.0015

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-178459-1

SDG Number:

Matrix: Water Instrument ID: ICAP2

Method: 6010C XMDL Date: 07/17/2013 11:47

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Aluminum	308.215	0.2	0.06
Antimony	206.833	0.02	0.00679
Arsenic	189.042	0.015	0.00555
Barium	455.403	0.002	0.0007
Beryllium	313.042	0.002	0.0003
Cadmium	228.802	0.002	0.0005
Calcium	317.933	0.5	0.1
Chromium	267.716	0.004	0.001
Cobalt	228.616	0.004	0.00063
Copper	327.396	0.01	0.0016
Iron	259.940	0.05	0.0193
Lead	220.353	0.01	0.003
Magnesium	279.079	0.2	0.0434
Manganese	257.610	0.003	0.0004
Nickel	231.604	0.01	0.00126
Potassium	766.490	0.5	0.1
Selenium	196.090	0.025	0.0087
Silver	328.068	0.006	0.0017
Sodium	589.592	1	0.324
Thallium	190.856	0.02	0.01024
Vanadium	292.402	0.005	0.0015
Zinc	206.2	0.01	0.0015

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-178459-1

SDG Number:

Matrix: Water Instrument ID: LEEMAN4

Method: 7470A MDL Date: 01/28/2010 00:00

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Mercury	253.7	0.0002	0.00012

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-178459-1

SDG Number:

Matrix: Water Instrument ID: LEEMAN4

Method: 7470A XMDL Date: 01/28/2010 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Mercury	253.7	0.0002	0.00012

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-178459-1

SDG No.:

ICP-AES Instrument ID: ICAP2 Date: 03/12/2020

Analyte	Wave Length	Al	As	B	Ca	Ce	Co	Cr	Cu	Fe	Mg	Mn	Mo	S	Si
Aluminum	308.215														
Antimony	206.833	-0.000007						0.010493		-0.000007					
Arsenic	189.042							-0.003		-0.000017					
Barium	455.403														
Beryllium	313.042														
Boron	208.959												0.031758		
Cadmium	228.802		0.003547							-0.000007					
Calcium	317.933														
Chromium	267.716	-0.000004								-0.000004		0.000150			
Cobalt	228.616	0.000012											0.000776		
Copper	327.396				0.000024										
Iron	259.940														
Lead	220.353	-0.000057							0.000881	0.000029			-0.001918		0.003267
Lithium	670.784				0.00009										
Magnesium	279.079											-0.003351			
Manganese	257.610	0.000005								0.000003					
Molybdenum	202.030														
Nickel	231.604									0.000020					
Potassium	766.490														
Selenium	196.090									0.000015		0.000390			
Silicon	288.158														
Silver	328.068					-0.003915				-0.000005		0.000025			
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856						0.003145					0.000390165			
Tin	189.989														
Titanium	334.904												0.000971565		

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-178459-1

SDG No.:

ICP-AES Instrument ID: ICAP2 Date: 03/12/2020

Analyte	Wave Length	Al	As	B	Ca	Ce	Co	Cr	Cu	Fe	Mg	Mn	Mo	S	Si
Vanadium	292.402									0.000035917			-0.010240		
Zinc	206.200							-0.001388							

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-178459-1

SDG No.:

ICP-AES Instrument ID: ICAP2 Date: 03/12/2020

Analyte	Wave Length	Ti	V	Zn											
Aluminum	308.215		0.296448												
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Boron	208.959														
Cadmium	228.802														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616	0.002076													
Copper	327.396	-0.001581													
Iron	259.940														
Lead	220.353														
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490														
Selenium	196.090														
Silicon	288.158														
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856		-0.0062377	0.000229											
Tin	189.989														
Titanium	334.904														
Vanadium	292.402	0.000388													
Zinc	206.200														

X-IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No: 480-178459-1

SDG No.:

Instrument ID: ICAP2 Date: 08/01/2019 10:00

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum	15	600	6010C
Antimony	15	10	6010C
Arsenic	15	5	6010C
Barium	15	10	6010C
Beryllium	15	25	6010C
Cadmium	15	5	6010C
Calcium	15	1000	6010C
Chromium	15	10	6010C
Cobalt	15	20	6010C
Copper	15	25	6010C
Iron	15	600	6010C
Lead	15	120	6010C
Magnesium	15	500	6010C
Manganese	15	50	6010C
Nickel	15	10	6010C
Potassium	15	600	6010C
Selenium	15	60	6010C
Silver	15	3	6010C
Sodium	15	1000	6010C
Thallium	15	20	6010C
Vanadium	15	5	6010C
Zinc	15	20	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No: 480-178459-1

SDG No.:

Instrument ID: LEEMAN4 Date: 10/09/2018 16:03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Mercury	10	20	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 480-560468/1-A	11/23/2020 11:05	560468		50	50
LCS 480-560468/2-A	11/23/2020 11:05	560468		50	50
480-178459-1	11/23/2020 11:05	560468		50	50
480-178459-2	11/23/2020 11:05	560468		50	50
480-178459-3	11/23/2020 11:05	560468		50	50
480-178459-3 MS	11/23/2020 11:05	560468		50	50
480-178459-3 MSD	11/23/2020 11:05	560468		50	50
480-178459-4	11/23/2020 11:05	560468		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 480-560510/1-A	11/23/2020 13:25	560510		30	50
LCS 480-560510/2-A	11/23/2020 13:25	560510		30	50
480-178459-1	11/23/2020 13:25	560510		30	50
480-178459-2	11/23/2020 13:25	560510		30	50
480-178459-3	11/23/2020 13:25	560510		30	50
480-178459-3 MS	11/23/2020 13:25	560510		30	50
480-178459-3 MSD	11/23/2020 13:25	560510		30	50
480-178459-4	11/23/2020 13:25	560510		30	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: ICAP2 Method: 6010C

Start Date: 11/24/2020 12:06 End Date: 11/24/2020 16:15

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ICIS 480-560898/1	1		12:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 480-560898/2			12:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 480-560898/3			12:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 480-560898/4			12:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 480-560898/5	1		12:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 480-560898/6	1		12:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICVL 480-560898/7	1		12:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 480-560898/8	1		12:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 480-560898/9	1		12:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:39																				
ZZZZZZ			12:43																				
ZZZZZZ			12:47																				
ZZZZZZ			12:51																				
ZZZZZZ			12:55																				
CCV 480-560898/15	1		12:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 480-560898/16	1		13:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCVL 480-560898/17	1		13:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 480-560468/1-A	1	T	13:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 480-560468/2-A	1	T	13:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-178459-1	1	T	13:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-178459-2	1	T	13:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-178459-3	1	T	13:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-178459-3 SD	5	T	13:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-178459-3 PDS	1	T	13:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-178459-3 MS	1	T	13:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 480-560898/26	1		13:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 480-560898/27	1		13:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCVL 480-560898/28	1		14:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-178459-3 MSD	1	T	14:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-178459-4	1	T	14:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			14:11																				
ZZZZZZ			14:15																				
ZZZZZZ			14:19																				
ZZZZZZ			14:22																				
ZZZZZZ			14:26																				
ZZZZZZ			14:30																				
ZZZZZZ			14:34																				
CCV 480-560898/38	1		14:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 480-560898/39	1		14:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCVL 480-560898/40	1		14:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			14:49																				
ZZZZZZ			14:52																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: ICAP2 Method: 6010C

Start Date: 11/24/2020 12:06 End Date: 11/24/2020 16:15

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			14:56																					
ZZZZZZ			15:00																					
ZZZZZZ			15:04																					
ZZZZZZ			15:07																					
ZZZZZZ			15:11																					
ZZZZZZ			15:15																					
ZZZZZZ			15:19																					
CCV 480-560898/50			15:23																					
CCB 480-560898/51			15:26																					
CCVL 480-560898/52			15:30																					
ZZZZZZ			15:34																					
ZZZZZZ			15:37																					
ZZZZZZ			15:41																					
ZZZZZZ			15:45																					
ZZZZZZ			15:49																					
ZZZZZZ			15:52																					
ZZZZZZ			15:56																					
CCV 480-560898/60			16:08																					
CCB 480-560898/61			16:11																					
CCVL 480-560898/62			16:15																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: ICAP2 Method: 6010C

Start Date: 11/24/2020 12:06 End Date: 11/24/2020 16:15

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
ICIS 480-560898/1	1		12:06	X	X																		
IC 480-560898/2			12:10	X	X																		
IC 480-560898/3			12:14	X	X																		
IC 480-560898/4			12:17	X	X																		
ICV 480-560898/5	1		12:21	X	X																		
ICB 480-560898/6	1		12:24	X	X																		
ICVL 480-560898/7	1		12:28	X	X																		
ICSA 480-560898/8	1		12:32	X	X																		
ICSAB 480-560898/9	1		12:36	X	X																		
ZZZZZZ			12:39																				
ZZZZZZ			12:43																				
ZZZZZZ			12:47																				
ZZZZZZ			12:51																				
ZZZZZZ			12:55																				
CCV 480-560898/15	1		12:58	X	X																		
CCB 480-560898/16	1		13:02	X	X																		
CCVL 480-560898/17	1		13:16	X	X																		
MB 480-560468/1-A	1	T	13:24	X	X																		
LCS 480-560468/2-A	1	T	13:27	X	X																		
480-178459-1	1	T	13:31	X	X																		
480-178459-2	1	T	13:35	X	X																		
480-178459-3	1	T	13:38	X	X																		
480-178459-3 SD	5	T	13:42	X	X																		
480-178459-3 PDS	1	T	13:46	X	X																		
480-178459-3 MS	1	T	13:49	X	X																		
CCV 480-560898/26	1		13:53	X	X																		
CCB 480-560898/27	1		13:56	X	X																		
CCVL 480-560898/28	1		14:00	X	X																		
480-178459-3 MSD	1	T	14:04	X	X																		
480-178459-4	1	T	14:08	X	X																		
ZZZZZZ			14:11																				
ZZZZZZ			14:15																				
ZZZZZZ			14:19																				
ZZZZZZ			14:22																				
ZZZZZZ			14:26																				
ZZZZZZ			14:30																				
ZZZZZZ			14:34																				
CCV 480-560898/38	1		14:37	X	X																		
CCB 480-560898/39	1		14:41	X	X																		
CCVL 480-560898/40	1		14:45	X	X																		
ZZZZZZ			14:49																				
ZZZZZZ			14:52																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: ICAP2 Method: 6010C

Start Date: 11/24/2020 12:06 End Date: 11/24/2020 16:15

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			14:56																				
ZZZZZZ			15:00																				
ZZZZZZ			15:04																				
ZZZZZZ			15:07																				
ZZZZZZ			15:11																				
ZZZZZZ			15:15																				
ZZZZZZ			15:19																				
CCV 480-560898/50			15:23																				
CCB 480-560898/51			15:26																				
CCVL 480-560898/52			15:30																				
ZZZZZZ			15:34																				
ZZZZZZ			15:37																				
ZZZZZZ			15:41																				
ZZZZZZ			15:45																				
ZZZZZZ			15:49																				
ZZZZZZ			15:52																				
ZZZZZZ			15:56																				
CCV 480-560898/60			16:08																				
CCB 480-560898/61			16:11																				
CCVL 480-560898/62			16:15																				

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: LEEMAN4 Method: 7470A

Start Date: 11/23/2020 16:04 End Date: 11/23/2020 20:04

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
IC 480-560592/1-A			16:04	X																			
IC 480-560592/2-A			16:05	X																			
IC 480-560592/3-A			16:07	X																			
IC 480-560592/4-A			16:09	X																			
IC 480-560592/5-A			16:10	X																			
IC 480-560592/6-A			16:12	X																			
ICV 480-560597/7	1		16:13	X																			
ICB 480-560597/8	1		16:15	X																			
ICVL 480-560597/9	1		16:16	X																			
CCV 480-560597/10	1		16:18	X																			
CCB 480-560597/11	1		16:19	X																			
MB 480-560510/1-A	1	T	16:21	X																			
LCS 480-560510/2-A	1	T	16:22	X																			
ZZZZZZ			16:24																				
ZZZZZZ			16:25																				
ZZZZZZ			16:27																				
ZZZZZZ			16:29																				
ZZZZZZ			16:30																				
480-178459-1	1	T	16:32	X																			
480-178459-2	1	T	16:33	X																			
480-178459-3	1	T	16:35	X																			
CCV 480-560597/22	1		16:36	X																			
CCB 480-560597/23	1		16:38	X																			
480-178459-3 SD	5	T	16:39	X																			
480-178459-3 MS	1	T	16:41	X																			
480-178459-3 MSD	1	T	16:42	X																			
480-178459-4	1	T	16:44	X																			
ZZZZZZ			16:45																				
ZZZZZZ			16:47																				
ZZZZZZ			16:49																				
ZZZZZZ			16:50																				
ZZZZZZ			16:52																				
ZZZZZZ			16:53																				
CCV 480-560597/34	1		16:55	X																			
CCB 480-560597/35	1		16:56	X																			
ZZZZZZ			16:58																				
ZZZZZZ			16:59																				
ZZZZZZ			17:01																				
ZZZZZZ			17:02																				
ZZZZZZ			17:04																				
ZZZZZZ			17:05																				
ZZZZZZ			17:07																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: LEEMAN4 Method: 7470A

Start Date: 11/23/2020 16:04 End Date: 11/23/2020 20:04

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			17:08																				
ZZZZZZ			17:10																				
ZZZZZZ			17:12																				
CCV 480-560597/46			17:13																				
CCB 480-560597/47			17:15																				
ZZZZZZ			17:16																				
ZZZZZZ			17:18																				
ZZZZZZ			17:19																				
ZZZZZZ			17:21																				
ZZZZZZ			17:22																				
ZZZZZZ			17:24																				
ZZZZZZ			17:25																				
ZZZZZZ			17:27																				
ZZZZZZ			17:28																				
ZZZZZZ			17:30																				
CCV 480-560597/58			17:32																				
CCB 480-560597/59			17:33																				
ZZZZZZ			17:35																				
ZZZZZZ			17:36																				
ZZZZZZ			17:38																				
ZZZZZZ			17:39																				
ZZZZZZ			17:41																				
ZZZZZZ			17:42																				
ZZZZZZ			17:44																				
ZZZZZZ			17:45																				
ZZZZZZ			17:47																				
ZZZZZZ			17:48																				
CCV 480-560597/70			17:50																				
CCB 480-560597/71			17:52																				
ZZZZZZ			17:53																				
ZZZZZZ			17:55																				
ZZZZZZ			17:56																				
ZZZZZZ			17:58																				
ZZZZZZ			17:59																				
ZZZZZZ			18:01																				
ZZZZZZ			18:02																				
ZZZZZZ			18:04																				
ZZZZZZ			18:05																				
ZZZZZZ			18:07																				
CCV 480-560597/82			18:09																				
CCB 480-560597/83			18:10																				
ZZZZZZ			18:12																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: LEEMAN4 Method: 7470A

Start Date: 11/23/2020 16:04 End Date: 11/23/2020 20:04

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			18:13																				
ZZZZZZ			18:15																				
ZZZZZZ			18:16																				
ZZZZZZ			18:18																				
ZZZZZZ			18:19																				
ZZZZZZ			18:21																				
ZZZZZZ			18:22																				
ZZZZZZ			18:24																				
ZZZZZZ			18:25																				
CCV 480-560597/94			18:27																				
CCB 480-560597/95			18:29																				
ZZZZZZ			18:30																				
ZZZZZZ			18:32																				
ZZZZZZ			18:33																				
ZZZZZZ			18:35																				
ZZZZZZ			18:36																				
CCV 480-560597/101			18:38																				
CCB 480-560597/102			18:39																				
CCVL 480-560597/103	1		18:41	X																			
ZZZZZZ			18:42																				
ZZZZZZ			18:44																				
ZZZZZZ			18:46																				
ZZZZZZ			18:47																				
ZZZZZZ			18:49																				
ZZZZZZ			18:50																				
ZZZZZZ			18:52																				
ZZZZZZ			18:53																				
ZZZZZZ			18:55																				
ZZZZZZ			18:56																				
CCV 480-560597/114			18:58																				
CCB 480-560597/115			18:59																				
ZZZZZZ			19:01																				
ZZZZZZ			19:02																				
ZZZZZZ			19:04																				
ZZZZZZ			19:06																				
ZZZZZZ			19:07																				
ZZZZZZ			19:09																				
ZZZZZZ			19:10																				
ZZZZZZ			19:12																				
ZZZZZZ			19:13																				
ZZZZZZ			19:15																				
CCV 480-560597/126			19:16																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Instrument ID: LEEMAN4 Method: 7470A

Start Date: 11/23/2020 16:04 End Date: 11/23/2020 20:04

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
CCB 480-560597/127			19:18																				
ZZZZZZ			19:19																				
ZZZZZZ			19:21																				
ZZZZZZ			19:23																				
ZZZZZZ			19:24																				
ZZZZZZ			19:26																				
ZZZZZZ			19:27																				
ZZZZZZ			19:29																				
ZZZZZZ			19:30																				
ZZZZZZ			19:32																				
ZZZZZZ			19:33																				
CCV 480-560597/138			19:35																				
CCB 480-560597/139			19:36																				
ZZZZZZ			19:38																				
ZZZZZZ			19:40																				
ZZZZZZ			19:41																				
ZZZZZZ			19:43																				
ZZZZZZ			19:44																				
ZZZZZZ			19:46																				
ZZZZZZ			19:47																				
ZZZZZZ			19:49																				
ZZZZZZ			19:50																				
ZZZZZZ			19:52																				
CCV 480-560597/150			19:53																				
CCB 480-560597/151			19:55																				
ZZZZZZ			19:57																				
ZZZZZZ			19:58																				
ZZZZZZ			20:00																				
CCV 480-560597/155			20:01																				
CCB 480-560597/156			20:03																				
CCVL 480-560597/157			20:04																				

Prep Types
T = Total/NA

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.: Analysis Batch No.: 560898

ICP Instrument ID: ICAP2 Start Date: 11/24/2020 End Date: 11/24/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element In 230.606	Q	Element Y 224.306	Q	Element Y 360.073	Q	Element Y 377.433	Q	Element	Q
ICIS 480-560898/1	12:06										
ICV 480-560898/5	12:21	86		96		94		100			
ICB 480-560898/6	12:24	100		100		100		101			
ICVL 480-560898/7	12:28	99		100		100		102			
ICSA 480-560898/8	12:32	73		87		85		98			
ICSAB 480-560898/9	12:36	71		86		84		97			
CCV 480-560898/15	12:58	85		95		94		99			
CCB 480-560898/16	13:02	100		99		100		100			
CCVL 480-560898/17	13:16	98		99		100		101			
MB 480-560468/1-A	13:24	102		101		102		103			
LCS 480-560468/2-A	13:27	94		99		99		101			
480-178459-1	13:31	90		96		96		101			
480-178459-2	13:35	89		95		95		101			
480-178459-3	13:38	89		95		95		101			
480-178459-3 SD	13:42	96		98		98		102			
480-178459-3 PDS	13:46	87		95		95		101			
480-178459-3 MS	13:49	87		95		95		101			
CCV 480-560898/26	13:53	85		96		94		101			
CCB 480-560898/27	13:56	100		99		100		101			
CCVL 480-560898/28	14:00	99		99		99		100			
480-178459-3 MSD	14:04	87		95		95		100			
480-178459-4	14:08	89		95		95		101			
CCV 480-560898/38	14:37	85		95		94		100			
CCB 480-560898/39	14:41	100		100		100		100			
CCVL 480-560898/40	14:45	98		99		99		100			

Run File: I2112420A Instrument: ICAP2

Analyst: ADM Data Review: UMH 11/25/2020

Spikes Ids:6092437(W1), 6090031(W2),6078057(Sn), 6142258(Ag), 6038315(Si), 5817361(TCLP), 6038300(S)
Pipette IDs: 11/17/20-(1-11)
Internal Standard:6242449

Seq#	Run File ID	Sample ID	Date / Time	Type
1	I2112420A	ICIS-6254294	11/24/2020 12:06:32PM	Standard
2	I2112420A	IC-6256824	11/24/2020 12:10:18PM	Standard
3	I2112420A	IC-6249977	11/24/2020 12:14:03PM	Standard
4	I2112420A	IC-6239131	11/24/2020 12:17:36PM	Standard
5	I2112420A	ICV-6232148	11/24/2020 12:21:09PM	QC
6	I2112420A	ICB-6254294	11/24/2020 12:24:43PM	QC
7	I2112420A	ICVL-6256824	11/24/2020 12:28:29PM	QC
8	I2112420A	ICSA-6255359	11/24/2020 12:32:15PM	QC
9	I2112420A	ICSAB-6213230	11/24/2020 12:36:03PM	QC
10	I2112420A	ICEX1	11/24/2020 12:39:46PM	Unknown
11	I2112420A	ICEX2	11/24/2020 12:43:41PM	Unknown
12	I2112420A	ICEX3	11/24/2020 12:47:29PM	Unknown
13	I2112420A	ICEX4	11/24/2020 12:51:25PM	Unknown
14	I2112420A	ICEX5	11/24/2020 12:55:08PM	Unknown
15	I2112420A	CCV-6249977	11/24/2020 12:58:55PM	QC
16	I2112420A	CCB-6254294	11/24/2020 1:02:28PM	QC
17	I2112420A	CCVL-6256824	11/24/2020 1:16:33PM	QC
18	I2112420A	Sn spike	11/24/2020 1:20:19PM	Unknown
19	I2112420A	MB 480-560468/1-A	11/24/2020 1:24:04PM	Unknown
20	I2112420A	LCS 480-560468/2-A	11/24/2020 1:27:52PM	Unknown
21	I2112420A	480-178459-C-1-A	11/24/2020 1:31:26PM	Unknown
22	I2112420A	480-178459-C-2-A	11/24/2020 1:35:06PM	Unknown
23	I2112420A	480-178459-C-3-A	11/24/2020 1:38:48PM	Unknown
24	I2112420A	480-178459-C-3-ASD@5	11/24/2020 1:42:30PM	Unknown
25	I2112420A	480-178459-C-3-APDS	11/24/2020 1:46:14PM	Unknown
26	I2112420A	480-178459-C-3-B MS	11/24/2020 1:49:47PM	Unknown
27	I2112420A	CCV-6249977	11/24/2020 1:53:23PM	QC
28	I2112420A	CCB-6254294	11/24/2020 1:56:55PM	QC
29	I2112420A	CCVL-6256824	11/24/2020 2:00:43PM	QC
30	I2112420A	480-178459-C-3-C MSD	11/24/2020 2:04:27PM	Unknown
31	I2112420A	480-178459-C-4-A	11/24/2020 2:08:00PM	Unknown
32	I2112420A	480-178105-A-1-A	11/24/2020 2:11:41PM	Unknown
33	I2112420A	480-178105-A-2-A	11/24/2020 2:15:26PM	Unknown
34	I2112420A	480-178105-A-3-A	11/24/2020 2:19:11PM	Unknown
35	I2112420A	480-178105-A-4-A	11/24/2020 2:22:56PM	Unknown
36	I2112420A	480-178105-A-5-A	11/24/2020 2:26:42PM	Unknown
37	I2112420A	480-178105-A-6-A	11/24/2020 2:30:27PM	Unknown
38	I2112420A	480-178105-A-7-A	11/24/2020 2:34:13PM	Unknown
39	I2112420A	CCV-6249977	11/24/2020 2:37:59PM	QC
40	I2112420A	CCB-6254294	11/24/2020 2:41:30PM	QC
41	I2112420A	CCVL-6256824	11/24/2020 2:45:19PM	QC
42	I2112420A	480-178152-D-1-A	11/24/2020 2:49:05PM	Unknown

43	I2112420A	480-178440-D-9-B	11/24/2020	2:52:58PM	Unknown
44	I2112420A	480-178440-D-10-B	11/24/2020	2:56:44PM	Unknown
45	I2112420A	480-178440-D-11-B	11/24/2020	3:00:26PM	Unknown
46	I2112420A	480-178334-C-1-A	11/24/2020	3:04:13PM	Unknown
47	I2112420A	480-178390-D-1-A	11/24/2020	3:07:57PM	Unknown
48	I2112420A	480-178313-K-1-A	11/24/2020	3:11:36PM	Unknown
49	I2112420A	480-177307-C-12-A	11/24/2020	3:15:34PM	Unknown
50	I2112420A	480-177307-C-13-A	11/24/2020	3:19:21PM	Unknown
51	I2112420A	CCV-6249977	11/24/2020	3:23:05PM	QC
52	I2112420A	CCB-6254294	11/24/2020	3:26:38PM	QC
53	I2112420A	CCVL-6256824	11/24/2020	3:30:25PM	QC
54	I2112420A	480-178105-A-1-A@5	11/24/2020	3:34:10PM	Unknown
55	I2112420A	480-178105-A-2-A@5	11/24/2020	3:37:56PM	Unknown
56	I2112420A	480-178105-A-3-A@5	11/24/2020	3:41:41PM	Unknown
57	I2112420A	480-178105-A-4-A@5	11/24/2020	3:45:26PM	Unknown
58	I2112420A	480-178105-A-5-A@5	11/24/2020	3:49:12PM	Unknown
59	I2112420A	480-178105-A-6-A@5	11/24/2020	3:52:57PM	Unknown
60	I2112420A	480-178105-A-7-A@5	11/24/2020	3:56:43PM	Unknown
61	I2112420A	480-178137-B-2-A@5	11/24/2020	4:00:28PM	Unknown
62	I2112420A	480-178137-B-3-A@5	11/24/2020	4:04:16PM	Unknown
63	I2112420A	CCV-6249977	11/24/2020	4:08:05PM	QC
64	I2112420A	CCB-6254294	11/24/2020	4:11:38PM	QC
65	I2112420A	CCVL-6256824	11/24/2020	4:15:26PM	QC
66	I2112420A	480-178137-B-4-A@5	11/24/2020	4:19:11PM	Unknown
67	I2112420A	rinse	11/24/2020	4:22:58PM	Unknown
68	I2112420A	MB 480-560066/1-A	11/24/2020	4:26:45PM	Unknown
69	I2112420A	LCS 480-560066/2-A	11/24/2020	4:30:31PM	Unknown
70	I2112420A	480-178192-C-1-A	11/24/2020	4:34:06PM	Unknown
71	I2112420A	480-178192-C-2-A	11/24/2020	4:37:52PM	Unknown
72	I2112420A	480-178192-C-2-ASD@5	11/24/2020	4:41:38PM	Unknown
73	I2112420A	480-178192-C-2-APDS	11/24/2020	4:45:20PM	Unknown
74	I2112420A	480-178192-C-2-B MS	11/24/2020	4:49:05PM	Unknown
75	I2112420A	CCV-6249977	11/24/2020	4:52:53PM	QC
76	I2112420A	CCB-6254294	11/24/2020	4:56:25PM	QC
77	I2112420A	CCVL-6256824	11/24/2020	5:00:14PM	QC
78	I2112420A	480-178192-C-2-C MSD	11/24/2020	5:03:59PM	Unknown
79	I2112420A	480-178192-C-3-A	11/24/2020	5:07:45PM	Unknown
80	I2112420A	480-178192-C-4-A	11/24/2020	5:11:28PM	Unknown
81	I2112420A	480-178192-C-5-A	11/24/2020	5:15:20PM	Unknown
82	I2112420A	480-178192-C-6-A	11/24/2020	5:19:04PM	Unknown
83	I2112420A	480-178460-A-13-A	11/24/2020	5:22:46PM	Unknown
84	I2112420A	480-178418-F-4-A	11/24/2020	5:26:31PM	Unknown
85	I2112420A	MB 480-560261/1-A	11/24/2020	5:30:15PM	Unknown
86	I2112420A	LCS 480-560261/2-A	11/24/2020	5:34:01PM	Unknown
87	I2112420A	CCV-6249977	11/24/2020	5:37:40PM	QC
88	I2112420A	CCB-6254294	11/24/2020	5:41:13PM	QC
89	I2112420A	CCVL-6256824	11/24/2020	5:45:03PM	QC
90	I2112420A	480-178291-H-1-A	11/24/2020	5:48:48PM	Unknown
91	I2112420A	480-178291-H-2-A	11/24/2020	5:52:34PM	Unknown
92	I2112420A	480-178291-H-3-A	11/24/2020	5:56:14PM	Unknown
93	I2112420A	480-178291-H-3-ASD@5	11/24/2020	5:59:57PM	Unknown
94	I2112420A	480-178291-H-3-APDS	11/24/2020	6:03:41PM	Unknown

95	I2112420A	480-178291-H-3-B MS	11/24/2020	6:07:14PM	Unknown
96	I2112420A	480-178291-H-3-C MSD	11/24/2020	6:10:49PM	Unknown
97	I2112420A	480-178299-J-1-A	11/24/2020	6:14:23PM	Unknown
98	I2112420A	480-178299-J-2-A	11/24/2020	6:18:03PM	Unknown
99	I2112420A	CCV-6249977	11/24/2020	6:21:54PM	QC
100	I2112420A	CCB-6254294	11/24/2020	6:25:26PM	QC
101	I2112420A	CCVL-6256824	11/24/2020	6:29:16PM	QC
102	I2112420A	480-178299-J-3-A	11/24/2020	6:33:01PM	Unknown
103	I2112420A	480-178300-J-1-A	11/24/2020	6:36:47PM	Unknown
104	I2112420A	480-178300-J-2-A	11/24/2020	6:40:42PM	Unknown
105	I2112420A	480-178303-C-1-A	11/24/2020	6:44:37PM	Unknown
106	I2112420A	480-178303-A-2-A	11/24/2020	6:48:15PM	Unknown
107	I2112420A	rinse	11/24/2020	6:52:17PM	Unknown
108	I2112420A	rinse	11/24/2020	6:56:03PM	Unknown
109	I2112420A	480-178303-A-4-A	11/24/2020	6:59:49PM	Unknown
110	I2112420A	480-178303-C-5-A	11/24/2020	7:03:34PM	Unknown
111	I2112420A	CCV-6249977	11/24/2020	7:07:18PM	QC
112	I2112420A	CCB-6254294	11/24/2020	7:10:50PM	QC
113	I2112420A	CCVL-6256824	11/24/2020	7:14:39PM	QC
114	I2112420A	480-178303-A-7-A	11/24/2020	7:18:25PM	Unknown
115	I2112420A	480-178303-A-9-A	11/24/2020	7:22:06PM	Unknown
116	I2112420A	480-178303-C-11-A	11/24/2020	7:25:45PM	Unknown
117	I2112420A	480-178303-C-13-A	11/24/2020	7:29:26PM	Unknown
118	I2112420A	480-178317-E-1-A	11/24/2020	7:33:06PM	Unknown
119	I2112420A	480-178317-E-2-A	11/24/2020	7:36:51PM	Unknown
120	I2112420A	480-178317-E-3-A	11/24/2020	7:40:35PM	Unknown
121	I2112420A	480-178317-E-4-A	11/24/2020	7:44:21PM	Unknown
122	I2112420A	MB 480-560496/1-A	11/24/2020	7:48:02PM	Unknown
123	I2112420A	CCV-6249977	11/24/2020	7:51:52PM	QC
124	I2112420A	CCB-6254294	11/24/2020	7:55:24PM	QC
125	I2112420A	CCVL-6256824	11/24/2020	7:59:13PM	QC
126	I2112420A	LCS 480-560496/2-A	11/24/2020	8:02:58PM	Unknown
127	I2112420A	480-178318-D-1-A	11/24/2020	8:06:32PM	Unknown
128	I2112420A	480-178318-D-3-A	11/24/2020	8:10:13PM	Unknown
129	I2112420A	480-178318-D-3-ASD@5	11/24/2020	8:13:52PM	Unknown
130	I2112420A	480-178318-D-3-APDS	11/24/2020	8:17:35PM	Unknown
131	I2112420A	480-178318-D-3-B MS	11/24/2020	8:21:09PM	Unknown
132	I2112420A	480-178318-D-3-C MSD	11/24/2020	8:24:43PM	Unknown
133	I2112420A	480-178335-A-1-A	11/24/2020	8:28:16PM	Unknown
134	I2112420A	480-178367-D-1-A	11/24/2020	8:32:00PM	Unknown
135	I2112420A	CCV-6249977	11/24/2020	8:35:48PM	QC
136	I2112420A	CCB-6254294	11/24/2020	8:39:20PM	QC
137	I2112420A	CCVL-6256824	11/24/2020	8:43:08PM	QC
138	I2112420A	480-178376-A-2-A	11/24/2020	8:46:54PM	Unknown
139	I2112420A	480-178376-A-2-B MS	11/24/2020	8:50:36PM	Unknown
140	I2112420A	480-178376-A-2-C MSD	11/24/2020	8:54:09PM	Unknown
141	I2112420A	480-178377-C-1-A	11/24/2020	8:57:43PM	Unknown
142	I2112420A	480-178390-D-1-B	11/24/2020	9:01:22PM	Unknown
143	I2112420A	480-178395-A-3-A	11/24/2020	9:05:03PM	Unknown
144	I2112420A	480-178395-A-4-A	11/24/2020	9:08:44PM	Unknown
145	I2112420A	480-178434-D-1-A	11/24/2020	9:12:25PM	Unknown
146	I2112420A	480-178436-B-1-A	11/24/2020	9:16:09PM	Unknown

147	I2112420A	CCV-6249977	11/24/2020	9:19:50PM	QC
148	I2112420A	CCB-6254294	11/24/2020	9:23:21PM	QC
149	I2112420A	CCVL-6256824	11/24/2020	9:27:08PM	QC
150	I2112420A	480-178436-B-2-A	11/24/2020	9:30:53PM	Unknown
151	I2112420A	480-178457-J-1-A	11/24/2020	9:34:34PM	Unknown
152	I2112420A	480-178466-K-1-A	11/24/2020	9:38:16PM	Unknown
153	I2112420A	480-178500-E-1-A@10	11/24/2020	9:42:03PM	Unknown
154	I2112420A	480-178392-D-1-A	11/24/2020	9:45:53PM	Unknown
155	I2112420A	480-178319-B-1-A	11/24/2020	9:49:37PM	Unknown
156	I2112420A	480-178319-B-2-A	11/24/2020	9:53:18PM	Unknown
157	I2112420A	MB 480-560632/1-A	11/24/2020	9:57:00PM	Unknown
158	I2112420A	LCS 480-560632/2-A	11/24/2020	10:00:47PM	Unknown
159	I2112420A	CCV-6249977	11/24/2020	10:04:25PM	QC
160	I2112420A	CCB-6254294	11/24/2020	10:07:57PM	QC
161	I2112420A	CCVL-6256824	11/24/2020	10:11:48PM	QC
162	I2112420A	480-178415-H-1-A	11/24/2020	10:15:34PM	Unknown
163	I2112420A	480-178415-H-1-ASD@5	11/24/2020	10:19:19PM	Unknown
164	I2112420A	480-178415-H-1-APDS	11/24/2020	10:23:01PM	Unknown
165	I2112420A	480-178415-H-1-B MS	11/24/2020	10:26:45PM	Unknown
166	I2112420A	480-178415-H-1-C MSD	11/24/2020	10:30:29PM	Unknown
167	I2112420A	480-177811-D-1-A	11/24/2020	10:34:14PM	Unknown
168	I2112420A	MB 480-560498/1-A	11/24/2020	10:38:02PM	Unknown
169	I2112420A	LCS 480-560498/2-A	11/24/2020	10:41:47PM	Unknown
170	I2112420A	480-177733-M-1-B	11/24/2020	10:45:21PM	Unknown
171	I2112420A	CCV-6249977	11/24/2020	10:49:14PM	QC
172	I2112420A	CCB-6254294	11/24/2020	10:52:47PM	QC
173	I2112420A	CCVL-6256824	11/24/2020	10:56:35PM	QC
174	I2112420A	480-177739-D-1-B	11/24/2020	11:00:21PM	Unknown
175	I2112420A	480-177739-D-2-B	11/24/2020	11:04:04PM	Unknown
176	I2112420A	480-177739-D-3-B	11/24/2020	11:07:46PM	Unknown
177	I2112420A	480-177739-D-4-B	11/24/2020	11:11:45PM	Unknown
178	I2112420A	480-177739-D-5-B	11/24/2020	11:15:29PM	Unknown
179	I2112420A	480-177765-A-1-A	11/24/2020	11:19:17PM	Unknown
180	I2112420A	480-177765-A-2-A	11/24/2020	11:22:57PM	Unknown
181	I2112420A	480-177765-A-2-ASD@5	11/24/2020	11:26:38PM	Unknown
182	I2112420A	480-177765-A-2-APDS	11/24/2020	11:30:23PM	Unknown
183	I2112420A	CCV-6249977	11/24/2020	11:33:58PM	QC
184	I2112420A	CCB-6254294	11/24/2020	11:37:31PM	QC
185	I2112420A	CCVL-6256824	11/24/2020	11:41:20PM	QC
186	I2112420A	480-177765-A-2-B MS	11/24/2020	11:45:06PM	Unknown
187	I2112420A	480-177765-A-2-C MSD	11/24/2020	11:48:39PM	Unknown
188	I2112420A	CCVL-6256824	11/24/2020	11:52:14PM	QC
189	I2112420A	ICSA-6190462	11/24/2020	11:56:01PM	QC
190	I2112420A	ICSAB-6213230	11/24/2020	11:59:49PM	QC
191	I2112420A	CCV-6249977	11/25/2020	12:03:31AM	QC
192	I2112420A	CCB-6254294	11/25/2020	12:07:04AM	QC

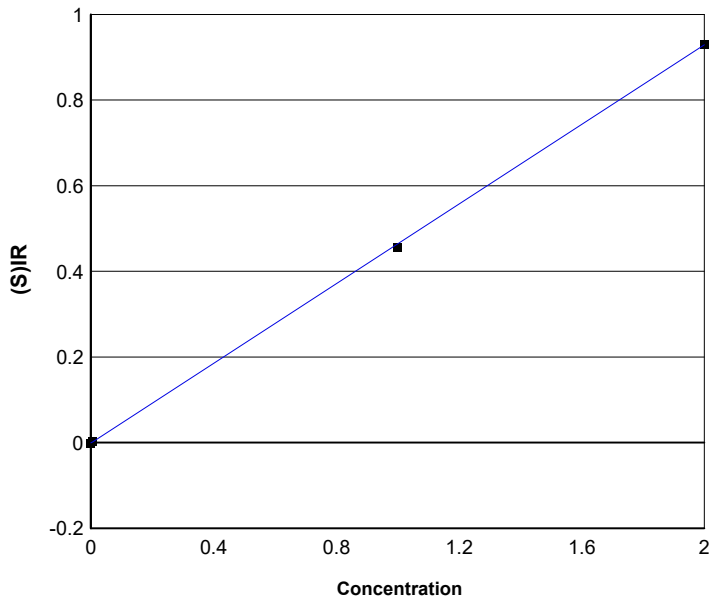
I2112420A

Author: ADM

Published: 11/25/2020 10:45:29AM

Instrument Name: 20094602a Serial Number: 20094602

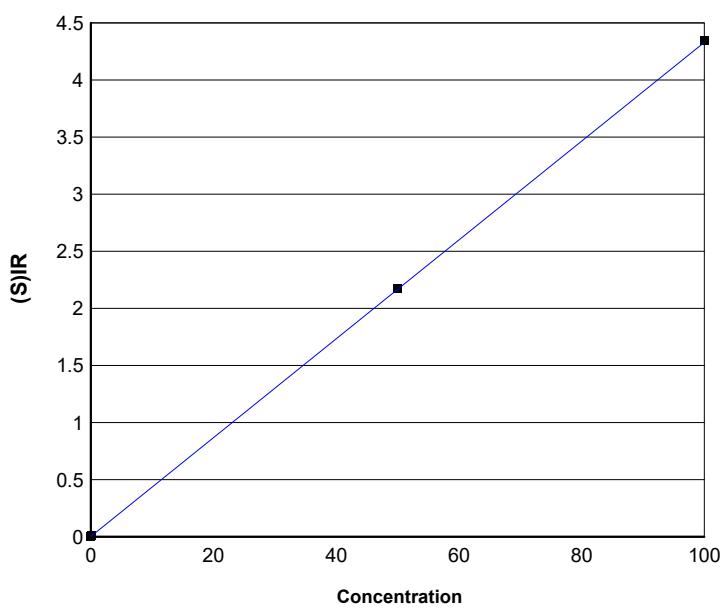
Method Name: ICAP2 New stds DEC2019 (386)



Element Name:	Ag
Element Wavelength:	Ag 328.068 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	-0.00067838
A1 (Gain):	0.46492
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

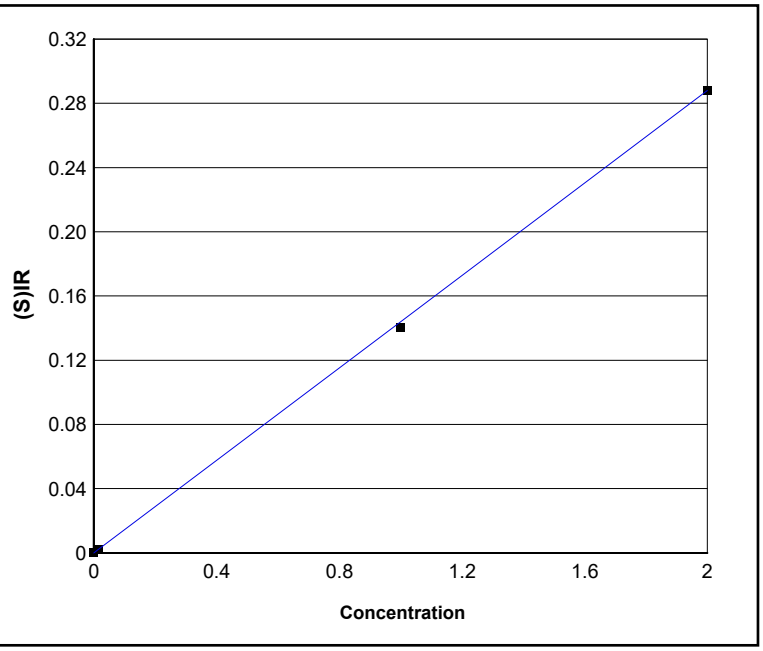
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000000034	0.0000000034	0.00000	-0.00067838	0.00023437	1
IC-6256824	0.0060000	0.0060310	0.000031040	0.51733	0.0021253	0.000041341	1
IC-6249977	1.0000	0.98857	-0.011433	-1.1433	0.45683	0.00054065	1
IC-6239131	2.0000	2.0114	0.011402	0.57008	0.93027	0.0011648	1



Element Name:	Al
Element Wavelength:	Al 308.215 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	0.0023468
A1 (Gain):	0.043279
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

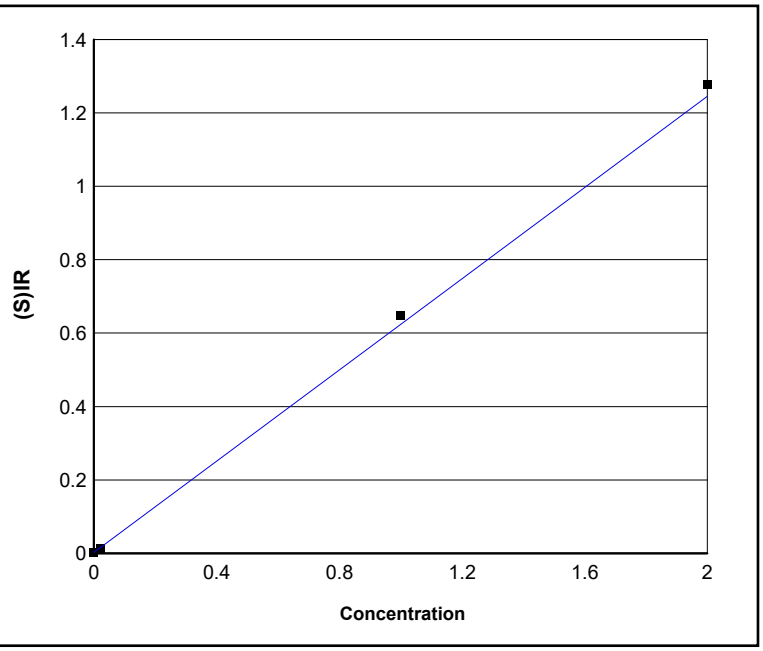
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	-0.000040244	-0.000040244	0.00000	0.0023450	0.00077916	1
IC-6256824	0.20000	0.24031	0.040309	20.155	0.012793	0.00046444	1
IC-6249977	50.000	50.008	0.0075992	0.015198	2.1758	0.00083427	1
IC-6239131	100.00	99.952	-0.047951	-0.047951	4.3465	0.018754	1



Element Name:	As
Element Wavelength:	As 189.042 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99991
A0 (Offset):	0.000025616
A1 (Gain):	0.14394
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

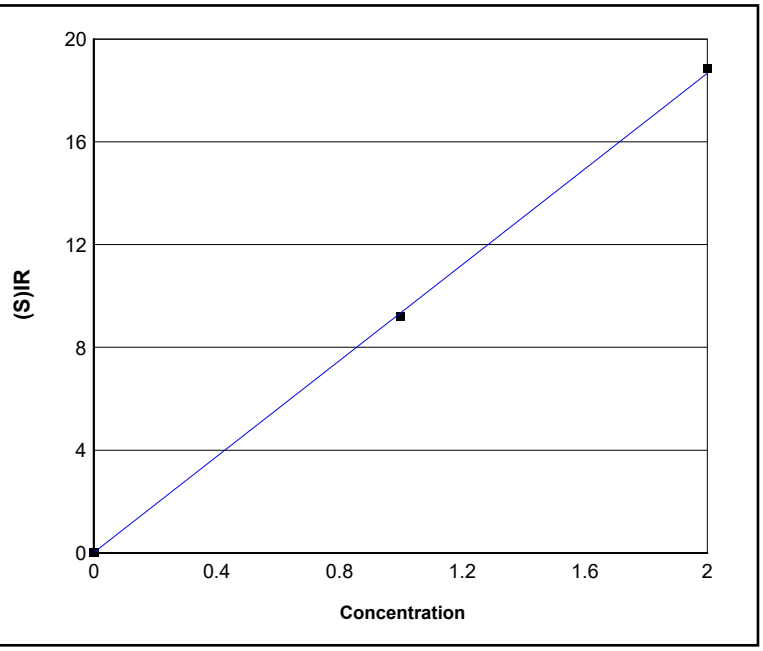
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000015223	0.0000015223	0.00000	0.000025835	0.000049543	1
IC-6256824	0.015000	0.013582	-0.0014177	-9.4515	0.0019756	0.000038499	1
IC-6249977	1.0000	0.98462	-0.015375	-1.5375	0.14053	0.000096409	1
IC-6239131	2.0000	2.0168	0.016802	0.84010	0.28787	0.00080579	1



Element Name:	B
Element Wavelength:	B 208.959 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.0024190
A1 (Gain):	0.62123
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

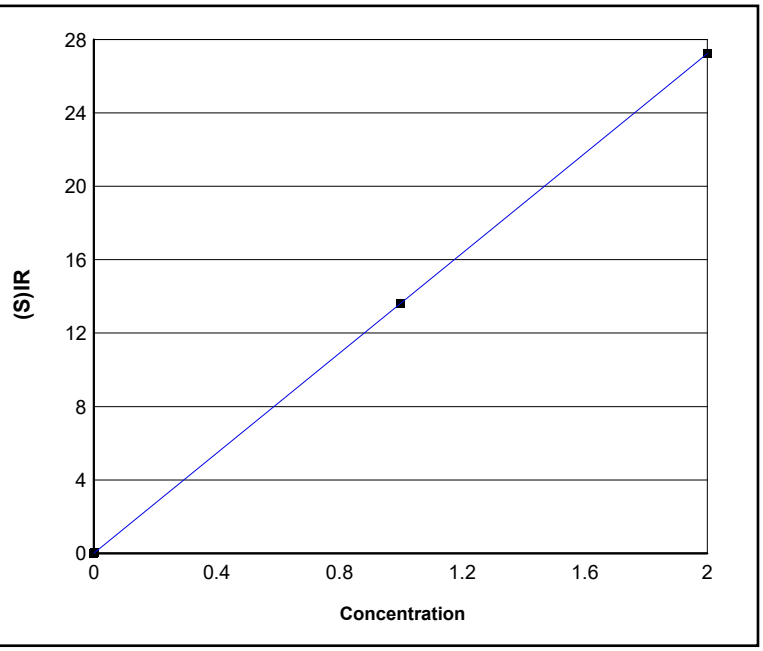
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000006195	0.0000006195	0.00000	0.0024194	0.00018685	1
IC-6256824	0.020000	0.019292	-0.00070761	-3.5380	0.014591	0.000069212	1
IC-6249977	1.0000	1.0081	0.0081161	0.81161	0.64736	0.00051145	1
IC-6239131	2.0000	1.9926	-0.0074188	-0.37094	1.2776	0.0013023	1



Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99992
A0 (Offset):	0.019922
A1 (Gain):	9.3258
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

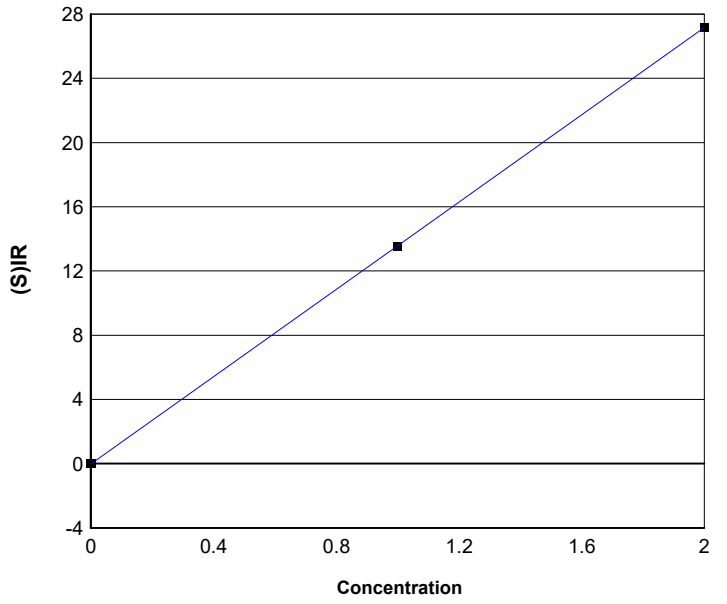
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000003558	0.0000003558	0.00000	0.019926	0.0019399	1
IC-6256824	0.0020000	0.0016609	-0.00033908	-16.954	0.035412	0.00067943	1
IC-6249977	1.0000	0.98296	-0.017039	-1.7039	9.1868	0.00091864	1
IC-6239131	2.0000	2.0174	0.017378	0.86892	18.834	0.011708	1



Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.0042855
A1 (Gain):	13.617
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

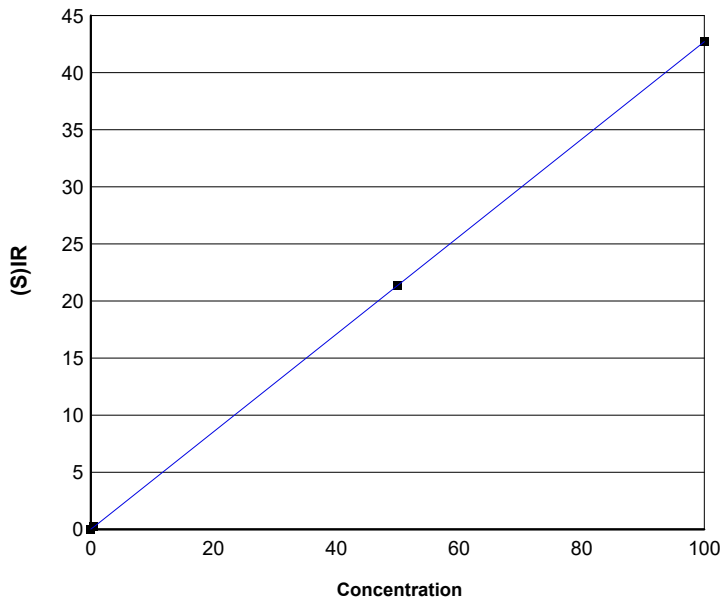
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000000492	-0.0000000492	0.00000	0.0042848	0.00029192	1
IC-6256824	0.0020000	0.0020479	0.000047914	2.3957	0.032171	0.00022504	1
IC-6249977	1.0000	1.0013	0.0012959	0.12959	13.639	0.12702	1
IC-6239131	2.0000	1.9987	-0.0013438	-0.067190	27.220	0.21190	1



Element Name:	Be
Element Wavelength:	Be 313.042 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.0086203
A1 (Gain):	13.584
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

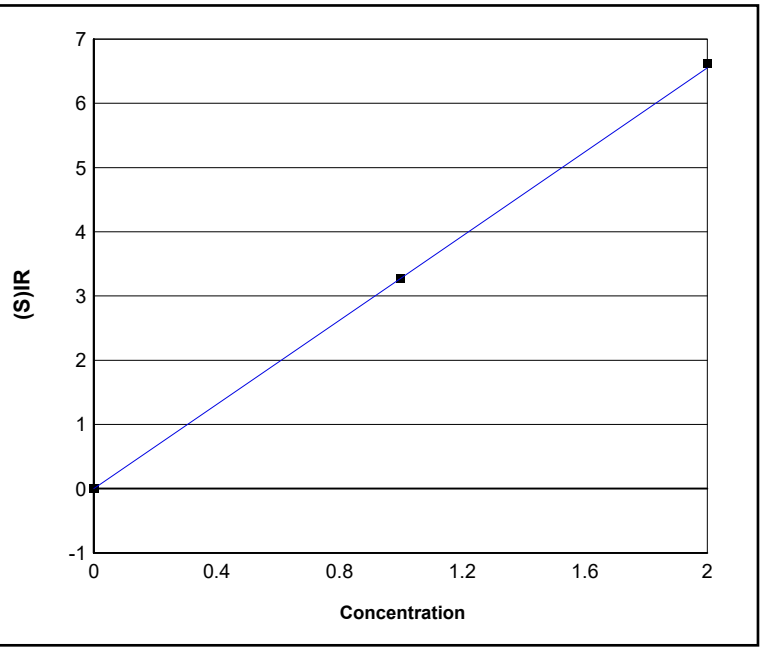
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000000096	-0.0000000096	0.00000	-0.0086204	0.00081273	1
IC-6256824	0.0020000	0.0020123	0.000012252	0.61261	0.018714	0.00020426	1
IC-6249977	1.0000	0.99732	-0.0026784	-0.26784	13.539	0.021351	1
IC-6239131	2.0000	2.0027	0.0026661	0.13331	27.195	0.079895	1



Element Name:	Ca
Element Wavelength:	Ca 317.933 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.011133
A1 (Gain):	0.42691
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

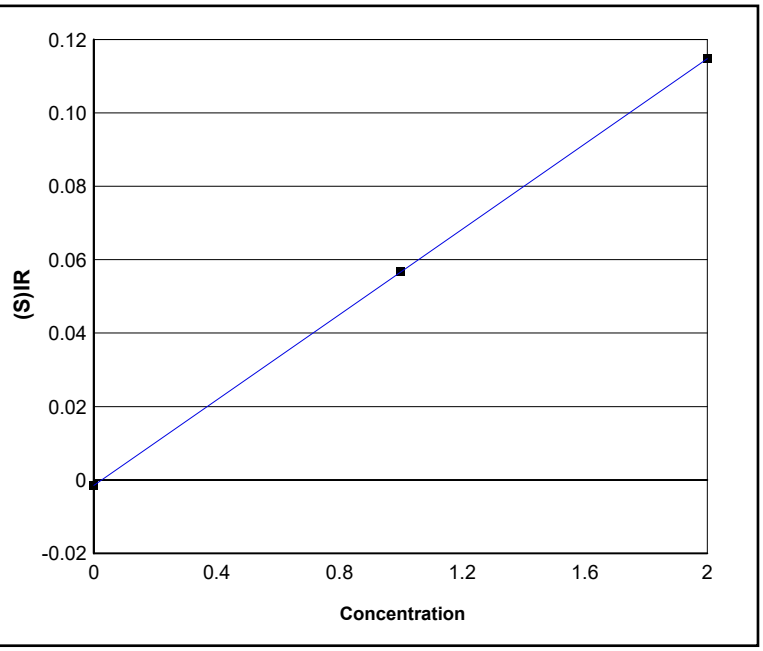
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	-0.000021883	-0.000021883	0.00000	0.011123	0.00054408	1
IC-6256824	0.50000	0.52202	0.022020	4.4039	0.23399	0.0010260	1
IC-6249977	50.000	49.995	-0.0052577	-0.010515	21.354	0.035821	1
IC-6239131	100.00	99.983	-0.016762	-0.016762	42.695	0.17576	1



Element Name:	Cd
Element Wavelength:	Cd 228.802 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.000058955
A1 (Gain):	3.2755
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

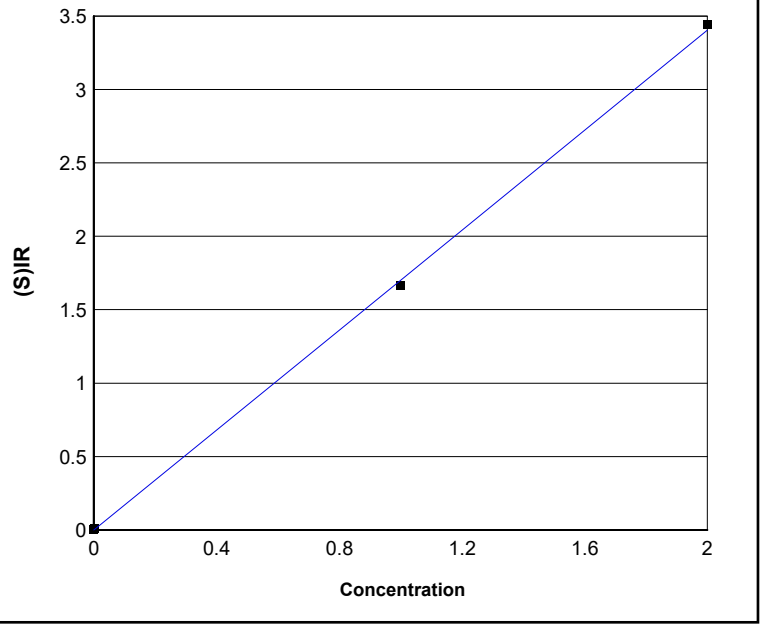
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000000752	0.0000000752	0.00000	-0.000058709	0.00023823	1
IC-6256824	0.0020000	0.0019338	-0.000066218	-3.3109	0.0066008	0.000080290	1
IC-6249977	1.0000	0.99097	-0.0090306	-0.90306	3.2684	0.0022653	1
IC-6239131	2.0000	2.0091	0.0090997	0.45498	6.6258	0.00059762	1



Element Name:	Ce
Element Wavelength:	Ce 404.076 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.0000
A0 (Offset):	-0.001494
A1 (Gain):	0.05815
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

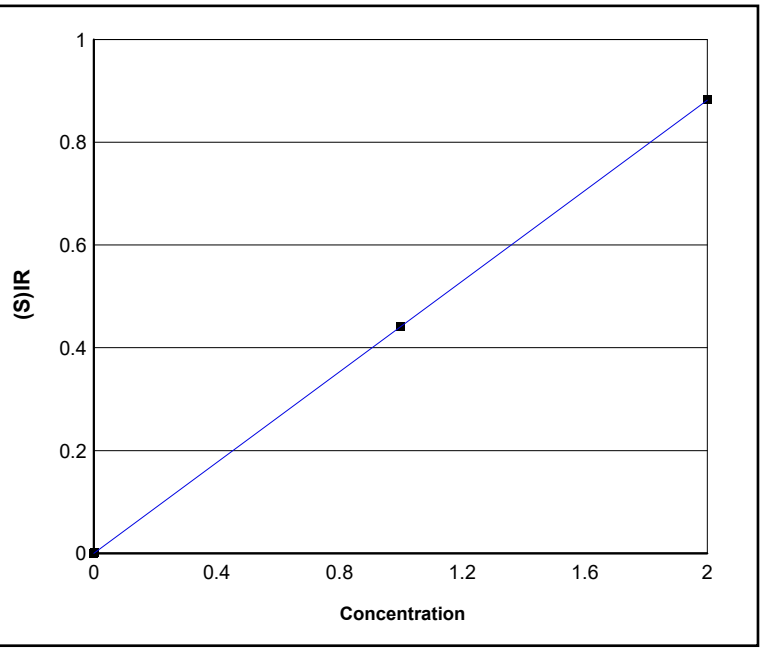
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.0000	0.0000000169	-0.0000000169	0.0000	-0.001494	0.003187	1
IC-6239131	2.000	2.000	-0.00003375	-0.001687	0.1148	0.002783	1
IC-6249977	1.000	1.000	0.00003375	0.003375	0.05666	0.0005803	1



Element Name:	Co
Element Wavelength:	Co 228.616 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99987
A0 (Offset):	0.00043236
A1 (Gain):	1.7014
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

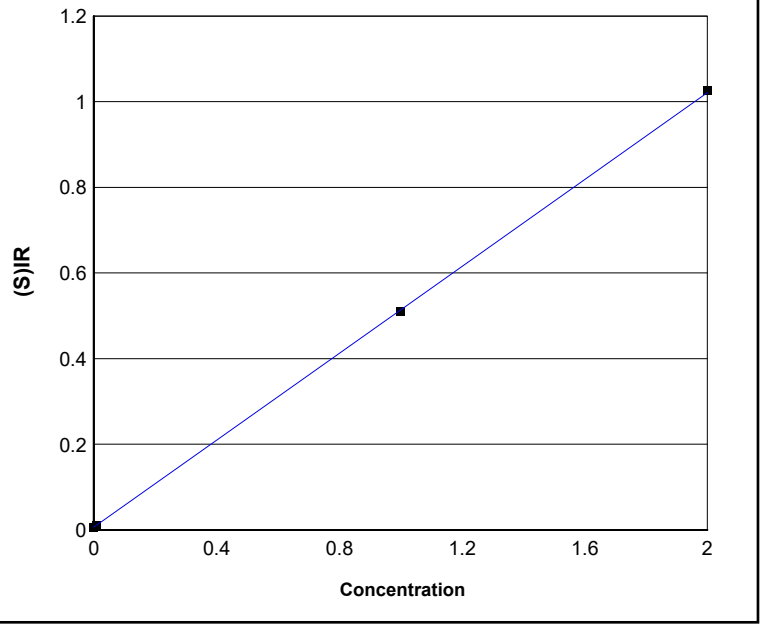
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000004779	0.0000004779	0.00000	0.00043317	0.00017521	1
IC-6256824	0.0040000	0.0035644	-0.00043565	-10.891	0.0064945	0.000060784	1
IC-6249977	1.0000	0.97842	-0.021578	-2.1578	1.6663	0.000053482	1
IC-6239131	2.0000	2.0220	0.022013	1.1006	3.4430	0.00062342	1



Element Name:	Cr
Element Wavelength:	Cr 267.716 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.00011182
A1 (Gain):	0.44106
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

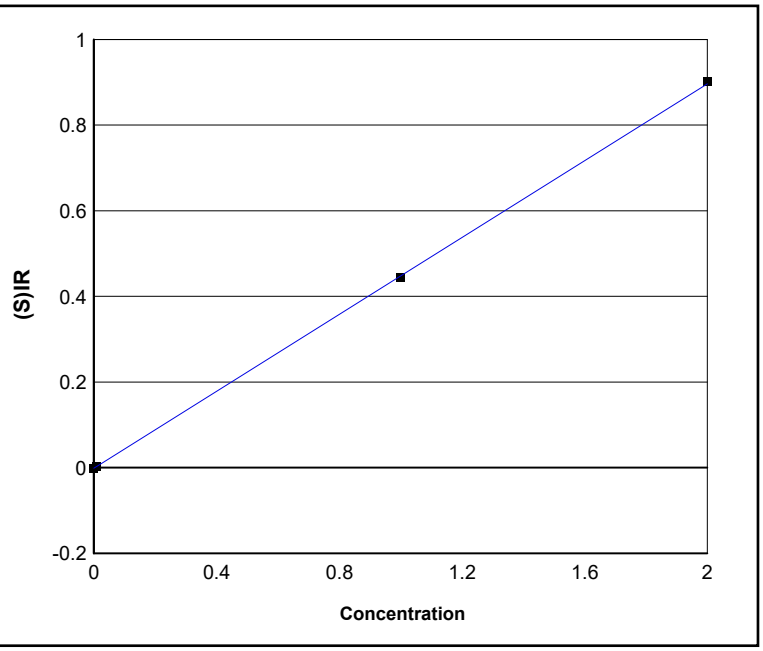
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000000965	-0.0000000965	0.00000	0.00011178	0.0000048573	1
IC-6256824	0.0040000	0.0040997	0.000099689	2.4922	0.0019206	0.000025425	1
IC-6249977	1.0000	0.99848	-0.0015157	-0.15157	0.44086	0.00023055	1
IC-6239131	2.0000	2.0014	0.0014161	0.070804	0.88357	0.00041341	1



Element Name:	Cu
Element Wavelength:	Cu 324.754 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.0064430
A1 (Gain):	0.50720
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

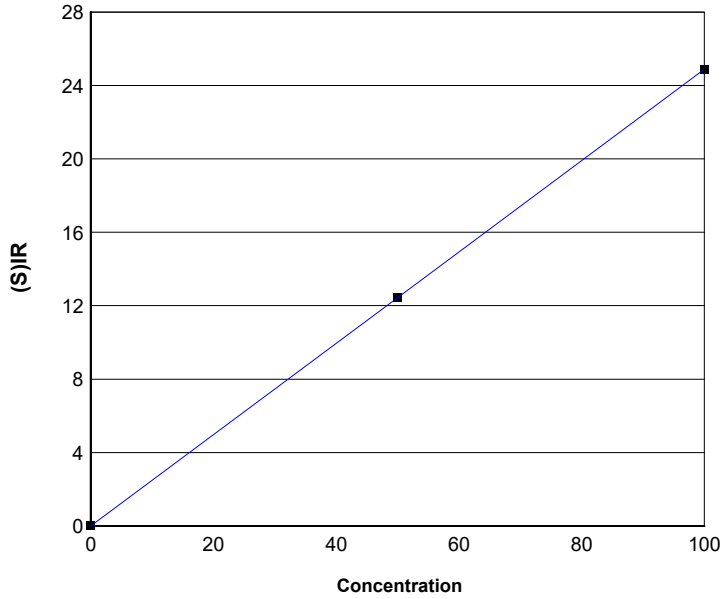
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000002708	0.0000002708	0.00000	0.0064432	0.000028528	1
IC-6256824	0.010000	0.0097763	-0.00022371	-2.2371	0.011402	0.000035095	1
IC-6249977	1.0000	0.99036	-0.0096397	-0.96397	0.50876	0.0013221	1
IC-6239131	2.0000	2.0099	0.0098634	0.49317	1.0258	0.0024668	1



Element Name:	Cu
Element Wavelength:	Cu 327.396 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.0012400
A1 (Gain):	0.44892
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

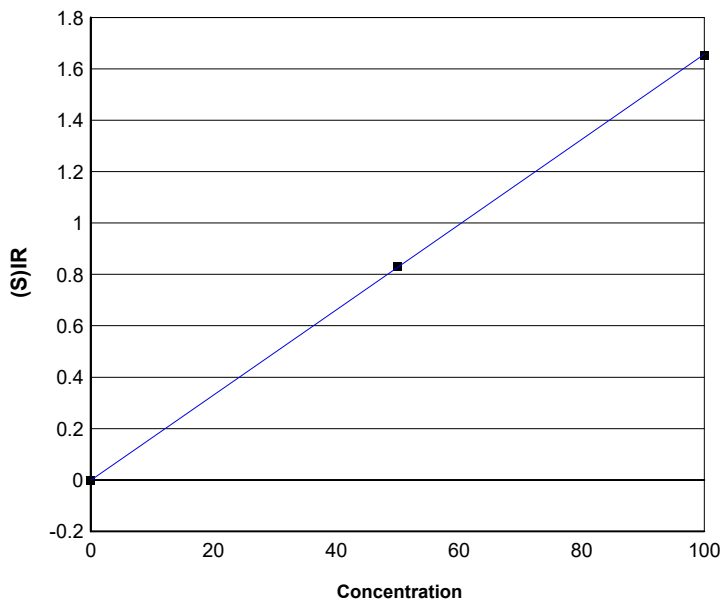
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000009742	0.0000009742	0.00000	-0.0012395	0.000034157	1
IC-6256824	0.010000	0.0090734	-0.00092663	-9.2663	0.0028366	0.00028783	1
IC-6249977	1.0000	0.98956	-0.010442	-1.0442	0.44313	0.00082601	1
IC-6239131	2.0000	2.0114	0.011369	0.56847	0.90197	0.0013723	1



Element Name:	Fe
Element Wavelength:	Fe 259.940 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.00096942
A1 (Gain):	0.24878
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

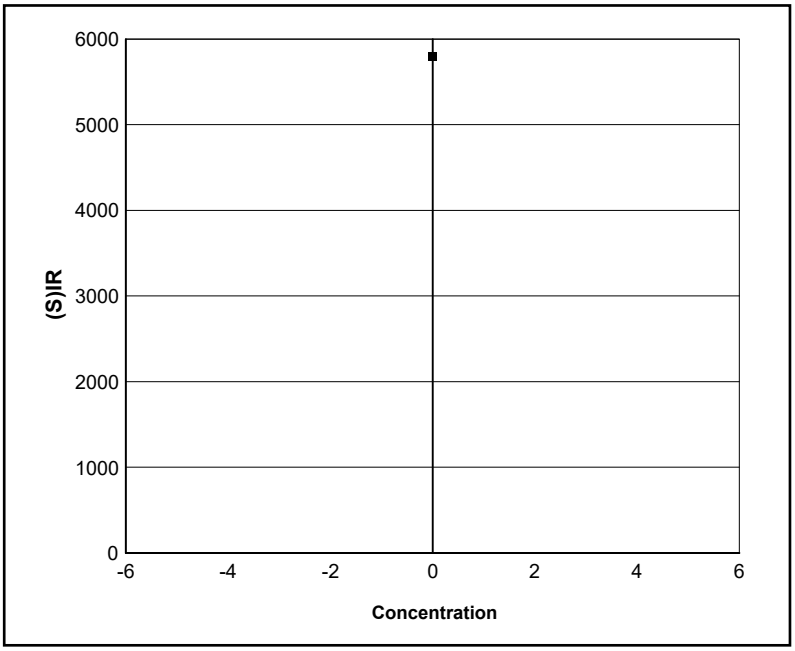
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000000537	-0.0000000537	0.00000	0.00096941	0.000020659	1
IC-6256824	0.050000	0.050044	0.000043998	0.087995	0.013419	0.00058087	1
IC-6249977	50.025	50.044	0.019452	0.038884	12.451	0.028214	1
IC-6239131	100.00	99.981	-0.019496	-0.019496	24.874	0.076598	1



Element Name:	Fe
Element Wavelength:	Fe 271.441 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99969
A0 (Offset):	-0.00084975
A1 (Gain):	0.016575
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

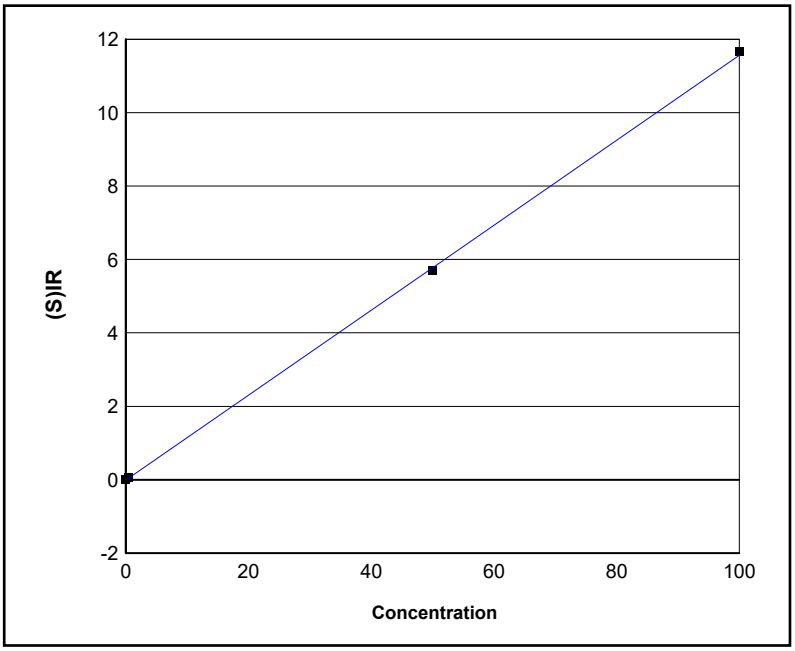
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.000067630	0.000067630	0.00000	-0.00084863	0.00038257	1
IC-6256824	0.050000	-0.017771	-0.067771	-135.54	-0.0011443	0.00016731	1
IC-6249977	50.025	50.240	0.21479	0.42937	0.83187	0.0015821	1
IC-6239131	100.00	99.853	-0.14702	-0.14702	1.6542	0.0047249	1



Element Name:	In
Element Wavelength:	In 230.606 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:10:11PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		**QC Normalize**	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

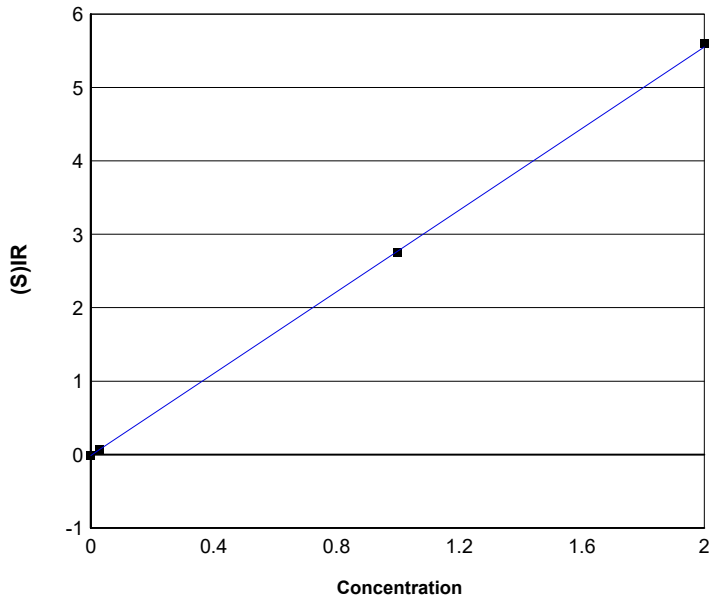
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.0000			0.0000	5,802	13.74	1



Element Name:	K
Element Wavelength:	K 766.490 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	-0.0067732
A1 (Gain):	0.11573
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

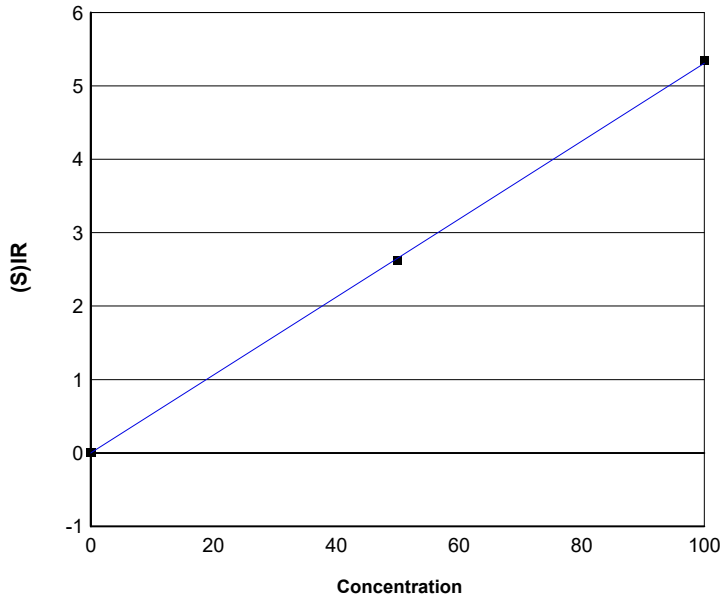
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.000016809	0.000016809	0.00000	-0.0067713	0.00090376	1
IC-6256824	0.50000	0.48686	-0.013139	-2.6277	0.049573	0.0026416	1
IC-6249977	50.000	49.253	-0.74722	-1.4944	5.6934	0.0022310	1
IC-6239131	100.00	100.76	0.76036	0.76036	11.654	0.018334	1



Element Name:	Li
Element Wavelength:	Li 670.784 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.012537
A1 (Gain):	2.7815
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

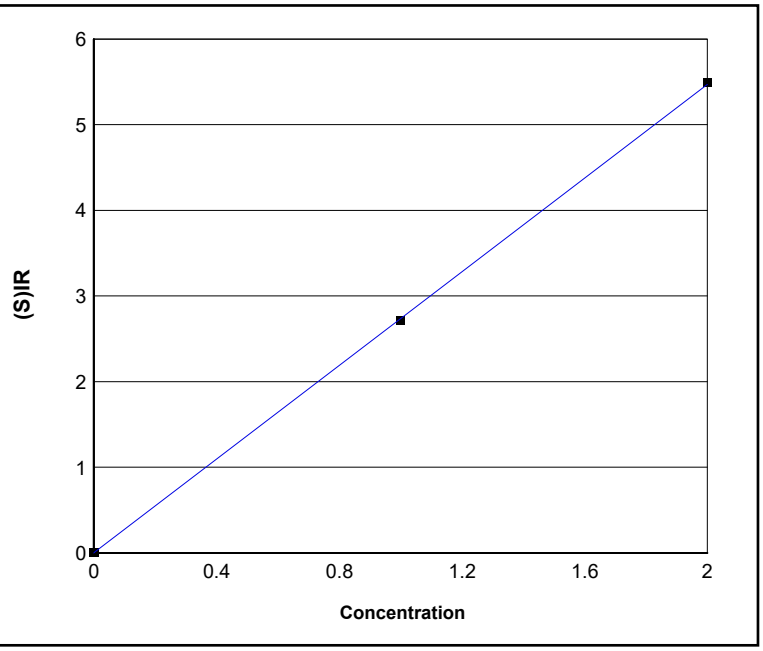
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000010950	-0.0000010950	0.00000	-0.012540	0.0023226	1
IC-6256824	0.030000	0.031289	0.0012888	4.2961	0.074614	0.0011110	1
IC-6249977	1.0000	0.98836	-0.011637	-1.1637	2.7486	0.000019094	1
IC-6239131	2.0000	2.0104	0.010352	0.51760	5.6032	0.0080836	1



Element Name:	Mg
Element Wavelength:	Mg 279.079 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99995
A0 (Offset):	-0.00025778
A1 (Gain):	0.053084
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

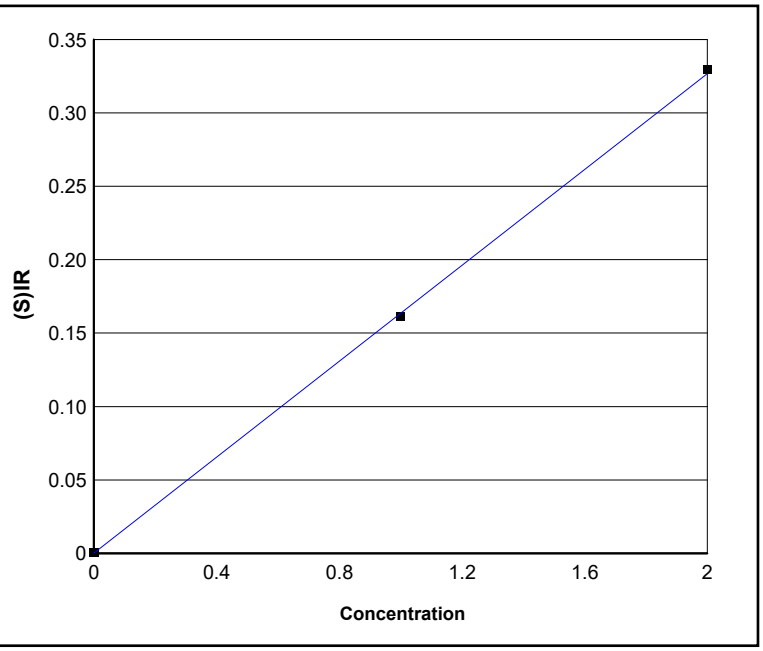
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000025233	-0.0000025233	0.00000	-0.00025792	0.000047277	1
IC-6256824	0.20000	0.20393	0.0039297	1.9648	0.010567	0.000039116	1
IC-6249977	50.000	49.301	-0.69926	-1.3985	2.6167	0.0064267	1
IC-6239131	100.00	100.70	0.69533	0.69533	5.3447	0.0024931	1



Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.00079822
A1 (Gain):	2.7346
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

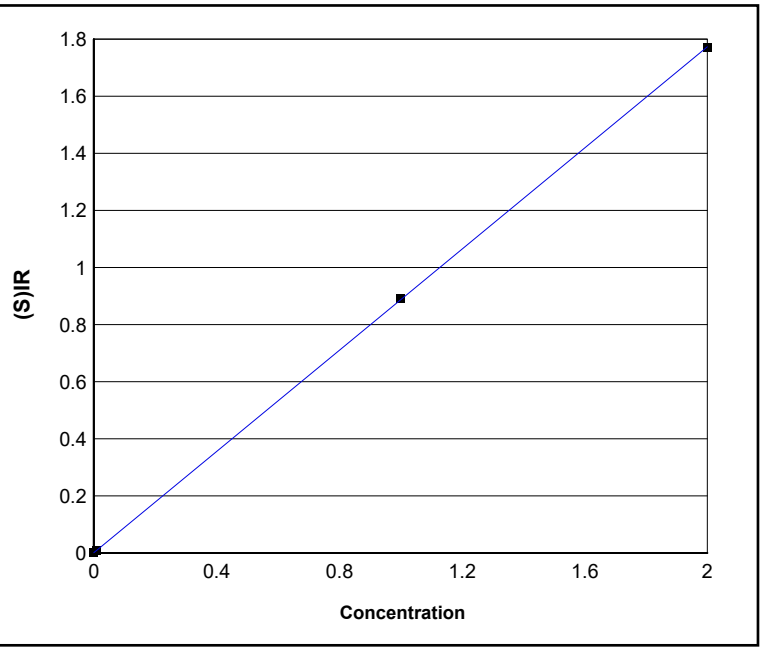
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000001145	-0.0000001145	0.00000	0.00079790	0.00020696	1
IC-6256824	0.0030000	0.0031264	0.00012640	4.2134	0.0093510	0.000014124	1
IC-6249977	1.0000	0.99220	-0.0077960	-0.77960	2.7152	0.0083706	1
IC-6239131	2.0000	2.0077	0.0076696	0.38348	5.4932	0.0012336	1



Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99992
A0 (Offset):	0.00020180
A1 (Gain):	0.16330
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

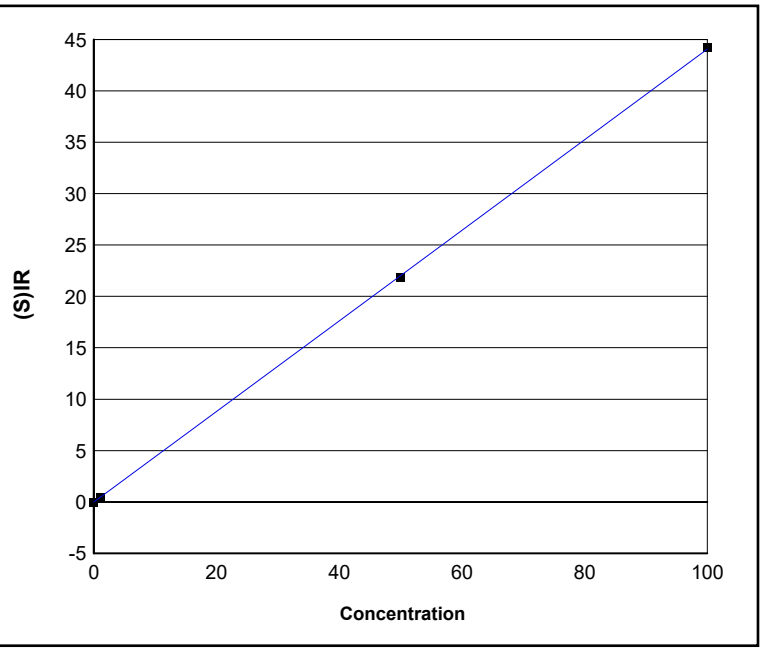
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000005562	0.0000005562	0.00000	0.00020189	0.000017601	1
IC-6256824	0.0030000	0.0024666	-0.00053338	-17.779	0.00060480	0.0000026874	1
IC-6249977	1.0000	0.98428	-0.015722	-1.5722	0.16100	0.00018783	1
IC-6239131	2.0000	2.0163	0.016255	0.81276	0.32960	0.0015423	1



Element Name:	Mo
Element Wavelength:	Mo 202.030 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.00086584
A1 (Gain):	0.88618
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

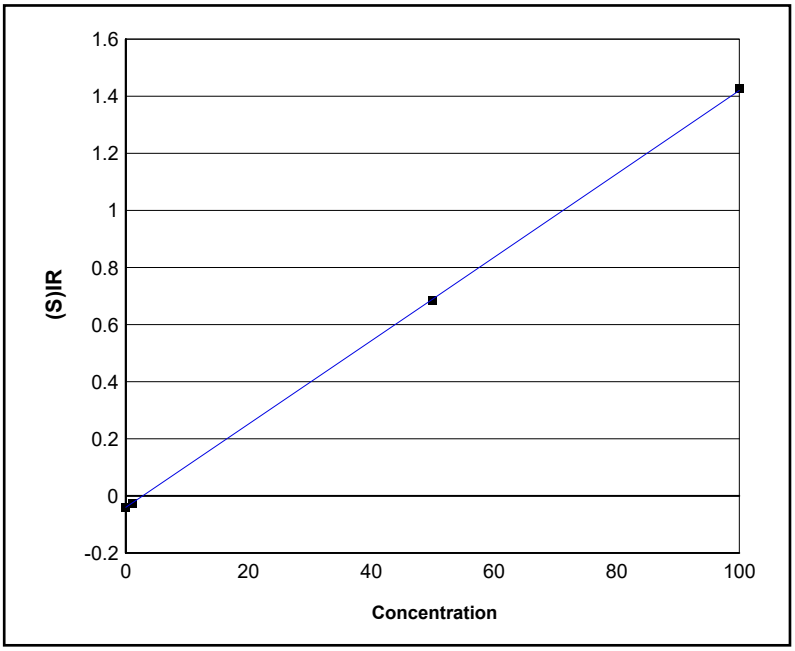
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000002572	0.0000002572	0.00000	0.00086607	0.00013400	1
IC-6256824	0.010000	0.0097268	-0.00027320	-2.7320	0.0094855	0.000036807	1
IC-6249977	1.0000	1.0029	0.0029203	0.29203	0.88963	0.0050614	1
IC-6239131	2.0000	1.9974	-0.0026471	-0.13236	1.7709	0.010410	1



Element Name:	Na
Element Wavelength:	Na 589.592 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.022394
A1 (Gain):	0.44097
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

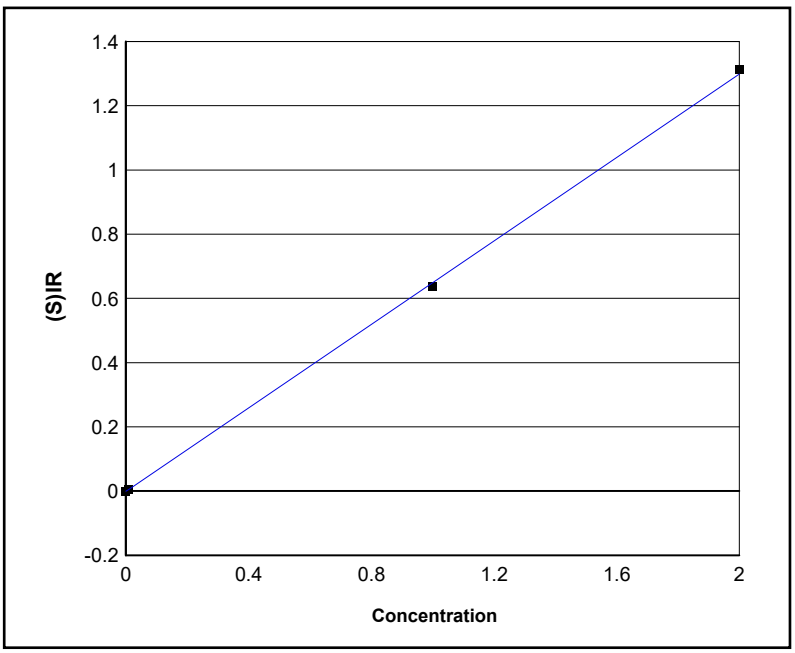
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	-0.000010001	-0.000010001	0.00000	-0.022399	0.0011369	1
IC-6256824	1.0000	1.0146	0.014645	1.4645	0.42503	0.0047521	1
IC-6249977	50.000	49.550	-0.44983	-0.89967	21.828	0.012489	1
IC-6239131	100.00	100.44	0.43519	0.43519	44.266	0.091104	1



Element Name:	Na
Element Wavelength:	Na 818.326 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.040413
A1 (Gain):	0.014603
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

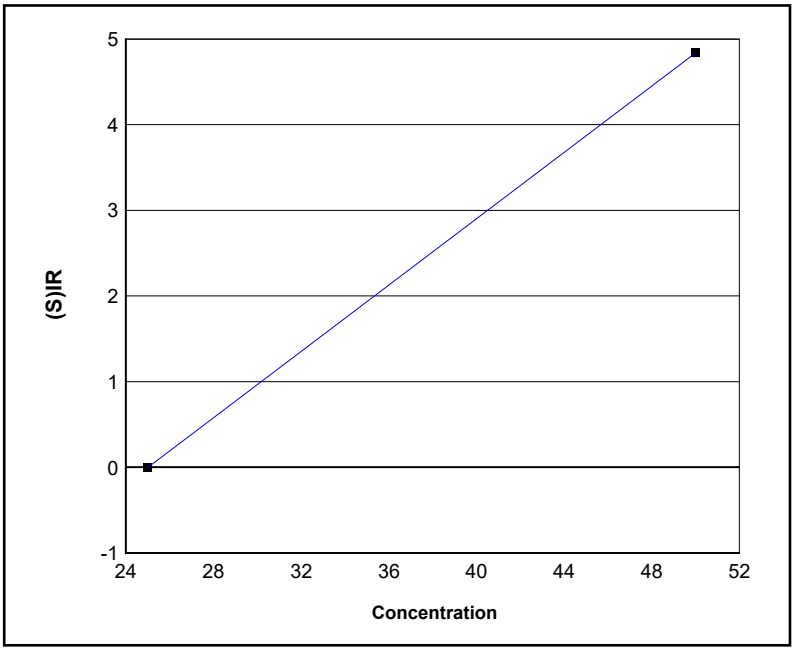
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000058445	0.0000058445	0.00000	-0.040413	0.0014331	1
IC-6256824	1.0000	0.99853	-0.0014748	-0.14748	-0.025832	0.0011206	1
IC-6249977	50.000	49.562	-0.43844	-0.87688	0.68333	0.0017134	1
IC-6239131	100.00	100.44	0.43992	0.43992	1.4263	0.0033208	1



Element Name:	Ni
Element Wavelength:	Ni 231.604 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99991
A0 (Offset):	-0.00057783
A1 (Gain):	0.64966
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

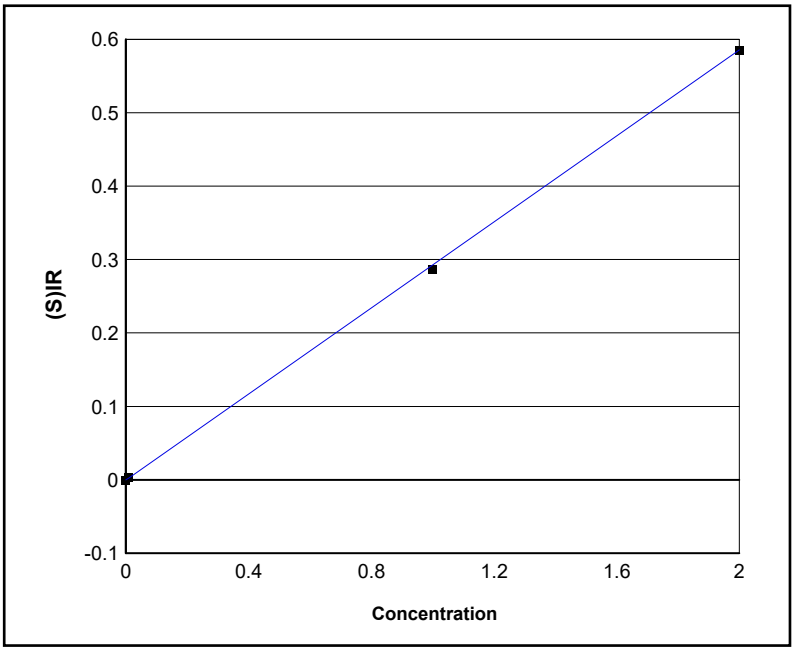
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000006690	0.0000006690	0.00000	-0.00057739	0.000056340	1
IC-6256824	0.010000	0.0094180	-0.00058196	-5.8196	0.0055413	0.000010490	1
IC-6249977	1.0000	0.98202	-0.017981	-1.7981	0.63805	0.00040039	1
IC-6239131	2.0000	2.0186	0.018563	0.92813	1.3121	0.00076276	1



Element Name:	P
Element Wavelength:	P 213.618 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.000
A0 (Offset):	-4.845
A1 (Gain):	0.1937
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

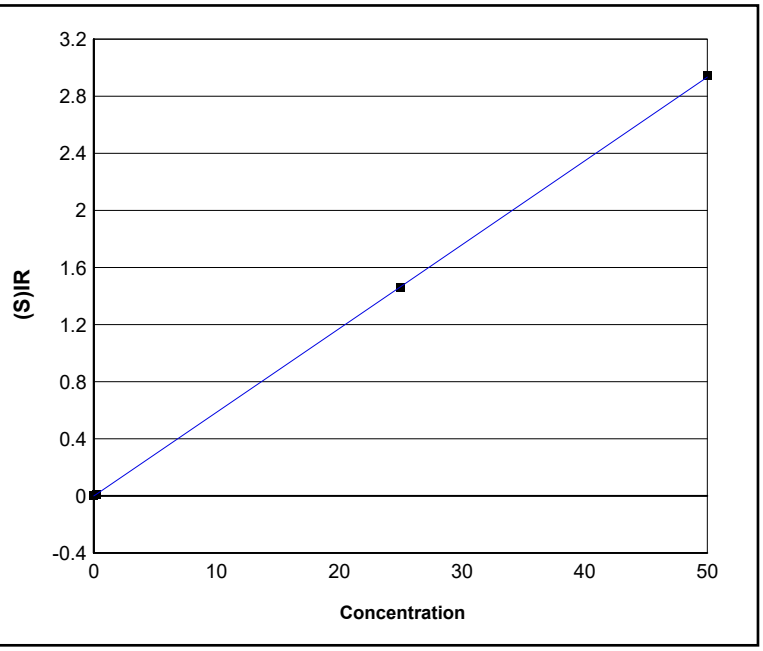
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
IC-6256824	25.00	25.00	0.0000000000	0.0000000000	-0.001908	0.00005338	1
IC-6239131	50.00	50.00	0.0000000000	0.0000000000	4.841	0.009564	1



Element Name:	Pb
Element Wavelength:	Pb 220.353 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99995
A0 (Offset):	-0.00025966
A1 (Gain):	0.29291
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

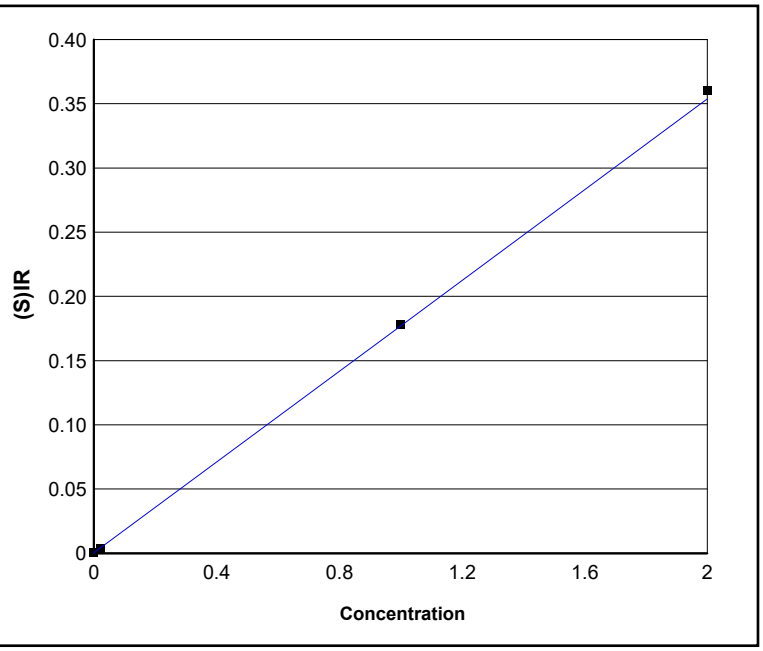
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000004822	0.0000004822	0.00000	-0.00025952	0.000051922	1
IC-6256824	0.010000	0.0095848	-0.00041520	-4.1520	0.0025618	0.000030439	1
IC-6249977	1.0000	0.98617	-0.013826	-1.3826	0.28641	0.00036556	1
IC-6239131	2.0000	2.0142	0.014246	0.71231	0.58536	0.000083922	1



Element Name:	S
Element Wavelength:	S 182.034 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.00031666
A1 (Gain):	0.058663
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

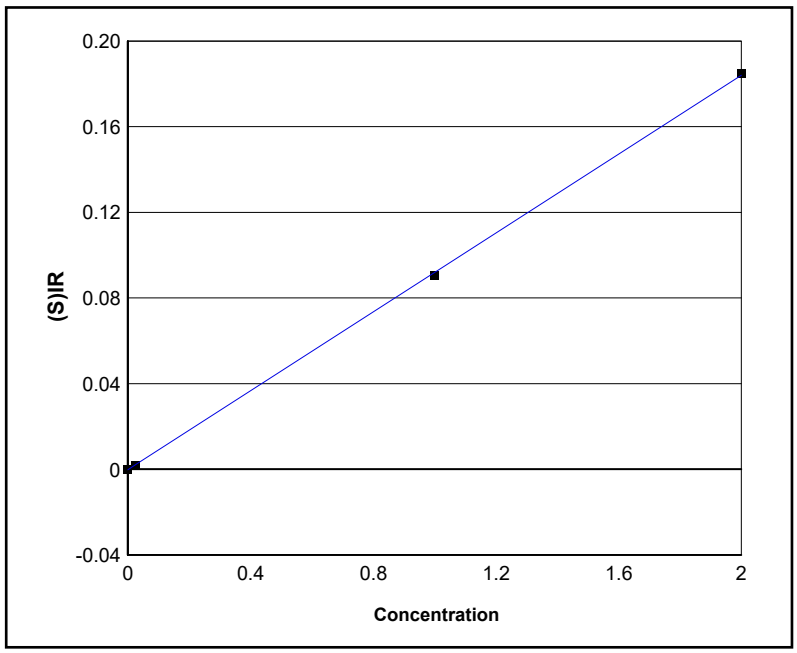
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000083889	0.0000083889	0.00000	-0.00031617	0.000013059	1
IC-6256824	0.20000	0.19210	-0.0079022	-3.9511	0.010952	0.000094302	1
IC-6249977	25.000	24.870	-0.12959	-0.51837	1.4587	0.00071568	1
IC-6239131	50.000	50.137	0.13749	0.27499	2.9409	0.0034650	1



Element Name:	Sb
Element Wavelength:	Sb 206.833 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	0.00029068
A1 (Gain):	0.17680
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

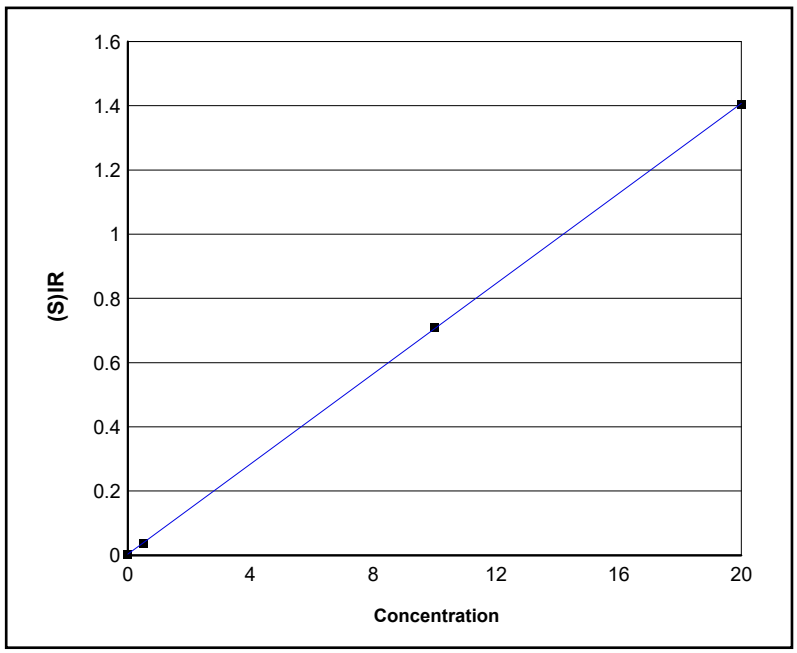
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000022829	0.0000022829	0.00000	0.00029109	0.000065689	1
IC-6256824	0.020000	0.017773	-0.0022274	-11.137	0.0034398	0.00014190	1
IC-6249977	1.0000	0.99224	-0.0077566	-0.77566	0.17806	0.00065259	1
IC-6239131	2.0000	2.0100	0.0099592	0.49796	0.36034	0.00077437	1



Element Name:	Se
Element Wavelength:	Se 196.090 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99987
A0 (Offset):	-0.00020212
A1 (Gain):	0.092136
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

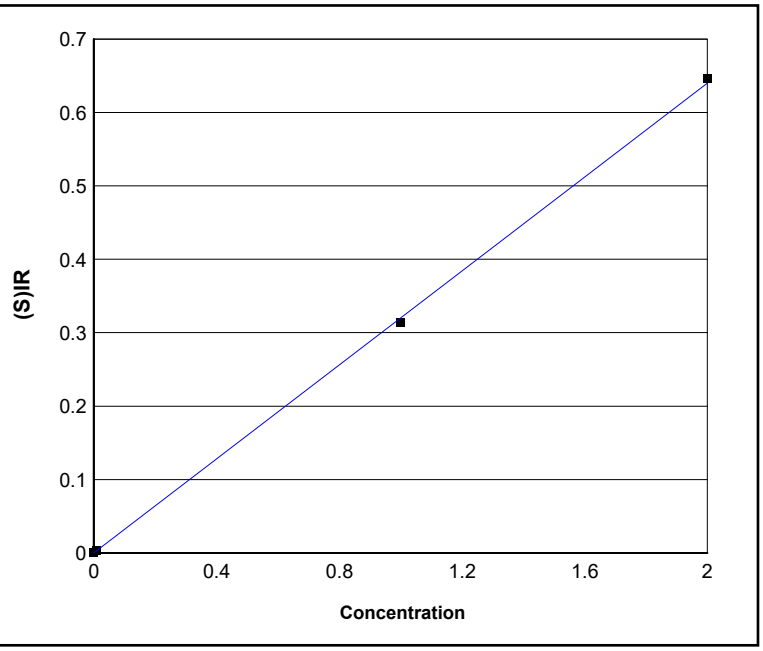
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000036800	0.0000036800	0.00000	-0.00020178	0.000098076	1
IC-6256824	0.025000	0.021432	-0.0035676	-14.271	0.0017722	0.000097846	1
IC-6249977	1.0000	0.98743	-0.012574	-1.2574	0.090374	0.00029593	1
IC-6239131	2.0000	2.0162	0.016157	0.80786	0.18476	0.000098085	1



Element Name:	Si
Element Wavelength:	Si 288.158 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.0038794
A1 (Gain):	0.070185
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

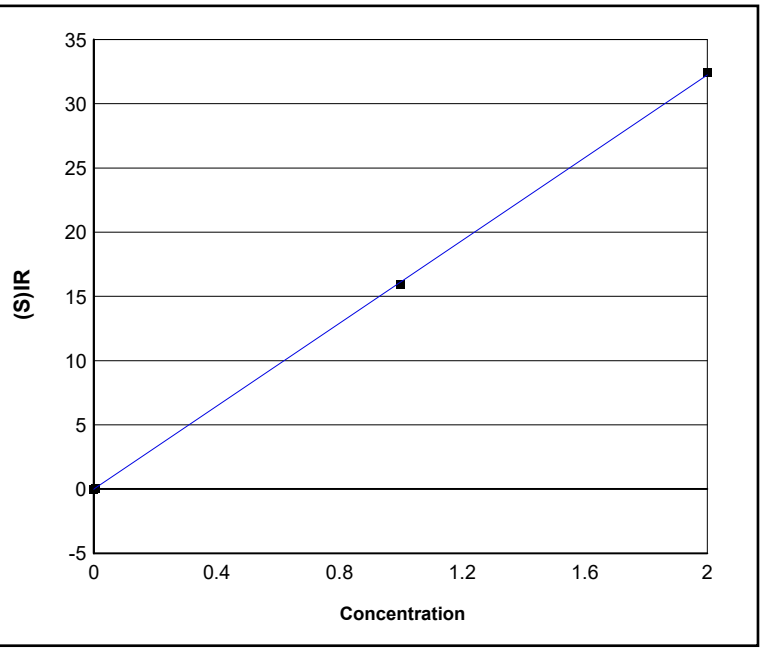
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.000015091	0.000015091	0.00000	0.0038804	0.00021783	1
IC-6256824	0.50000	0.48280	-0.017196	-3.4392	0.037765	0.00013753	1
IC-6249977	10.000	10.067	0.067023	0.67023	0.71043	0.0027398	1
IC-6239131	20.000	19.950	-0.049827	-0.24914	1.4041	0.00050564	1



Element Name:	Sn
Element Wavelength:	Sn 189.989 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99991
A0 (Offset):	0.00020926
A1 (Gain):	0.31980
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

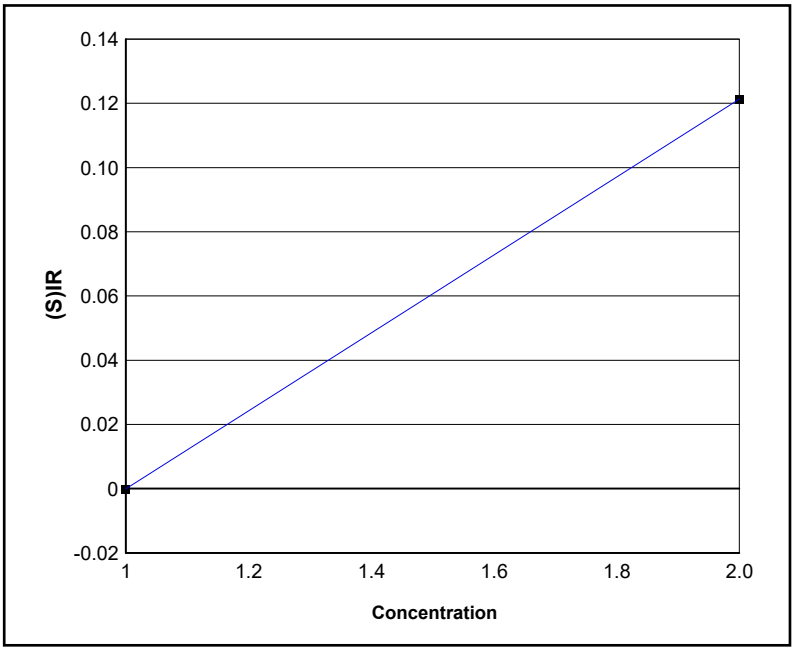
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000007884	0.0000007884	0.00000	0.00020951	0.000061512	1
IC-6256824	0.010000	0.0092981	-0.00070187	-7.0187	0.0031828	0.000087391	1
IC-6249977	1.0000	0.98200	-0.018002	-1.8002	0.31425	0.00030182	1
IC-6239131	2.0000	2.0187	0.018704	0.93521	0.64579	0.0000066478	1



Element Name:	Sr
Element Wavelength:	Sr 407.771 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	-0.0048160
A1 (Gain):	16.129
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

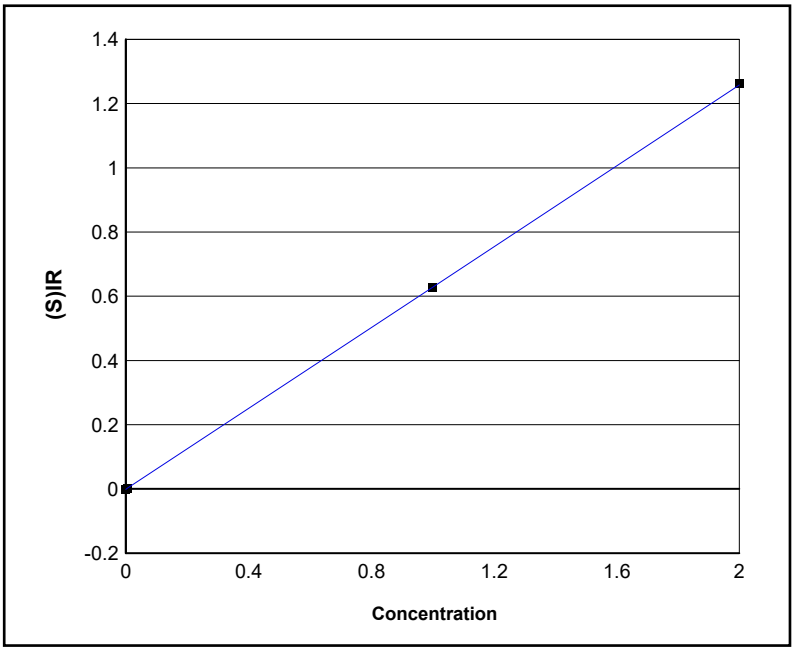
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000001209	0.0000001209	0.00000	-0.0048140	0.00048256	1
IC-6256824	0.0050000	0.0049074	-0.000092636	-1.8527	0.074335	0.00066908	1
IC-6249977	1.0000	0.98859	-0.011414	-1.1414	15.940	0.0079871	1
IC-6239131	2.0000	2.0115	0.011506	0.57532	32.439	0.056358	1



Element Name:	Th
Element Wavelength:	Th 283.730 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.000
A0 (Offset):	-0.1215
A1 (Gain):	0.1214
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

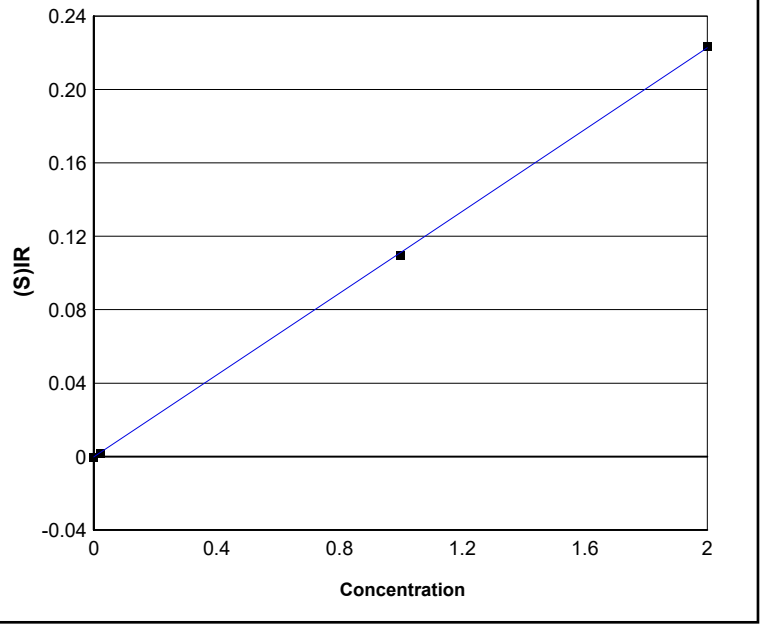
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
IC-6256824	1.000	1.0000	0.0000000000	0.0000000000	-0.00009857	0.0003539	1
IC-6239131	2.000	2.000	0.0000000000	0.0000000000	0.1213	0.0002084	1



Element Name:	Ti
Element Wavelength:	Ti 334.904 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.00099923
A1 (Gain):	0.62962
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

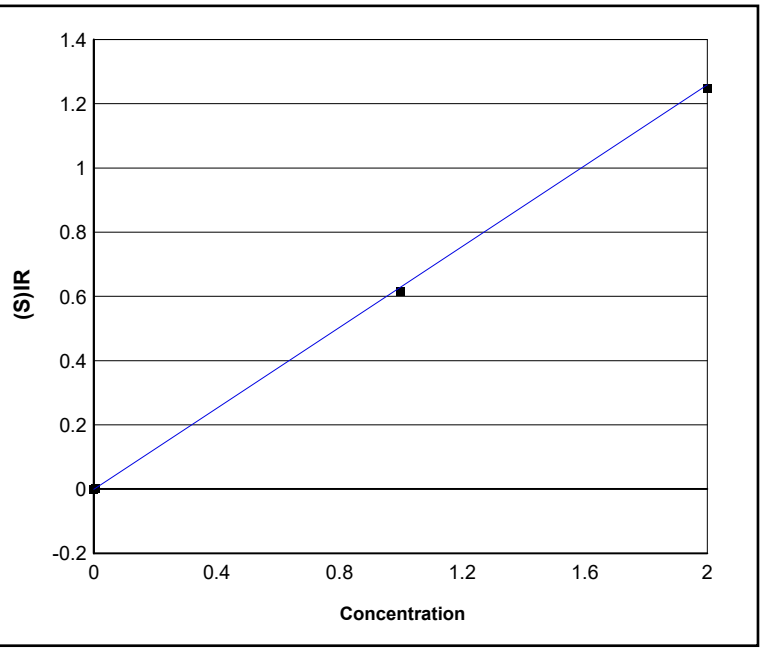
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000003065	0.0000003065	0.00000	-0.00099904	0.00010663	1
IC-6256824	0.0050000	0.0047002	-0.00029979	-5.9957	0.0019662	0.00048880	1
IC-6249977	1.0000	0.99700	-0.0030000	-0.30000	0.62734	0.0021217	1
IC-6239131	2.0000	2.0033	0.0033000	0.16500	1.2615	0.00068843	1



Element Name:	Tl
Element Wavelength:	Tl 190.856 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.00025280
A1 (Gain):	0.11151
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

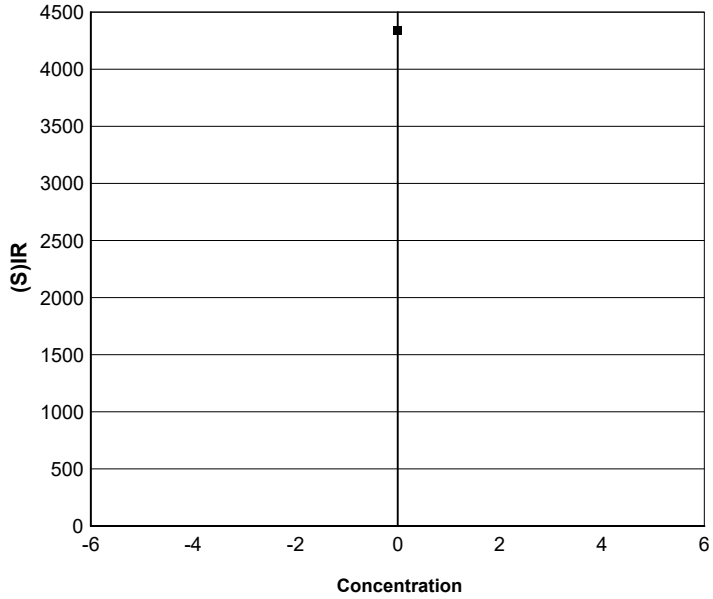
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000012814	0.0000012814	0.00000	-0.00025266	0.0000002539	1
IC-6256824	0.020000	0.018817	-0.0011827	-5.9135	0.0018432	0.000015474	1
IC-6249977	1.0000	0.98894	-0.011059	-1.1059	0.10958	0.00022292	1
IC-6239131	2.0000	2.0122	0.012245	0.61224	0.22325	0.00054700	1



Element Name:	V
Element Wavelength:	V 292.402 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	-0.00023848
A1 (Gain):	0.62936
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

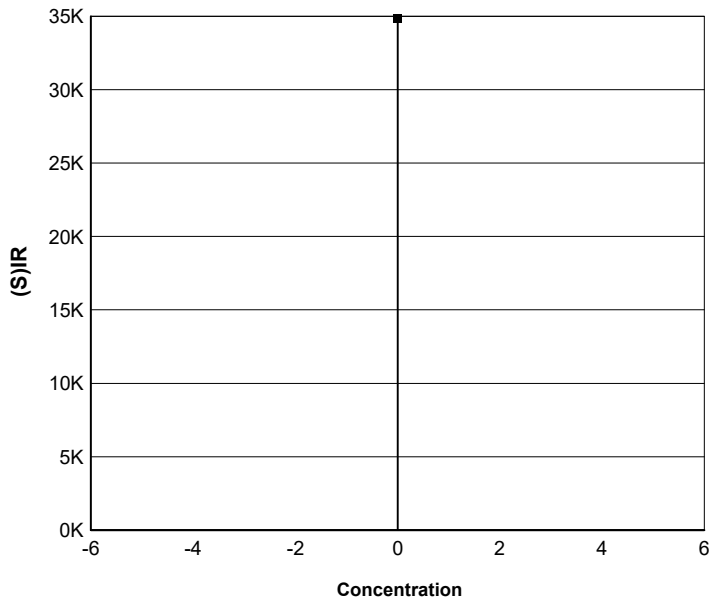
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000002080	0.0000002080	0.00000	-0.00023835	0.000094281	1
IC-6256824	0.0050000	0.0048170	-0.00018299	-3.6598	0.0027080	0.000050094	1
IC-6249977	1.0000	0.98983	-0.010169	-1.0169	0.61433	0.0010296	1
IC-6239131	2.0000	2.0103	0.010350	0.51749	1.2482	0.0014526	1



Element Name:	Y
Element Wavelength:	Y 224.306 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:10:11PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

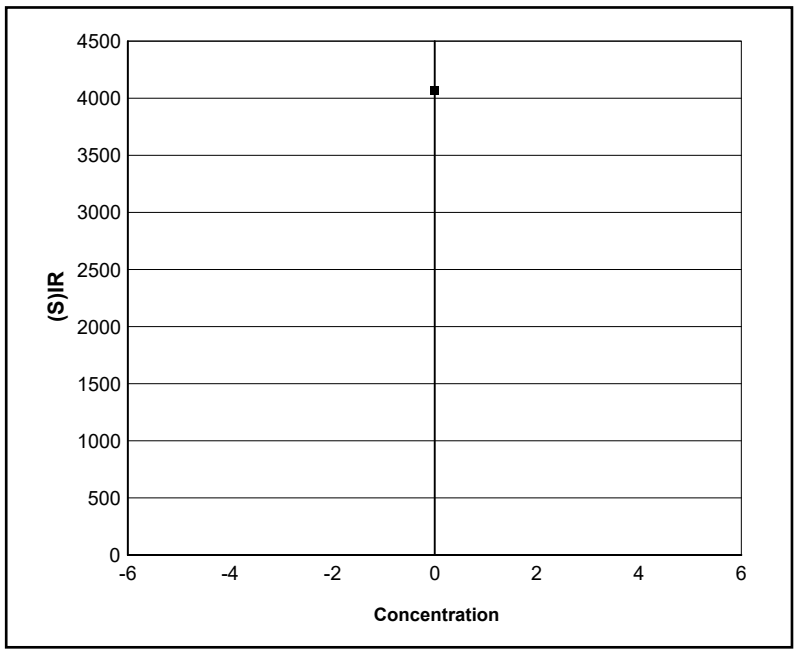
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.0000			0.0000	4,342	9.822	1



Element Name:	Y
Element Wavelength:	Y 360.073 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:10:11PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

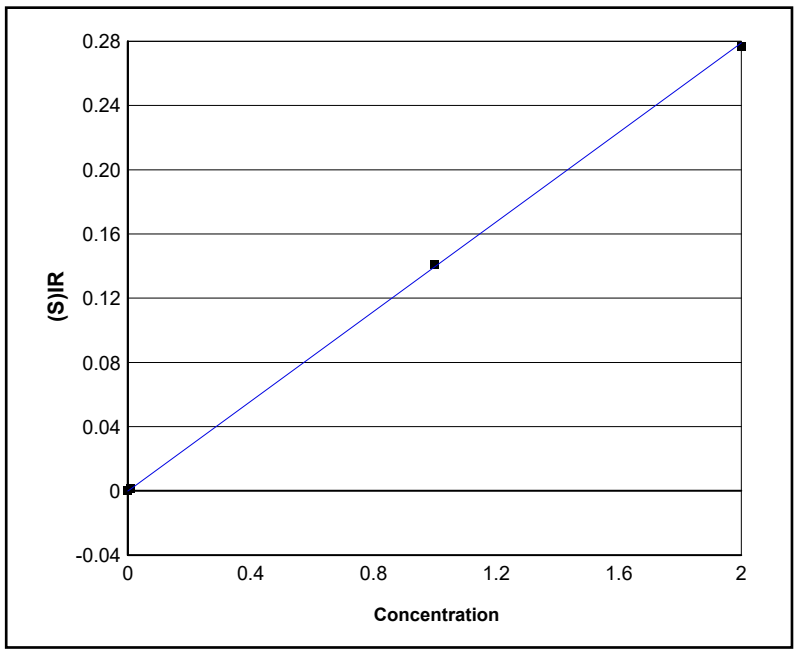
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.0000			0.0000	34,840	1.878	1



Element Name:	Y
Element Wavelength:	Y 377.433 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:10:11PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

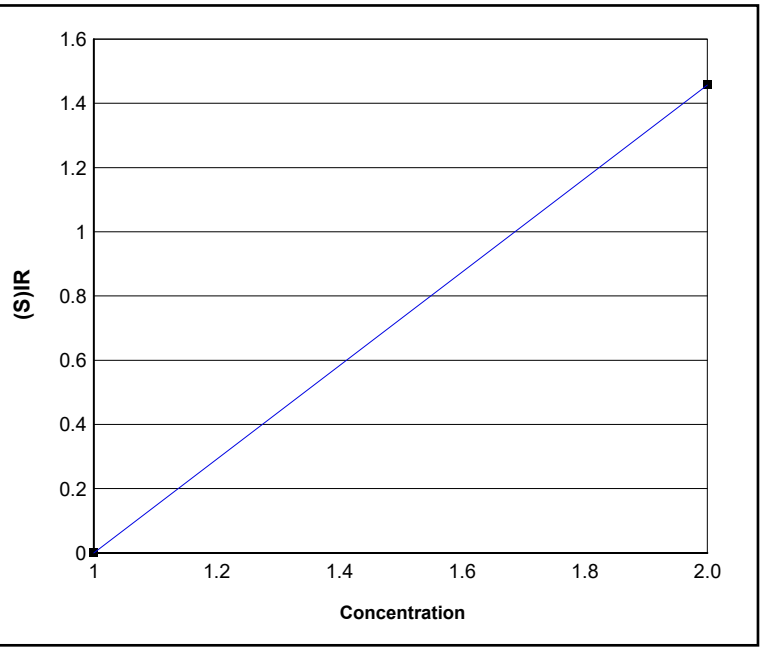
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.0000			0.0000	4,065	0.4307	1



Element Name:	Zn
Element Wavelength:	Zn 206.200 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.000031529
A1 (Gain):	0.13953
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-6254294	0.00000	0.0000003020	-0.0000003020	0.00000	-0.000031571	0.000011000	1
IC-6256824	0.010000	0.010239	0.00023888	2.3888	0.0013964	0.000063027	1
IC-6249977	1.0000	1.0129	0.012856	1.2856	0.14112	0.00025980	1
IC-6239131	2.0000	1.9869	-0.013095	-0.65473	0.27686	0.000070222	1



Element Name:	Zr
Element Wavelength:	Zr 343.823 nm
Concentration Units:	ppm
Date of Calibration:	11/24/2020 12:21:01PM
Date of Fit:	11/24/2020 1:10:55PM
Type of Fit:	Linear
Correlation:	1.000
A0 (Offset):	-1.457
A1 (Gain):	1.457
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		**QC Normalize**	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
IC-6256824	1.000	1.0000	0.0000000000	0.0000000000	0.0001395	0.0001162	1
IC-6239131	2.000	2.000	0.0000000000	0.0000000000	1.457	0.0003837	1

Sample Name: ICIS-6254294 Acquired: 11/24/2020 12:06:32 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00068**	**.00235**	**.00003**	**.00242**	**.01993**
Stddev	.00023	.00078	.00005	.00019	.00194
%RSD	34.548	33.226	191.77	7.7231	9.7360
#1	-.00051	.00290	.00006	.00229	.01855
#2	-.00084	.00179	-.00001	.00255	.02130

Elem	Ba4554-2	Be3130	Ca3179	Cd2288	**Ce4040
Line	455.403 { 74}2	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00428**	**-.00862**	**.01112**	**-.00006**	**-.0015**
Stddev	.00029	.00081	.00054	.00024	.0032
%RSD	6.8128	9.4280	4.8913	405.78	213.3
#1	.00449	-.00920	.01151	.00011	-.0037
#2	.00408	-.00805	.01074	-.00023	.0008

Elem	Co2286	Cr2677	Cu3273	Fe2599	Fe2714
Line	228.616 {447}	267.716 {126}	327.396 {103}	259.940 {130}	271.441 {124}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00043**	**.00011**	**-.00124**	**.00097**	**-.00085**
Stddev	.00018	.00000	.00003	.00002	.00038
%RSD	40.447	4.3456	2.7556	2.1311	45.081
#1	.00056	.00012	-.00122	.00095	-.00112
#2	.00031	.00011	-.00126	.00098	-.00058

Elem	K_7664	Li6707	Mg2790	Mn2576	Mn2576-2
Line	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	257.610 {131}2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00677**	**-.01254**	**-.00026**	**.00080**	**.00020**
Stddev	.00090	.00232	.00005	.00021	.00002
%RSD	13.347	18.522	18.330	25.938	8.7185
#1	-.00741	-.01090	-.00029	.00065	.00019
#2	-.00613	-.01418	-.00022	.00094	.00021

Sample Name: ICIS-6254294 Acquired: 11/24/2020 12:06:32 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	Na5895	Na8183	Ni2316	Pb2203
Line	202.030 {467}	589.592 { 57}	818.326 { 41}	231.604 {446}	220.353 {453}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00087**	**-.02240**	**-.04041**	**-.00058**	**-.00026**
Stddev	.00013	.00114	.00143	.00006	.00005
%RSD	15.472	5.0759	3.5461	9.7576	20.007
#1	.00077	-.02320	-.04143	-.00062	-.00022
#2	.00096	-.02159	-.03940	-.00054	-.00030

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2	189.989 {477}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00032**	**.00029**	**-.00020**	**.00388**	**.00021**
Stddev	.00001	.00007	.00010	.00022	.00006
%RSD	4.1303	22.567	48.604	5.6136	29.359
#1	-.00031	.00034	-.00027	.00373	.00025
#2	-.00033	.00024	-.00013	.00403	.00017

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Line	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}	206.200 {163}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00481**	**-.00100**	**-.00025**	**-.00024**	**-.00003**
Stddev	.00048	.00011	.00000	.00009	.00001
%RSD	10.024	10.674	.10050	39.556	34.841
#1	-.00516	-.00092	-.00025	-.00031	-.00004
#2	-.00447	-.00107	-.00025	-.00017	-.00002

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5802.2**	**4341.7**	**34838.**	**4065.3**
Stddev	13.7	9.8	2.	.4
%RSD	.23680	.22623	.00539	.01059
#1	5792.5	4334.7	34840.	4065.6
#2	5811.9	4348.6	34837.	4065.0

Sample Name: IC-6256824 Acquired: 11/24/2020 12:10:18 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00213**	**.01279**	**.00198**	**.01459**	**.03541**
Stddev	.00004	.00046	.00004	.00007	.00068
%RSD	1.9452	3.6304	1.9487	.47435	1.9187
#1	.00210	.01312	.00195	.01464	.03493
#2	.00215	.01246	.00200	.01454	.03589

Elem	Ba4554-2	Be3130	Ca3179	Cd2288	Co2286
Line	455.403 { 74}2	313.042 {108}	317.933 {106}	228.802 {447}	228.616 {447}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.03217**	**.01871**	**.23399**	**.00660**	**.00649**
Stddev	.00023	.00020	.00103	.00008	.00006
%RSD	.69952	1.0915	.43847	1.2164	.93593
#1	.03233	.01857	.23471	.00654	.00645
#2	.03201	.01886	.23326	.00666	.00654

Elem	Cr2677	Cu3273	Fe2599	Fe2714	K_7664
Line	267.716 {126}	327.396 {103}	259.940 {130}	271.441 {124}	766.490 { 44}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00192**	**.00284**	**.01342**	**-.00114**	**.04957**
Stddev	.00003	.00029	.00058	.00017	.00264
%RSD	1.3238	10.147	4.3286	14.621	5.3287
#1	.00194	.00263	.01301	-.00126	.04770
#2	.00190	.00304	.01383	-.00103	.05144

Elem	Li6707	Mg2790	Mn2576	Mn2576-2	Mo2020
Line	670.784 { 50}	279.079 {121}2	257.610 {131}	257.610 {131}2	202.030 {467}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.07461**	**.01057**	**.00935**	**.00060**	**.00949**
Stddev	.00111	.00004	.00001	.00000	.00004
%RSD	1.4891	.37016	.15104	.44434	.38804
#1	.07383	.01054	.00936	.00060	.00951
#2	.07540	.01059	.00934	.00061	.00946

Sample Name: IC-6256824 Acquired: 11/24/2020 12:10:18 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895	Na8183	Ni2316	P_2136	Pb2203
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	213.618 {458}	220.353 {453}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.42503**	**-.02583**	**.00554**	**-.0019**	**.00256**
Stddev	.00475	.00112	.00001	.0001	.00003
%RSD	1.1181	4.3380	.18931	2.798	1.1882
#1	.42167	-.02504	.00553	-.0019	.00258
#2	.42839	-.02662	.00555	-.0019	.00254

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2	189.989 {477}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01095**	**.00344**	**.00177**	**.03777**	**.00318**
Stddev	.00009	.00014	.00010	.00014	.00009
%RSD	.86102	4.1253	5.5210	.36416	2.7457
#1	.01089	.00334	.00184	.03786	.00312
#2	.01102	.00354	.00170	.03767	.00324

Elem	Sr4077	Th2837	Ti3349	Tl1908	V_2924
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	292.402 {115}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.07433**	**-.0001**	**.00197**	**.00184**	**.00271**
Stddev	.00067	.0004	.00049	.00002	.00005
%RSD	.90009	359.1	24.860	.83952	1.8499
#1	.07481	-.0003	.00231	.00185	.00274
#2	.07386	.0002	.00162	.00183	.00267

Elem	Zn2062	Zr3438
Line	206.200 {163}	343.823 { 98}
Units	Cts/S	Cts/S
Avg	**.00140**	**.0001**
Stddev	.00006	.0001
%RSD	4.5135	83.32
#1	.00144	.0002
#2	.00135	.0001

Sample Name: IC-6256824 Acquired: 11/24/2020 12:10:18 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5712.7**	**4294.7**	**34626.**	**4042.0**
Stddev	3.1	1.0	56.	4.0
%RSD	.05510	.02430	.16296	.09781
#1	5714.9	4295.4	34666.	4039.2
#2	5710.4	4293.9	34586.	4044.8

Sample Name: IC-6249977 Acquired: 11/24/2020 12:14:03 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.45683**	**2.1758**	**.14053**	**.64736**	**9.1868**
Stddev	.00054	.0008	.00010	.00051	.0009
%RSD	.11835	.03834	.06861	.07901	.01000
#1	.45645	2.1752	.14046	.64700	9.1874
#2	.45721	2.1764	.14059	.64773	9.1861

Elem	Ba4554-2	Be3130	Ca3179	Cd2288	**Ce4040
Line	455.403 { 74}2	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**13.639**	**13.539**	**21.354**	**3.2684**	**.0567**
Stddev	.127	.021	.036	.0023	.0006
%RSD	.93129	.15770	.16775	.06931	1.024
#1	13.549	13.554	21.329	3.2668	.0562
#2	13.729	13.524	21.380	3.2700	.0571

Elem	Co2286	Cr2677	Cu3273	Fe2599	Fe2714
Line	228.616 {447}	267.716 {126}	327.396 {103}	259.940 {130}	271.441 {124}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.6663**	**.44086**	**.44313**	**12.451**	**.83187**
Stddev	.0001	.00023	.00083	.028	.00158
%RSD	.00321	.05229	.18640	.22660	.19019
#1	1.6662	.44070	.44254	12.431	.83075
#2	1.6663	.44103	.44371	12.471	.83299

Elem	K_7664	Li6707	Mg2790	Mn2576	Mn2576-2
Line	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	257.610 {131}2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.6934**	**2.7486**	**2.6167**	**2.7152**	**.16100**
Stddev	.0022	.0000	.0064	.0084	.00019
%RSD	.03919	.00069	.24560	.30829	.11666
#1	5.6950	2.7486	2.6121	2.7093	.16114
#2	5.6918	2.7486	2.6212	2.7211	.16087

Sample Name: IC-6249977 Acquired: 11/24/2020 12:14:03 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	Na5895	Na8183	Ni2316	Pb2203
Line	202.030 {467}	589.592 { 57}	818.326 { 41}	231.604 {446}	220.353 {453}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.88963**	**21.828**	**.68333**	**.63805**	**.28641**
Stddev	.00506	.012	.00171	.00040	.00037
%RSD	.56894	.05722	.25074	.06275	.12764
#1	.89321	21.819	.68454	.63833	.28667
#2	.88605	21.836	.68212	.63776	.28615

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2	189.989 {477}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.4587**	**.17806**	**.09037**	**.71043**	**.31425**
Stddev	.0007	.00065	.00030	.00274	.00030
%RSD	.04906	.36649	.32745	.38566	.09604
#1	1.4592	.17760	.09058	.70850	.31446
#2	1.4582	.17852	.09016	.71237	.31404

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Line	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}	206.200 {163}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**15.940**	**.62734**	**.10958**	**.61433**	**.14112**
Stddev	.008	.00212	.00022	.00103	.00026
%RSD	.05011	.33821	.20342	.16759	.18410
#1	15.934	.62584	.10974	.61360	.14094
#2	15.946	.62884	.10942	.61506	.14131

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4925.6**	**4152.9**	**32582.**	**4021.9**
Stddev	1.2	.2	116.	21.9
%RSD	.02396	.00505	.35721	.54381
#1	4924.8	4152.8	32664.	4037.4
#2	4926.4	4153.1	32499.	4006.5

Sample Name: IC-6239131 Acquired: 11/24/2020 12:17:36 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.93027**	**4.3465**	**.28787**	**1.2776**	**18.834**
Stddev	.00116	.0187	.00081	.0013	.012
%RSD	.12521	.43147	.27992	.10193	.06217
#1	.93109	4.3597	.28844	1.2785	18.842
#2	.92944	4.3332	.28730	1.2767	18.825

Elem	Ba4554-2	Be3130	Ca3179	Cd2288	**Ce4040
Line	455.403 { 74}2	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**27.220**	**27.195**	**42.695**	**6.6258**	**.1148**
Stddev	.212	.080	.176	.0006	.0028
%RSD	.77847	.29379	.41167	.00902	2.424
#1	27.070	27.252	42.819	6.6263	.1128
#2	27.369	27.139	42.570	6.6254	.1168

Elem	Co2286	Cr2677	Cu3273	Fe2599	Fe2714
Line	228.616 {447}	267.716 {126}	327.396 {103}	259.940 {130}	271.441 {124}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.4430**	**.88357**	**.90197**	**24.874**	**1.6542**
Stddev	.0006	.00041	.00137	.077	.0047
%RSD	.01811	.04679	.15215	.30794	.28563
#1	3.4434	.88328	.90295	24.928	1.6576
#2	3.4425	.88387	.90100	24.820	1.6509

Elem	K_7664	Li6707	Mg2790	Mn2576	Mn2576-2
Line	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	257.610 {131}2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11.654**	**5.6032**	**5.3447**	**5.4932**	**.32960**
Stddev	.018	.0081	.0025	.0012	.00154
%RSD	.15732	.14427	.04665	.02246	.46793
#1	11.667	5.6089	5.3430	5.4941	.32851
#2	11.642	5.5975	5.3465	5.4923	.33069

Sample Name: IC-6239131 Acquired: 11/24/2020 12:17:36 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	Na5895	Na8183	Ni2316	P_2136
Line	202.030 {467}	589.592 { 57}	818.326 { 41}	231.604 {446}	213.618 {458}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.7709**	**44.266**	**1.4263**	**1.3121**	**4.841**
Stddev	.0104	.091	.0033	.0008	.010
%RSD	.58782	.20581	.23282	.05813	.1976
#1	1.7782	44.331	1.4287	1.3116	4.848
#2	1.7635	44.202	1.4240	1.3126	4.834

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.58536**	**2.9409**	**.36034**	**.18476**	**1.4041**
Stddev	.00008	.0035	.00077	.00010	.0005
%RSD	.01434	.11782	.21490	.05309	.03601
#1	.58542	2.9433	.36089	.18483	1.4037
#2	.58530	2.9384	.35979	.18469	1.4044

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.64579**	**32.439**	**.1213**	**1.2615**	**.22325**
Stddev	.00001	.056	.0002	.0007	.00055
%RSD	.00103	.17374	.1718	.05457	.24502
#1	.64578	32.479	.1214	1.2620	.22364
#2	.64579	32.399	.1211	1.2610	.22286

Elem	V_2924	Zn2062	Zr3438
Line	292.402 {115}	206.200 {163}	343.823 { 98}
Units	Cts/S	Cts/S	Cts/S
Avg	**1.2482**	**.27686**	**1.457**
Stddev	.0014	.00007	.000
%RSD	.11637	.02536	.0263
#1	1.2472	.27691	1.457
#2	1.2492	.27681	1.457

Sample Name: IC-6239131 Acquired: 11/24/2020 12:17:36 Type: Cal
Method: ICAP2 New stds DEC2019(v386) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4623.2**	**4064.4**	**31723.**	**4000.5**
Stddev	8.8	8.4	61.	19.3
%RSD	.19081	.20706	.19117	.48289
#1	4629.5	4070.4	31766.	3986.8
#2	4617.0	4058.5	31680.	4014.1

Sample Name: ICV-6232148 Acquired: 11/24/2020 12:21:09 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.74307**	**37.112**	**.73971**	**.74873**	**.73716**
Stddev	.00261	.183	.00068	.00054	.00273
%RSD	.35097	.49339	.09159	.07259	.37080
#1	.74122	37.242	.74019	.74835	.73909
#2	.74491	36.983	.73923	.74912	.73522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.74107**	**36.979**	**.74010**	**-.0058**	**.72449**
Stddev	.00285	.166	.00030	.0285	.00017
%RSD	.38516	.44876	.04080	489.7	.02312
#1	.74309	37.097	.73989	.0143	.72461
#2	.73906	36.862	.74032	-.0260	.72438
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.75219**	**.71934**	**37.541**	**37.535**	**.73943**
Stddev	.00057	.00109	.146	.206	.00333
%RSD	.07538	.15127	.38859	.54858	.45052
#1	.75259	.72011	37.644	37.681	.74178
#2	.75179	.71858	37.438	37.390	.73707
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ICV-6232148 Acquired: 11/24/2020 12:21:09 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.153**	**.76077**	**.77455**	**37.587**	**.72547**
Stddev	.052	.00026	.00105	.160	.00114
%RSD	.14060	.03380	.13588	.42651	.15673
#1	37.190	.76095	.77529	37.701	.72627
#2	37.116	.76058	.77381	37.474	.72466
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**34.37**	**.73571**	**18.955**	**.73983**	**.74984**
Stddev	.01	.00090	.032	.00113	.00558
%RSD	.0229	.12224	.16773	.15247	.74381
#1	34.36	.73634	18.933	.74063	.74589
#2	34.38	.73507	18.978	.73903	.75378
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.3442**	**.72090**	**.74139**	**1.032**	**.73731**
Stddev	.0289	.00012	.00218	.001	.00064
%RSD	.39323	.01633	.29424	.0683	.08624
#1	7.3647	.72081	.74294	1.032	.73776
#2	7.3238	.72098	.73985	1.031	.73686
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: ICV-6232148 Acquired: 11/24/2020 12:21:09 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.74873**	**.74650**	**.72486**	**1.004**
Stddev	.00227	.00076	.00126	.001
%RSD	.30369	.10126	.17342	.1206
#1	.75033	.74596	.72575	1.003
#2	.74712	.74703	.72397	1.005
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5007.6**	**4176.9**	**32760.**	**4074.7**
Stddev	8.3	1.5	100.	23.7
%RSD	.16592	.03640	.30538	.58112
#1	5001.7	4175.8	32689.	4058.0
#2	5013.5	4178.0	32831.	4091.5

Sample Name: ICB-6254294 Acquired: 11/24/2020 12:24:43 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00045**	**.00345**	**.00011**	**.00039**	**.00022**
Stddev	.00104	.01397	.00080	.00029	.00001
%RSD	232.33	405.04	739.58	74.744	6.3696
#1	-.00029	.01333	.00067	.00060	.00021
#2	.00118	-.00643	-.00046	.00018	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.00188**	**.00002**	**.0089**	**-.00003**
Stddev	.00002	.00317	.00012	.0062	.00006
%RSD	46.123	168.14	553.95	69.56	187.18
#1	.00006	.00412	-.00006	.0045	-.00007
#2	.00003	-.00036	.00010	.0133	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**.00075**	**.00252**	**.03765**	**.00130**
Stddev	.00025	.00059	.00002	.00960	.00079
%RSD	110.98	77.979	.77770	25.504	60.818
#1	.00005	.00034	.00254	.04444	.00186
#2	.00041	.00117	.00251	.03086	.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICB-6254294 Acquired: 11/24/2020 12:24:43 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00259**	**.00008**	**.00544**	**.01335**	**.00024**
Stddev	.00233	.00001	.00131	.00206	.00007
%RSD	90.060	8.0484	24.147	15.393	28.329
#1	.00094	.00008	.00451	.01481	.00019
#2	.00424	.00008	.00637	.01190	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00081**	**.00220**	**-.00005**	**-.00041**
Stddev	.00	.00019	.00197	.00039	.00135
%RSD	.0013	23.762	89.604	727.63	329.37
#1	25.02	.00095	.00359	-.00033	.00054
#2	25.02	.00067	.00081	.00022	-.00136
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00444**	**.00040**	**.00010**	**.9951**	**.00050**
Stddev	.01461	.00005	.00009	.0011	.00031
%RSD	329.30	13.175	96.329	.1069	60.802
#1	-.01477	.00036	.00003	.9958	.00029
#2	.00589	.00044	.00016	.9943	.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICB-6254294 Acquired: 11/24/2020 12:24:43 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.00012**	**-.00009**	**.00032**	**.9998**
Stddev	.00019	.00001	.00016	.0002
%RSD	163.79	13.571	50.682	.0235
#1	.00025	-.00008	.00044	.9996
#2	-.00002	-.00010	.00021	1.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5785.3**	**4323.5**	**34738.**	**4095.0**
Stddev	15.2	12.5	8.	11.6
%RSD	.26289	.28905	.02291	.28397
#1	5774.5	4314.6	34732.	4103.3
#2	5796.0	4332.3	34744.	4086.8

Sample Name: ICVL-6256824 Acquired: 11/24/2020 12:28:29 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00608**	**.21816**	**.01454**	**.01996**	**.00212**
Stddev	.00006	.02345	.00036	.00018	.00003
%RSD	1.0180	10.750	2.4434	.90305	1.1929
#1	.00603	.23475	.01479	.01984	.00210
#2	.00612	.20158	.01429	.02009	.00213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00203**	**.51687**	**.00207**	**-.0017**	**.00364**
Stddev	.00000	.00035	.00015	.0053	.00002
%RSD	.15620	.06709	7.3719	309.2	.42829
#1	.00203	.51663	.00196	.0020	.00363
#2	.00202	.51712	.00218	-.0054	.00365
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00385**	**.00983**	**.05152**	**.53972**	**.03313**
Stddev	.00009	.00101	.00164	.02005	.00205
%RSD	2.4201	10.300	3.1748	3.7149	6.1892
#1	.00392	.00911	.05267	.55390	.03168
#2	.00378	.01054	.05036	.52555	.03458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ICVL-6256824 Acquired: 11/24/2020 12:28:29 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20867**	**.00327**	**.01128**	**1.0135**	**.00932**
Stddev	.00105	.00002	.00037	.0001	.00012
%RSD	.50190	.61524	3.2434	.01059	1.2458
#1	.20793	.00325	.01102	1.0136	.00940
#2	.20941	.00328	.01153	1.0134	.00924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.01013**	**.19282**	**.01714**	**.02330**
Stddev	.00	.00102	.00117	.00122	.00044
%RSD	.0055	10.102	.60635	7.1346	1.9002
#1	25.00	.01085	.19365	.01628	.02298
#2	25.00	.00941	.19199	.01801	.02361
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46327**	**.00957**	**.00495**	F **1.001**	**.00487**
Stddev	.00170	.00048	.00001	.012	.00024
%RSD	.36695	5.0664	.22445	1.165	4.8432
#1	.46447	.00922	.00494	.9931	.00471
#2	.46206	.00991	.00496	1.010	.00504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: ICVL-6256824 Acquired: 11/24/2020 12:28:29 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01988**	**.00465**	**.01039**	F **.9991**
Stddev	.00004	.00006	.00027	.0008
%RSD	.19325	1.2005	2.6195	.0765
#1	.01985	.00461	.01058	.9985
#2	.01991	.00469	.01020	.9996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5749.6**	**4336.9**	**34862.**	**4155.6**
Stddev	5.1	2.4	11.	7.0
%RSD	.08859	.05602	.03172	.16776
#1	5746.0	4338.6	34869.	4160.6
#2	5753.2	4335.2	34854.	4150.7

Sample Name: ICSA-6255359 Acquired: 11/24/2020 12:32:15 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**512.09**	**-.00073**	**-.00117**	F **.00690**
Stddev	.00013	.07	.00064	.00099	.00002
%RSD	13.101	.01290	87.926	84.373	.34588
#1	.00105	512.04	-.00028	-.00047	.00689
#2	.00087	512.14	-.00118	-.00187	.00692
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					.00400
Low Limit					-.00400

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**478.28**	**-.00155**	**.0293**	**.00026**
Stddev	.00001	.81	.00006	.0172	.00009
%RSD	10.125	.16968	4.1970	58.49	33.088
#1	-.00009	478.85	-.00159	.0415	.00020
#2	-.00007	477.70	-.00150	.0172	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00144**	**.00070**	**188.00**	**.10426**	**.00175**
Stddev	.00048	.00061	.24	.03657	.00157
%RSD	33.545	87.326	.12997	35.075	89.311
#1	-.00178	.00112	187.83	.13011	.00065
#2	-.00110	.00027	188.17	.07840	.00286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICSA-6255359 Acquired: 11/24/2020 12:32:15 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**500.71**	**-.00090**	**-.00109**	**.09126**	**-.00093**
Stddev	.92	.00000	.00033	.00074	.00033
%RSD	.18286	.22299	29.974	.81592	35.495
#1	501.36	-.00090	-.00132	.09074	-.00070
#2	500.06	-.00090	-.00086	.09179	-.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.85**	**.00791**	**-.05860**	**.01032**	**-.00026**
Stddev	.00	.00087	.00251	.00161	.00104
%RSD	.0012	10.969	4.2853	15.618	393.24
#1	24.85	.00730	-.05682	.01146	-.00100
#2	24.85	.00853	-.06037	.00918	.00047
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.01306**	**.00111**	**.01438**	**1.087**	**.00331**
Stddev	.01024	.00007	.00022	.002	.00022
%RSD	78.412	6.3355	1.5204	.1722	6.6805
#1	-.02030	.00116	.01453	1.089	.00315
#2	-.00582	.00106	.01422	1.086	.00346
Check ?	None	Chk Pass	None	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICSA-6255359 Acquired: 11/24/2020 12:32:15 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00434**	**.00051**	**.00128**	**1.003**
Stddev	.00106	.00047	.00084	.000
%RSD	24.371	93.773	65.563	.0447
#1	-.00360	.00017	.00187	1.003
#2	-.00509	.00084	.00069	1.004
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4217.8**	**3789.7**	**29782.**	**3975.3**
Stddev	1.4	.8	36.	.2
%RSD	.03266	.02061	.11989	.00399
#1	4218.8	3790.3	29757.	3975.2
#2	4216.9	3789.2	29807.	3975.4

Sample Name: ICSAB-6213230 Acquired: 11/24/2020 12:36:03 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.54160**	**507.86**	**.50868**	**4.8879**	**.51727**
Stddev	.00026	.19	.00042	.0014	.00532
%RSD	.04716	.03663	.08180	.02778	1.0281
#1	.54178	507.73	.50839	4.8869	.52103
#2	.54142	507.99	.50898	4.8888	.51350
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.24968**	**477.26**	**.51589**	**.0497**	**.49918**
Stddev	.00028	.45	.00060	.0125	.00026
%RSD	.11066	.09385	.11627	25.10	.05147
#1	.24987	476.94	.51631	.0586	.49937
#2	.24948	477.58	.51546	.0409	.49900
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.49374**	**.51553**	**187.68**	**5.1466**	**.00061**
Stddev	.00006	.00024	.15	.0341	.00138
%RSD	.01120	.04588	.07822	.66200	226.88
#1	.49378	.51536	187.79	5.1707	-.00037
#2	.49370	.51570	187.58	5.1226	.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	None	None
Value					
Range					

Sample Name: ICSAB-6213230 Acquired: 11/24/2020 12:36:03 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**498.10**	**.49269**	**.49805**	**5.3198**	**.48921**
Stddev	.10	.00050	.00242	.0026	.00062
%RSD	.02045	.10178	.48596	.04826	.12725
#1	498.02	.49233	.49976	5.3216	.48877
#2	498.17	.49304	.49634	5.3180	.48965
Check ?	Chk Pass	Chk Pass	None	None	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**27.02**	**.50462**	**-.05833**	**.49196**	**.51084**
Stddev	.00	.00133	.00217	.00117	.00748
%RSD	.0019	.26384	3.7277	.23685	1.4651
#1	27.02	.50556	-.05987	.49114	.50555
#2	27.02	.50367	-.05679	.49279	.51613
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.9037**	**.50287**	**.50881**	**1.069**	**.50819**
Stddev	.0011	.00177	.00009	.009	.00108
%RSD	.02226	.35225	.01777	.8021	.21197
#1	4.9045	.50412	.50875	1.075	.50742
#2	4.9029	.50161	.50887	1.063	.50895
Check ?	None	None	None	None	None
Value					
Range					

Sample Name: ICSAB-6213230 Acquired: 11/24/2020 12:36:03 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.48272**	**.49845**	**.46614**	**1.003**
Stddev	.00402	.00041	.00020	.000
%RSD	.83329	.08184	.04332	.0086
#1	.48557	.49816	.46600	1.003
#2	.47988	.49874	.46628	1.003
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4147.7**	**3741.7**	**29349.**	**3931.1**
Stddev	1.0	3.9	88.	19.2
%RSD	.02408	.10402	.29932	.48910
#1	4148.4	3744.4	29287.	3917.5
#2	4147.0	3738.9	29411.	3944.7

Sample Name: ICEX1 Acquired: 11/24/2020 12:39:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**.06357**	**5.2274**	**.00274**	**.00009**
Stddev	.00036	.03058	.0112	.00036	.00002
%RSD	146.63	48.112	.21442	13.288	27.698
#1	-.00001	.04194	5.2353	.00300	.00007
#2	.00049	.08520	5.2195	.00248	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00055**	**.04000**	**.00026**	**.0054**	**-.00000**
Stddev	.00010	.01034	.00019	.0287	.00003
%RSD	17.291	25.861	72.296	530.6	798.03
#1	.00062	.03268	.00039	-.0149	-.00002
#2	.00048	.04731	.00013	.0257	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00048**	**24.436**	**.01953**	**-.01117**	**.00169**
Stddev	.00033	.326	.00391	.00059	.00225
%RSD	69.643	1.3352	20.033	5.3149	133.40
#1	.00024	24.205	.01676	-.01075	.00328
#2	.00071	24.666	.02230	-.01159	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX1 Acquired: 11/24/2020 12:39:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05744**	**-.00011**	**-.00055**	**.01321**	**.00024**
Stddev	.00056	.00002	.00041	.00005	.00011
%RSD	.98180	15.855	73.457	.36217	46.531
#1	.05784	-.00010	-.00084	.01318	.00031
#2	.05704	-.00012	-.00027	.01325	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	**.00014**	**.00513**	**.00094**	**-.00032**
Stddev	-----	.00098	.00013	.00129	.00150
%RSD	-----	687.80	2.4467	136.84	474.47
#1	^ -----	.00084	.00504	.00185	-.00138
#2	^ -----	-.00055	.00522	.00003	.00074
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03034**	**.00020**	**.00001**	**.9977**	**.00063**
Stddev	.00028	.00003	.00007	.0032	.00042
%RSD	.93928	14.404	584.96	.3192	66.768
#1	.03054	.00018	.00006	.9999	.00033
#2	.03014	.00022	-.00004	.9954	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX1 Acquired: 11/24/2020 12:39:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00149**	**5.0333**	**.00040**	**.9977**
Stddev	.00037	.0092	.00005	.0008
%RSD	25.110	.18249	13.155	.0839
#1	.00176	5.0268	.00036	.9971
#2	.00123	5.0398	.00043	.9983
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5817.0**	**4342.4**	**35110.**	**4059.8**
Stddev	22.1	12.1	180.	31.2
%RSD	.37954	.27798	.51362	.76766
#1	5832.7	4350.9	35238.	4037.8
#2	5801.4	4333.8	34983.	4081.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.26%	100.02%	100.78%	99.867%
Range				

Sample Name: ICEX2 Acquired: 11/24/2020 12:43:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00178**	**.07715**	**.00227**	**.00272**	**.00007**
Stddev	.00083	.01680	.00211	.00002	.00005
%RSD	46.493	21.774	92.829	.84625	67.321
#1	-.00237	.06527	.00078	.00270	.00010
#2	-.00120	.08903	.00376	.00274	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**-.00254**	**.00045**	**-.0086**	**.00306**
Stddev	.00008	.00085	.00003	.0051	.00006
%RSD	179.25	33.622	7.1432	59.51	2.1191
#1	-.00010	-.00315	.00043	-.0050	.00302
#2	.00001	-.00194	.00048	-.0123	.00311
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00054**	**-.00158**	**.00235**	**-.04034**	**10.225**
Stddev	.00012	.00060	.00180	.01831	.015
%RSD	21.288	37.971	76.643	45.387	.14445
#1	.00046	-.00116	.00108	-.05328	10.235
#2	.00062	-.00201	.00363	-.02739	10.215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX2 Acquired: 11/24/2020 12:43:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00416**	**.00000**	**-.00020**	**-.00842**	**.00452**
Stddev	.00009	.00009	.00011	.00947	.00021
%RSD	2.1775	2244.5	52.364	112.46	4.6035
#1	.00423	-.00006	-.00028	-.01511	.00437
#2	.00410	.00007	-.00013	-.00172	.00467
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**-.00770**	**-.00265**	**.00244**	**-.00026**
Stddev	.00	.00051	.00079	.00004	.00129
%RSD	.0007	6.6917	29.628	1.5295	492.87
#1	25.01	-.00806	-.00321	.00246	-.00118
#2	25.01	-.00733	-.00210	.00241	.00065
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**47.552**	**-.00026**	**.00005**	**.9993**	**19.558**
Stddev	.084	.00036	.00006	.0038	.030
%RSD	.17695	138.01	110.26	.3838	.15498
#1	47.493	-.00001	.00001	1.002	19.537
#2	47.612	-.00051	.00010	.9966	19.580
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX2 Acquired: 11/24/2020 12:43:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**20.471**	**-.00100**	**-.00023**	**1.003**
Stddev	.016	.00018	.00009	.001
%RSD	.07938	17.929	37.776	.1406
#1	20.460	-.00113	-.00030	1.002
#2	20.483	-.00087	-.00017	1.004
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5387.5**	**4276.1**	**34040.**	**4098.6**
Stddev	5.3	.8	21.	26.0
%RSD	.09824	.01839	.06158	.63499
#1	5391.2	4276.7	34025.	4117.0
#2	5383.7	4275.6	34055.	4080.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.852%	98.490%	97.708%	100.82%
Range				

Sample Name: ICEX3 Acquired: 11/24/2020 12:47:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00101**	**.02224**	**.00264**	**.00005**	**-.00003**
Stddev	.00003	.02171	.00096	.00007	.00001
%RSD	3.2005	97.653	36.373	130.03	33.656
#1	.00103	.03759	.00196	.00010	-.00002
#2	.00098	.00688	.00331	.00000	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.00025**	**.00021**	**-.1692**	**.00008**
Stddev	.00006	.00098	.00004	.0019	.00003
%RSD	566.54	397.15	19.881	1.132	38.043
#1	-.00005	.00094	.00018	-.1679	.00010
#2	.00003	-.00045	.00024	-.1706	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00081**	**.00129**	**-.01022**	**-.00906**	**.00031**
Stddev	.00021	.00063	.00229	.02166	.00102
%RSD	25.545	48.897	22.379	239.10	327.98
#1	.00066	.00173	-.01184	.00626	.00103
#2	.00096	.00084	-.00860	-.02438	-.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX3 Acquired: 11/24/2020 12:47:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576-2	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}2	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01350**	**50.217**	**-.00246**	**.00237**	**.00059**
Stddev	.00251	.339	.00013	.00471	.00019
%RSD	18.588	.67416	5.2205	198.49	31.333
#1	.01528	50.457	-.00255	.00571	.00046
#2	.01173	49.978	-.00237	-.00096	.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**.00552**	**97.539**	**-.00548**	**.00322**
Stddev	.00	.00066	.213	.00024	.00174
%RSD	.0059	11.875	.21847	4.3848	53.977
#1	25.01	.00598	97.690	-.00531	.00445
#2	25.01	.00506	97.388	-.00565	.00199
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00094**	**-.00020**	**.00000**	**.9921**	**.00411**
Stddev	.00622	.00006	.00005	.0005	.00041
%RSD	661.85	28.565	1383.2	.0526	10.038
#1	-.00533	-.00016	.00004	.9924	.00382
#2	.00346	-.00025	-.00003	.9917	.00440
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX3 Acquired: 11/24/2020 12:47:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00974**	**.00093**	**.00130**	**.9682**
Stddev	.00136	.00005	.00038	.0005
%RSD	13.982	5.2472	29.270	.0469
#1	.00877	.00090	.00103	.9679
#2	.01070	.00097	.00157	.9685
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5761.1**	**4361.0**	**34632.**	**4103.7**
Stddev	8.6	10.3	24.	3.3
%RSD	.14921	.23635	.07011	.08122
#1	5767.2	4368.3	34649.	4101.3
#2	5755.0	4353.7	34615.	4106.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.292%	100.45%	99.409%	100.95%
Range				

Sample Name: ICEX4 Acquired: 11/24/2020 12:51:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00773**	**.00063**	**-.00129**	**.00006**
Stddev	.00016	.02861	.00032	.00036	.00001
%RSD	94.658	370.10	51.128	27.691	20.074
#1	-.00029	.02796	.00040	-.00154	.00007
#2	-.00006	-.01250	.00085	-.00104	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**.00236**	**-.00032**	**.0223**	**18.257**
Stddev	.00007	.00430	.00005	.0344	.006
%RSD	82.323	182.32	16.087	154.5	.03253
#1	-.00004	.00540	-.00028	-.0021	18.253
#2	-.00013	-.00068	-.00036	.0466	18.262
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.252**	**.00599**	**.00390**	**.00696**	**.00105**
Stddev	.030	.00085	.00126	.01295	.00131
%RSD	.29351	14.189	32.179	185.92	124.50
#1	10.230	.00659	.00301	.01612	.00198
#2	10.273	.00539	.00479	-.00219	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX4 Acquired: 11/24/2020 12:51:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00152**	**.00163**	**-.00019**	**.00388**	**9.4193**
Stddev	.00090	.00009	.00004	.00357	.0077
%RSD	59.325	5.3058	23.112	92.043	.08218
#1	.00215	.00169	-.00022	.00135	9.4138
#2	.00088	.00157	-.00016	.00640	9.4247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**.00044**	**.02530**	**.00368**	**.00068**
Stddev	.00	.00019	.00039	.00007	.00047
%RSD	.0067	43.614	1.5461	1.8846	69.755
#1	25.01	.00031	.02558	.00373	.00034
#2	25.01	.00058	.02503	.00363	.00101
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.14581**	**-.00004**	**.00004**	**1.004**	**.00318**
Stddev	.01127	.00076	.00021	.007	.00032
%RSD	7.7313	2001.2	555.83	.7007	10.035
#1	-.13784	.00050	.00019	.9991	.00295
#2	-.15378	-.00058	-.00011	1.009	.00341
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX4 Acquired: 11/24/2020 12:51:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00614**	**-.00013**	**-.00284**	**.9954**
Stddev	.00115	.00034	.00015	.0002
%RSD	18.700	257.58	5.3783	.0211
#1	.00695	-.00038	-.00273	.9956
#2	.00533	.00011	-.00295	.9953
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5707.7**	**4293.4**	**34655.**	**4125.5**
Stddev	3.8	.5	85.	17.9
%RSD	.06658	.01184	.24489	.43454
#1	5705.0	4293.1	34715.	4138.2
#2	5710.4	4293.8	34595.	4112.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.371%	98.888%	99.473%	101.48%
Range				

Sample Name: ICEX5 Acquired: 11/24/2020 12:55:08 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.08824**	**.00475**	**-.01225**	**-.00012**
Stddev	.00014	.00580	.00097	.00038	.00001
%RSD	80.545	6.5741	20.484	3.0715	11.458
#1	-.00007	.09235	.00543	-.01199	-.00011
#2	-.00027	.08414	.00406	-.01252	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.00190**	**.00009**	**.0104**	**.00019**
Stddev	.00001	.00197	.00004	.0130	.00001
%RSD	163.47	103.72	40.456	124.2	5.5733
#1	-.00000	.00051	.00006	.0196	.00020
#2	.00002	.00329	.00011	.0013	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00057**	**-.00083**	**.00036**	**-.03180**	**.00074**
Stddev	.00032	.00033	.00122	.00112	.00145
%RSD	56.479	39.821	338.63	3.5202	195.43
#1	-.00034	-.00060	-.00050	-.03260	.00176
#2	-.00079	-.00106	.00122	-.03101	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX5 Acquired: 11/24/2020 12:55:08 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.02868**	**.00022**	**5.1526**	**.01009**	**.00021**
Stddev	.00154	.00002	.0625	.00019	.00018
%RSD	5.3644	10.796	1.2126	1.8888	85.244
#1	-.02977	.00020	5.1968	.00996	.00008
#2	-.02759	.00024	5.1084	.01022	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**-.00238**	**-.00955**	**-.00234**	**.00156**
Stddev	.00	.00076	.00149	.00021	.00172
%RSD	.0005	31.782	15.575	9.0730	110.19
#1	25.01	-.00291	-.00850	-.00249	.00277
#2	25.01	-.00184	-.01061	-.00219	.00034
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00728**	**-.00032**	**.00001**	**1.002**	**.00179**
Stddev	.00565	.00028	.00018	.001	.00041
%RSD	77.642	88.298	2207.3	.1217	22.926
#1	-.00328	-.00012	.00014	1.003	.00150
#2	-.01127	-.00052	-.00012	1.001	.00208
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX5 Acquired: 11/24/2020 12:55:08 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00106**	**-.00385**	**.00030**	**.9987**
Stddev	.00027	.00049	.00072	.0004
%RSD	25.781	12.640	240.68	.0425
#1	-.00126	-.00350	-.00021	.9984
#2	-.00087	-.00419	.00081	.9990
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5792.6**	**4343.6**	**35080.**	**4129.3**
Stddev	2.6	6.5	103.	3.2
%RSD	.04543	.14890	.29448	.07795
#1	5794.5	4348.2	35007.	4127.1
#2	5790.7	4339.0	35153.	4131.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.835%	100.04%	100.69%	101.58%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 12:58:55 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0006**	**51.832**	**1.0121**	**1.0376**	**1.0055**
Stddev	.0009	.115	.0013	.0012	.0034
%RSD	.08805	.22169	.12462	.11780	.34033
#1	1.0012	51.751	1.0112	1.0367	1.0031
#2	.99997	51.913	1.0130	1.0385	1.0079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0343**	**51.566**	**1.0177**	**1.041**	**.99785**
Stddev	.0047	.096	.0013	.046	.00117
%RSD	.45351	.18592	.12854	4.450	.11733
#1	1.0310	51.498	1.0168	1.074	.99867
#2	1.0376	51.633	1.0186	1.008	.99702
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0259**	**1.0113**	**51.194**	**50.311**	**1.0158**
Stddev	.0008	.0022	.164	.191	.0062
%RSD	.07961	.21832	.31993	.37949	.61345
#1	1.0254	1.0129	51.079	50.176	1.0114
#2	1.0265	1.0097	51.310	50.446	1.0202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 12:58:55 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.861**	**1.0080**	**1.0674**	**51.048**	**1.0024**
Stddev	.125	.0020	.0024	.186	.0005
%RSD	.25108	.19665	.22689	.36363	.04613
#1	49.950	1.0094	1.0657	50.916	1.0021
#2	49.773	1.0066	1.0691	51.179	1.0027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.85**	**1.0079**	**25.637**	**1.0247**	**1.0175**
Stddev	.01	.0002	.022	.0001	.0014
%RSD	.0328	.02031	.08664	.01057	.14278
#1	37.84	1.0081	25.622	1.0247	1.0186
#2	37.86	1.0078	25.653	1.0246	1.0165
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.259**	**1.0100**	**1.0146**	**1.509**	**1.0250**
Stddev	.014	.0002	.0036	.002	.0004
%RSD	.13166	.02309	.34956	.1611	.03691
#1	10.249	1.0102	1.0121	1.511	1.0253
#2	10.269	1.0099	1.0172	1.507	1.0247
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 12:58:55 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0078**	**1.0157**	**1.0335**	**1.515**
Stddev	.0018	.0022	.0026	.003
%RSD	.17456	.21486	.25328	.1970
#1	1.0091	1.0173	1.0354	1.512
#2	1.0066	1.0142	1.0317	1.517
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4936.1**	**4144.7**	**32625.**	**4015.2**
Stddev	.5	6.1	15.	11.9
%RSD	.00980	.14727	.04622	.29734
#1	4935.8	4149.0	32635.	4006.8
#2	4936.4	4140.4	32614.	4023.7

Sample Name: CCB-6254294 Acquired: 11/24/2020 13:02:28 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.03049**	**-.00075**	**.00030**	**.00014**
Stddev	.00024	.02113	.00104	.00037	.00001
%RSD	74.145	69.297	138.64	121.03	8.7362
#1	.00049	.04543	-.00001	.00056	.00014
#2	.00015	.01555	-.00149	.00004	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.00418**	**.00004**	**.0109**	**.00033**
Stddev	.00003	.00140	.00017	.0051	.00005
%RSD	31.855	33.552	379.88	46.69	16.378
#1	.00007	.00319	.00016	.0073	.00037
#2	.00010	.00517	-.00007	.0144	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00040**	**.00028**	**.00346**	**.02224**	**.00077**
Stddev	.00028	.00012	.00080	.01253	.00016
%RSD	69.320	44.570	22.994	56.344	21.069
#1	.00021	.00037	.00402	.01338	.00089
#2	.00060	.00019	.00290	.03110	.00066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 13:02:28 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00200**	**.00008**	**.00957**	**.00607**	**.00035**
Stddev	.00119	.00003	.00217	.00956	.00023
%RSD	59.580	37.033	22.708	157.35	66.539
#1	.00284	.00011	.00803	.01283	.00018
#2	.00115	.00006	.01110	-.00068	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00012**	**.00041**	**-.00104**	**-.00050**
Stddev	.00	.00052	.00194	.00100	.00206
%RSD	.0059	428.28	472.17	95.353	416.33
#1	25.02	.00025	.00178	-.00175	.00096
#2	25.02	-.00049	-.00096	-.00034	-.00196
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00710**	**.00036**	**.00003**	**1.000**	**.00034**
Stddev	.01079	.00003	.00000	.000	.00041
%RSD	152.03	9.5069	3.7300	.0426	123.25
#1	-.01473	.00038	.00003	1.000	.00063
#2	.00053	.00033	.00003	.9997	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 13:02:28 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.00032**	**.00006**	**1.000**
Stddev	.00057	.00046	.00026	.001
%RSD	1849.9	145.13	417.99	.0774
#1	.00037	-.00001	.00024	.9996
#2	-.00043	.00064	-.00012	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5796.6**	**4301.1**	**34779.**	**4058.8**
Stddev	9.8	5.2	51.	22.6
%RSD	.16889	.12028	.14773	.55638
#1	5803.6	4304.7	34815.	4042.9
#2	5789.7	4297.4	34743.	4074.8

Sample Name: CCVL-6256824 Acquired: 11/24/2020 13:16:33 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00584**	**.19971**	**.01437**	**.01957**	**.00209**
Stddev	.00043	.02891	.00074	.00017	.00000
%RSD	7.4195	14.477	5.1657	.88172	.04842
#1	.00615	.17926	.01385	.01970	.00209
#2	.00553	.22015	.01489	.01945	.00209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00208**	**.51178**	**.00191**	**.0229**	**.00365**
Stddev	.00003	.00277	.00004	.0250	.00005
%RSD	1.3670	.54162	1.8811	108.9	1.3925
#1	.00206	.50982	.00193	.0053	.00361
#2	.00210	.51374	.00188	.0406	.00368
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00391**	**.01032**	**.05413**	**.47419**	**.03115**
Stddev	.00026	.00017	.00038	.04928	.00051
%RSD	6.5666	1.6881	.69423	10.392	1.6455
#1	.00373	.01020	.05440	.43935	.03079
#2	.00409	.01045	.05387	.50904	.03151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 13:16:33 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20464**	**.00318**	**.01082**	**.99239**	**.00940**
Stddev	.00127	.00001	.00034	.00721	.00002
%RSD	.61823	.21726	3.1843	.72686	.16950
#1	.20554	.00317	.01058	.98729	.00939
#2	.20375	.00318	.01106	.99749	.00941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00976**	**.18479**	**.01835**	**.02382**
Stddev	.00	.00129	.00097	.00006	.00021
%RSD	.0001	13.273	.52368	.32792	.90025
#1	25.00	.00884	.18410	.01839	.02397
#2	25.00	.01067	.18547	.01830	.02367
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46660**	**.00940**	**.00498**	F **1.004**	**.00573**
Stddev	.01865	.00022	.00010	.004	.00002
%RSD	3.9969	2.3108	2.0109	.4144	.40381
#1	.45342	.00924	.00505	1.007	.00574
#2	.47979	.00955	.00490	1.001	.00571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 13:16:33 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	.01831	.00474	.00994	F .9998
Stddev	.00001	.00004	.00024	.0003
%RSD	.07725	.81174	2.4152	.0270
#1	.01830	.00471	.00977	1.000
#2	.01832	.00477	.01011	.9996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5699.6	4297.9	34690.	4103.7
Stddev	4.9	1.9	35.	23.2
%RSD	.08520	.04531	.09956	.56624
#1	5696.2	4296.5	34665.	4087.3
#2	5703.0	4299.3	34714.	4120.1

Sample Name: Sn spike Acquired: 11/24/2020 13:20:19 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.01134**	**-.00037**	**-.00111**	**-.00002**
Stddev	.00032	.01481	.00067	.00002	.00005
%RSD	135.99	130.60	179.23	2.1957	251.59
#1	-.00001	.02182	-.00084	-.00109	.00001
#2	-.00046	.00087	.00010	-.00112	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.00438**	**-.00002**	**-.0052**	**.00001**
Stddev	.00008	.00064	.00010	.0165	.00000
%RSD	312.15	14.581	544.46	318.1	47.155
#1	-.00003	.00483	.00005	.0065	.00001
#2	.00008	.00393	-.00009	-.0168	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.00105**	**.00155**	**.00309**	**.00034**
Stddev	.00016	.00016	.00087	.00460	.00014
%RSD	118.70	15.366	55.996	149.01	40.339
#1	.00002	.00093	.00217	.00634	.00044
#2	.00025	.00116	.00094	-.00017	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: Sn spike Acquired: 11/24/2020 13:20:19 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**-.00002**	**-.00060**	**-.00862**	**-.00004**
Stddev	.00026	.00010	.00019	.00631	.00001
%RSD	105.19	527.61	31.204	73.207	22.298
#1	.00006	.00005	-.00073	-.01308	-.00004
#2	.00043	-.00009	-.00047	-.00416	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00032**	**-.00585**	**-.00057**	**-.00130**
Stddev	.00	.00030	.00175	.00070	.00019
%RSD	.0027	95.683	29.872	122.09	14.502
#1	25.02	.00010	-.00462	-.00008	-.00117
#2	25.02	.00053	-.00709	-.00107	-.00144
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00503**	**.18328**	**.00001**	**1.001**	**.00021**
Stddev	.00471	.00014	.00001	.001	.00017
%RSD	93.550	.07577	167.47	.0890	78.201
#1	-.00170	.18338	-.00000	1.002	.00009
#2	-.00836	.18318	.00002	1.001	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: Sn spike Acquired: 11/24/2020 13:20:19 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00022**	**.00006**	**.00021**	**.9995**
Stddev	.00040	.00029	.00006	.0004
%RSD	180.17	515.33	28.167	.0415
#1	-.00050	-.00015	.00017	.9992
#2	.00006	.00026	.00025	.9998
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5836.2**	**4336.5**	**34911.**	**4079.0**
Stddev	7.5	3.7	12.	10.0
%RSD	.12847	.08606	.03542	.24584
#1	5830.9	4333.9	34919.	4071.9
#2	5841.5	4339.1	34902.	4086.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.59%	99.881%	100.21%	100.34%
Range				

Sample Name: MB 480-560468/1-A Acquired: 11/24/2020 13:24:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**.01123**	**-.00064**	**-.00063**	**.00006**
Stddev	.00082	.00971	.00105	.00021	.00003
%RSD	514.26	86.446	164.08	33.538	42.763
#1	.00074	.00437	-.00139	-.00078	.00004
#2	-.00042	.01810	.00010	-.00048	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.02075**	**-.00011**	**-.0276**	**-.00010**
Stddev	.00001	.00264	.00005	.0008	.00014
%RSD	27.900	12.717	50.847	3.039	137.74
#1	-.00002	.02261	-.00014	-.0270	-.00020
#2	-.00003	.01888	-.00007	-.0282	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00022**	**.00234**	**.00093**	**-.01476**	**.00143**
Stddev	.00041	.00041	.00044	.01236	.00045
%RSD	185.18	17.689	47.524	83.746	31.168
#1	.00007	.00263	.00062	-.00602	.00175
#2	-.00052	.00205	.00125	-.02351	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560468/1-A Acquired: 11/24/2020 13:24:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00239**	**.00021**	**-.00043**	**.01610**	**.00019**
Stddev	.00124	.00002	.00004	.01998	.00002
%RSD	51.968	11.962	8.6581	124.07	10.207
#1	.00151	.00023	-.00046	.00198	.00020
#2	.00327	.00019	-.00041	.03023	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**.00042**	**-.00098**	**-.00158**	**-.00166**
Stddev	.00	.00023	.00145	.00068	.00175
%RSD	.0016	55.717	148.11	43.397	104.96
#1	25.01	.00025	.00005	-.00109	-.00043
#2	25.01	.00059	-.00200	-.00206	-.00290
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00472**	**-.00001**	**.00003**	**.9978**	**.00035**
Stddev	.00043	.00010	.00009	.0008	.00002
%RSD	9.0398	767.94	278.68	.0781	4.4801
#1	-.00442	-.00008	-.00003	.9973	.00036
#2	-.00502	.00006	.00009	.9984	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560468/1-A Acquired: 11/24/2020 13:24:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00031**	**-.00023**	**.00205**	**.9999**
Stddev	.00027	.00003	.00003	.0000
%RSD	88.571	13.117	1.5867	.0022
#1	-.00050	-.00021	.00202	.9999
#2	-.00011	-.00025	.00207	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5889.5**	**4382.4**	**35566.**	**4169.0**
Stddev	4.0	5.7	118.	37.6
%RSD	.06805	.13005	.33248	.90079
#1	5886.7	4386.4	35483.	4195.5
#2	5892.3	4378.3	35650.	4142.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.50%	100.94%	102.09%	102.55%
Range				

Sample Name: LCS 480-560468/2-A Acquired: 11/24/2020 13:27:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04913**	**10.293**	**.20252**	**.20058**	**.21056**
Stddev	.00005	.074	.00131	.00050	.00011
%RSD	.09421	.72218	.64633	.24718	.05084
#1	.04910	10.240	.20160	.20023	.21048
#2	.04916	10.346	.20345	.20093	.21063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21084**	**10.179**	**.19955**	**-.0173**	**.18774**
Stddev	.00010	.012	.00013	.0068	.00012
%RSD	.04549	.12057	.06587	39.22	.06215
#1	.21077	10.170	.19964	-.0221	.18765
#2	.21090	10.188	.19946	-.0125	.18782
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19747**	**.20045**	**9.8163**	**9.9511**	**.20568**
Stddev	.00001	.00095	.0140	.0275	.00028
%RSD	.00518	.47596	.14229	.27595	.13474
#1	.19746	.20113	9.8064	9.9317	.20588
#2	.19748	.19978	9.8262	9.9705	.20549
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560468/2-A Acquired: 11/24/2020 13:27:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7593**	**.20049**	**.20569**	**10.040**	**.18758**
Stddev	.0051	.00005	.00085	.015	.00018
%RSD	.05194	.02318	.41100	.15354	.09360
#1	9.7628	.20052	.20629	10.029	.18745
#2	9.7557	.20046	.20510	10.051	.18770
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.69**	**.19439**	**9.9843**	**.20176**	**.19919**
Stddev	.00	.00139	.0000	.00063	.00152
%RSD	.0052	.71448	.00018	.31073	.76290
#1	24.69	.19341	9.9843	.20220	.19812
#2	24.69	.19537	9.9843	.20131	.20026
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7329**	**.19067**	**.20136**	**1.005**	**.20122**
Stddev	.0297	.00086	.00027	.005	.00064
%RSD	.30495	.44873	.13500	.5140	.31617
#1	9.7539	.19128	.20117	1.009	.20167
#2	9.7120	.19007	.20155	1.001	.20077
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560468/2-A Acquired: 11/24/2020 13:27:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.19778**	**.19551**	**.20226**	**1.002**
Stddev	.00077	.00025	.00026	.000
%RSD	.38889	.12991	.12734	.0352
#1	.19723	.19569	.20244	1.002
#2	.19832	.19533	.20208	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5470.5**	**4283.5**	**34535.**	**4102.5**
Stddev	3.3	6.0	21.	2.3
%RSD	.06024	.13989	.06224	.05559
#1	5468.2	4279.3	34520.	4104.1
#2	5472.9	4287.8	34550.	4100.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.284%	98.661%	99.130%	100.92%
Range				

Sample Name: 480-178459-C-1-A Acquired: 11/24/2020 13:31:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**.00755**	**.00056**	**.02468**	**.13593**
Stddev	.00051	.00668	.00113	.00020	.00008
%RSD	116.59	88.485	200.92	.79533	.06200
#1	-.00008	.01227	.00136	.02482	.13587
#2	-.00080	.00283	-.00024	.02454	.13599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**127.31**	**.00024**	**-.0112**	**.00020**
Stddev	.00001	.40	.00007	.0232	.00006
%RSD	21.702	.31746	28.484	207.5	27.360
#1	.00004	127.60	.00029	.0052	.00024
#2	.00005	127.03	.00019	-.0275	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**.05764**	**.00807**	**2.9158**	**.00875**
Stddev	.00003	.00049	.00043	.0025	.00107
%RSD	13.506	.85718	5.2970	.08637	12.166
#1	.00021	.05729	.00777	2.9176	.00951
#2	.00026	.05799	.00838	2.9140	.00800
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-1-A Acquired: 11/24/2020 13:31:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**15.595**	**.54162**	**.00012**	**13.261**	**.00215**
Stddev	.035	.00098	.00020	.009	.00031
%RSD	.22127	.18103	161.98	.06900	14.541
#1	15.571	.54093	.00026	13.267	.00237
#2	15.620	.54232	-.00002	13.254	.00193
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.94**	**.01346**	**3.1867**	**-.00167**	**.00047**
Stddev	.00	.00030	.0033	.00025	.00034
%RSD	.0008	2.2580	.10330	14.732	73.085
#1	24.94	.01368	3.1844	-.00184	.00023
#2	24.94	.01325	3.1891	-.00150	.00071
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.9169**	**.00058**	**.29141**	**1.001**	**.00072**
Stddev	.0417	.00018	.00066	.001	.00023
%RSD	.52690	31.432	.22760	.1226	31.883
#1	7.9464	.00045	.29188	1.000	.00056
#2	7.8874	.00070	.29095	1.002	.00088
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-1-A Acquired: 11/24/2020 13:31:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00136**	**-.00040**	**.39795**	**.9995**
Stddev	.00009	.00029	.00142	.0000
%RSD	6.7160	72.742	.35765	.0024
#1	-.00142	-.00019	.39694	.9995
#2	-.00129	-.00061	.39896	.9995
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5197.2**	**4148.6**	**33366.**	**4092.2**
Stddev	5.3	1.8	83.	1.5
%RSD	.10250	.04453	.24768	.03576
#1	5193.5	4147.3	33424.	4091.2
#2	5201.0	4150.0	33307.	4093.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.574%	95.554%	95.773%	100.66%
Range				

Sample Name: 480-178459-C-2-A Acquired: 11/24/2020 13:35:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00027**	**.02146**	**-.00055**	**.02211**	**.13776**
Stddev	.00019	.01296	.00029	.00028	.00057
%RSD	70.758	60.376	52.193	1.2872	.41519
#1	-.00041	.03062	-.00035	.02231	.13735
#2	-.00014	.01230	-.00075	.02191	.13816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**130.41**	**.00017**	**-.0081**	**.00006**
Stddev	.00012	.23	.00005	.0024	.00004
%RSD	2763.3	.17800	26.966	28.98	75.489
#1	.00009	130.24	.00020	-.0098	.00003
#2	-.00008	130.57	.00014	-.0065	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.03578**	**-.00044**	**2.7909**	**.00766**
Stddev	.00035	.00025	.00106	.0020	.00015
%RSD	116.02	.69594	241.44	.07048	2.0053
#1	.00054	.03560	.00031	2.7895	.00755
#2	.00005	.03595	-.00119	2.7923	.00777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-2-A Acquired: 11/24/2020 13:35:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.139**	**.61654**	**-.00036**	**13.649**	**.00147**
Stddev	.048	.00155	.00005	.047	.00015
%RSD	.29752	.25192	14.899	.34166	10.101
#1	16.105	.61544	-.00040	13.616	.00136
#2	16.173	.61764	-.00033	13.682	.00157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.97**	**.00131**	**3.2611**	**-.00170**	**-.00142**
Stddev	.00	.00032	.0008	.00105	.00199
%RSD	.0004	24.175	.02348	61.997	139.58
#1	24.97	.00109	3.2605	-.00245	-.00283
#2	24.97	.00154	3.2616	-.00096	-.00002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.0210**	**.00020**	**.29411**	**1.001**	**.00120**
Stddev	.0398	.00025	.00056	.001	.00039
%RSD	.49683	126.59	.19201	.0603	32.259
#1	7.9928	.00002	.29371	1.001	.00092
#2	8.0491	.00038	.29451	1.002	.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-2-A Acquired: 11/24/2020 13:35:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00138**	**-.00052**	**.14915**	**.9999**
Stddev	.00033	.00024	.00124	.0001
%RSD	24.259	45.767	.83091	.0140
#1	-.00114	-.00069	.14827	1.0000
#2	-.00162	-.00035	.15002	.9998
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5173.8**	**4138.0**	**33262.**	**4093.4**
Stddev	3.1	2.2	92.	19.9
%RSD	.05914	.05425	.27646	.48626
#1	5175.9	4136.4	33197.	4079.3
#2	5171.6	4139.6	33327.	4107.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.169%	95.309%	95.475%	100.69%
Range				

Sample Name: 480-178459-C-3-A Acquired: 11/24/2020 13:38:48 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.02488**	**.00020**	**.02275**	**.14466**
Stddev	.00076	.00234	.00108	.00008	.00026
%RSD	7095.8	9.3863	528.93	.34515	.17708
#1	.00053	.02323	.00096	.02269	.14484
#2	-.00055	.02654	-.00056	.02280	.14448
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**130.70**	**.00017**	**-.0329**	**.00003**
Stddev	.00004	.24	.00008	.0135	.00010
%RSD	74.648	.18467	48.537	41.05	361.56
#1	.00003	130.87	.00011	-.0233	-.00004
#2	.00008	130.53	.00023	-.0424	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**.01451**	**.00078**	**2.9879**	**.00748**
Stddev	.00020	.00019	.00119	.0565	.00035
%RSD	111.79	1.3424	153.09	1.8918	4.7010
#1	.00004	.01465	.00162	3.0278	.00773
#2	.00033	.01437	-.00006	2.9479	.00723
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-A Acquired: 11/24/2020 13:38:48 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.237**	**.65244**	**-.00031**	**13.685**	**.00123**
Stddev	.010	.00009	.00005	.002	.00022
%RSD	.06241	.01407	16.892	.01721	17.952
#1	16.244	.65250	-.00027	13.683	.00139
#2	16.230	.65237	-.00035	13.687	.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.00**	**.00237**	**3.1582**	**-.00208**	**-.00137**
Stddev	.00	.00033	.0005	.00011	.00258
%RSD	.0042	13.964	.01718	5.1105	189.01
#1	25.00	.00261	3.1585	-.00200	-.00320
#2	25.00	.00214	3.1578	-.00215	.00046
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.2591**	**.00005**	**.30037**	**.9988**	**.00137**
Stddev	.0508	.00026	.00025	.0054	.00033
%RSD	.61555	506.77	.08340	.5427	24.328
#1	8.2950	-.00014	.30055	1.003	.00161
#2	8.2231	.00024	.30019	.9949	.00114
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-A Acquired: 11/24/2020 13:38:48 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00091**	**-.00012**	**.30230**	**.9984**
Stddev	.00113	.00049	.00012	.0003
%RSD	123.75	416.21	.03966	.0338
#1	-.00170	.00023	.30239	.9982
#2	-.00011	-.00047	.30222	.9987
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5165.8**	**4133.9**	**33199.**	**4105.5**
Stddev	1.0	3.1	85.	10.4
%RSD	.02014	.07483	.25625	.25450
#1	5165.0	4131.7	33139.	4112.9
#2	5166.5	4136.0	33260.	4098.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.031%	95.213%	95.296%	100.99%
Range				

Sample Name: 480-178459-C-3-ASD@5 Acquired: 11/24/2020 13:42:30 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**-.02048**	**.00039**	**.00371**	**.02967**
Stddev	.00008	.00442	.00136	.00017	.00000
%RSD	76.166	21.573	351.03	4.6839	.01514
#1	.00005	-.02360	-.00058	.00384	.02966
#2	.00016	-.01735	.00135	.00359	.02967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**26.090**	**.00002**	**-.0012**	**-.00013**
Stddev	.00003	.080	.00007	.0070	.00013
%RSD	39.159	.30531	411.28	563.4	95.663
#1	.00008	26.146	-.00003	-.0062	-.00022
#2	.00005	26.034	.00007	.0037	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00337**	**-.00035**	**.60869**	**.00279**
Stddev	.00010	.00013	.00184	.00049	.00037
%RSD	172.77	3.9154	522.15	.07977	13.213
#1	-.00001	.00346	-.00165	.60835	.00305
#2	.00013	.00327	.00095	.60903	.00253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-ASD@5 Acquired: 11/24/2020 13:42:30 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.3598**	**.13498**	**-.00062**	**2.7589**	**.00053**
Stddev	.0038	.00060	.00004	.0134	.00001
%RSD	.11415	.44728	6.9943	.48472	2.6384
#1	3.3571	.13456	-.00059	2.7684	.00052
#2	3.3626	.13541	-.00065	2.7495	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**.00030**	**.60697**	**-.00202**	**-.00085**
Stddev	.00	.00008	.00216	.00008	.00228
%RSD	.0024	27.330	.35578	4.1233	267.66
#1	25.01	.00024	.60850	-.00196	-.00246
#2	25.01	.00036	.60545	-.00208	.00076
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.6283**	**-.00008**	**.06122**	**.9992**	**.00034**
Stddev	.0148	.00037	.00008	.0034	.00001
%RSD	.90933	453.67	.13111	.3373	2.5747
#1	1.6179	-.00034	.06128	1.002	.00034
#2	1.6388	.00018	.06116	.9969	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-ASD@5 Acquired: 11/24/2020 13:42:30 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00030**	**-.00032**	**.06210**	**.9987**
Stddev	.00022	.00063	.00050	.0003
%RSD	73.967	197.69	.80488	.0272
#1	-.00014	-.00076	.06174	.9989
#2	-.00045	.00013	.06245	.9985
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5563.6**	**4267.1**	**34257.**	**4127.8**
Stddev	.7	3.1	233.	15.3
%RSD	.01302	.07169	.67900	.37043
#1	5564.1	4265.0	34422.	4116.9
#2	5563.1	4269.3	34093.	4138.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.888%	98.283%	98.333%	101.54%
Range				

Sample Name: 480-178459-C-3-APDS Acquired: 11/24/2020 13:46:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05101**	**10.151**	**.21203**	**.23526**	**.34996**
Stddev	.00015	.074	.00052	.00144	.00025
%RSD	.28786	.72876	.24432	.61394	.07007
#1	.05091	10.099	.21240	.23424	.35013
#2	.05111	10.204	.21166	.23628	.34979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21357**	**134.69**	**.20652**	**-.0124**	**.19570**
Stddev	.00027	.21	.00040	.0110	.00023
%RSD	.12486	.15558	.19169	88.57	.11664
#1	.21338	134.54	.20624	-.0046	.19586
#2	.21375	134.84	.20680	-.0202	.19553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20146**	**.21950**	**9.8164**	**13.225**	**.21362**
Stddev	.00011	.00015	.0318	.075	.00151
%RSD	.05574	.06689	.32437	.56941	.70751
#1	.20138	.21961	9.7939	13.172	.21255
#2	.20154	.21940	9.8389	13.279	.21469
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-APDS Acquired: 11/24/2020 13:46:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.688**	**.83920**	**.21309**	**23.455**	**.19679**
Stddev	.031	.00077	.00051	.045	.00025
%RSD	.12051	.09131	.24150	.19094	.12808
#1	25.710	.83975	.21345	23.423	.19662
#2	25.666	.83866	.21272	23.486	.19697
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.68**	**.20283**	**13.561**	**.20544**	**.20929**
Stddev	.00	.00065	.023	.00033	.00269
%RSD	.0098	.32247	.17161	.16249	1.2866
#1	24.68	.20329	13.577	.20520	.20738
#2	24.69	.20237	13.544	.20567	.21119
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.283**	**.20280**	**.49453**	**.9935**	**.20594**
Stddev	.057	.00095	.00042	.0063	.00005
%RSD	.31027	.46958	.08405	.6300	.02241
#1	18.243	.20347	.49424	.9980	.20597
#2	18.323	.20212	.49483	.9891	.20590
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-APDS Acquired: 11/24/2020 13:46:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20452**	**.20483**	**.48913**	**1.000**
Stddev	.00008	.00095	.00213	.001
%RSD	.03855	.46466	.43541	.0784
#1	.20457	.20550	.48763	1.001
#2	.20446	.20415	.49064	.9997
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5039.8**	**4142.1**	**32991.**	**4107.4**
Stddev	1.5	5.5	91.	20.1
%RSD	.02988	.13243	.27725	.49030
#1	5040.8	4146.0	33056.	4121.6
#2	5038.7	4138.2	32927.	4093.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.860%	95.404%	94.699%	101.04%
Range				

Sample Name: 480-178459-C-3-B MS Acquired: 11/24/2020 13:49:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04960**	**9.8731**	**.20565**	**.22723**	**.35191**
Stddev	.00065	.0243	.00182	.00027	.00083
%RSD	1.3158	.24618	.88682	.11794	.23603
#1	.05007	9.8559	.20694	.22742	.35250
#2	.04914	9.8903	.20436	.22704	.35133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20907**	**135.10**	**.20083**	**-.0285**	**.19054**
Stddev	.00053	.40	.00035	.0143	.00002
%RSD	.25330	.29456	.17558	50.29	.01235
#1	.20869	134.82	.20108	-.0387	.19053
#2	.20944	135.38	.20058	-.0184	.19056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19699**	**.22314**	**9.5845**	**13.054**	**.21270**
Stddev	.00084	.00073	.0418	.029	.00158
%RSD	.42747	.32812	.43570	.22432	.74122
#1	.19640	.22366	9.5550	13.033	.21159
#2	.19759	.22262	9.6141	13.075	.21382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-B MS Acquired: 11/24/2020 13:49:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.493**	**.83812**	**.20875**	**23.254**	**.19183**
Stddev	.063	.00139	.00072	.037	.00048
%RSD	.24604	.16551	.34525	.15859	.25100
#1	25.537	.83910	.20926	23.228	.19148
#2	25.448	.83714	.20824	23.280	.19217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.68**	**.19634**	**13.106**	**.20228**	**.20309**
Stddev	.00	.00045	.012	.00255	.00058
%RSD	.0012	.23064	.09137	1.2610	.28413
#1	24.68	.19666	13.115	.20048	.20268
#2	24.68	.19602	13.098	.20409	.20350
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.222**	**.19340**	**.49188**	**1.000**	**.20066**
Stddev	.033	.00071	.00133	.005	.00069
%RSD	.19254	.36874	.26996	.5134	.34263
#1	17.199	.19390	.49094	1.004	.20115
#2	17.246	.19289	.49282	.9968	.20017
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-B MS Acquired: 11/24/2020 13:49:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20058**	**.20010**	**.37237**	**.9999**
Stddev	.00036	.00009	.00062	.0006
%RSD	.18136	.04669	.16705	.0567
#1	.20032	.20017	.37281	.9995
#2	.20083	.20003	.37193	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5033.3**	**4144.5**	**33027.**	**4115.7**
Stddev	2.9	4.7	75.	11.7
%RSD	.05731	.11385	.22807	.28378
#1	5031.3	4141.1	32973.	4123.9
#2	5035.3	4147.8	33080.	4107.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.748%	95.458%	94.800%	101.24%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 13:53:23 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99939**	**50.655**	**1.0202**	**1.0468**	**1.0166**
Stddev	.00034	.151	.0018	.0024	.0002
%RSD	.03447	.29761	.17421	.22410	.02097
#1	.99963	50.761	1.0190	1.0484	1.0168
#2	.99915	50.548	1.0215	1.0451	1.0165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0259**	**50.454**	**1.0159**	**1.044**	**1.0001**
Stddev	.0011	.053	.0014	.017	.0009
%RSD	.11014	.10520	.13864	1.617	.09376
#1	1.0251	50.491	1.0169	1.056	.99944
#2	1.0267	50.416	1.0149	1.032	1.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0316**	**1.0085**	**50.280**	**50.769**	**1.0134**
Stddev	.0023	.0004	.218	.105	.0007
%RSD	.22115	.03848	.43406	.20608	.06929
#1	1.0300	1.0082	50.434	50.843	1.0139
#2	1.0332	1.0088	50.125	50.695	1.0129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 13:53:23 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**50.311**	**1.0203**	**1.0454**	**50.828**	**1.0086**
Stddev	.078	.0005	.0066	.044	.0005
%RSD	.15459	.05152	.62649	.08651	.04696
#1	50.256	1.0206	1.0500	50.860	1.0083
#2	50.366	1.0199	1.0408	50.797	1.0090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.78**	**1.0041**	**25.622**	**1.0224**	**1.0319**
Stddev	.00	.0028	.068	.0002	.0039
%RSD	.0072	.27555	.26359	.02162	.37351
#1	37.78	1.0021	25.574	1.0226	1.0346
#2	37.78	1.0060	25.670	1.0222	1.0291
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.116**	**1.0035**	**1.0137**	**1.497**	**1.0109**
Stddev	.017	.0012	.0002	.005	.0007
%RSD	.17250	.11803	.02126	.3458	.06893
#1	10.103	1.0027	1.0139	1.501	1.0104
#2	10.128	1.0043	1.0136	1.493	1.0114
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 13:53:23 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0240**	**1.0267**	**1.0212**	**1.514**
Stddev	.0014	.0003	.0019	.001
%RSD	.14201	.03318	.19037	.0514
#1	1.0229	1.0265	1.0199	1.514
#2	1.0250	1.0269	1.0226	1.515
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4959.0**	**4184.2**	**32855.**	**4113.1**
Stddev	3.0	6.9	110.	37.1
%RSD	.06064	.16449	.33331	.90232
#1	4956.8	4179.3	32932.	4086.8
#2	4961.1	4189.0	32778.	4139.3

Sample Name: CCB-6254294 Acquired: 11/24/2020 13:56:55 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00057**	**-.00791**	**.00084**	**-.00017**	**.00014**
Stddev	.00020	.01854	.00146	.00023	.00001
%RSD	35.545	234.45	173.11	133.07	4.6137
#1	-.00043	-.02102	.00187	-.00001	.00015
#2	-.00071	.00520	-.00019	-.00033	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00574**	**-.00004**	**.0242**	**-.00004**
Stddev	.00007	.00080	.00007	.0399	.00002
%RSD	160.81	14.010	192.77	165.2	41.454
#1	-.00001	.00518	-.00009	-.0041	-.00003
#2	.00009	.00631	.00001	.0524	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**.00066**	**.00332**	**.02721**	**.00111**
Stddev	.00013	.00060	.00057	.01767	.00172
%RSD	105.53	92.168	17.035	64.948	154.94
#1	.00003	.00023	.00292	.01471	.00233
#2	.00022	.00108	.00372	.03970	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 13:56:55 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00288**	**.00012**	**.00399**	**.00791**	**.00005**
Stddev	.00113	.00005	.00114	.00162	.00004
%RSD	39.341	41.067	28.441	20.470	91.495
#1	.00208	.00009	.00319	.00677	.00002
#2	.00368	.00015	.00480	.00906	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00034**	**-.00671**	**.00022**	**-.00021**
Stddev	.00	.00049	.00038	.00135	.00005
%RSD	.0035	142.63	5.6296	617.62	25.009
#1	25.02	.00000	-.00698	-.00074	-.00018
#2	25.02	-.00069	-.00645	.00117	-.00025
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00472**	**.00030**	**.00006**	**1.001**	**.00035**
Stddev	.00506	.00014	.00004	.000	.00005
%RSD	107.13	47.395	58.533	.0342	15.608
#1	-.00830	.00039	.00004	1.001	.00031
#2	-.00115	.00020	.00009	1.000	.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 13:56:55 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00031**	**-.00016**	**.00015**	**1.000**
Stddev	.00038	.00017	.00013	.001
%RSD	122.16	107.26	85.249	.0864
#1	-.00004	-.00004	.00006	.9998
#2	-.00058	-.00028	.00024	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5817.1**	**4308.1**	**34928.**	**4091.1**
Stddev	7.4	5.3	133.	16.0
%RSD	.12784	.12217	.38004	.39153
#1	5811.9	4304.4	34834.	4079.7
#2	5822.4	4311.8	35022.	4102.4

Sample Name: CCVL-6256824 Acquired: 11/24/2020 14:00:43 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00616**	**.17944**	**.01536**	**.01949**	**.00209**
Stddev	.00047	.00429	.00152	.00029	.00003
%RSD	7.6947	2.3930	9.9094	1.4943	1.5307
#1	.00582	.17640	.01429	.01970	.00207
#2	.00650	.18247	.01644	.01929	.00211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00215**	**.52827**	**.00192**	**.0028**	**.00352**
Stddev	.00002	.00383	.00009	.0023	.00003
%RSD	1.0193	.72416	4.6500	82.09	.77436
#1	.00216	.52557	.00198	.0012	.00354
#2	.00213	.53098	.00185	.0044	.00350
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00383**	**.00959**	**.05365**	**.46787**	**.03136**
Stddev	.00006	.00014	.00133	.02086	.00145
%RSD	1.5252	1.4805	2.4753	4.4575	4.6333
#1	.00379	.00969	.05459	.48261	.03238
#2	.00387	.00949	.05271	.45312	.03033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 14:00:43 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20282**	**.00313**	**.01039**	**1.0112**	**.00939**
Stddev	.00549	.00000	.00017	.0076	.00029
%RSD	2.7054	.12200	1.6631	.75575	3.1410
#1	.19894	.00312	.01026	1.0057	.00918
#2	.20670	.00313	.01051	1.0166	.00960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00951**	**.18280**	**.01749**	**.02242**
Stddev	.00	.00064	.00116	.00051	.00096
%RSD	.0026	6.7100	.63328	2.8917	4.2667
#1	25.00	.00997	.18362	.01785	.02174
#2	25.00	.00906	.18198	.01713	.02309
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.48081**	**.00968**	**.00495**	F **.9990**	**.00508**
Stddev	.00615	.00021	.00002	.0029	.00020
%RSD	1.2783	2.2095	.49342	.2924	3.9904
#1	.47646	.00953	.00494	.9969	.00493
#2	.48515	.00984	.00497	1.001	.00522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 14:00:43 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	.01976	.00451	.00999	F .9997
Stddev	.00161	.00025	.00044	.0008
%RSD	8.1563	5.5609	4.3578	.0791
#1	.02090	.00433	.01029	1.000
#2	.01862	.00469	.00968	.9992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5715.9	4282.4	34654.	4065.5
Stddev	1.3	7.6	4.	22.9
%RSD	.02258	.17743	.01123	.56404
#1	5715.0	4277.0	34656.	4081.7
#2	5716.9	4287.8	34651.	4049.3

Sample Name: 480-178459-C-3-C MSD Acquired: 11/24/2020 14:04:27 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04977**	**10.151**	**.20629**	**.22760**	**.35075**
Stddev	.00087	.069	.00080	.00054	.00052
%RSD	1.7492	.68440	.38566	.23608	.14805
#1	.04915	10.200	.20685	.22722	.35112
#2	.05038	10.102	.20572	.22798	.35039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21155**	**140.44**	**.20172**	**-.0026**	**.19105**
Stddev	.00015	.03	.00017	.0101	.00011
%RSD	.07129	.01976	.08310	383.0	.06006
#1	.21166	140.46	.20160	-.0098	.19113
#2	.21144	140.43	.20184	.0045	.19097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19807**	**.22165**	**9.6484**	**12.979**	**.21389**
Stddev	.00023	.00101	.0110	.014	.00209
%RSD	.11382	.45779	.11397	.10819	.97601
#1	.19791	.22237	9.6562	12.989	.21537
#2	.19823	.22093	9.6407	12.969	.21241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-C MSD Acquired: 11/24/2020 14:04:27 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.713**	**.84296**	**.20724**	**23.663**	**.19148**
Stddev	.002	.00001	.00008	.026	.00024
%RSD	.00691	.00071	.04099	.11147	.12468
#1	25.715	.84296	.20730	23.682	.19165
#2	25.712	.84295	.20718	23.645	.19131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.67**	**.19938**	**13.410**	**.20310**	**.20377**
Stddev	.00	.00130	.001	.00090	.00158
%RSD	.0041	.65178	.00876	.44074	.77378
#1	24.68	.19846	13.409	.20373	.20488
#2	24.67	.20030	13.411	.20246	.20265
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.784**	**.19553**	**.49678**	**1.003**	**.20326**
Stddev	.032	.00040	.00093	.005	.00156
%RSD	.17847	.20493	.18818	.4777	.76616
#1	17.807	.19582	.49744	1.006	.20436
#2	17.762	.19525	.49612	.9993	.20216
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-3-C MSD Acquired: 11/24/2020 14:04:27 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.19701**	**.19948**	**.76688**	**1.001**
Stddev	.00115	.00095	.00055	.000
%RSD	.58149	.47623	.07179	.0252
#1	.19620	.20015	.76727	1.001
#2	.19782	.19881	.76649	1.002
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5045.7**	**4137.6**	**33120.**	**4076.0**
Stddev	1.8	.0	25.	15.5
%RSD	.03586	.00053	.07641	.38127
#1	5044.4	4137.6	33138.	4065.0
#2	5047.0	4137.6	33102.	4087.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.962%	95.300%	95.067%	100.26%
Range				

Sample Name: 480-178459-C-4-A Acquired: 11/24/2020 14:08:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.02933**	**.00104**	**.02277**	**.14308**
Stddev	.00013	.01145	.00005	.00004	.00032
%RSD	94.177	39.050	4.7887	.15825	.22362
#1	-.00023	.02123	.00108	.02274	.14331
#2	-.00005	.03743	.00101	.02279	.14285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**129.93**	**.00013**	**-.0298**	**-.00005**
Stddev	.00001	.05	.00013	.0111	.00011
%RSD	16.053	.03489	100.92	37.43	248.74
#1	-.00004	129.89	.00022	-.0376	-.00012
#2	-.00005	129.96	.00004	-.0219	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.02388**	**-.00193**	**2.9731**	**.00671**
Stddev	.00020	.00069	.00067	.0061	.00141
%RSD	411.85	2.9031	34.433	.20615	20.982
#1	.00009	.02339	-.00240	2.9774	.00771
#2	-.00019	.02437	-.00146	2.9688	.00572
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-4-A Acquired: 11/24/2020 14:08:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.101**	**.64691**	**.00025**	**13.634**	**.00120**
Stddev	.014	.00104	.00037	.034	.00023
%RSD	.08887	.16023	146.95	.25118	19.277
#1	16.090	.64764	-.00001	13.658	.00103
#2	16.111	.64618	.00051	13.610	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.99**	**.00240**	**3.1588**	**-.00019**	**-.00162**
Stddev	.00	.00048	.0114	.00048	.00252
%RSD	.0009	19.882	.36133	251.12	156.29
#1	24.99	.00274	3.1668	.00015	-.00340
#2	24.99	.00206	3.1507	-.00054	.00017
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.1690**	**.00027**	**.29816**	**1.003**	**.00128**
Stddev	.0237	.00002	.00035	.004	.00034
%RSD	.28980	7.1272	.11886	.3650	26.784
#1	8.1523	.00025	.29841	1.001	.00104
#2	8.1857	.00028	.29791	1.006	.00152
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178459-C-4-A Acquired: 11/24/2020 14:08:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.00037**	**.33879**	**.9996**
Stddev	.00010	.00025	.00048	.0019
%RSD	29.720	67.410	.14035	.1911
#1	-.00026	.00019	.33846	.9983
#2	-.00040	.00055	.33913	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5175.5**	**4137.5**	**33255.**	**4088.5**
Stddev	6.0	4.0	33.	4.5
%RSD	.11506	.09648	.09787	.10991
#1	5171.3	4134.6	33278.	4091.7
#2	5179.7	4140.3	33232.	4085.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.198%	95.296%	95.455%	100.57%
Range				

Sample Name: 480-178105-A-1-A Acquired: 11/24/2020 14:11:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00037**	**-.01233**	**.00783**	**.00757**	**.00029**
Stddev	.00089	.01461	.00026	.00058	.00000
%RSD	239.10	118.54	3.3013	7.7257	1.0046
#1	.00026	-.00200	.00801	.00715	.00029
#2	-.00100	-.02266	.00765	.00798	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.11825**	**.00009**	**.0082**	**.00012**
Stddev	.00004	.00127	.00003	.0121	.00011
%RSD	231.34	1.0738	30.270	147.7	94.984
#1	.00001	.11735	.00007	.0168	.00004
#2	-.00004	.11915	.00011	-.0004	.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00127**	**.00141**	**.01066**	**.13006**	**-.00043**
Stddev	.00039	.00005	.00162	.02810	.00045
%RSD	30.769	3.2784	15.196	21.607	103.79
#1	.00100	.00138	.00952	.11019	-.00012
#2	.00155	.00144	.01181	.14993	-.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-1-A Acquired: 11/24/2020 14:11:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01672**	**.00035**	**-.00003**	**6.4264**	**.00111**
Stddev	.00097	.00001	.00004	.0078	.00005
%RSD	5.8016	3.2734	134.62	.12144	4.6951
#1	.01741	.00034	-.00000	6.4319	.00108
#2	.01604	.00035	-.00006	6.4209	.00115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00044**	F **93.595**	**-.00004**	**.01448**
Stddev	.00	.00052	1.783	.00023	.00014
%RSD	.0040	116.69	1.9053	553.86	.95747
#1	25.02	-.00081	94.855	-.00020	.01458
#2	25.02	-.00008	92.334	.00012	.01439
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01012**	**.00306**	**.00025**	**.9960**	**.00131**
Stddev	.00439	.00023	.00006	.0047	.00006
%RSD	43.412	7.4324	23.842	.4737	4.2676
#1	.01322	.00322	.00029	.9927	.00135
#2	.00701	.00290	.00021	.9993	.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-1-A Acquired: 11/24/2020 14:11:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00620**	**-.00010**	**.00535**	**1.000**
Stddev	.00007	.00038	.00019	.001
%RSD	1.0982	391.48	3.5091	.0751
#1	-.00624	.00017	.00521	.9998
#2	-.00615	-.00037	.00548	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5755.9**	**4196.6**	**34028.**	**4032.4**
Stddev	.2	6.6	5.	10.6
%RSD	.00421	.15652	.01463	.26194
#1	5755.8	4201.2	34024.	4025.0
#2	5756.1	4191.9	34031.	4039.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.203%	96.658%	97.674%	99.192%
Range				

Sample Name: 480-178105-A-2-A Acquired: 11/24/2020 14:15:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00041**	**.00601**	**.00861**	**.00735**	**.00036**
Stddev	.00055	.02973	.00093	.00002	.00002
%RSD	134.29	494.31	10.797	.24512	6.9327
#1	-.00079	.02704	.00926	.00734	.00037
#2	-.00002	-.01501	.00795	.00737	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.07852**	**.00012**	**.0202**	**.00001**
Stddev	.00009	.00178	.00011	.0094	.00004
%RSD	417.71	2.2606	95.815	46.63	284.60
#1	.00009	.07977	.00019	.0136	.00004
#2	-.00004	.07726	.00004	.0269	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00114**	**.01645**	**.07590**	**.11445**	**.00196**
Stddev	.00043	.00009	.00102	.00853	.00012
%RSD	37.633	.52931	1.3501	7.4573	6.3249
#1	.00084	.01651	.07662	.10841	.00188
#2	.00144	.01638	.07517	.12048	.00205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-2-A Acquired: 11/24/2020 14:15:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01966**	**.00143**	**-.00025**	**6.2875**	**.00120**
Stddev	.00034	.00009	.00010	.0182	.00027
%RSD	1.7512	6.6548	39.900	.28923	22.618
#1	.01942	.00136	-.00018	6.3003	.00139
#2	.01991	.00149	-.00033	6.2746	.00101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.00**	**.00021**	F **91.784**	**.00036**	**.01235**
Stddev	.00	.00027	1.650	.00069	.00127
%RSD	.0037	132.03	1.7978	193.28	10.266
#1	25.00	.00001	92.950	-.00013	.01324
#2	25.00	.00040	90.617	.00084	.01145
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00188**	**.00281**	**.00036**	**.9941**	**.00118**
Stddev	.01775	.00021	.00013	.0030	.00041
%RSD	945.16	7.4219	36.766	.3029	34.728
#1	-.01067	.00266	.00026	.9962	.00089
#2	.01443	.00295	.00045	.9920	.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-2-A Acquired: 11/24/2020 14:15:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00685**	**-.00003**	**.01170**	**.9997**
Stddev	.00030	.00026	.00030	.0002
%RSD	4.4099	816.80	2.5283	.0200
#1	-.00663	.00015	.01191	.9996
#2	-.00706	-.00021	.01149	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5741.6**	**4196.0**	**34148.**	**4018.8**
Stddev	10.8	8.5	142.	24.7
%RSD	.18728	.20298	.41479	.61560
#1	5749.2	4202.0	34248.	4036.3
#2	5734.0	4190.0	34048.	4001.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.956%	96.644%	98.019%	98.858%
Range				

Sample Name: 480-178105-A-3-A Acquired: 11/24/2020 14:19:11 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.02327**	**.00758**	**.00488**	**.00042**
Stddev	.00016	.00913	.00006	.00004	.00001
%RSD	86.577	39.244	.72778	.90452	1.4655
#1	-.00029	.01681	.00762	.00492	.00041
#2	-.00007	.02972	.00754	.00485	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.27108**	**.00008**	**-.0287**	**.00008**
Stddev	.00013	.00212	.00003	.0061	.00000
%RSD	110.43	.78287	33.552	21.18	2.9670
#1	.00020	.26958	.00010	-.0244	.00008
#2	.00002	.27258	.00006	-.0330	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**.00157**	**.01322**	**.15836**	**-.00005**
Stddev	.00048	.00014	.00067	.01961	.00054
%RSD	50.211	8.9484	5.0836	12.384	1113.0
#1	.00062	.00167	.01274	.14449	-.00043
#2	.00130	.00147	.01369	.17222	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-3-A Acquired: 11/24/2020 14:19:11 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03337**	**.00053**	**-.00030**	**6.3044**	**.00138**
Stddev	.00136	.00002	.00001	.0066	.00014
%RSD	4.0778	2.9464	4.9770	.10387	10.330
#1	.03433	.00051	-.00031	6.2998	.00128
#2	.03240	.00054	-.00029	6.3091	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.03**	**.00033**	F **95.861**	**.00195**	**.01279**
Stddev	.00	.00120	2.008	.00275	.00375
%RSD	.0002	366.00	2.0946	141.14	29.291
#1	25.03	.00117	97.281	.00389	.01014
#2	25.03	-.00052	94.442	.00000	.01543
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00894**	**.00304**	**.00091**	**1.000**	**.00167**
Stddev	.01005	.00044	.00005	.003	.00018
%RSD	112.37	14.417	5.2661	.2896	10.773
#1	.00184	.00273	.00095	.9984	.00154
#2	.01605	.00335	.00088	1.002	.00179
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-3-A Acquired: 11/24/2020 14:19:11 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00673**	**-.00040**	**.00714**	**1.0000**
Stddev	.00076	.00023	.00018	.0009
%RSD	11.335	57.840	2.4990	.0852
#1	-.00727	-.00056	.00702	.9994
#2	-.00619	-.00023	.00727	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5725.6**	**4184.4**	**34063.**	**4003.7**
Stddev	13.6	5.2	9.	12.9
%RSD	.23835	.12373	.02567	.32157
#1	5716.0	4180.8	34057.	4012.8
#2	5735.3	4188.1	34069.	3994.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.680%	96.378%	97.776%	98.485%
Range				

Sample Name: 480-178105-A-4-A Acquired: 11/24/2020 14:22:56 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00058**	**.04446**	**.00830**	**.00455**	**.00038**
Stddev	.00029	.01162	.00044	.00007	.00002
%RSD	50.706	26.140	5.2685	1.5052	4.1918
#1	-.00037	.03625	.00861	.00450	.00039
#2	-.00079	.05268	.00799	.00459	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.22751**	**.00001**	**-.0074**	**-.00005**
Stddev	.00002	.00062	.00003	.0260	.00002
%RSD	68.928	.27400	211.44	352.1	51.973
#1	-.00004	.22707	.00004	-.0257	-.00006
#2	-.00001	.22795	-.00001	.0110	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.00231**	**.01291**	**.14413**	**.00042**
Stddev	.00016	.00010	.00166	.06257	.00065
%RSD	19.656	4.5216	12.875	43.408	155.06
#1	.00094	.00223	.01409	.09989	-.00004
#2	.00071	.00238	.01174	.18837	.00088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-4-A Acquired: 11/24/2020 14:22:56 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03339**	**.00041**	**-.00022**	**6.3130**	**.00174**
Stddev	.00071	.00007	.00012	.0246	.00006
%RSD	2.1357	16.144	54.817	.39051	3.2996
#1	.03390	.00045	-.00013	6.3305	.00169
#2	.03289	.00036	-.00030	6.2956	.00178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.03**	**-.00027**	F **95.534**	**-.00004**	**.01108**
Stddev	.00	.00041	2.381	.00166	.00069
%RSD	.0028	151.97	2.4926	4369.9	6.2067
#1	25.03	.00002	97.217	.00113	.01157
#2	25.03	-.00056	93.850	-.00121	.01060
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.01356**	**.00286**	**.00079**	**1.000**	**.00125**
Stddev	.01100	.00030	.00007	.003	.00005
%RSD	81.125	10.609	8.8520	.3208	4.2700
#1	-.02134	.00307	.00084	1.002	.00128
#2	-.00578	.00264	.00074	.9979	.00121
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-4-A Acquired: 11/24/2020 14:22:56 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00713**	**-.00007**	**.00677**	**.9997**
Stddev	.00082	.00034	.00027	.0005
%RSD	11.463	505.25	3.9263	.0505
#1	-.00655	.00017	.00696	1.000
#2	-.00771	-.00031	.00658	.9994
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5727.5**	**4198.4**	**34048.**	**4032.5**
Stddev	17.6	7.1	203.	20.3
%RSD	.30717	.16829	.59741	.50273
#1	5715.1	4193.5	34192.	4018.1
#2	5740.0	4203.4	33904.	4046.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.713%	96.701%	97.732%	99.193%
Range				

Sample Name: 480-178105-A-5-A Acquired: 11/24/2020 14:26:42 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.02208**	**.00916**	**.00481**	**.00058**
Stddev	.00052	.01230	.00078	.00010	.00001
%RSD	165.34	55.715	8.5494	2.1411	2.3431
#1	-.00069	.01338	.00861	.00489	.00057
#2	.00005	.03078	.00971	.00474	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.36928**	**.00002**	**.0218**	**.00006**
Stddev	.00003	.00206	.00002	.0215	.00001
%RSD	103.71	.55893	85.871	98.61	17.301
#1	.00005	.37074	.00003	.0369	.00005
#2	.00001	.36782	.00001	.0066	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00095**	**.00073**	**.01363**	**.11290**	**.00004**
Stddev	.00029	.00033	.00085	.02478	.00083
%RSD	30.426	45.247	6.2219	21.950	2209.2
#1	.00115	.00050	.01423	.09537	-.00055
#2	.00074	.00096	.01303	.13042	.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-5-A Acquired: 11/24/2020 14:26:42 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03113**	**.00045**	**-.00034**	**6.4242**	**.00152**
Stddev	.00460	.00002	.00004	.0332	.00026
%RSD	14.770	4.9116	12.612	.51616	16.826
#1	.03439	.00043	-.00037	6.4008	.00134
#2	.02788	.00046	-.00031	6.4477	.00170
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.04**	**.00008**	F **98.200**	**-.00030**	**.01304**
Stddev	.00	.00032	2.615	.00023	.00246
%RSD	.0035	390.85	2.6632	78.680	18.851
#1	25.04	-.00014	100.05	-.00013	.01477
#2	25.04	.00031	96.351	-.00046	.01130
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00690**	**.00312**	**.00085**	**.9993**	**.00131**
Stddev	.00969	.00010	.00000	.0039	.00037
%RSD	140.47	3.3211	.24591	.3914	28.019
#1	-.01376	.00305	.00086	.9965	.00157
#2	-.00005	.00320	.00085	1.002	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-5-A Acquired: 11/24/2020 14:26:42 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00634**	**-.00021**	**.01434**	**.9988**
Stddev	.00061	.00036	.00008	.0006
%RSD	9.5711	168.18	.56633	.0589
#1	-.00677	.00004	.01439	.9993
#2	-.00591	-.00047	.01428	.9984
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5745.5**	**4192.4**	**34168.**	**4035.0**
Stddev	13.3	2.6	67.	2.4
%RSD	.23164	.06206	.19523	.05860
#1	5754.9	4194.3	34121.	4036.7
#2	5736.1	4190.6	34216.	4033.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.022%	96.562%	98.077%	99.255%
Range				

Sample Name: 480-178105-A-6-A Acquired: 11/24/2020 14:30:27 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00027**	**-.00380**	**.00856**	**.00438**	**.00035**
Stddev	.00030	.00130	.00045	.00028	.00001
%RSD	110.44	34.345	5.2123	6.3479	4.1621
#1	-.00049	-.00288	.00887	.00418	.00034
#2	-.00006	-.00472	.00824	.00458	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.31287**	**-.00002**	**.0060**	**.00008**
Stddev	.00005	.00222	.00007	.0157	.00007
%RSD	122.09	.70902	361.19	262.6	88.711
#1	.00001	.31444	-.00007	.0170	.00003
#2	.00008	.31130	.00003	-.0051	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00079**	**.00061**	**.01205**	**.09721**	**.00077**
Stddev	.00032	.00018	.00011	.02928	.00298
%RSD	39.733	29.841	.89474	30.117	385.02
#1	.00057	.00074	.01213	.07651	-.00133
#2	.00102	.00048	.01198	.11792	.00288
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-6-A Acquired: 11/24/2020 14:30:27 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02916**	**.00037**	**-.00040**	**6.1509**	**.00133**
Stddev	.00279	.00005	.00000	.0087	.00014
%RSD	9.5520	13.007	.33252	.14107	10.490
#1	.02719	.00041	-.00040	6.1570	.00143
#2	.03113	.00034	-.00040	6.1447	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.03**	**.00046**	F **93.571**	**-.00093**	**.01089**
Stddev	.00	.00058	2.837	.00206	.00287
%RSD	.0019	127.79	3.0321	222.24	26.316
#1	25.03	.00004	95.577	-.00238	.01292
#2	25.03	.00087	91.565	.00053	.00886
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00920**	**.00291**	**.00091**	**.9984**	**.00169**
Stddev	.00497	.00034	.00015	.0020	.00048
%RSD	53.975	11.657	16.811	.2036	28.325
#1	.01271	.00314	.00080	.9970	.00135
#2	.00569	.00267	.00102	.9999	.00203
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-6-A Acquired: 11/24/2020 14:30:27 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00624**	**-.00005**	**.00928**	**.9993**
Stddev	.00010	.00019	.00014	.0010
%RSD	1.6404	415.33	1.4830	.0990
#1	-.00631	.00009	.00938	1.0000
#2	-.00616	-.00018	.00919	.9986
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5759.0**	**4202.8**	**34192.**	**4029.2**
Stddev	7.0	8.9	27.	.2
%RSD	.12102	.21189	.08027	.00588
#1	5754.1	4196.5	34211.	4029.0
#2	5764.0	4209.1	34173.	4029.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.256%	96.802%	98.145%	99.112%
Range				

Sample Name: 480-178105-A-7-A Acquired: 11/24/2020 14:34:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00045**	**.34094**	**.00783**	**.00484**	**.00049**
Stddev	.00039	.01201	.00098	.00032	.00001
%RSD	86.497	3.5240	12.456	6.5179	2.4391
#1	-.00073	.33244	.00714	.00507	.00050
#2	-.00018	.34944	.00852	.00462	.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**1.3497**	**.00004**	**-.0169**	**.00001**
Stddev	.00006	.0013	.00005	.0463	.00007
%RSD	88.176	.09232	132.57	274.6	761.08
#1	.00011	1.3506	.00007	-.0496	-.00004
#2	.00003	1.3489	.00000	.0159	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00156**	**.00455**	**.05923**	**.12157**	**.00079**
Stddev	.00026	.00122	.00226	.04826	.00093
%RSD	16.933	26.805	3.8111	39.699	117.47
#1	.00174	.00541	.06083	.15570	.00145
#2	.00137	.00369	.05763	.08745	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-7-A Acquired: 11/24/2020 14:34:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18484**	**.00781**	**-.00024**	**6.0781**	**.00164**
Stddev	.00232	.00002	.00009	.0263	.00034
%RSD	1.2532	.21846	39.032	.43225	20.975
#1	.18647	.00780	-.00018	6.0596	.00140
#2	.18320	.00782	-.00031	6.0967	.00188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.03**	**.00054**	F **94.610**	**-.00039**	**.01149**
Stddev	.00	.00141	1.605	.00086	.00234
%RSD	.0044	258.86	1.6967	223.14	20.323
#1	25.03	-.00045	95.745	.00022	.00984
#2	25.03	.00154	93.475	-.00100	.01315
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04036**	**.00267**	**.00314**	**.9989**	**.00177**
Stddev	.02095	.00024	.00005	.0006	.00062
%RSD	51.912	9.0643	1.5155	.0601	35.311
#1	.05518	.00285	.00310	.9993	.00221
#2	.02555	.00250	.00317	.9985	.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-7-A Acquired: 11/24/2020 14:34:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00640**	**.00135**	**.36449**	**1.000**
Stddev	.00017	.00006	.00111	.001
%RSD	2.7209	4.5880	.30546	.0621
#1	-.00628	.00139	.36371	1.001
#2	-.00652	.00131	.36528	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5723.8**	**4197.2**	**34170.**	**4050.2**
Stddev	2.7	3.5	8.	2.7
%RSD	.04756	.08397	.02198	.06688
#1	5725.8	4199.7	34164.	4052.2
#2	5721.9	4194.7	34175.	4048.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.649%	96.672%	98.081%	99.630%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 14:37:59 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0028**	**50.874**	**1.0171**	**1.0481**	**1.0135**
Stddev	.0028	.050	.0014	.0022	.0000
%RSD	.27861	.09886	.13485	.20602	.00272
#1	1.0008	50.838	1.0161	1.0496	1.0135
#2	1.0048	50.909	1.0180	1.0466	1.0134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0283**	**50.672**	**1.0199**	**1.006**	**.99752**
Stddev	.0008	.014	.0009	.004	.00049
%RSD	.08258	.02743	.08488	.4031	.04877
#1	1.0277	50.662	1.0205	1.003	.99718
#2	1.0289	50.682	1.0192	1.009	.99787
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0215**	**1.0199**	**50.503**	**50.422**	**1.0150**
Stddev	.0035	.0026	.086	.029	.0016
%RSD	.34201	.25455	.17049	.05658	.16056
#1	1.0190	1.0181	50.442	50.402	1.0162
#2	1.0240	1.0218	50.564	50.442	1.0139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 14:37:59 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.904**	**1.0112**	**1.0430**	**50.765**	**1.0034**
Stddev	.130	.0029	.0065	.042	.0000
%RSD	.26042	.28811	.62634	.08219	.00027
#1	49.812	1.0091	1.0476	50.794	1.0034
#2	49.996	1.0132	1.0384	50.735	1.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.76**	**1.0030**	**26.600**	**1.0278**	**1.0246**
Stddev	.02	.0001	.064	.0001	.0034
%RSD	.0553	.01244	.23953	.00718	.32987
#1	37.78	1.0029	26.555	1.0278	1.0222
#2	37.75	1.0031	26.645	1.0279	1.0270
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.025**	**.99767**	**1.0140**	**1.503**	**1.0104**
Stddev	.001	.00021	.0011	.002	.0007
%RSD	.01441	.02127	.11109	.1480	.06608
#1	10.024	.99752	1.0148	1.501	1.0100
#2	10.026	.99782	1.0132	1.504	1.0109
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 14:37:59 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0252**	**1.0196**	**1.0120**	**1.481**
Stddev	.0012	.0008	.0034	.002
%RSD	.12018	.08274	.33611	.1576
#1	1.0261	1.0190	1.0096	1.483
#2	1.0244	1.0202	1.0144	1.479
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4921.0**	**4144.9**	**32768.**	**4083.8**
Stddev	2.3	1.8	59.	2.5
%RSD	.04668	.04227	.17885	.06234
#1	4922.6	4143.6	32810.	4085.6
#2	4919.3	4146.1	32727.	4082.0

Sample Name: CCB-6254294 Acquired: 11/24/2020 14:41:30 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00060**	**.02966**	**-.00053**	**-.00053**	**.00008**
Stddev	.00030	.00028	.00018	.00018	.00005
%RSD	49.913	.93902	33.563	34.441	62.699
#1	-.00039	.02986	-.00066	-.00040	.00004
#2	-.00081	.02947	-.00041	-.00066	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00082**	**.00010**	**-.0044**	**.00009**
Stddev	.00005	.00365	.00002	.0072	.00000
%RSD	80.796	442.19	23.067	163.3	4.7204
#1	.00009	-.00175	.00011	-.0095	.00009
#2	.00002	.00340	.00008	.0007	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.00046**	**.00114**	**-.00445**	**.00001**
Stddev	.00065	.00027	.00201	.01448	.00122
%RSD	1740.2	59.437	176.64	325.33	20279.
#1	-.00050	.00027	-.00028	-.01469	-.00086
#2	.00042	.00065	.00256	.00579	.00087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 14:41:30 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00149**	**.00004**	**.00391**	**.00470**	**.00004**
Stddev	.00053	.00003	.00110	.01313	.00009
%RSD	35.519	80.488	27.996	279.73	218.23
#1	.00186	.00006	.00314	.01398	.00011
#2	.00111	.00002	.00469	-.00459	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00023**	F **.49261**	**-.00008**	**-.00039**
Stddev	.00	.00025	.06725	.00148	.00114
%RSD	.0021	108.59	13.652	1917.0	294.71
#1	25.02	.00040	.44506	.00097	.00042
#2	25.02	.00005	.54017	-.00113	-.00119
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.20000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.02224**	**.00031**	**.00001**	**1.005**	**.00025**
Stddev	.01359	.00011	.00001	.004	.00007
%RSD	61.091	36.633	236.22	.4416	28.504
#1	-.03185	.00039	-.00000	1.002	.00031
#2	-.01264	.00023	.00001	1.008	.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 14:41:30 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00044**	**-.00032**	**.00017**	**1.000**
Stddev	.00028	.00035	.00009	.000
%RSD	63.304	108.86	49.110	.0171
#1	-.00064	-.00057	.00024	1.000
#2	-.00025	-.00007	.00011	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5809.8**	**4330.1**	**34922.**	**4083.0**
Stddev	2.5	3.7	50.	10.0
%RSD	.04322	.08660	.14223	.24442
#1	5808.1	4327.4	34957.	4076.0
#2	5811.6	4332.7	34887.	4090.1

Sample Name: CCVL-6256824 Acquired: 11/24/2020 14:45:19 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00545**	**.20416**	**.01499**	**.01948**	**.00210**
Stddev	.00119	.01359	.00098	.00022	.00001
%RSD	21.876	6.6556	6.5309	1.1414	.28350
#1	.00629	.19455	.01568	.01964	.00210
#2	.00461	.21376	.01430	.01933	.00209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00205**	**.51056**	**.00189**	**.0311**	**.00355**
Stddev	.00012	.00284	.00005	.0504	.00000
%RSD	5.8078	.55605	2.5609	162.1	.08525
#1	.00214	.51257	.00192	.0667	.00354
#2	.00197	.50855	.00185	-.0045	.00355
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00437**	**.01048**	**.04809**	**.47082**	**.03230**
Stddev	.00042	.00029	.00142	.05985	.00111
%RSD	9.6023	2.7591	2.9611	12.711	3.4474
#1	.00467	.01069	.04909	.51314	.03152
#2	.00407	.01028	.04708	.42850	.03309
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 14:45:19 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20435**	**.00309**	**.01061**	**1.0004**	**.00913**
Stddev	.00161	.00007	.00005	.0006	.00009
%RSD	.78893	2.1689	.47191	.05833	1.0173
#1	.20549	.00304	.01057	.99999	.00920
#2	.20321	.00314	.01064	1.0008	.00907
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.01014**	F **.39726**	**.01605**	**.02465**
Stddev	.00	.00055	.04223	.00005	.00364
%RSD	.0020	5.4717	10.630	.29800	14.745
#1	25.00	.00974	.36740	.01602	.02722
#2	25.00	.01053	.42712	.01609	.02208
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	.0060		.20000		
Range	50.00%		50.000%		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46781**	**.00926**	**.00490**	F **.9972**	**.00505**
Stddev	.00746	.00036	.00003	.0002	.00035
%RSD	1.5954	3.9162	.62125	.0196	6.8296
#1	.46253	.00952	.00492	.9974	.00530
#2	.47309	.00900	.00488	.9971	.00481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 14:45:19 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01970**	**.00473**	**.00968**	F **1.000**
Stddev	.00027	.00003	.00037	.000
%RSD	1.3726	.58208	3.7967	.0315
#1	.01951	.00475	.00942	.9998
#2	.01989	.00471	.00994	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5694.0**	**4283.4**	**34648.**	**4072.3**
Stddev	11.7	4.4	9.	14.1
%RSD	.20468	.10273	.02485	.34680
#1	5685.8	4280.3	34642.	4062.4
#2	5702.3	4286.5	34654.	4082.3

Sample Name: 480-178152-D-1-A Acquired: 11/24/2020 14:49:05 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**.07869**	**.00129**	**5.1979**	**.00348**
Stddev	.00016	.00869	.00051	.0024	.00001
%RSD	36.502	11.037	39.187	.04634	.20900
#1	.00032	.07255	.00093	5.1961	.00347
#2	.00054	.08483	.00165	5.1996	.00348
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**467.87**	**.00027**	**.0291**	**-.00001**
Stddev	.00005	8.38	.00018	.0326	.00003
%RSD	56.516	1.7908	69.007	112.1	280.37
#1	-.00005	473.79	.00014	.0060	-.00003
#2	-.00012	461.94	.00040	.0522	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00154**	**.00169**	**5.8899**	**20.956**	**.16533**
Stddev	.00036	.00048	.0096	.013	.00073
%RSD	23.281	28.281	.16267	.06228	.44053
#1	.00179	.00135	5.8967	20.965	.16481
#2	.00128	.00203	5.8831	20.946	.16584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178152-D-1-A Acquired: 11/24/2020 14:49:05 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**163.70**	**.02298**	**-.00052**	**169.83**	**-.00021**
Stddev	.41	.00005	.00016	.20	.00062
%RSD	.24852	.22522	31.671	.11688	288.89
#1	163.41	.02302	-.00063	169.97	.00022
#2	163.99	.02295	-.00040	169.69	-.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**.00190**	F **723.29**	**-.00233**	**-.00281**
Stddev	.00	.00092	1.97	.00111	.00095
%RSD	.0024	48.383	.27248	47.685	33.999
#1	25.01	.00255	724.68	-.00155	-.00348
#2	25.01	.00125	721.90	-.00312	-.00213
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.8002**	**-.00008**	F **9.7042**	**1.004**	**.00358**
Stddev	.0176	.00024	.1543	.001	.00016
%RSD	.46455	289.27	1.5896	.0488	4.4258
#1	3.7877	-.00025	9.8132	1.004	.00369
#2	3.8127	.00009	9.5951	1.004	.00347
Check ?	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
High Limit			9.0000		
Low Limit			-.00500		

Sample Name: 480-178152-D-1-A Acquired: 11/24/2020 14:49:05 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00199**	**-.00165**	**.00371**	**1.001**
Stddev	.00070	.00001	.00001	.000
%RSD	35.402	.57263	.30284	.0111
#1	-.00149	-.00166	.00372	1.001
#2	-.00248	-.00165	.00370	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4503.6**	**3841.6**	**30751.**	**4020.3**
Stddev	15.1	18.7	121.	27.1
%RSD	.33431	.48608	.39433	.67454
#1	4492.9	3828.4	30837.	4001.1
#2	4514.2	3854.8	30666.	4039.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	77.618%	88.481%	88.269%	98.894%
Range				

Sample Name: 480-178440-D-9-B Acquired: 11/24/2020 14:52:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**10.235**	**.00142**	**.03898**	**.24835**
Stddev	.00032	.058	.00050	.00024	.00007
%RSD	601.28	.56710	34.857	.62183	.02749
#1	.00018	10.194	.00107	.03880	.24830
#2	-.00028	10.276	.00177	.03915	.24839
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00034**	**170.72**	**.00114**	**.0287**	**.00366**
Stddev	.00005	1.11	.00011	.0216	.00007
%RSD	14.636	.64845	9.7316	75.27	1.8070
#1	.00030	169.94	.00122	.0134	.00361
#2	.00037	171.50	.00107	.0440	.00370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01408**	**.00776**	**9.9399**	**4.2889**	**.02855**
Stddev	.00016	.00028	.0264	.0140	.00061
%RSD	1.1720	3.5726	.26574	.32544	2.1222
#1	.01419	.00796	9.9212	4.2790	.02812
#2	.01396	.00757	9.9585	4.2988	.02898
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178440-D-9-B Acquired: 11/24/2020 14:52:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**60.267**	**.19309**	**.00055**	**12.888**	**.01105**
Stddev	.024	.00001	.00002	.030	.00015
%RSD	.04001	.00620	4.0604	.22979	1.3910
#1	60.284	.19309	.00053	12.867	.01095
#2	60.250	.19310	.00056	12.909	.01116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.07**	**.00316**	**10.332**	**-.00214**	**-.00027**
Stddev	.00	.00023	.018	.00129	.00028
%RSD	.0069	7.1276	.17910	60.392	103.17
#1	25.07	.00300	10.345	-.00305	-.00046
#2	25.06	.00332	10.319	-.00122	-.00007
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.149**	**.00037**	**.29650**	**1.002**	**.18141**
Stddev	.000	.00011	.00054	.001	.00239
%RSD	.00128	29.068	.18341	.0842	1.3170
#1	24.149	.00030	.29689	1.001	.18310
#2	24.148	.00045	.29612	1.002	.17972
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178440-D-9-B Acquired: 11/24/2020 14:52:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00055**	**.01702**	**.02672**	**1.001**
Stddev	.00058	.00017	.00015	.000
%RSD	106.70	.98840	.55359	.0391
#1	-.00013	.01714	.02683	1.001
#2	-.00096	.01690	.02662	1.002
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4936.3**	**4110.6**	**32698.**	**4152.5**
Stddev	.5	1.4	13.	39.3
%RSD	.00988	.03352	.03896	.94686
#1	4936.7	4111.6	32689.	4180.3
#2	4936.0	4109.7	32707.	4124.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.077%	94.679%	93.858%	102.15%
Range				

Sample Name: 480-178440-D-10-B Acquired: 11/24/2020 14:56:44 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**3.9239**	**.00156**	**.01466**	**.07272**
Stddev	.00034	.0083	.00101	.00018	.00017
%RSD	543.35	.21249	64.407	1.2503	.23106
#1	.00018	3.9298	.00227	.01453	.07284
#2	-.00030	3.9180	.00085	.01479	.07260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**96.898**	**.00050**	**.0381**	**.00145**
Stddev	.00009	.084	.00010	.0395	.00014
%RSD	50.247	.08672	20.629	103.8	9.5561
#1	.00012	96.958	.00043	.0660	.00155
#2	.00024	96.839	.00058	.0101	.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00467**	**.00812**	**4.2241**	**7.5019**	**.00511**
Stddev	.00012	.00091	.0112	.0425	.00080
%RSD	2.6111	11.258	.26591	.56679	15.699
#1	.00458	.00877	4.2321	7.4718	.00568
#2	.00475	.00747	4.2162	7.5319	.00454
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178440-D-10-B Acquired: 11/24/2020 14:56:44 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.445**	**.10487**	**.00054**	**2.0466**	**.00552**
Stddev	.039	.00025	.00011	.0067	.00010
%RSD	.33659	.23375	21.160	.32931	1.7769
#1	11.472	.10504	.00046	2.0514	.00559
#2	11.418	.10469	.00062	2.0418	.00546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.05**	**.00225**	**17.122**	**-.00158**	**.00155**
Stddev	.00	.00080	.040	.00063	.00063
%RSD	.0009	35.643	.23068	39.712	40.803
#1	25.05	.00282	17.094	-.00114	.00110
#2	25.05	.00169	17.150	-.00202	.00200
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.9560**	**.00008**	**.21103**	**1.004**	**.09158**
Stddev	.0318	.00032	.00001	.001	.00032
%RSD	.35470	380.41	.00598	.0662	.34645
#1	8.9336	.00031	.21102	1.004	.09136
#2	8.9785	-.00014	.21104	1.005	.09180
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178440-D-10-B Acquired: 11/24/2020 14:56:44 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00042**	**.00650**	**.01407**	**1.001**
Stddev	.00036	.00061	.00046	.000
%RSD	85.267	9.4247	3.2773	.0192
#1	.00068	.00694	.01440	1.001
#2	.00017	.00607	.01375	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5264.3**	**4217.5**	**33677.**	**4154.9**
Stddev	7.1	3.2	114.	18.1
%RSD	.13402	.07537	.33717	.43604
#1	5259.3	4215.2	33597.	4142.1
#2	5269.3	4219.7	33757.	4167.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.729%	97.139%	96.667%	102.20%
Range				

Sample Name: 480-178440-D-11-B Acquired: 11/24/2020 15:00:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00037**	**.76174**	**.00147**	**.03057**	**.03616**
Stddev	.00014	.02482	.00007	.00027	.00008
%RSD	37.488	3.2583	4.6002	.87456	.21451
#1	.00027	.77929	.00151	.03076	.03611
#2	.00047	.74419	.00142	.03039	.03622
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**206.00**	**.00251**	**.0044**	**.00074**
Stddev	.00004	1.35	.00000	.0277	.00004
%RSD	209060.	.65701	.04029	623.5	4.9325
#1	-.00003	206.96	.00251	-.0152	.00076
#2	.00003	205.05	.00251	.0240	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00128**	**.00210**	**1.6947**	**2.0195**	**.01995**
Stddev	.00039	.00094	.0088	.0259	.00031
%RSD	30.255	44.867	.51805	1.2812	1.5510
#1	.00155	.00277	1.7009	2.0378	.02016
#2	.00101	.00144	1.6885	2.0012	.01973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178440-D-11-B Acquired: 11/24/2020 15:00:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**64.314**	**.33927**	**.00173**	**65.165**	**.00260**
Stddev	.066	.00067	.00011	.107	.00007
%RSD	.10317	.19855	6.1214	.16469	2.5155
#1	64.361	.33975	.00166	65.089	.00265
#2	64.267	.33880	.00180	65.241	.00256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00084**	F **128.62**	**-.00143**	**-.00089**
Stddev	.00	.00016	.25	.00004	.00344
%RSD	.0011	19.002	.19801	2.7753	385.58
#1	25.02	.00095	128.44	-.00145	.00154
#2	25.02	.00072	128.80	-.00140	-.00333
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.012**	**.00019**	**.25963**	**.9956**	**.01748**
Stddev	.108	.00001	.00075	.0012	.00151
%RSD	1.0740	4.9113	.28886	.1176	8.6502
#1	10.088	.00020	.26016	.9964	.01641
#2	9.9361	.00019	.25910	.9948	.01855
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178440-D-11-B Acquired: 11/24/2020 15:00:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00144**	**.00004**	**.02223**	**.9995**
Stddev	.00066	.00020	.00046	.0005
%RSD	45.719	475.48	2.0542	.0528
#1	-.00191	-.00010	.02256	.9999
#2	-.00098	.00018	.02191	.9991
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4907.4**	**4017.1**	**32257.**	**4099.2**
Stddev	3.6	2.1	115.	2.4
%RSD	.07290	.05123	.35787	.05849
#1	4904.9	4015.7	32338.	4097.5
#2	4909.9	4018.6	32175.	4100.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.578%	92.525%	92.590%	100.83%
Range				

Sample Name: 480-178334-C-1-A Acquired: 11/24/2020 15:04:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.02435**	**.00085**	**.04471**	**.17104**
Stddev	.00033	.01612	.00039	.00048	.00007
%RSD	290.51	66.233	46.477	1.0767	.04326
#1	.00035	.01294	.00057	.04505	.17109
#2	-.00012	.03575	.00113	.04437	.17099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**15.493**	**.00013**	**.0162**	**.00003**
Stddev	.00008	.003	.00020	.0078	.00005
%RSD	67.630	.02203	157.41	48.42	175.43
#1	.00018	15.490	.00027	.0217	-.00001
#2	.00006	15.495	-.00001	.0106	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.00144**	**.01112**	**3.4904**	**.00594**
Stddev	.00041	.00044	.00224	.0747	.00062
%RSD	793.48	30.410	20.170	2.1393	10.508
#1	.00034	.00113	.00954	3.5432	.00550
#2	-.00024	.00175	.01271	3.4376	.00639
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178334-C-1-A Acquired: 11/24/2020 15:04:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.803**	**.01185**	**-.00064**	**16.599**	**.00293**
Stddev	.007	.00008	.00004	.005	.00013
%RSD	.06268	.69633	6.1191	.03060	4.3707
#1	10.798	.01191	-.00067	16.595	.00284
#2	10.808	.01179	-.00061	16.602	.00302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.03**	**-.00055**	**4.4213**	**-.00215**	**-.00256**
Stddev	.00	.00016	.0009	.00168	.00268
%RSD	.0043	29.922	.02097	78.175	104.61
#1	25.03	-.00043	4.4220	-.00333	-.00067
#2	25.03	-.00066	4.4206	-.00096	-.00445
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.8621**	**-.00002**	**.11714**	**.9997**	**.00072**
Stddev	.0046	.00026	.00011	.0022	.00019
%RSD	.05175	1521.7	.09814	.2175	26.792
#1	8.8589	-.00020	.11723	1.001	.00086
#2	8.8653	.00017	.11706	.9981	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178334-C-1-A Acquired: 11/24/2020 15:04:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00126**	**-.00024**	**.00890**	**1.000**
Stddev	.00060	.00011	.00029	.000
%RSD	47.207	45.013	3.2419	.0309
#1	-.00168	-.00031	.00910	.9999
#2	-.00084	-.00016	.00869	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5516.8**	**4285.8**	**34535.**	**4155.0**
Stddev	3.8	1.8	93.	.9
%RSD	.06930	.04311	.26839	.02065
#1	5514.1	4284.5	34601.	4155.6
#2	5519.5	4287.2	34470.	4154.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.081%	98.714%	99.131%	102.21%
Range				

Sample Name: 480-178390-D-1-A Acquired: 11/24/2020 15:07:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**.19408**	**.00167**	**.06565**	**.05586**
Stddev	.00059	.02350	.00222	.00021	.00002
%RSD	379.37	12.110	132.80	.32178	.03166
#1	.00058	.17746	.00010	.06550	.05587
#2	-.00026	.21070	.00324	.06580	.05585
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**108.56**	**.00013**	**.0211**	**.00123**
Stddev	.00005	.39	.00005	.0232	.00001
%RSD	69.454	.35956	41.593	110.1	.66756
#1	.00004	108.83	.00009	.0375	.00122
#2	.00012	108.28	.00016	.0047	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00197**	**.00437**	**2.6116**	**5.4546**	**.00400**
Stddev	.00018	.00005	.0037	.0464	.00258
%RSD	9.2227	1.0998	.14156	.85063	64.556
#1	.00210	.00441	2.6090	5.4874	.00217
#2	.00185	.00434	2.6142	5.4218	.00583
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178390-D-1-A Acquired: 11/24/2020 15:07:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6130**	**.34856**	**.00356**	**18.523**	**.00471**
Stddev	.0017	.00059	.00013	.068	.00006
%RSD	.01728	.16986	3.6755	.36740	1.3525
#1	9.6118	.34898	.00366	18.571	.00467
#2	9.6142	.34814	.00347	18.475	.00476
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.21**	**.00306**	**12.103**	**.00063**	**.00012**
Stddev	.00	.00097	.012	.00039	.00057
%RSD	.0079	31.862	.09526	62.052	479.81
#1	25.22	.00375	12.095	.00035	.00052
#2	25.21	.00237	12.112	.00090	-.00028
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.0634**	**.00041**	**.54350**	**1.001**	**.00642**
Stddev	.0180	.00022	.00132	.002	.00014
%RSD	.58742	53.483	.24349	.1933	2.2520
#1	3.0507	.00057	.54444	.9994	.00652
#2	3.0762	.00026	.54257	1.002	.00632
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178390-D-1-A Acquired: 11/24/2020 15:07:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00104**	**.00077**	**.44684**	**.9989**
Stddev	.00049	.00030	.00161	.0002
%RSD	47.443	38.895	.36013	.0192
#1	-.00069	.00098	.44798	.9991
#2	-.00139	.00056	.44571	.9988
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5221.1**	**4155.0**	**33434.**	**4117.5**
Stddev	2.6	5.2	11.	17.1
%RSD	.04899	.12490	.03414	.41493
#1	5219.3	4151.4	33442.	4105.4
#2	5223.0	4158.7	33426.	4129.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.986%	95.701%	95.969%	101.28%
Range				

Sample Name: 480-178313-K-1-A Acquired: 11/24/2020 15:11:36 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00084**	**.44046**	**.07299**	**7.2261**	**.03012**
Stddev	.00089	.01862	.00220	.0122	.00015
%RSD	105.51	4.2277	3.0156	.16873	.48421
#1	.00021	.45363	.07143	7.2347	.03022
#2	.00147	.42729	.07454	7.2175	.03002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**11.832**	**.00062**	**-.0463**	**.02386**
Stddev	.00006	.070	.00017	.0252	.00005
%RSD	44.320	.58824	27.917	54.46	.22323
#1	.00009	11.881	.00075	-.0641	.02383
#2	.00017	11.783	.00050	-.0285	.02390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.10323**	**.01563**	**.97621**	F **893.48**	**.08923**
Stddev	.00007	.00182	.00569	9.01	.00131
%RSD	.07008	11.620	.58293	1.0089	1.4659
#1	.10318	.01691	.98024	899.86	.08830
#2	.10329	.01434	.97219	887.11	.09015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-178313-K-1-A Acquired: 11/24/2020 15:11:36 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**109.03**	**.03283**	**.01941**	F **7942.7**	**.30555**
Stddev	.10	.00009	.00053	128.0	.00031
%RSD	.08786	.26413	2.7312	1.6112	.10192
#1	109.10	.03277	.01979	7852.2	.30577
#2	108.97	.03289	.01904	8033.2	.30533
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**27.54**	**.00700**	F **2732.3**	**.00180**	**.00022**
Stddev	.01	.00071	7.9	.00038	.00375
%RSD	.0239	10.190	.28931	20.876	1687.6
#1	27.54	.00750	2737.9	.00206	.00288
#2	27.54	.00649	2726.7	.00153	-.00243
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.3978**	**.00749**	**.14403**	**1.002**	**.16649**
Stddev	.0411	.00004	.00086	.000	.00052
%RSD	.64220	.47031	.59577	.0384	.31525
#1	6.4268	.00751	.14464	1.002	.16686
#2	6.3687	.00746	.14342	1.001	.16612
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178313-K-1-A Acquired: 11/24/2020 15:11:36 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00359**	**.06113**	**.02678**	**1.416**
Stddev	.00032	.00038	.00037	.005
%RSD	9.0275	.62769	1.3971	.3389
#1	-.00336	.06140	.02651	1.420
#2	-.00381	.06086	.02704	1.413
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3320.6**	**3163.6**	**23955.**	**3682.8**
Stddev	2.6	1.0	5.	9.9
%RSD	.07777	.03129	.02003	.26875
#1	3322.4	3164.3	23959.	3689.8
#2	3318.8	3162.9	23952.	3675.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	57.230%	72.866%	68.761%	90.592%
Range				

Sample Name: 480-177307-C-12-A Acquired: 11/24/2020 15:15:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.29214**	**.00963**	**3.1355**	**.19441**
Stddev	.00042	.02214	.00037	.0020	.00036
%RSD	208.24	7.5781	3.8715	.06415	.18637
#1	.00050	.27648	.00989	3.1369	.19467
#2	-.00009	.30779	.00936	3.1341	.19415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**230.04**	**-.00082**	**.0231**	**.01802**
Stddev	.00001	.85	.00009	.0253	.00028
%RSD	12.432	.37007	10.458	109.6	1.5358
#1	.00006	230.65	-.00076	.0410	.01783
#2	.00005	229.44	-.00088	.0052	.01822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01549**	**.00380**	**101.85**	**143.17**	**.03114**
Stddev	.00047	.00017	.24	.74	.00005
%RSD	3.0066	4.4094	.24014	.51992	.16481
#1	.01582	.00392	102.03	143.69	.03118
#2	.01516	.00368	101.68	142.64	.03111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177307-C-12-A Acquired: 11/24/2020 15:15:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**65.293**	**2.3937**	**-.00036**	**437.21**	**.06349**
Stddev	.023	.0006	.00010	2.70	.00024
%RSD	.03576	.02658	28.806	.61779	.38522
#1	65.277	2.3933	-.00044	439.12	.06366
#2	65.310	2.3942	-.00029	435.30	.06332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.50**	**.01757**	**76.041**	**-.01239**	**.00690**
Stddev	.00	.00041	.184	.00155	.00141
%RSD	.0043	2.3522	.24233	12.508	20.484
#1	25.50	.01786	76.171	-.01130	.00590
#2	25.50	.01728	75.910	-.01349	.00790
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.3151**	**.00357**	**.83555**	**1.042**	**.03502**
Stddev	.0162	.00057	.00331	.001	.00024
%RSD	.22134	15.869	.39626	.0755	.68687
#1	7.3266	.00317	.83789	1.042	.03519
#2	7.3037	.00397	.83321	1.041	.03485
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177307-C-12-A Acquired: 11/24/2020 15:15:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00285**	**.01783**	**.27595**	**1.025**
Stddev	.00136	.00021	.00005	.001
%RSD	47.869	1.1939	.01831	.0596
#1	-.00381	.01768	.27591	1.024
#2	-.00188	.01798	.27598	1.025
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4414.3**	**3848.2**	**30509.**	**4064.1**
Stddev	1.6	2.3	110.	29.7
%RSD	.03734	.05969	.35925	.73014
#1	4413.1	3846.6	30587.	4043.1
#2	4415.4	3849.9	30432.	4085.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	76.079%	88.635%	87.574%	99.970%
Range				

Sample Name: 480-177307-C-13-A Acquired: 11/24/2020 15:19:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**.52939**	**.06491**	**11.782**	**.28679**
Stddev	.00020	.01524	.00087	.001	.00060
%RSD	58.389	2.8785	1.3474	.01024	.20809
#1	-.00048	.54016	.06553	11.781	.28721
#2	-.00020	.51861	.06429	11.783	.28637
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**162.40**	**.00039**	**.0081**	**.03780**
Stddev	.00004	.12	.00008	.0447	.00015
%RSD	98.472	.07263	20.905	551.0	.40043
#1	-.00001	162.48	.00033	-.0235	.03791
#2	-.00006	162.31	.00045	.0397	.03769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20103**	**.07012**	**9.0196**	**390.36**	**.10966**
Stddev	.00046	.00097	.0229	1.08	.00035
%RSD	.22645	1.3767	.25421	.27558	.32279
#1	.20135	.06943	9.0358	391.12	.10941
#2	.20071	.07080	9.0034	389.60	.10991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177307-C-13-A Acquired: 11/24/2020 15:19:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**87.834**	**2.6743**	**.00370**	F **1315.2**	**.14419**
Stddev	.074	.0040	.00006	4.4	.00064
%RSD	.08447	.15116	1.7242	.33701	.44101
#1	87.887	2.6772	.00366	1318.3	.14464
#2	87.782	2.6714	.00375	1312.1	.14374
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**28.73**	**.00637**	F **92.906**	**.00434**	**.00193**
Stddev	.00	.00119	.058	.00112	.00192
%RSD	.0102	18.673	.06189	25.772	99.324
#1	28.74	.00722	92.865	.00355	.00057
#2	28.73	.00553	92.946	.00514	.00329
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.383**	**.03307**	**1.1404**	**1.004**	**.11929**
Stddev	.057	.00073	.0044	.004	.00075
%RSD	.32768	2.2174	.38348	.3901	.63068
#1	17.342	.03358	1.1435	1.007	.11876
#2	17.423	.03255	1.1373	1.002	.11983
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177307-C-13-A Acquired: 11/24/2020 15:19:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00173**	**.03954**	**.11042**	**1.042**
Stddev	.00086	.00027	.00002	.000
%RSD	49.476	.67783	.01473	.0225
#1	-.00234	.03973	.11043	1.042
#2	-.00113	.03935	.11041	1.043
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4061.7**	**3633.7**	**28368.**	**3874.7**
Stddev	2.9	4.2	31.	9.3
%RSD	.07034	.11636	.10806	.24103
#1	4063.7	3636.7	28346.	3881.3
#2	4059.7	3630.7	28389.	3868.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	70.003%	83.693%	81.427%	95.313%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 15:23:05 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99684**	**50.384**	**1.0121**	**1.0592**	**1.0191**
Stddev	.00122	.017	.0021	.0010	.0018
%RSD	.12253	.03306	.20368	.09709	.17778
#1	.99770	50.372	1.0106	1.0600	1.0204
#2	.99597	50.396	1.0136	1.0585	1.0178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0259**	**50.297**	**1.0114**	**1.027**	**.99270**
Stddev	.0008	.071	.0008	.028	.00043
%RSD	.07642	.14176	.07970	2.740	.04335
#1	1.0254	50.247	1.0120	1.007	.99240
#2	1.0265	50.347	1.0108	1.046	.99301
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0376**	**1.0049**	**50.221**	**51.329**	**1.0120**
Stddev	.0001	.0022	.055	.059	.0005
%RSD	.01334	.21530	.10936	.11413	.05084
#1	1.0375	1.0065	50.182	51.370	1.0116
#2	1.0377	1.0034	50.260	51.288	1.0123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 15:23:05 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**50.066**	**1.0224**	**1.0471**	**50.881**	**1.0019**
Stddev	.002	.0011	.0064	.040	.0005
%RSD	.00492	.10325	.61042	.07789	.05031
#1	50.064	1.0231	1.0516	50.853	1.0016
#2	50.068	1.0216	1.0426	50.909	1.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.53**	**.99284**	**25.301**	**1.0124**	**1.0208**
Stddev	.02	.00093	.018	.0003	.0017
%RSD	.0596	.09329	.07154	.02788	.16419
#1	37.55	.99350	25.313	1.0126	1.0220
#2	37.52	.99219	25.288	1.0122	1.0196
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.371**	**.99026**	**1.0121**	**1.502**	**1.0078**
Stddev	.028	.00296	.0008	.001	.0035
%RSD	.27044	.29908	.07454	.0548	.34939
#1	10.351	.99235	1.0126	1.501	1.0103
#2	10.391	.98816	1.0116	1.502	1.0053
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 15:23:05 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0229**	**1.0340**	**1.0092**	**1.515**
Stddev	.0014	.0006	.0014	.002
%RSD	.13268	.05935	.13861	.1002
#1	1.0219	1.0335	1.0102	1.514
#2	1.0238	1.0344	1.0082	1.516
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4899.9**	**4124.8**	**32462.**	**4045.5**
Stddev	2.7	2.3	51.	17.0
%RSD	.05429	.05558	.15564	.41920
#1	4901.8	4123.2	32498.	4057.4
#2	4898.0	4126.4	32426.	4033.5

Sample Name: CCB-6254294 Acquired: 11/24/2020 15:26:38 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.00763**	**-.00051**	**.00658**	**.00010**
Stddev	.00002	.02667	.00075	.00028	.00000
%RSD	7.6562	349.42	145.39	4.2350	2.1328
#1	.00028	.02649	-.00104	.00677	.00009
#2	.00031	-.01123	.00001	.00638	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00508**	**-.00002**	**.0061**	**-.00004**
Stddev	.00006	.00055	.00014	.0166	.00011
%RSD	37.135	10.757	879.63	270.5	301.93
#1	.00022	.00470	.00009	.0178	-.00012
#2	.00013	.00547	-.00012	-.0056	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.00195**	**.00435**	**.27595**	**.00136**
Stddev	.00001	.00016	.00111	.00740	.00044
%RSD	14.711	8.0281	25.457	2.6799	32.607
#1	.00009	.00206	.00513	.28118	.00167
#2	.00011	.00184	.00356	.27073	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 15:26:38 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00690**	**.00006**	**.00420**	**.29107**	**.00014**
Stddev	.00066	.00002	.00113	.00559	.00018
%RSD	9.5394	34.673	26.846	1.9201	126.57
#1	.00736	.00005	.00340	.29502	.00001
#2	.00643	.00008	.00500	.28712	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00025**	**.15705**	**-.00159**	**.00074**
Stddev	.00	.00059	.00243	.00081	.00394
%RSD	.0056	234.32	1.5484	50.805	529.16
#1	25.02	.00067	.15533	-.00216	.00353
#2	25.02	-.00017	.15877	-.00102	-.00204
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02690**	**.00047**	**-.00004**	**1.003**	**.00032**
Stddev	.02106	.00003	.00012	.006	.00005
%RSD	78.293	6.6642	320.18	.5545	16.048
#1	.01201	.00044	-.00013	.9989	.00029
#2	.04180	.00049	.00005	1.007	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 15:26:38 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00072**	**-.00002**	**.00031**	**1.000**
Stddev	.00048	.00048	.00004	.000
%RSD	65.750	2089.8	12.653	.0202
#1	-.00039	.00031	.00034	1.000
#2	-.00106	-.00036	.00028	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5817.4**	**4350.8**	**35117.**	**4138.5**
Stddev	8.3	5.3	16.	38.3
%RSD	.14347	.12291	.04414	.92592
#1	5811.5	4347.0	35128.	4111.4
#2	5823.3	4354.6	35106.	4165.5

Sample Name: CCVL-6256824 Acquired: 11/24/2020 15:30:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00592**	**.20199**	**.01491**	**.02450**	**.00205**
Stddev	.00018	.03389	.00089	.00043	.00002
%RSD	3.0004	16.776	5.9860	1.7478	1.1390
#1	.00580	.22595	.01428	.02480	.00203
#2	.00605	.17803	.01554	.02419	.00207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00226**	**.53029**	**.00201**	**.0262**	**.00355**
Stddev	.00012	.00144	.00011	.0285	.00005
%RSD	5.3751	.27095	5.5653	108.7	1.3190
#1	.00217	.53130	.00194	.0464	.00358
#2	.00234	.52927	.00209	.0061	.00351
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00430**	**.00969**	**.05279**	W **.69631**	**.03333**
Stddev	.00030	.00094	.00286	.04905	.00000
%RSD	7.0290	9.6759	5.4189	7.0448	.01437
#1	.00451	.01035	.05481	.66163	.03333
#2	.00408	.00902	.05077	.73100	.03334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value				.50000	
Range				30.000%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 15:30:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20231**	**.00325**	**.01050**	W **1.3689**	**.00936**
Stddev	.00434	.00005	.00011	.0115	.00003
%RSD	2.1459	1.3951	1.0860	.84270	.27756
#1	.20538	.00328	.01058	1.3771	.00938
#2	.19924	.00322	.01042	1.3608	.00934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value				1.0000	
Range				30.000%	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00990**	F **.35062**	**.01748**	**.02096**
Stddev	.00	.00006	.00788	.00041	.00145
%RSD	.0012	.59252	2.2488	2.3407	6.9319
#1	25.00	.00986	.35620	.01719	.02199
#2	25.00	.00994	.34505	.01777	.01994
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	.0060		.20000		
Range	50.00%		50.000%		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.49427**	**.00935**	**.00491**	F **1.001**	**.00513**
Stddev	.00840	.00011	.00003	.003	.00010
%RSD	1.6999	1.1886	.60709	.2812	1.9730
#1	.50022	.00927	.00489	.9992	.00521
#2	.48833	.00943	.00493	1.003	.00506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 15:30:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01901**	**.00458**	**.01015**	F **1.001**
Stddev	.00020	.00025	.00016	.000
%RSD	1.0451	5.4536	1.5735	.0138
#1	.01915	.00440	.01026	1.001
#2	.01887	.00475	.01004	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5750.2**	**4302.0**	**34869.**	**4071.3**
Stddev	5.2	1.9	45.	3.3
%RSD	.09126	.04402	.12774	.08116
#1	5746.5	4300.7	34900.	4068.9
#2	5753.9	4303.3	34837.	4073.6

Sample Name: 480-178105-A-1-A@5 Acquired: 11/24/2020 15:34:10 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00013**	**.00339**	**.00159**	**.00426**	**.00006**
Stddev	.00019	.00477	.00040	.00007	.00004
%RSD	143.95	140.87	25.292	1.5272	65.800
#1	.00000	.00001	.00130	.00422	.00009
#2	-.00027	.00676	.00187	.00431	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.01856**	**-.00011**	**.0284**	**-.00011**
Stddev	.00005	.00166	.00006	.0102	.00003
%RSD	73.566	8.9244	53.201	35.78	23.971
#1	-.00010	.01738	-.00007	.0212	-.00013
#2	-.00003	.01973	-.00016	.0356	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.00035**	**.00099**	**.19939**	**.00159**
Stddev	.00005	.00050	.00074	.02341	.00159
%RSD	14.384	143.13	74.574	11.741	100.06
#1	.00028	-.00000	.00152	.21594	.00271
#2	.00035	.00070	.00047	.18283	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-1-A@5 Acquired: 11/24/2020 15:34:10 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00681**	**.00008**	**-.00043**	**1.4655**	**.00019**
Stddev	.00194	.00003	.00014	.0073	.00010
%RSD	28.436	43.466	32.903	.49936	52.659
#1	.00817	.00010	-.00053	1.4707	.00012
#2	.00544	.00005	-.00033	1.4603	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00014**	**18.794**	**.00059**	**.00139**
Stddev	.00	.00036	.629	.00141	.00339
%RSD	.0001	262.16	3.3484	238.89	242.98
#1	25.02	-.00012	19.239	.00159	.00379
#2	25.02	.00039	18.349	-.00041	-.00100
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00334**	**.00059**	**.00005**	**.9989**	**.00047**
Stddev	.00626	.00006	.00004	.0029	.00017
%RSD	187.69	9.8247	95.128	.2914	36.325
#1	-.00777	.00055	.00002	1.001	.00035
#2	.00109	.00063	.00008	.9968	.00060
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-1-A@5 Acquired: 11/24/2020 15:34:10 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00162**	**-.00036**	**.00109**	**.9991**
Stddev	.00036	.00042	.00025	.0005
%RSD	22.313	116.64	23.167	.0494
#1	-.00188	-.00066	.00127	.9995
#2	-.00137	-.00006	.00091	.9988
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5879.0**	**4311.3**	**35032.**	**4124.2**
Stddev	7.7	11.0	71.	3.7
%RSD	.13097	.25514	.20151	.08935
#1	5873.6	4303.5	34982.	4126.8
#2	5884.5	4319.1	35082.	4121.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.32%	99.301%	100.56%	101.45%
Range				

Sample Name: 480-178105-A-2-A@5 Acquired: 11/24/2020 15:37:56 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.01974**	**.00084**	**.00346**	**.00005**
Stddev	.00003	.00006	.00095	.00004	.00000
%RSD	16.627	.31858	114.09	1.1453	2.8764
#1	-.00018	.01969	.00151	.00349	.00005
#2	-.00023	.01978	.00016	.00343	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.01223**	**-.00000**	**-.0247**	**-.00006**
Stddev	.00004	.00322	.00003	.0058	.00000
%RSD	288.12	26.363	1648.0	23.35	7.8014
#1	.00005	.01451	-.00002	-.0287	-.00005
#2	-.00002	.00995	.00002	-.0206	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**.00354**	**.01426**	**.13389**	**.00162**
Stddev	.00013	.00043	.00012	.00045	.00035
%RSD	40.294	12.050	.84626	.33493	21.848
#1	.00022	.00324	.01418	.13357	.00187
#2	.00040	.00385	.01435	.13421	.00137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-2-A@5 Acquired: 11/24/2020 15:37:56 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00306**	**.00022**	**-.00034**	**1.4313**	**.00037**
Stddev	.00009	.00005	.00009	.0055	.00005
%RSD	2.9651	23.590	25.485	.38519	13.926
#1	.00300	.00018	-.00040	1.4352	.00033
#2	.00312	.00025	-.00028	1.4274	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**-.00006**	**18.678**	**-.00096**	**-.00117**
Stddev	.00	.00021	.540	.00042	.00104
%RSD	.0014	346.39	2.8937	43.341	88.429
#1	25.01	.00009	19.061	-.00067	-.00044
#2	25.01	-.00021	18.296	-.00126	-.00190
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.01573**	**.00082**	**.00006**	**.9995**	**.00012**
Stddev	.00952	.00007	.00004	.0056	.00029
%RSD	60.504	8.2130	74.507	.5631	245.56
#1	-.00900	.00087	.00009	1.003	-.00009
#2	-.02246	.00078	.00003	.9955	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-2-A@5 Acquired: 11/24/2020 15:37:56 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00250**	**-.00017**	**.00253**	**.9991**
Stddev	.00021	.00004	.00010	.0004
%RSD	8.4473	26.142	4.0877	.0436
#1	-.00235	-.00014	.00246	.9988
#2	-.00265	-.00020	.00260	.9994
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5850.4**	**4298.9**	**34925.**	**4124.5**
Stddev	5.6	1.2	120.	25.9
%RSD	.09504	.02716	.34279	.62900
#1	5854.3	4299.7	34840.	4106.1
#2	5846.4	4298.1	35009.	4142.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.83%	99.014%	100.25%	101.46%
Range				

Sample Name: 480-178105-A-3-A@5 Acquired: 11/24/2020 15:41:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**-.00191**	**.00112**	**.00224**	**.00007**
Stddev	.00029	.00236	.00046	.00011	.00003
%RSD	308.21	123.53	41.010	4.9228	40.210
#1	.00011	-.00357	.00145	.00216	.00009
#2	-.00030	-.00024	.00080	.00231	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.04610**	**-.00002**	**-.0050**	**-.00008**
Stddev	.00011	.00263	.00004	.0203	.00002
%RSD	487.34	5.6966	224.15	407.4	21.667
#1	-.00006	.04425	-.00004	.0094	-.00010
#2	.00010	.04796	.00001	-.0194	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**.00113**	**.00143**	**.13070**	**.00173**
Stddev	.00014	.00015	.00077	.01741	.00299
%RSD	45.867	13.102	54.250	13.320	172.49
#1	.00021	.00102	.00197	.11839	.00385
#2	.00042	.00123	.00088	.14301	-.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-3-A@5 Acquired: 11/24/2020 15:41:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00720**	**.00006**	**-.00052**	**1.4014**	**.00033**
Stddev	.00300	.00002	.00011	.0030	.00013
%RSD	41.633	38.959	21.601	.21237	39.188
#1	.00508	.00004	-.00044	1.4035	.00042
#2	.00932	.00008	-.00060	1.3993	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00014**	**19.125**	**-.00046**	**.00198**
Stddev	.00	.00013	.575	.00105	.00037
%RSD	.0003	96.070	3.0055	230.15	18.762
#1	25.02	.00004	19.532	-.00120	.00172
#2	25.02	.00023	18.719	.00029	.00224
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00175**	**.00078**	**.00017**	**.9985**	**.00060**
Stddev	.00169	.00011	.00007	.0027	.00021
%RSD	96.331	13.572	42.090	.2729	35.797
#1	-.00294	.00085	.00022	.9966	.00045
#2	-.00056	.00070	.00012	1.000	.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-3-A@5 Acquired: 11/24/2020 15:41:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00229**	**-.00013**	**.00160**	**.9998**
Stddev	.00089	.00025	.00000	.0002
%RSD	38.762	190.66	.26759	.0209
#1	-.00166	-.00031	.00161	1.0000
#2	-.00292	.00005	.00160	.9997
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5832.4**	**4289.8**	**34779.**	**4121.1**
Stddev	1.9	3.7	205.	22.5
%RSD	.03308	.08688	.58968	.54582
#1	5833.8	4292.4	34634.	4137.0
#2	5831.0	4287.1	34924.	4105.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.52%	98.804%	99.831%	101.37%
Range				

Sample Name: 480-178105-A-4-A@5 Acquired: 11/24/2020 15:45:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.02066**	**.00180**	**.00139**	**.00007**
Stddev	.00040	.03409	.00048	.00013	.00000
%RSD	198.14	164.98	26.387	9.0405	.82086
#1	-.00048	.04476	.00146	.00148	.00007
#2	.00008	-.00344	.00214	.00130	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.03856**	**-.00007**	**.0180**	**-.00005**
Stddev	.00001	.00042	.00007	.0143	.00011
%RSD	33.637	1.0966	103.61	79.63	203.47
#1	.00004	.03826	-.00002	.0079	.00002
#2	.00003	.03886	-.00012	.0281	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00080**	**.00204**	**.11006**	**-.00001**
Stddev	.00016	.00010	.00101	.01022	.00059
%RSD	91.770	12.636	49.724	9.2842	5675.6
#1	.00006	.00087	.00275	.11729	.00040
#2	.00028	.00073	.00132	.10284	-.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-4-A@5 Acquired: 11/24/2020 15:45:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00737**	**.00007**	**-.00042**	**1.4157**	**.00039**
Stddev	.00122	.00003	.00011	.0047	.00016
%RSD	16.621	40.051	25.265	.33276	41.639
#1	.00823	.00005	-.00034	1.4190	.00050
#2	.00650	.00009	-.00049	1.4124	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00018**	**18.939**	**-.00210**	**.00147**
Stddev	.00	.00049	.474	.00023	.00162
%RSD	.0063	275.46	2.5002	10.876	110.46
#1	25.02	.00017	19.273	-.00226	.00262
#2	25.02	-.00052	18.604	-.00194	.00032
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.01720**	**.00077**	**.00013**	**.9978**	**.00019**
Stddev	.00984	.00002	.00005	.0032	.00009
%RSD	57.216	2.5058	37.630	.3201	43.874
#1	-.01024	.00078	.00017	1.000	.00025
#2	-.02416	.00075	.00010	.9955	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-4-A@5 Acquired: 11/24/2020 15:45:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00178**	**-.00037**	**.00159**	**.9989**
Stddev	.00006	.00014	.00003	.0012
%RSD	3.5500	38.819	1.9403	.1218
#1	-.00182	-.00047	.00157	.9981
#2	-.00173	-.00027	.00161	.9998
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5824.9**	**4284.4**	**34623.**	**4090.9**
Stddev	6.7	5.0	6.	49.2
%RSD	.11479	.11624	.01703	1.2018
#1	5820.2	4280.9	34619.	4056.2
#2	5829.6	4288.0	34627.	4125.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.39%	98.681%	99.383%	100.63%
Range				

Sample Name: 480-178105-A-5-A@5 Acquired: 11/24/2020 15:49:12 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**.01552**	**.00240**	**.00117**	**.00009**
Stddev	.00037	.01666	.00087	.00027	.00000
%RSD	140.35	107.33	36.334	22.850	3.7562
#1	.00052	.02730	.00301	.00098	.00008
#2	.00000	.00374	.00178	.00136	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.07213**	**.00002**	**.0071**	**-.00005**
Stddev	.00006	.00049	.00008	.0126	.00002
%RSD	131.68	.68324	520.67	178.3	48.841
#1	.00009	.07178	.00007	.0159	-.00003
#2	.00000	.07248	-.00004	-.0018	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00085**	**.00198**	**.04329**	**.00244**
Stddev	.00004	.00019	.00196	.00882	.00077
%RSD	25.015	22.623	99.137	20.381	31.659
#1	.00014	.00071	.00336	.04952	.00189
#2	.00020	.00098	.00059	.03705	.00298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-5-A@5 Acquired: 11/24/2020 15:49:12 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01115**	**.00006**	**-.00075**	**1.4151**	**.00025**
Stddev	.00103	.00003	.00006	.0019	.00052
%RSD	9.2080	48.662	8.4902	.13698	206.27
#1	.01042	.00004	-.00080	1.4165	-.00012
#2	.01188	.00009	-.00071	1.4137	.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00088**	**19.279**	**-.00044**	**.00350**
Stddev	.00	.00052	.512	.00156	.00044
%RSD	.0048	58.502	2.6572	354.58	12.555
#1	25.02	.00052	19.641	-.00154	.00381
#2	25.02	.00125	18.916	.00066	.00319
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.02030**	**.00088**	**.00022**	**1.000**	**.00046**
Stddev	.00519	.00035	.00001	.002	.00021
%RSD	25.554	39.193	2.4480	.2216	44.995
#1	-.02396	.00064	.00022	.9987	.00060
#2	-.01663	.00113	.00022	1.002	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-5-A@5 Acquired: 11/24/2020 15:49:12 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00137**	**.00002**	**.00296**	**.9989**
Stddev	.00043	.00030	.00018	.0004
%RSD	31.660	1676.0	5.9380	.0365
#1	-.00106	-.00020	.00308	.9987
#2	-.00167	.00023	.00283	.9992
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5800.9**	**4269.3**	**34697.**	**4102.6**
Stddev	10.3	3.0	40.	19.6
%RSD	.17803	.06982	.11390	.47766
#1	5793.6	4267.2	34725.	4088.7
#2	5808.2	4271.4	34669.	4116.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.977%	98.332%	99.593%	100.92%
Range				

Sample Name: 480-178105-A-6-A@5 Acquired: 11/24/2020 15:52:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.00875**	**.00182**	**.00068**	**.00006**
Stddev	.00016	.01137	.00185	.00017	.00001
%RSD	170.12	130.00	101.29	24.693	23.056
#1	-.00020	.01679	.00313	.00080	.00005
#2	.00002	.00071	.00052	.00056	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.05775**	**-.00009**	**.0269**	**-.00004**
Stddev	.00010	.00163	.00021	.0072	.00014
%RSD	311.77	2.8268	235.09	26.83	337.50
#1	-.00004	.05659	-.00024	.0218	-.00014
#2	.00010	.05890	.00006	.0320	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.00045**	**.00093**	**.08016**	**.00146**
Stddev	.00025	.00003	.00343	.02794	.00122
%RSD	176.17	6.4251	370.23	34.855	83.607
#1	.00032	.00043	-.00150	.06041	.00060
#2	-.00003	.00047	.00335	.09992	.00233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-6-A@5 Acquired: 11/24/2020 15:52:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00662**	**.00008**	**-.00058**	**1.3512**	**.00034**
Stddev	.00082	.00003	.00011	.0082	.00007
%RSD	12.340	31.658	18.526	.60474	21.815
#1	.00604	.00006	-.00065	1.3569	.00039
#2	.00720	.00010	-.00050	1.3454	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00047**	**18.401**	**.00080**	**.00163**
Stddev	.00	.00048	.504	.00140	.00054
%RSD	.0015	101.17	2.7373	175.79	33.510
#1	25.02	.00081	18.758	-.00019	.00124
#2	25.02	.00013	18.045	.00179	.00201
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00925**	**.00066**	**.00016**	**.9980**	**.00066**
Stddev	.00312	.00002	.00008	.0068	.00032
%RSD	33.792	3.0894	51.710	.6821	48.651
#1	-.00704	.00068	.00021	.9932	.00043
#2	-.01146	.00065	.00010	1.003	.00089
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-6-A@5 Acquired: 11/24/2020 15:52:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00222**	**-.00043**	**.00196**	**.9988**
Stddev	.00006	.00019	.00016	.0003
%RSD	2.6641	43.296	7.9465	.0271
#1	-.00226	-.00056	.00185	.9986
#2	-.00218	-.00030	.00207	.9990
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5812.5**	**4277.0**	**34789.**	**4134.2**
Stddev	3.3	4.7	165.	1.7
%RSD	.05609	.10939	.47547	.04074
#1	5814.8	4280.3	34672.	4135.4
#2	5810.2	4273.7	34906.	4133.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.18%	98.510%	99.858%	101.70%
Range				

Sample Name: 480-178105-A-7-A@5 Acquired: 11/24/2020 15:56:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**.07196**	**.00161**	**.00064**	**.00007**
Stddev	.00116	.00417	.00085	.00029	.00000
%RSD	266.23	5.7961	53.047	45.517	.94672
#1	.00039	.07491	.00100	.00043	.00007
#2	-.00126	.06901	.00221	.00085	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.26158**	**-.00004**	**.0313**	**-.00001**
Stddev	.00004	.00431	.00012	.0258	.00000
%RSD	149.76	1.6472	337.44	82.48	26.060
#1	.00005	.26462	.00005	.0130	-.00002
#2	-.00000	.25853	-.00012	.0495	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.00190**	**.00787**	**.07684**	**.00048**
Stddev	.00021	.00045	.00148	.00469	.00107
%RSD	106.51	23.522	18.839	6.1000	221.15
#1	.00005	.00222	.00682	.07353	-.00027
#2	.00034	.00159	.00892	.08016	.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-7-A@5 Acquired: 11/24/2020 15:56:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03979**	**.00157**	**-.00077**	**1.3432**	**.00042**
Stddev	.00054	.00006	.00004	.0021	.00002
%RSD	1.3566	3.5157	5.1524	.15367	5.7708
#1	.03941	.00153	-.00074	1.3447	.00043
#2	.04017	.00161	-.00080	1.3417	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00024**	**18.662**	**-.00094**	**.00078**
Stddev	.00	.00102	.454	.00091	.00103
%RSD	.0008	428.23	2.4353	97.670	131.78
#1	25.02	.00048	18.984	-.00029	.00151
#2	25.02	-.00096	18.341	-.00158	.00005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00242**	**.00093**	**.00066**	**.9959**	**.00017**
Stddev	.00159	.00021	.00002	.0042	.00001
%RSD	65.921	22.669	3.3934	.4240	4.8779
#1	.00354	.00078	.00068	.9989	.00018
#2	.00129	.00107	.00065	.9929	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178105-A-7-A@5 Acquired: 11/24/2020 15:56:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00167**	**-.00009**	**.06947**	**1.000**
Stddev	.00062	.00046	.00015	.001
%RSD	37.088	505.32	.22069	.0454
#1	-.00123	-.00041	.06958	.9999
#2	-.00211	.00023	.06936	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5833.1**	**4297.9**	**34820.**	**4145.1**
Stddev	7.9	1.7	112.	15.8
%RSD	.13467	.04051	.32214	.38026
#1	5827.5	4299.2	34900.	4134.0
#2	5838.6	4296.7	34741.	4156.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.53%	98.992%	99.948%	101.96%
Range				

Sample Name: 480-178137-B-2-A@5 Acquired: 11/24/2020 16:00:28 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**.01262**	**.00044**	**8.0744**	**.03686**
Stddev	.00030	.02493	.00027	.0030	.00006
%RSD	142.36	197.58	60.178	.03726	.15767
#1	.00000	-.00501	.00063	8.0723	.03690
#2	-.00043	.03024	.00025	8.0765	.03682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**64.366**	**.00023**	**-.0320**	**.00046**
Stddev	.00003	.043	.00009	.0087	.00001
%RSD	106.50	.06703	36.934	27.31	2.1370
#1	-.00004	64.397	.00017	-.0382	.00047
#2	-.00001	64.336	.00030	-.0258	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00155**	**.00198**	**.01131**	**53.712**	**.09276**
Stddev	.00052	.00013	.00142	.074	.00022
%RSD	33.357	6.8091	12.562	.13849	.23642
#1	.00192	.00188	.01031	53.659	.09260
#2	.00119	.00207	.01232	53.764	.09291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178137-B-2-A@5 Acquired: 11/24/2020 16:00:28 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**44.673**	**.03897**	**-.00052**	**221.40**	**.00235**
Stddev	.184	.00009	.00006	.09	.00017
%RSD	.41191	.22703	11.417	.04275	7.3844
#1	44.803	.03903	-.00047	221.33	.00223
#2	44.543	.03891	-.00056	221.47	.00247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.10**	**.00032**	F **101.21**	**-.00157**	**-.00379**
Stddev	.00	.00005	.00	.00014	.00237
%RSD	.0005	16.880	.00489	8.8644	62.611
#1	25.10	.00028	101.20	-.00147	-.00211
#2	25.10	.00036	101.21	-.00167	-.00547
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.6312**	**-.00004**	**.33785**	**.9982**	**.00162**
Stddev	.0027	.00011	.00018	.0003	.00018
%RSD	.10344	313.63	.05395	.0287	11.229
#1	2.6331	-.00012	.33798	.9980	.00149
#2	2.6293	.00004	.33772	.9984	.00175
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178137-B-2-A@5 Acquired: 11/24/2020 16:00:28 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00225**	**.00154**	**.00054**	**1.000**
Stddev	.00040	.00047	.00041	.000
%RSD	17.839	30.452	75.227	.0038
#1	-.00253	.00187	.00025	1.000
#2	-.00197	.00121	.00083	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4841.7**	**4026.3**	**32069.**	**4087.4**
Stddev	5.8	11.0	115.	2.3
%RSD	.12069	.27401	.35725	.05618
#1	4845.9	4034.1	31988.	4089.0
#2	4837.6	4018.5	32150.	4085.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.446%	92.736%	92.050%	100.54%
Range				

Sample Name: 480-178137-B-3-A@5 Acquired: 11/24/2020 16:04:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**-.01093**	**.00066**	**7.5186**	**.03646**
Stddev	.00020	.04148	.00007	.0115	.00000
%RSD	74.352	379.50	10.372	.15318	.00521
#1	.00040	-.04026	.00061	7.5267	.03646
#2	.00012	.01840	.00071	7.5104	.03645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**59.731**	**.00029**	**-.0283**	**.00079**
Stddev	.00006	.098	.00013	.0143	.00014
%RSD	132.90	.16476	43.680	50.48	17.465
#1	-.00000	59.661	.00038	-.0182	.00089
#2	-.00009	59.800	.00020	-.0384	.00069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00216**	**.00106**	**.10494**	**53.674**	**.08177**
Stddev	.00014	.00067	.00051	.227	.00014
%RSD	6.3139	63.492	.48168	.42224	.17203
#1	.00226	.00058	.10458	53.514	.08187
#2	.00207	.00154	.10529	53.835	.08167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178137-B-3-A@5 Acquired: 11/24/2020 16:04:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**42.893**	**.03808**	**-.00065**	**213.05**	**.00375**
Stddev	.213	.00010	.00004	.85	.00015
%RSD	.49602	.25293	6.1901	.39963	4.0651
#1	43.044	.03801	-.00068	212.44	.00386
#2	42.743	.03815	-.00062	213.65	.00364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.10**	**.00027**	F **90.748**	**-.00080**	**-.00268**
Stddev	.00	.00002	.084	.00120	.00119
%RSD	.0002	8.7510	.09223	150.24	44.440
#1	25.10	.00025	90.807	-.00164	-.00184
#2	25.10	.00029	90.689	.00005	-.00352
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.4700**	**-.00012**	**.30748**	**1.001**	**.00198**
Stddev	.0183	.00052	.00108	.004	.00011
%RSD	.74002	435.24	.34973	.3638	5.7464
#1	2.4571	.00025	.30672	.9987	.00190
#2	2.4829	-.00048	.30824	1.004	.00206
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178137-B-3-A@5 Acquired: 11/24/2020 16:04:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00072**	**.00164**	**.00024**	**1.002**
Stddev	.00097	.00016	.00044	.000
%RSD	134.81	9.7518	181.92	.0079
#1	-.00141	.00153	-.00007	1.002
#2	-.00003	.00175	.00056	1.002
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4855.5**	**4025.6**	**32339.**	**4013.6**
Stddev	6.7	7.1	178.	7.9
%RSD	.13870	.17684	.55153	.19677
#1	4860.2	4030.6	32212.	4008.1
#2	4850.7	4020.5	32465.	4019.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.684%	92.719%	92.825%	98.730%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 16:08:05 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99715**	**51.604**	**1.0140**	**1.0551**	**1.0084**
Stddev	.00226	.080	.0008	.0017	.0007
%RSD	.22651	.15495	.08388	.15645	.06625
#1	.99875	51.661	1.0146	1.0563	1.0089
#2	.99555	51.548	1.0134	1.0540	1.0080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0345**	**51.148**	**1.0191**	**1.014**	**.99606**
Stddev	.0001	.051	.0017	.004	.00026
%RSD	.00979	.10012	.16166	.3950	.02659
#1	1.0346	51.184	1.0203	1.011	.99625
#2	1.0344	51.112	1.0180	1.017	.99587
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0342**	**1.0110**	**50.654**	**50.362**	**1.0145**
Stddev	.0009	.0004	.069	.123	.0013
%RSD	.09018	.03918	.13538	.24471	.12786
#1	1.0349	1.0112	50.702	50.449	1.0136
#2	1.0336	1.0107	50.605	50.275	1.0154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 16:08:05 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.771**	**1.0116**	**1.0440**	**51.092**	**1.0024**
Stddev	.105	.0016	.0079	.024	.0004
%RSD	.21159	.15540	.75899	.04784	.04164
#1	49.845	1.0127	1.0496	51.109	1.0027
#2	49.696	1.0105	1.0384	51.074	1.0021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.77**	**.99907**	**25.614**	**1.0225**	**1.0193**
Stddev	.03	.00117	.031	.0025	.0005
%RSD	.0806	.11746	.12118	.24645	.05117
#1	37.79	.99824	25.636	1.0243	1.0197
#2	37.75	.99990	25.592	1.0207	1.0189
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.118**	**1.0038**	**1.0135**	**1.507**	**1.0214**
Stddev	.028	.0009	.0016	.007	.0005
%RSD	.27253	.09099	.15399	.4777	.04884
#1	10.137	1.0044	1.0146	1.512	1.0218
#2	10.098	1.0031	1.0123	1.502	1.0211
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 16:08:05 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0145**	**1.0239**	**1.0265**	**1.506**
Stddev	.0012	.0027	.0024	.002
%RSD	.11744	.26680	.22878	.1131
#1	1.0153	1.0258	1.0281	1.508
#2	1.0136	1.0220	1.0248	1.505
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4925.9**	**4132.4**	**32681.**	**4050.5**
Stddev	9.3	3.0	31.	15.3
%RSD	.18821	.07173	.09515	.37681
#1	4932.5	4134.4	32703.	4039.7
#2	4919.4	4130.3	32659.	4061.3

Sample Name: CCB-6254294 Acquired: 11/24/2020 16:11:38 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.02388**	**.00151**	**.00564**	**.00009**
Stddev	.00015	.00055	.00113	.00010	.00003
%RSD	99.602	2.3120	74.867	1.7678	28.063
#1	-.00005	.02427	.00071	.00571	.00007
#2	-.00026	.02349	.00231	.00557	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00067**	**-.00003**	**.0164**	**-.00005**
Stddev	.00003	.00006	.00008	.0149	.00007
%RSD	63.002	8.2444	275.08	90.76	132.88
#1	.00002	.00063	-.00009	.0059	-.00010
#2	.00006	.00071	.00003	.0270	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**.00132**	**.00271**	**.08503**	**.00160**
Stddev	.00005	.00039	.00048	.02237	.00086
%RSD	1155.1	29.933	17.640	26.310	53.607
#1	-.00004	.00159	.00237	.10085	.00100
#2	.00003	.00104	.00305	.06921	.00221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 16:11:38 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00223**	**.00003**	**.00413**	**.11310**	**.00021**
Stddev	.00162	.00007	.00090	.00692	.00002
%RSD	72.770	217.15	21.730	6.1169	8.1920
#1	.00108	-.00002	.00349	.10821	.00022
#2	.00338	.00008	.00476	.11799	.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00046**	**.04504**	**-.00035**	**-.00124**
Stddev	.00	.00040	.00393	.00019	.00051
%RSD	.0045	85.062	8.7262	52.824	40.669
#1	25.02	.00074	.04226	-.00022	-.00089
#2	25.02	.00019	.04782	-.00048	-.00160
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00197**	**.00063**	**.00005**	**.9971**	**.00037**
Stddev	.01138	.00011	.00005	.0002	.00029
%RSD	578.25	17.885	102.01	.0178	78.593
#1	-.01001	.00070	.00002	.9970	.00057
#2	.00608	.00055	.00009	.9972	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 16:11:38 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.00038**	**-.00007**	**.00012**	**1.000**
Stddev	.00093	.00016	.00000	.000
%RSD	248.02	213.90	.89942	.0120
#1	-.00028	-.00019	.00012	1.000
#2	.00103	.00004	.00012	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5787.2**	**4309.6**	**34905.**	**4105.5**
Stddev	.6	.4	95.	25.3
%RSD	.01079	.00839	.27263	.61581
#1	5787.6	4309.3	34837.	4087.6
#2	5786.7	4309.8	34972.	4123.4

Sample Name: CCVL-6256824 Acquired: 11/24/2020 16:15:26 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00616**	**.18229**	**.01456**	**.02377**	**.00211**
Stddev	.00049	.02062	.00161	.00022	.00003
%RSD	7.9746	11.311	11.076	.93501	1.6052
#1	.00651	.19687	.01342	.02361	.00209
#2	.00582	.16771	.01570	.02393	.00214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00200**	**.51526**	**.00201**	**.0296**	**.00350**
Stddev	.00013	.00346	.00000	.0018	.00006
%RSD	6.3381	.67155	.03883	6.102	1.7336
#1	.00209	.51282	.00201	.0309	.00355
#2	.00191	.51771	.00201	.0283	.00346
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00407**	**.01046**	**.05246**	**.53511**	**.03221**
Stddev	.00033	.00013	.00487	.00535	.00032
%RSD	7.9868	1.2413	9.2788	1.0007	1.0068
#1	.00384	.01055	.04902	.53133	.03198
#2	.00430	.01037	.05590	.53890	.03244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 16:15:26 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20592**	**.00318**	**.01039**	**1.1008**	**.00949**
Stddev	.00338	.00003	.00011	.0030	.00003
%RSD	1.6415	.85505	1.0856	.27464	.35334
#1	.20353	.00316	.01047	1.0987	.00946
#2	.20831	.00320	.01031	1.1030	.00951
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00988**	**.22362**	**.01874**	**.02201**
Stddev	.00	.00050	.00104	.00168	.00054
%RSD	.0041	5.0187	.46486	8.9482	2.4629
#1	25.00	.00953	.22288	.01993	.02163
#2	25.00	.01023	.22435	.01756	.02239
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46343**	**.00920**	**.00492**	F **.9963**	**.00471**
Stddev	.00926	.00025	.00001	.0010	.00014
%RSD	1.9978	2.6918	.16388	.0997	2.8886
#1	.45689	.00937	.00492	.9956	.00462
#2	.46998	.00902	.00491	.9970	.00481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 16:15:26 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01936**	**.00439**	**.00987**	F **1.001**
Stddev	.00074	.00004	.00066	.000
%RSD	3.8114	.91697	6.6526	.0292
#1	.01988	.00436	.00941	1.000
#2	.01884	.00442	.01034	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5697.4**	**4276.3**	**34735.**	**4082.5**
Stddev	.5	.9	49.	22.3
%RSD	.00933	.02048	.14041	.54552
#1	5697.8	4276.9	34770.	4098.2
#2	5697.0	4275.7	34701.	4066.7

Sample Name: 480-178137-B-4-A@5 Acquired: 11/24/2020 16:19:11 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00052**	**-.01228**	**-.00082**	**7.9870**	**.03694**
Stddev	.00044	.02683	.00123	.0134	.00007
%RSD	85.888	218.51	150.93	.16743	.20018
#1	-.00083	-.03125	.00005	7.9775	.03689
#2	-.00020	.00669	-.00169	7.9964	.03700
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**64.047**	**.00022**	**.0232**	**.00060**
Stddev	.00007	.167	.00022	.0322	.00017
%RSD	77.481	.26133	99.605	138.8	28.013
#1	.00014	63.929	.00006	.0004	.00072
#2	.00004	64.166	.00037	.0460	.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00119**	**.00108**	**.01348**	**53.655**	**.09046**
Stddev	.00008	.00000	.00039	.122	.00048
%RSD	6.7265	.10320	2.9038	.22762	.52863
#1	.00124	.00108	.01376	53.568	.09080
#2	.00113	.00107	.01321	53.741	.09012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178137-B-4-A@5 Acquired: 11/24/2020 16:19:11 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**44.550**	**.03939**	**-.00042**	**222.31**	**.00259**
Stddev	.051	.00005	.00009	.68	.00014
%RSD	.11340	.13458	22.072	.30411	5.3440
#1	44.586	.03943	-.00035	221.83	.00268
#2	44.514	.03935	-.00048	222.78	.00249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.10**	**-.00006**	F **98.309**	**-.00040**	**-.00200**
Stddev	.00	.00094	.038	.00008	.00131
%RSD	.0016	1620.8	.03892	18.812	65.303
#1	25.10	-.00072	98.336	-.00035	-.00293
#2	25.10	.00061	98.282	-.00046	-.00108
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.6180**	**.00008**	**.33780**	**.9923**	**.00185**
Stddev	.0007	.00000	.00023	.0060	.00010
%RSD	.02662	.37456	.06902	.6082	5.6000
#1	2.6185	.00008	.33764	.9965	.00178
#2	2.6175	.00008	.33797	.9880	.00192
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178137-B-4-A@5 Acquired: 11/24/2020 16:19:11 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00111**	**.00135**	**.00046**	**1.000**
Stddev	.00155	.00036	.00015	.000
%RSD	139.71	26.669	32.676	.0115
#1	-.00221	.00160	.00035	1.000
#2	-.00001	.00109	.00056	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4793.3**	**3999.6**	**31761.**	**4019.3**
Stddev	5.4	2.9	40.	7.0
%RSD	.11225	.07178	.12512	.17521
#1	4797.1	4001.7	31733.	4024.3
#2	4789.5	3997.6	31789.	4014.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.611%	92.122%	91.167%	98.870%
Range				

Sample Name: rinse Acquired: 11/24/2020 16:22:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00056**	**.00392**	**-.00071**	**.00816**	**.00001**
Stddev	.00073	.02570	.00003	.00088	.00004
%RSD	130.43	654.95	4.4920	10.820	345.40
#1	-.00004	-.01425	-.00073	.00879	.00004
#2	-.00108	.02210	-.00068	.00754	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**-.00556**	**-.00002**	**.0060**	**-.00014**
Stddev	.00008	.00106	.00010	.0017	.00010
%RSD	228.78	19.049	531.90	28.38	72.251
#1	-.00010	-.00631	.00005	.0072	-.00021
#2	.00002	-.00481	-.00009	.0048	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00012**	**.00117**	**-.00362**	**.04324**	**.00003**
Stddev	.00005	.00002	.00126	.01494	.00102
%RSD	40.444	1.3734	34.637	34.559	2929.8
#1	-.00009	.00119	-.00451	.05381	.00076
#2	-.00015	.00116	-.00274	.03268	-.00069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: rinse Acquired: 11/24/2020 16:22:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00169**	**-.00001**	**-.00069**	**.10116**	**.00036**
Stddev	.00197	.00004	.00006	.00409	.00008
%RSD	116.38	579.42	8.2407	4.0440	22.304
#1	.00030	.00002	-.00073	.09827	.00030
#2	.00308	-.00004	-.00065	.10405	.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00058**	**.03240**	**-.00046**	**-.00135**
Stddev	.00	.00067	.00080	.00154	.00313
%RSD	.0003	116.09	2.4636	338.99	231.45
#1	25.02	.00010	.03183	.00064	-.00356
#2	25.02	.00105	.03296	-.00155	.00086
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.01105**	**.00002**	**-.00009**	**.9996**	**.00003**
Stddev	.00844	.00039	.00000	.0048	.00034
%RSD	76.403	2223.8	.02396	.4809	1143.5
#1	-.00508	-.00026	-.00009	1.003	.00027
#2	-.01702	.00029	-.00009	.9962	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: rinse Acquired: 11/24/2020 16:22:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00039**	**-.00037**	**.00045**	**.9998**
Stddev	.00051	.00037	.00031	.0005
%RSD	131.70	98.672	69.347	.0473
#1	-.00075	-.00063	.00068	1.000
#2	-.00003	-.00011	.00023	.9995
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5782.0**	**4297.1**	**34595.**	**4083.4**
Stddev	1.1	2.5	86.	14.1
%RSD	.01879	.05829	.24925	.34429
#1	5781.2	4295.3	34534.	4073.4
#2	5782.7	4298.8	34656.	4093.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.651%	98.972%	99.303%	100.45%
Range				

Sample Name: MB 480-560066/1-A Acquired: 11/24/2020 16:26:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**-.00439**	**.00041**	**.00490**	**-.00001**
Stddev	.00089	.00781	.00108	.00014	.00002
%RSD	235.24	177.83	261.05	2.8840	165.45
#1	-.00101	-.00991	-.00035	.00500	-.00002
#2	.00025	.00113	.00118	.00480	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.00827**	**.00003**	**.0021**	**-.00010**
Stddev	.00009	.00179	.00001	.0001	.00006
%RSD	84.407	21.641	29.052	5.148	67.190
#1	.00004	.00700	.00003	.0021	-.00014
#2	.00017	.00953	.00004	.0020	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00153**	**-.00012**	**.03438**	**.00062**
Stddev	.00022	.00023	.00094	.00416	.00032
%RSD	558.04	15.013	814.42	12.107	52.110
#1	-.00012	.00170	.00055	.03143	.00085
#2	.00020	.00137	-.00078	.03732	.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560066/1-A Acquired: 11/24/2020 16:26:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00062**	**.00023**	**-.00073**	**.08155**	**.00008**
Stddev	.00210	.00002	.00011	.00480	.00003
%RSD	341.01	7.3667	15.377	5.8816	32.049
#1	-.00210	.00024	-.00081	.07816	.00010
#2	.00087	.00022	-.00065	.08494	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00024**	**.02047**	**-.00152**	**-.00140**
Stddev	.00	.00027	.00103	.00000	.00220
%RSD	.0058	112.17	5.0266	.12142	156.81
#1	25.02	-.00005	.02120	-.00152	.00015
#2	25.01	-.00042	.01974	-.00152	-.00295
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00762**	**.00001**	**.00003**	**.9968**	**.00040**
Stddev	.00091	.00024	.00001	.0005	.00023
%RSD	11.904	2258.9	41.353	.0525	55.954
#1	-.00826	.00018	.00003	.9964	.00024
#2	-.00698	-.00016	.00002	.9971	.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560066/1-A Acquired: 11/24/2020 16:26:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00073**	**-.00020**	**.00045**	**.9995**
Stddev	.00035	.00002	.00012	.0005
%RSD	48.390	8.2614	26.294	.0482
#1	-.00048	-.00022	.00054	.9992
#2	-.00098	-.00019	.00037	.9998
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5868.3**	**4374.1**	**35397.**	**4208.4**
Stddev	10.5	7.1	112.	18.8
%RSD	.17875	.16220	.31779	.44640
#1	5875.7	4379.1	35477.	4221.7
#2	5860.8	4369.1	35318.	4195.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.14%	100.75%	101.60%	103.52%
Range				

Sample Name: LCS 480-560066/2-A Acquired: 11/24/2020 16:30:31 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05004**	**10.080**	**.20152**	**.20814**	**.21100**
Stddev	.00020	.071	.00075	.00051	.00016
%RSD	.38990	.70584	.36978	.24482	.07531
#1	.05018	10.030	.20099	.20778	.21111
#2	.04990	10.131	.20204	.20850	.21089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21054**	**10.026**	**.19983**	**.0056**	**.18754**
Stddev	.00077	.009	.00050	.0309	.00016
%RSD	.36728	.08480	.24954	549.3	.08429
#1	.21109	10.032	.20018	.0274	.18743
#2	.20999	10.020	.19947	-.0162	.18765
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20033**	**.20015**	**9.6554**	**10.004**	**.20372**
Stddev	.00002	.00087	.0006	.029	.00004
%RSD	.01019	.43301	.00620	.29051	.02148
#1	.20032	.20076	9.6549	10.025	.20375
#2	.20035	.19953	9.6558	9.9839	.20368
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560066/2-A Acquired: 11/24/2020 16:30:31 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7737**	**.20176**	**.20784**	**10.080**	**.18760**
Stddev	.0006	.00054	.00027	.032	.00016
%RSD	.00650	.26526	.12996	.31793	.08486
#1	9.7732	.20213	.20803	10.103	.18749
#2	9.7741	.20138	.20765	10.057	.18771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.69**	**.19322**	**10.074**	**.20147**	**.20086**
Stddev	.00	.00089	.001	.00123	.00075
%RSD	.0035	.46168	.00614	.60908	.37396
#1	24.69	.19258	10.075	.20234	.20139
#2	24.69	.19385	10.074	.20060	.20033
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.5993**	**.18998**	**.20034**	**1.004**	**.19983**
Stddev	.0003	.00095	.00053	.005	.00000
%RSD	.00343	.50036	.26285	.4631	.00194
#1	9.5990	.19065	.20071	1.001	.19983
#2	9.5995	.18931	.19997	1.007	.19983
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560066/2-A Acquired: 11/24/2020 16:30:31 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.19977**	**.19971**	**.19978**	**1.002**
Stddev	.00051	.00106	.00073	.000
%RSD	.25711	.52956	.36702	.0042
#1	.19941	.20046	.20030	1.002
#2	.20014	.19896	.19926	1.002
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5466.5**	**4276.2**	**34389.**	**4124.3**
Stddev	2.6	5.9	77.	18.1
%RSD	.04796	.13836	.22458	.43961
#1	5464.6	4272.0	34334.	4111.5
#2	5468.3	4280.3	34443.	4137.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.214%	98.491%	98.710%	101.45%
Range				

Sample Name: 480-178192-C-1-A Acquired: 11/24/2020 16:34:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.00399**	**-.00216**	**.00444**	**.00016**
Stddev	.00069	.04773	.00064	.00013	.00002
%RSD	423.12	1195.4	29.422	2.8713	14.023
#1	.00032	-.02976	-.00171	.00435	.00018
#2	-.00065	.03774	-.00261	.00453	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.00689**	**.00007**	**-.0030**	**-.00000**
Stddev	.00002	.00040	.00007	.0064	.00003
%RSD	22.241	5.8406	92.954	216.1	4636.5
#1	.00006	.00661	.00003	-.0075	.00002
#2	.00009	.00718	.00012	.0016	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00040**	**.00100**	**.00237**	**.01675**	**-.00029**
Stddev	.00008	.00082	.00169	.03012	.00110
%RSD	20.474	82.199	71.163	179.79	380.40
#1	.00034	.00042	.00118	-.00455	-.00107
#2	.00046	.00157	.00357	.03805	.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-1-A Acquired: 11/24/2020 16:34:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00226**	**.00000**	**-.00014**	**.07867**	**.00022**
Stddev	.00155	.00004	.00005	.01008	.00005
%RSD	68.544	916.16	34.359	12.814	25.232
#1	.00116	-.00003	-.00017	.08580	.00018
#2	.00335	.00004	-.00010	.07154	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00056**	**.01551**	**-.00014**	**-.00170**
Stddev	.00	.00024	.00253	.00006	.00161
%RSD	.0001	42.190	16.302	39.618	94.435
#1	25.01	.00039	.01729	-.00018	-.00057
#2	25.02	.00073	.01372	-.00010	-.00284
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00750**	**.00017**	**-.00003**	**.9974**	**.00017**
Stddev	.00855	.00011	.00004	.0065	.00039
%RSD	113.95	67.615	128.25	.6468	224.49
#1	-.01354	.00009	-.00000	.9928	-.00010
#2	-.00146	.00025	-.00006	1.002	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-1-A Acquired: 11/24/2020 16:34:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00120**	**-.00009**	**.00052**	**.9992**
Stddev	.00000	.00008	.00018	.0005
%RSD	.29951	92.543	34.246	.0550
#1	-.00119	-.00014	.00064	.9996
#2	-.00120	-.00003	.00039	.9988
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5842.0**	**4341.6**	**35277.**	**4135.5**
Stddev	7.8	3.2	172.	3.6
%RSD	.13300	.07468	.48769	.08611
#1	5836.5	4339.3	35156.	4133.0
#2	5847.4	4343.9	35399.	4138.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.69%	99.998%	101.26%	101.73%
Range				

Sample Name: 480-178192-C-2-A Acquired: 11/24/2020 16:37:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.25913**	**-.00062**	**.11620**	**.30575**
Stddev	.00040	.01917	.00167	.00020	.00073
%RSD	645.56	7.3990	267.67	.17116	.24011
#1	-.00022	.24557	.00056	.11634	.30523
#2	.00034	.27268	-.00180	.11606	.30627
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**88.579**	**.00144**	**-.0334**	**.14102**
Stddev	.00002	.387	.00003	.0179	.00002
%RSD	2.7403	.43714	2.2616	53.44	.01581
#1	.00059	88.306	.00146	-.0208	.14103
#2	.00061	88.853	.00142	-.0461	.14100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00054**	**.00290**	**.14352**	**10.999**	**.00138**
Stddev	.00005	.00014	.00095	.048	.00026
%RSD	8.4479	4.8089	.66416	.43229	18.843
#1	.00058	.00300	.14419	10.966	.00156
#2	.00051	.00280	.14284	11.033	.00120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-A Acquired: 11/24/2020 16:37:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**38.693**	**5.3978**	**-.00098**	**86.142**	**.02481**
Stddev	.023	.0079	.00015	.238	.00002
%RSD	.05954	.14581	15.108	.27667	.06874
#1	38.677	5.3922	-.00108	85.973	.02479
#2	38.710	5.4034	-.00087	86.310	.02482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00146**	**17.537**	**-.00311**	**-.00428**
Stddev	.00	.00020	.025	.00073	.00184
%RSD	.0017	13.772	.14092	23.384	42.884
#1	25.02	.00132	17.555	-.00259	-.00298
#2	25.02	.00160	17.520	-.00362	-.00558
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.3807**	**-.00018**	**.51142**	**.9966**	**.00482**
Stddev	.0322	.00030	.00352	.0018	.00024
%RSD	.43668	163.58	.68874	.1815	4.9398
#1	7.3579	.00003	.50893	.9953	.00499
#2	7.4035	-.00040	.51391	.9979	.00465
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-A Acquired: 11/24/2020 16:37:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00002**	**-.00055**	**.01502**	**.9967**
Stddev	.00068	.00015	.00043	.0001
%RSD	3219.4	27.072	2.8346	.0057
#1	-.00050	-.00066	.01532	.9968
#2	.00046	-.00045	.01472	.9967
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4979.9**	**4136.4**	**33104.**	**4114.9**
Stddev	8.0	13.1	11.	7.0
%RSD	.15983	.31643	.03445	.16955
#1	4985.5	4145.7	33096.	4119.8
#2	4974.3	4127.2	33112.	4109.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.828%	95.272%	95.022%	101.22%
Range				

Sample Name: 480-178192-C-2-ASD@5 Acquired: 11/24/2020 16:41:38 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.06592**	**.00072**	**.02411**	**.06272**
Stddev	.00023	.00823	.00038	.00015	.00010
%RSD	166.03	12.485	52.348	.62169	.15502
#1	.00002	.06010	.00045	.02422	.06265
#2	-.00031	.07174	.00098	.02401	.06279
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**17.820**	**.00022**	**-.0205**	**.02727**
Stddev	.00009	.041	.00003	.0423	.00002
%RSD	82.827	.22739	15.574	206.2	.08943
#1	.00017	17.792	.00019	.0094	.02725
#2	.00005	17.849	.00024	-.0504	.02728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.00122**	**.02799**	**2.2168**	**.00083**
Stddev	.00007	.00035	.00441	.0123	.00122
%RSD	137.05	28.719	15.767	.55430	146.50
#1	.00000	.00146	.03111	2.2255	.00169
#2	.00010	.00097	.02487	2.2081	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-ASD@5 Acquired: 11/24/2020 16:41:38 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.7791**	**1.1240**	**-.00075**	**17.347**	**.00488**
Stddev	.0070	.0000	.00020	.002	.00006
%RSD	.09021	.00211	26.954	.01022	1.2352
#1	7.7840	1.1240	-.00090	17.346	.00492
#2	7.7741	1.1240	-.00061	17.348	.00483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00081**	**3.4058**	**-.00166**	**-.00353**
Stddev	.00	.00005	.0047	.00217	.00238
%RSD	.0024	5.6511	.13803	130.26	67.223
#1	25.02	.00085	3.4091	-.00319	-.00185
#2	25.02	.00078	3.4025	-.00013	-.00521
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.4803**	**.00000**	**.10459**	**.9998**	**.00090**
Stddev	.0012	.00005	.00014	.0028	.00030
%RSD	.08274	1777.1	.13128	.2833	32.965
#1	1.4794	-.00003	.10449	1.002	.00069
#2	1.4811	.00004	.10468	.9978	.00111
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-ASD@5 Acquired: 11/24/2020 16:41:38 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00008**	**-.00014**	**.00306**	**.9990**
Stddev	.00023	.00012	.00015	.0004
%RSD	303.13	86.127	4.8838	.0430
#1	.00024	-.00023	.00296	.9993
#2	-.00009	-.00005	.00317	.9987
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5439.2**	**4229.9**	**33959.**	**4088.2**
Stddev	4.2	2.2	30.	20.1
%RSD	.07682	.05103	.08752	.49128
#1	5436.3	4228.4	33980.	4102.4
#2	5442.2	4231.5	33938.	4074.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.744%	97.426%	97.477%	100.56%
Range				

Sample Name: 480-178192-C-2-APDS Acquired: 11/24/2020 16:45:20 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05004**	**10.182**	**.20857**	**.31802**	**.49091**
Stddev	.00024	.028	.00025	.00019	.00428
%RSD	.47534	.27214	.11936	.06124	.87093
#1	.05021	10.162	.20875	.31789	.49394
#2	.04987	10.201	.20840	.31816	.48789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20907**	**93.439**	**.20244**	**.0059**	**.33093**
Stddev	.00037	.124	.00016	.0334	.00061
%RSD	.17916	.13243	.07784	569.9	.18380
#1	.20933	93.527	.20255	.0295	.33136
#2	.20880	93.352	.20233	-.0178	.33050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19801**	**.20102**	**9.6688**	**20.638**	**.20116**
Stddev	.00001	.00084	.0347	.029	.00159
%RSD	.00555	.41957	.35887	.13852	.79171
#1	.19802	.20162	9.6934	20.617	.20004
#2	.19801	.20042	9.6443	20.658	.20229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-APDS Acquired: 11/24/2020 16:45:20 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**46.825**	**5.3543**	**.20773**	**92.521**	**.21949**
Stddev	.048	.0171	.00109	.267	.00002
%RSD	.10316	.31917	.52513	.28857	.01097
#1	46.859	5.3423	.20850	92.710	.21950
#2	46.791	5.3664	.20696	92.332	.21947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.72**	**.19995**	**26.865**	**.20270**	**.20508**
Stddev	.00	.00051	.031	.00208	.00129
%RSD	.0069	.25558	.11487	1.0279	.63053
#1	24.72	.19959	26.887	.20122	.20599
#2	24.72	.20031	26.844	.20417	.20416
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.371**	**.20183**	**.68834**	**.9977**	**.20410**
Stddev	.024	.00042	.00029	.0041	.00005
%RSD	.13755	.20969	.04278	.4086	.02459
#1	17.388	.20213	.68855	1.001	.20413
#2	17.354	.20153	.68813	.9948	.20406
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-APDS Acquired: 11/24/2020 16:45:20 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20466**	**.20126**	**.20856**	**.9982**
Stddev	.00136	.00009	.00069	.0011
%RSD	.66368	.04393	.32878	.1059
#1	.20370	.20120	.20905	.9974
#2	.20562	.20132	.20808	.9989
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4886.9**	**4143.8**	**33144.**	**4130.9**
Stddev	1.8	5.3	112.	5.4
%RSD	.03759	.12803	.33820	.13099
#1	4888.2	4147.6	33065.	4127.1
#2	4885.6	4140.1	33223.	4134.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.225%	95.443%	95.137%	101.61%
Range				

Sample Name: 480-178192-C-2-B MS Acquired: 11/24/2020 16:49:05 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04986**	**10.032**	**.20741**	**.31785**	**.49588**
Stddev	.00046	.036	.00031	.00051	.00165
%RSD	.92677	.35985	.14936	.16157	.33208
#1	.05018	10.006	.20762	.31749	.49471
#2	.04953	10.057	.20719	.31822	.49704
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20751**	**95.737**	**.20031**	**-.0138**	**.33335**
Stddev	.00089	.393	.00003	.0071	.00012
%RSD	.42730	.41019	.01552	51.24	.03599
#1	.20688	95.460	.20029	-.0088	.33326
#2	.20813	96.015	.20033	-.0188	.33343
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19651**	**.19737**	**9.5065**	**20.812**	**.20249**
Stddev	.00070	.00125	.0385	.142	.00209
%RSD	.35446	.63466	.40528	.68331	1.0345
#1	.19602	.19649	9.4792	20.711	.20101
#2	.19700	.19826	9.5337	20.912	.20398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-B MS Acquired: 11/24/2020 16:49:05 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**47.792**	**5.5191**	**.20630**	**95.406**	**.21853**
Stddev	.111	.0389	.00078	.526	.00069
%RSD	.23160	.70491	.37721	.55118	.31797
#1	47.713	5.4916	.20685	95.035	.21804
#2	47.870	5.5466	.20575	95.778	.21902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.72**	**.20036**	**27.562**	**.19999**	**.20444**
Stddev	.00	.00084	.029	.00318	.00252
%RSD	.0042	.41695	.10425	1.5892	1.2321
#1	24.72	.19977	27.542	.19775	.20265
#2	24.72	.20095	27.582	.20224	.20622
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.395**	**.19704**	**.70159**	**1.003**	**.20160**
Stddev	.100	.00072	.00404	.007	.00037
%RSD	.61001	.36593	.57641	.6538	.18156
#1	16.324	.19653	.69873	.9979	.20186
#2	16.465	.19755	.70445	1.007	.20134
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-B MS Acquired: 11/24/2020 16:49:05 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20197**	**.19954**	**.20642**	**.9975**
Stddev	.00075	.00022	.00085	.0001
%RSD	.37048	.10906	.41237	.0096
#1	.20250	.19939	.20582	.9975
#2	.20144	.19969	.20702	.9976
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4914.2**	**4175.7**	**33193.**	**4170.1**
Stddev	2.8	4.2	83.	13.5
%RSD	.05734	.10092	.24862	.32480
#1	4916.2	4178.7	33251.	4179.6
#2	4912.2	4172.7	33135.	4160.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.696%	96.177%	95.277%	102.58%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 16:52:53 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99008**	**51.611**	**1.0190**	**1.0502**	**1.0126**
Stddev	.00221	.094	.0007	.0020	.0006
%RSD	.22307	.18243	.07141	.18924	.05934
#1	.98852	51.678	1.0185	1.0488	1.0130
#2	.99164	51.544	1.0195	1.0516	1.0122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0412**	**51.194**	**1.0189**	**1.022**	**.99699**
Stddev	.0017	.031	.0002	.006	.00176
%RSD	.16065	.06110	.02175	.5816	.17674
#1	1.0424	51.171	1.0190	1.026	.99823
#2	1.0401	51.216	1.0187	1.018	.99574
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0399**	**1.0057**	**50.786**	**50.791**	**1.0184**
Stddev	.0004	.0031	.200	.017	.0034
%RSD	.04207	.30389	.39417	.03260	.33567
#1	1.0396	1.0035	50.645	50.779	1.0208
#2	1.0403	1.0078	50.928	50.803	1.0160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 16:52:53 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.945**	**1.0152**	**1.0493**	**51.213**	**1.0057**
Stddev	.134	.0018	.0046	.042	.0013
%RSD	.26921	.18134	.44067	.08184	.12856
#1	49.850	1.0139	1.0525	51.243	1.0066
#2	50.040	1.0165	1.0460	51.183	1.0048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.80**	**1.0019**	**25.629**	**1.0247**	**1.0293**
Stddev	.00	.0003	.022	.0019	.0043
%RSD	.0128	.03389	.08704	.18229	.41873
#1	37.80	1.0017	25.613	1.0234	1.0263
#2	37.79	1.0022	25.645	1.0260	1.0324
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.262**	**1.0054**	**1.0150**	**1.499**	**1.0176**
Stddev	.013	.0031	.0003	.010	.0020
%RSD	.12270	.30654	.03250	.6509	.19590
#1	10.254	1.0075	1.0153	1.506	1.0162
#2	10.271	1.0032	1.0148	1.492	1.0190
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 16:52:53 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0194**	**1.0304**	**1.0276**	**1.524**
Stddev	.0001	.0018	.0012	.001
%RSD	.00487	.17589	.11265	.0719
#1	1.0195	1.0291	1.0268	1.524
#2	1.0194	1.0317	1.0285	1.523
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4936.6**	**4143.9**	**32720.**	**4039.3**
Stddev	1.5	3.8	37.	29.3
%RSD	.03106	.09108	.11448	.72532
#1	4935.5	4146.6	32694.	4060.0
#2	4937.7	4141.3	32747.	4018.5

Sample Name: CCB-6254294 Acquired: 11/24/2020 16:56:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**.00759**	**.00065**	**.00137**	**.00015**
Stddev	.00023	.00588	.00137	.00045	.00002
%RSD	6971.9	77.535	209.99	32.888	10.330
#1	.00016	.00343	.00162	.00169	.00014
#2	-.00017	.01175	-.00032	.00105	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.00114**	**-.00009**	**.0094**	**-.00007**
Stddev	.00001	.00024	.00000	.0382	.00003
%RSD	12.794	20.795	4.8833	406.1	39.070
#1	.00012	.00098	-.00010	.0364	-.00008
#2	.00010	.00131	-.00009	-.0176	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00039**	**.00035**	**.00261**	**.00723**	**.00143**
Stddev	.00019	.00056	.00205	.02086	.00138
%RSD	48.617	160.41	78.597	288.41	96.827
#1	.00026	.00074	.00406	.02198	.00240
#2	.00053	-.00005	.00116	-.00752	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 16:56:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00489**	**.00022**	**.00379**	**.05869**	**.00016**
Stddev	.00068	.00001	.00121	.00004	.00030
%RSD	14.003	2.9315	31.881	.07015	196.54
#1	.00441	.00021	.00293	.05872	-.00006
#2	.00538	.00022	.00464	.05866	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00010**	**.01087**	**.00045**	**.00018**
Stddev	.00	.00029	.00049	.00091	.00182
%RSD	.0028	291.27	4.4777	199.98	994.12
#1	25.02	-.00010	.01121	-.00019	-.00110
#2	25.02	.00030	.01052	.00110	.00147
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00223**	**.00063**	**.00001**	**.9992**	**.00035**
Stddev	.00057	.00021	.00007	.0029	.00005
%RSD	25.723	33.238	631.28	.2948	15.021
#1	-.00183	.00078	-.00004	1.001	.00031
#2	-.00264	.00048	.00006	.9971	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 16:56:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.00052**	**-.00030**	**.00030**	**1.001**
Stddev	.00014	.00017	.00008	.001
%RSD	26.705	56.989	28.117	.0931
#1	.00043	-.00042	.00024	1.001
#2	.00062	-.00018	.00036	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5793.1**	**4296.2**	**34741.**	**4050.0**
Stddev	2.8	3.7	190.	8.4
%RSD	.04793	.08716	.54749	.20777
#1	5791.1	4293.5	34606.	4055.9
#2	5795.1	4298.8	34875.	4044.0

Sample Name: CCVL-6256824 Acquired: 11/24/2020 17:00:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00594**	**.20278**	**.01474**	**.02089**	**.00213**
Stddev	.00019	.00918	.00012	.00002	.00005
%RSD	3.1661	4.5295	.80124	.10253	2.2835
#1	.00607	.19628	.01483	.02087	.00209
#2	.00581	.20927	.01466	.02090	.00216
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00217**	**.52512**	**.00197**	**.0076**	**.00351**
Stddev	.00016	.00619	.00010	.0218	.00003
%RSD	7.4507	1.1780	5.1146	286.9	.84790
#1	.00206	.52075	.00190	.0230	.00353
#2	.00229	.52950	.00204	-.0078	.00349
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00425**	**.00984**	**.05353**	**.51998**	**.03193**
Stddev	.00007	.00031	.00086	.03829	.00080
%RSD	1.5541	3.1139	1.6021	7.3632	2.5111
#1	.00429	.00962	.05414	.54705	.03136
#2	.00420	.01005	.05292	.49291	.03250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 17:00:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20200**	**.00332**	**.01061**	**1.0509**	**.00949**
Stddev	.00018	.00000	.00027	.0142	.00025
%RSD	.08707	.01082	2.5153	1.3541	2.6668
#1	.20187	.00332	.01042	1.0408	.00967
#2	.20212	.00332	.01080	1.0610	.00931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00965**	**.19867**	**.01703**	**.02408**
Stddev	.00	.00065	.00208	.00042	.00195
%RSD	.0011	6.7295	1.0484	2.4744	8.1021
#1	25.00	.01011	.20014	.01733	.02270
#2	25.00	.00919	.19719	.01673	.02546
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.48380**	**.00943**	**.00494**	F **1.004**	**.00534**
Stddev	.02032	.00006	.00001	.001	.00019
%RSD	4.2006	.66802	.14876	.0925	3.6296
#1	.49817	.00947	.00495	1.005	.00548
#2	.46943	.00938	.00494	1.003	.00521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 17:00:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	.01952	.00500	.00981	F .9991
Stddev	.00047	.00014	.00036	.0007
%RSD	2.4002	2.7943	3.6223	.0706
#1	.01919	.00510	.01007	.9996
#2	.01985	.00490	.00956	.9986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5718.5	4278.8	34807.	4058.6
Stddev	15.4	6.1	158.	5.8
%RSD	.26964	.14331	.45501	.14187
#1	5729.4	4283.2	34695.	4062.7
#2	5707.6	4274.5	34919.	4054.5

Sample Name: 480-178192-C-2-C MSD Acquired: 11/24/2020 17:03:59 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04957**	**10.186**	**.20621**	**.31652**	**.49939**
Stddev	.00009	.009	.00182	.00007	.00261
%RSD	.18925	.08350	.88169	.02297	.52264
#1	.04950	10.180	.20749	.31657	.50123
#2	.04964	10.192	.20492	.31647	.49754
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20815**	**97.330**	**.20010**	**-.0163**	**.33365**
Stddev	.00032	.194	.00000	.0309	.00018
%RSD	.15185	.19908	.00173	189.7	.05504
#1	.20793	97.193	.20010	.0056	.33378
#2	.20837	97.467	.20009	-.0382	.33352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19632**	**.19842**	**9.5407**	**20.650**	**.20106**
Stddev	.00045	.00059	.0201	.033	.00058
%RSD	.22899	.29641	.21058	.15860	.28739
#1	.19664	.19884	9.5265	20.627	.20065
#2	.19600	.19801	9.5549	20.673	.20147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-C MSD Acquired: 11/24/2020 17:03:59 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.023**	**5.5496**	**.20481**	**95.437**	**.21768**
Stddev	.088	.0064	.00115	.758	.00067
%RSD	.18358	.11574	.56353	.79429	.30720
#1	47.961	5.5450	.20563	94.901	.21721
#2	48.085	5.5541	.20399	95.973	.21815
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.72**	**.19835**	**27.443**	**.19825**	**.20195**
Stddev	.00	.00018	.012	.00006	.00070
%RSD	.0038	.09056	.04220	.02790	.34648
#1	24.72	.19848	27.451	.19829	.20245
#2	24.72	.19822	27.435	.19821	.20146
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.563**	**.19697**	**.70415**	**1.005**	**.20384**
Stddev	.053	.00028	.00060	.003	.00005
%RSD	.32293	.14462	.08519	.2572	.02297
#1	16.526	.19676	.70373	1.003	.20381
#2	16.601	.19717	.70458	1.007	.20388
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-2-C MSD Acquired: 11/24/2020 17:03:59 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20064**	**.19802**	**.20809**	**.9994**
Stddev	.00088	.00025	.00033	.0000
%RSD	.44024	.12490	.15999	.0031
#1	.20002	.19785	.20786	.9994
#2	.20127	.19820	.20833	.9994
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4889.7**	**4153.6**	**33121.**	**4149.1**
Stddev	.9	2.4	8.	23.5
%RSD	.01819	.05869	.02435	.56680
#1	4890.3	4151.9	33126.	4165.8
#2	4889.0	4155.3	33115.	4132.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.272%	95.668%	95.070%	102.06%
Range				

Sample Name: 480-178192-C-3-A Acquired: 11/24/2020 17:07:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00015**	**.02042**	**-.00037**	**.00837**	**.05997**
Stddev	.00011	.05860	.00001	.00004	.00017
%RSD	73.305	287.00	2.4540	.50720	.28043
#1	.00023	-.02102	-.00037	.00834	.05985
#2	.00007	.06185	-.00036	.00840	.06009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**84.231**	**.00012**	**.0120**	**-.00024**
Stddev	.00004	.308	.00014	.0365	.00001
%RSD	125.62	.36525	121.84	304.3	5.1683
#1	.00007	84.449	.00021	.0378	-.00023
#2	.00000	84.014	.00002	-.0138	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00064**	**.00299**	**.01090**	**1.6583**	**.00801**
Stddev	.00002	.00044	.00007	.0082	.00006
%RSD	3.0706	14.596	.61866	.49546	.78815
#1	.00065	.00268	.01095	1.6641	.00805
#2	.00063	.00330	.01085	1.6525	.00797
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-3-A Acquired: 11/24/2020 17:07:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.4507**	**.11855**	**.00009**	**14.108**	**.00211**
Stddev	.0285	.00025	.00007	.011	.00041
%RSD	.33771	.20753	78.731	.07892	19.528
#1	8.4306	.11838	.00004	14.116	.00182
#2	8.4709	.11873	.00014	14.101	.00240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.03**	**-.00092**	**9.7511**	**-.00160**	**-.00111**
Stddev	.00	.00078	.0221	.00185	.00024
%RSD	.0029	85.586	.22679	115.84	21.542
#1	25.03	-.00036	9.7667	-.00291	-.00094
#2	25.03	-.00147	9.7354	-.00029	-.00128
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.278**	**.00015**	**.79071**	**1.002**	**.00121**
Stddev	.022	.00051	.00140	.008	.00034
%RSD	.17894	332.17	.17726	.7620	27.912
#1	12.293	-.00021	.79170	1.007	.00145
#2	12.262	.00052	.78972	.9963	.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-3-A Acquired: 11/24/2020 17:07:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00055**	**-.00030**	**.01029**	**.9994**
Stddev	.00081	.00055	.00017	.0008
%RSD	148.45	180.98	1.6486	.0813
#1	-.00112	-.00069	.01017	.9999
#2	.00003	.00008	.01041	.9988
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5295.1**	**4179.2**	**33640.**	**4137.0**
Stddev	2.2	5.0	114.	2.0
%RSD	.04148	.11870	.33996	.04870
#1	5296.6	4182.7	33721.	4138.4
#2	5293.5	4175.7	33559.	4135.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.260%	96.257%	96.560%	101.76%
Range				

Sample Name: 480-178192-C-4-A Acquired: 11/24/2020 17:11:28 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00052**	**.00989**	**.00093**	**.99284**	**.07205**
Stddev	.00061	.01561	.00057	.00008	.00010
%RSD	118.45	157.80	61.562	.00780	.14309
#1	.00095	-.00115	.00134	.99289	.07197
#2	.00008	.02093	.00053	.99278	.07212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**91.159**	**.00035**	**.0022**	**.07978**
Stddev	.00011	.428	.00001	.0318	.00018
%RSD	882.78	.46916	1.6806	1435.	.22327
#1	.00007	90.857	.00035	-.0203	.07991
#2	-.00009	91.462	.00034	.0247	.07966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.00908**	**.00488**	**24.161**	**.00165**
Stddev	.00009	.00071	.00199	.099	.00152
%RSD	14.012	7.8376	40.674	.40794	92.030
#1	.00074	.00857	.00348	24.091	.00058
#2	.00060	.00958	.00629	24.231	.00272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-4-A Acquired: 11/24/2020 17:11:28 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.352**	**10.577**	**-.00073**	**333.68**	**.00816**
Stddev	.021	.081	.00007	1.30	.00001
%RSD	.08463	.76587	9.4131	.38877	.16691
#1	24.337	10.520	-.00068	332.77	.00815
#2	24.366	10.634	-.00078	334.60	.00817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00128**	**44.133**	**-.00053**	**-.00203**
Stddev	.00	.00089	.029	.00081	.00303
%RSD	.0021	69.419	.06600	152.49	149.41
#1	25.02	.00191	44.113	-.00110	.00011
#2	25.02	.00065	44.154	.00004	-.00417
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.8399**	**.00012**	**.30113**	**.9978**	**.00050**
Stddev	.0397	.00012	.00117	.0011	.00048
%RSD	1.3967	97.727	.38840	.1143	95.756
#1	2.8118	.00020	.30031	.9986	.00016
#2	2.8679	.00004	.30196	.9970	.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-4-A Acquired: 11/24/2020 17:11:28 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00129**	**-.00025**	**.01162**	**.9934**
Stddev	.00089	.00004	.00038	.0005
%RSD	68.738	16.243	3.2388	.0464
#1	.00066	-.00027	.01136	.9930
#2	.00192	-.00022	.01189	.9937
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4738.1**	**4008.3**	**31599.**	**4108.8**
Stddev	1.6	2.2	77.	19.5
%RSD	.03465	.05455	.24226	.47551
#1	4737.0	4006.8	31653.	4122.6
#2	4739.3	4009.9	31545.	4095.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.661%	92.322%	90.701%	101.07%
Range				

Sample Name: 480-178192-C-5-A Acquired: 11/24/2020 17:15:20 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**-.00908**	**-.00068**	**.02105**	**.04114**
Stddev	.00061	.02110	.00000	.00042	.00006
%RSD	373.86	232.46	.01089	2.0114	.14236
#1	.00027	.00584	-.00068	.02135	.04110
#2	-.00059	-.02400	-.00068	.02075	.04118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**26.308**	**.00011**	**.0236**	**-.00009**
Stddev	.00001	.032	.00011	.0010	.00000
%RSD	50.223	.11996	106.31	4.048	1.7859
#1	.00001	26.330	.00003	.0229	-.00009
#2	.00003	26.285	.00018	.0243	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.00112**	**.00150**	**2.4435**	**.00222**
Stddev	.00041	.00095	.00084	.0310	.00251
%RSD	98.018	84.561	55.877	1.2703	113.19
#1	.00070	.00179	.00209	2.4655	.00044
#2	.00013	.00045	.00091	2.4216	.00400
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-5-A Acquired: 11/24/2020 17:15:20 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.553**	**.00180**	**-.00073**	**19.255**	**.00212**
Stddev	.003	.00008	.00005	.011	.00014
%RSD	.03221	4.6674	6.8277	.05760	6.7776
#1	10.550	.00174	-.00070	19.263	.00222
#2	10.555	.00186	-.00077	19.248	.00202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00053**	**7.7447**	**-.00193**	**.00131**
Stddev	.00	.00029	.0103	.00071	.00057
%RSD	.0022	53.874	.13334	36.806	43.756
#1	25.02	-.00033	7.7520	-.00243	.00090
#2	25.02	-.00073	7.7374	-.00143	.00171
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.9004**	**-.00011**	**.22845**	**1.004**	**.00029**
Stddev	.0013	.00044	.00023	.004	.00062
%RSD	.01694	409.17	.09967	.3453	214.30
#1	7.9014	.00021	.22829	1.007	.00072
#2	7.8995	-.00042	.22861	1.002	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-5-A Acquired: 11/24/2020 17:15:20 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00019**	**-.00031**	**.00229**	**.9996**
Stddev	.00110	.00001	.00004	.0006
%RSD	591.36	4.8017	1.7656	.0614
#1	-.00096	-.00030	.00226	.9992
#2	.00059	-.00032	.00232	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5421.7**	**4228.8**	**34166.**	**4172.2**
Stddev	4.1	9.7	51.	11.7
%RSD	.07573	.22860	.14847	.28068
#1	5424.6	4235.7	34202.	4163.9
#2	5418.8	4222.0	34130.	4180.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.442%	97.400%	98.070%	102.63%
Range				

Sample Name: 480-178192-C-6-A Acquired: 11/24/2020 17:19:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.07714**	**-.00047**	**.02383**	**.09098**
Stddev	.00105	.03067	.00123	.00035	.00007
%RSD	623.89	39.758	263.31	1.4871	.07862
#1	-.00057	.05545	-.00134	.02408	.09103
#2	.00091	.09883	.00040	.02358	.09093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**63.705**	**.00028**	**-.0126**	**.00070**
Stddev	.00001	.007	.00005	.0055	.00001
%RSD	71.398	.01071	16.812	43.59	1.6677
#1	-.00001	63.701	.00025	-.0165	.00070
#2	-.00003	63.710	.00032	-.0087	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00070**	**.00088**	**.06904**	**1.9644**	**.00138**
Stddev	.00023	.00055	.00001	.0498	.00232
%RSD	32.293	62.335	.01557	2.5339	167.48
#1	.00086	.00127	.06904	1.9996	.00302
#2	.00054	.00049	.06903	1.9292	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-6-A Acquired: 11/24/2020 17:19:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**23.482**	**.08041**	**-.00050**	**20.699**	**.00457**
Stddev	.014	.00013	.00022	.005	.00003
%RSD	.05867	.16466	43.351	.02469	.68472
#1	23.492	.08032	-.00066	20.702	.00459
#2	23.472	.08051	-.00035	20.695	.00455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00039**	**6.7327**	**-.00264**	**-.00106**
Stddev	.00	.00048	.0037	.00002	.00021
%RSD	.0002	122.37	.05516	.60817	19.490
#1	25.02	-.00005	6.7353	-.00265	-.00092
#2	25.02	-.00073	6.7301	-.00263	-.00121
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.7934**	**.00048**	**.54623**	**1.000**	**.00121**
Stddev	.0115	.00030	.00006	.008	.00003
%RSD	.19820	62.084	.01087	.8194	2.2297
#1	5.7853	.00069	.54619	1.006	.00119
#2	5.8015	.00027	.54627	.9943	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178192-C-6-A Acquired: 11/24/2020 17:19:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00075**	**-.00042**	**.00238**	**.9994**
Stddev	.00012	.00043	.00022	.0007
%RSD	15.838	103.70	9.1932	.0705
#1	-.00084	-.00072	.00254	.9989
#2	-.00067	-.00011	.00223	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5232.3**	**4149.1**	**33528.**	**4107.6**
Stddev	2.1	.9	17.	31.2
%RSD	.04101	.02279	.04953	.76072
#1	5233.8	4148.4	33540.	4129.7
#2	5230.8	4149.8	33516.	4085.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.178%	95.565%	96.239%	101.04%
Range				

Sample Name: 480-178460-A-13-A Acquired: 11/24/2020 17:22:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00022**	**.14735**	**-.00085**	**.00199**	**.00743**
Stddev	.00020	.00719	.00046	.00004	.00001
%RSD	92.711	4.8779	53.743	1.8572	.09178
#1	-.00036	.15243	-.00053	.00202	.00742
#2	-.00008	.14227	-.00117	.00197	.00743
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**1.1801**	**.00014**	**-.0282**	**.00003**
Stddev	.00000	.0094	.00015	.0070	.00006
%RSD	.57074	.79434	105.93	24.95	233.57
#1	.00057	1.1735	.00004	-.0233	-.00002
#2	.00058	1.1867	.00025	-.0332	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00085**	**.08427**	**.32303**	**.01997**	**.00130**
Stddev	.00006	.00051	.00067	.01715	.00025
%RSD	7.1171	.60859	.20873	85.896	19.233
#1	.00089	.08463	.32350	.03210	.00112
#2	.00081	.08391	.32255	.00784	.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178460-A-13-A Acquired: 11/24/2020 17:22:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.33149**	**.04662**	**.00005**	**.93065**	**.00020**
Stddev	.00097	.00005	.00002	.00501	.00031
%RSD	.29272	.11563	42.602	.53870	154.20
#1	.33218	.04666	.00006	.93419	-.00002
#2	.33081	.04658	.00003	.92710	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.91**	**.00033**	**.09577**	**-.00088**	**.00098**
Stddev	.00	.00050	.00052	.00067	.00177
%RSD	.0030	151.94	.54734	75.910	180.47
#1	24.91	-.00002	.09614	-.00136	.00223
#2	24.91	.00068	.09540	-.00041	-.00027
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.71900**	**.00081**	**.01195**	**.9965**	**.01192**
Stddev	.00217	.00013	.00003	.0045	.00028
%RSD	.30225	15.477	.21727	.4503	2.3532
#1	.72054	.00072	.01197	.9933	.01212
#2	.71746	.00090	.01193	.9997	.01172
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178460-A-13-A Acquired: 11/24/2020 17:22:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00023**	**.00015**	**.01583**	**1.000**
Stddev	.00010	.00017	.00037	.000
%RSD	42.905	113.92	2.3581	.0170
#1	.00030	.00027	.01557	1.000
#2	.00016	.00003	.01609	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5765.7**	**4311.0**	**34923.**	**4135.6**
Stddev	1.6	.7	42.	19.7
%RSD	.02714	.01673	.12149	.47602
#1	5766.8	4311.6	34893.	4149.6
#2	5764.6	4310.5	34953.	4121.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.370%	99.294%	100.24%	101.73%
Range				

Sample Name: 480-178418-F-4-A Acquired: 11/24/2020 17:26:31 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00021**	**.02669**	**.00776**	**1.5712**	**.24610**
Stddev	.00019	.02883	.00189	.0001	.00004
%RSD	90.894	108.03	24.382	.00441	.01620
#1	.00035	.04708	.00642	1.5712	.24613
#2	.00008	.00630	.00910	1.5713	.24608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**178.29**	**.00079**	**-.0251**	**.00042**
Stddev	.00002	.86	.00012	.0087	.00006
%RSD	3251.7	.48073	15.161	34.46	14.232
#1	-.00001	177.69	.00088	-.0190	.00038
#2	.00002	178.90	.00071	-.0312	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00167**	**.00355**	**8.6689**	**48.521**	**.03055**
Stddev	.00001	.00029	.0109	.049	.00098
%RSD	.39980	8.2330	.12611	.10190	3.1975
#1	.00166	.00375	8.6766	48.556	.02986
#2	.00167	.00334	8.6612	48.486	.03124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178418-F-4-A Acquired: 11/24/2020 17:26:31 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**111.29**	**.78331**	**-.00072**	**89.963**	**.00656**
Stddev	.03	.00101	.00003	.800	.00000
%RSD	.02365	.12912	4.4699	.88980	.05227
#1	111.27	.78260	-.00075	90.529	.00656
#2	111.31	.78403	-.00070	89.397	.00656
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.24**	**.01047**	**15.536**	**-.00135**	**.00126**
Stddev	.00	.00150	.023	.00001	.00311
%RSD	.0163	14.365	.14517	.98869	247.29
#1	26.24	.00940	15.520	-.00135	.00345
#2	26.25	.01153	15.552	-.00134	-.00094
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.398**	**.00012**	**1.4129**	**.9991**	**.00285**
Stddev	.039	.00004	.0010	.0112	.00012
%RSD	.26903	28.832	.07078	1.120	4.1481
#1	14.425	.00010	1.4136	1.007	.00294
#2	14.370	.00015	1.4121	.9911	.00277
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178418-F-4-A Acquired: 11/24/2020 17:26:31 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00102**	**.00136**	**.09361**	**.9989**
Stddev	.00043	.00050	.00014	.0011
%RSD	42.286	36.579	.14703	.1075
#1	-.00071	.00100	.09371	.9981
#2	-.00132	.00171	.09351	.9997
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4738.8**	**3978.4**	**31946.**	**4092.4**
Stddev	8.9	7.2	64.	20.3
%RSD	.18814	.18140	.19996	.49718
#1	4732.5	3973.3	31900.	4078.1
#2	4745.1	3983.5	31991.	4106.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.672%	91.632%	91.697%	100.67%
Range				

Sample Name: MB 480-560261/1-A Acquired: 11/24/2020 17:30:15 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.00371**	**-.00005**	**.00060**	**.00004**
Stddev	.00033	.00311	.00136	.00016	.00000
%RSD	93.608	83.896	2905.2	26.198	8.0127
#1	.00059	.00590	.00091	.00071	.00004
#2	.00012	.00151	-.00101	.00049	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.03177**	**-.00002**	**.0171**	**-.00003**
Stddev	.00003	.00083	.00002	.0275	.00012
%RSD	133.63	2.6128	158.19	160.6	432.39
#1	.00000	.03236	.00000	.0365	.00006
#2	.00004	.03118	-.00003	-.0023	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**.00106**	**.01231**	**.05888**	**.00051**
Stddev	.00025	.00040	.00169	.01755	.00055
%RSD	139.57	37.874	13.695	29.816	108.88
#1	.00000	.00078	.01351	.07129	.00012
#2	.00035	.00135	.01112	.04646	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560261/1-A Acquired: 11/24/2020 17:30:15 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00783**	**.00047**	**-.00074**	**.05188**	**.00028**
Stddev	.00144	.00000	.00013	.00097	.00013
%RSD	18.429	.34831	16.833	1.8669	44.505
#1	.00681	.00047	-.00083	.05120	.00037
#2	.00885	.00047	-.00066	.05257	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00008**	**.01001**	**-.00163**	**-.00229**
Stddev	.00	.00019	.00097	.00074	.00036
%RSD	.0043	246.86	9.7185	45.281	15.833
#1	25.02	.00006	.00932	-.00215	-.00203
#2	25.02	-.00022	.01070	-.00111	-.00255
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00373**	**-.00041**	**.00006**	**1.007**	**-.00020**
Stddev	.00561	.00029	.00001	.003	.00042
%RSD	150.48	71.646	17.278	.3337	209.88
#1	-.00024	-.00062	.00005	1.009	.00010
#2	.00769	-.00020	.00007	1.004	-.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560261/1-A Acquired: 11/24/2020 17:30:15 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00086**	**-.00016**	**.00066**	**.9996**
Stddev	.00093	.00002	.00021	.0001
%RSD	107.86	9.3396	31.723	.0058
#1	-.00020	-.00017	.00051	.9996
#2	-.00152	-.00015	.00081	.9995
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5871.9**	**4370.2**	**35537.**	**4235.2**
Stddev	1.1	5.1	42.	1.5
%RSD	.01858	.11770	.11683	.03426
#1	5871.1	4373.8	35567.	4234.2
#2	5872.7	4366.5	35508.	4236.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.20%	100.66%	102.01%	104.18%
Range				

Sample Name: LCS 480-560261/2-A Acquired: 11/24/2020 17:34:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04989**	**10.171**	**.20473**	**.20747**	**.21578**
Stddev	.00013	.026	.00003	.00023	.00072
%RSD	.26414	.25346	.01638	.11133	.33380
#1	.04999	10.189	.20475	.20763	.21528
#2	.04980	10.153	.20471	.20731	.21629
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21272**	**10.109**	**.20196**	**.0052**	**.19012**
Stddev	.00011	.004	.00014	.0057	.00028
%RSD	.05161	.04345	.07151	109.8	.14673
#1	.21264	10.112	.20206	.0012	.19032
#2	.21279	10.106	.20186	.0092	.18993
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20275**	**.20382**	**9.8046**	**10.149**	**.20849**
Stddev	.00037	.00014	.0048	.008	.00078
%RSD	.18261	.06876	.04896	.07815	.37360
#1	.20249	.20373	9.8012	10.154	.20904
#2	.20301	.20392	9.8080	10.143	.20794
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560261/2-A Acquired: 11/24/2020 17:34:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8926**	**.20552**	**.21152**	**10.147**	**.19051**
Stddev	.0063	.00050	.00136	.007	.00027
%RSD	.06313	.24091	.64461	.06608	.14231
#1	9.8882	.20517	.21249	10.152	.19032
#2	9.8970	.20587	.21056	10.143	.19070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.69**	**.19521**	**10.111**	**.20497**	**.20373**
Stddev	.00	.00063	.016	.00033	.00243
%RSD	.0043	.32089	.15418	.16085	1.1935
#1	24.69	.19476	10.122	.20520	.20202
#2	24.69	.19565	10.100	.20474	.20545
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7395**	**.19202**	**.20342**	**1.001**	**.20235**
Stddev	.0405	.00077	.00039	.000	.00013
%RSD	.41587	.39869	.19356	.0139	.06364
#1	9.7681	.19257	.20369	1.001	.20226
#2	9.7108	.19148	.20314	1.001	.20244
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560261/2-A Acquired: 11/24/2020 17:34:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20149**	**.20260**	**.20089**	**1.000**
Stddev	.00076	.00068	.00009	.001
%RSD	.37802	.33601	.04293	.0470
#1	.20095	.20212	.20082	1.001
#2	.20203	.20308	.20095	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5460.4**	**4282.6**	**34598.**	**4174.4**
Stddev	6.2	1.5	5.	1.2
%RSD	.11398	.03498	.01502	.02868
#1	5464.8	4283.7	34602.	4173.6
#2	5456.0	4281.5	34594.	4175.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.110%	98.639%	99.310%	102.69%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 17:37:40 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99671**	**50.885**	**1.0110**	**1.0483**	**1.0158**
Stddev	.00018	.049	.0010	.0000	.0022
%RSD	.01808	.09562	.10063	.00342	.21330
#1	.99658	50.919	1.0103	1.0483	1.0173
#2	.99684	50.850	1.0118	1.0483	1.0143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0303**	**50.639**	**1.0162**	**1.046**	**.99376**
Stddev	.0017	.192	.0004	.027	.00136
%RSD	.16479	.37823	.04120	2.623	.13667
#1	1.0315	50.775	1.0165	1.065	.99472
#2	1.0291	50.504	1.0159	1.026	.99280
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0306**	**1.0092**	**50.495**	**50.643**	**1.0132**
Stddev	.0021	.0037	.333	.216	.0027
%RSD	.20796	.36378	.65885	.42698	.26852
#1	1.0291	1.0066	50.731	50.796	1.0113
#2	1.0321	1.0118	50.260	50.490	1.0151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 17:37:40 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.733**	**1.0148**	**1.0482**	**50.873**	**1.0018**
Stddev	.046	.0003	.0044	.031	.0006
%RSD	.09275	.03032	.41590	.06092	.06383
#1	49.765	1.0146	1.0513	50.895	1.0023
#2	49.700	1.0150	1.0451	50.851	1.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.67**	**.99707**	**25.236**	**1.0190**	**1.0191**
Stddev	.01	.00056	.018	.0029	.0044
%RSD	.0393	.05567	.07199	.28748	.43585
#1	37.68	.99747	25.249	1.0211	1.0222
#2	37.66	.99668	25.223	1.0170	1.0159
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.055**	**.99621**	**1.0150**	**1.504**	**1.0125**
Stddev	.003	.00147	.0015	.002	.0017
%RSD	.02635	.14748	.14528	.1472	.16890
#1	10.057	.99725	1.0160	1.505	1.0113
#2	10.053	.99517	1.0139	1.502	1.0137
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 17:37:40 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0160**	**1.0263**	**1.0116**	**1.520**
Stddev	.0027	.0004	.0009	.000
%RSD	.27113	.03364	.08974	.0168
#1	1.0141	1.0265	1.0122	1.520
#2	1.0180	1.0260	1.0109	1.519
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4915.5**	**4127.5**	**32730.**	**4057.3**
Stddev	2.5	5.0	95.	43.5
%RSD	.05068	.12018	.29004	1.0709
#1	4917.2	4131.1	32663.	4026.6
#2	4913.7	4124.0	32797.	4088.0

Sample Name: CCB-6254294 Acquired: 11/24/2020 17:41:13 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**-.00807**	**-.00032**	**.00063**	**.00018**
Stddev	.00095	.03636	.00014	.00007	.00003
%RSD	594.34	450.73	43.011	10.712	19.149
#1	.00051	.01764	-.00042	.00058	.00015
#2	-.00083	-.03378	-.00022	.00068	.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**.00666**	**.00006**	**.0009**	**-.00009**
Stddev	.00003	.00189	.00002	.0047	.00003
%RSD	20.943	28.435	28.994	553.5	28.170
#1	.00015	.00532	.00005	-.0025	-.00008
#2	.00011	.00799	.00008	.0042	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00154**	**.00535**	**.02827**	**.00087**
Stddev	.00002	.00036	.00189	.01477	.00121
%RSD	27.118	23.191	35.336	52.250	138.41
#1	.00008	.00179	.00668	.03872	.00002
#2	.00005	.00129	.00401	.01783	.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 17:41:13 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00874**	**.00019**	**.00410**	**.03918**	**.00015**
Stddev	.00079	.00003	.00126	.00871	.00001
%RSD	9.0246	16.802	30.680	22.221	4.3441
#1	.00818	.00017	.00321	.04534	.00015
#2	.00930	.00021	.00499	.03303	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00014**	**.00500**	**-.00003**	**.00063**
Stddev	.00	.00056	.00065	.00016	.00096
%RSD	.0004	412.52	13.098	564.02	153.14
#1	25.02	.00053	.00546	.00008	-.00005
#2	25.02	-.00026	.00454	-.00014	.00131
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01010**	**.00035**	**.00017**	**1.000**	**.00024**
Stddev	.00063	.00013	.00008	.006	.00006
%RSD	6.2796	35.824	48.109	.5716	24.557
#1	.00965	.00044	.00022	.9963	.00020
#2	.01055	.00026	.00011	1.004	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 17:41:13 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00089**	**.00029**	**.00005**	**1.000**
Stddev	.00005	.00022	.00009	.001
%RSD	5.7482	75.614	186.37	.1440
#1	-.00092	.00044	-.00002	.9990
#2	-.00085	.00013	.00011	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5744.5**	**4269.4**	**34604.**	**4088.9**
Stddev	2.9	1.3	268.	2.7
%RSD	.05044	.03012	.77389	.06536
#1	5746.5	4268.5	34794.	4090.8
#2	5742.4	4270.3	34415.	4087.0

Sample Name: CCVL-6256824 Acquired: 11/24/2020 17:45:03 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00601**	**.18873**	**.01558**	**.02002**	**.00214**
Stddev	.00015	.00274	.00004	.00008	.00001
%RSD	2.4515	1.4515	.24456	.39207	.31126
#1	.00611	.18679	.01556	.02008	.00214
#2	.00590	.19067	.01561	.01997	.00215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00212**	**.50897**	**.00207**	**.0097**	**.00357**
Stddev	.00008	.00223	.00003	.0176	.00001
%RSD	3.9564	.43737	1.4041	181.6	.25823
#1	.00218	.51055	.00209	-.0027	.00356
#2	.00206	.50740	.00205	.0221	.00358
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00411**	**.01040**	**.05284**	**.49684**	**.03169**
Stddev	.00023	.00126	.00135	.00784	.00027
%RSD	5.4751	12.107	2.5617	1.5775	.83857
#1	.00427	.00951	.05188	.50238	.03150
#2	.00395	.01129	.05380	.49130	.03188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 17:45:03 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20781**	**.00316**	**.01084**	**1.0328**	**.00940**
Stddev	.00085	.00004	.00032	.0104	.00000
%RSD	.40989	1.2082	2.9406	1.0103	.03071
#1	.20841	.00318	.01061	1.0255	.00940
#2	.20721	.00313	.01106	1.0402	.00940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00983**	**.18789**	**.01847**	**.02282**
Stddev	.00	.00138	.00134	.00062	.00370
%RSD	.0003	14.039	.71252	3.3740	16.218
#1	25.00	.01080	.18694	.01891	.02544
#2	25.00	.00885	.18883	.01803	.02021
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46419**	**.00926**	**.00485**	F **.9985**	**.00537**
Stddev	.00561	.00003	.00007	.0006	.00007
%RSD	1.2091	.36034	1.4904	.0607	1.3428
#1	.46022	.00928	.00480	.9981	.00542
#2	.46816	.00924	.00490	.9989	.00532
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 17:45:03 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01952**	**.00413**	**.00988**	F **.9991**
Stddev	.00069	.00003	.00020	.0007
%RSD	3.5264	.83744	2.0188	.0701
#1	.02001	.00415	.01002	.9996
#2	.01903	.00411	.00974	.9986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5706.3**	**4297.0**	**34674.**	**4085.7**
Stddev	3.3	1.7	159.	5.3
%RSD	.05850	.04027	.45718	.12866
#1	5704.0	4298.2	34562.	4089.4
#2	5708.7	4295.8	34786.	4082.0

Sample Name: 480-178291-H-1-A Acquired: 11/24/2020 17:48:48 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00042**	**-.03193**	**-.00020**	**-.00013**	**.00001**
Stddev	.00026	.02460	.00099	.00017	.00002
%RSD	62.462	77.062	482.29	135.29	248.45
#1	-.00024	-.04932	-.00090	-.00001	-.00001
#2	-.00061	-.01453	.00049	-.00025	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.00829**	**-.00003**	**.0109**	**-.00008**
Stddev	.00002	.00534	.00016	.0062	.00006
%RSD	68.123	64.398	596.85	56.76	72.019
#1	.00001	.01206	.00009	.0153	-.00004
#2	.00004	.00451	-.00014	.0066	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**.00100**	**.00293**	**-.00192**	**.00273**
Stddev	.00003	.00001	.00245	.02872	.00115
%RSD	14.378	.77433	83.385	1498.6	42.229
#1	.00021	.00101	.00466	.01839	.00355
#2	.00026	.00100	.00120	-.02223	.00192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-1-A Acquired: 11/24/2020 17:48:48 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00228**	**.00036**	**-.00036**	**.03076**	**.00018**
Stddev	.00174	.00001	.00008	.00673	.00019
%RSD	76.426	4.0331	22.359	21.885	109.97
#1	.00351	.00035	-.00030	.02600	.00004
#2	.00105	.00037	-.00041	.03552	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00022**	**-.00079**	**-.00060**	**-.00057**
Stddev	.00	.00054	.00164	.00003	.00012
%RSD	.0018	244.67	206.84	4.4843	21.256
#1	25.02	.00061	-.00195	-.00062	-.00048
#2	25.02	-.00016	.00037	-.00059	-.00065
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00353**	**-.00007**	**.00005**	**1.000**	**.00037**
Stddev	.01735	.00046	.00000	.001	.00025
%RSD	491.50	676.11	.85651	.0703	66.212
#1	.00874	.00026	.00005	1.001	.00020
#2	-.01579	-.00039	.00005	.9997	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-1-A Acquired: 11/24/2020 17:48:48 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00061**	**-.00011**	**.00075**	**.9993**
Stddev	.00046	.00044	.00002	.0004
%RSD	74.943	399.19	3.0348	.0394
#1	-.00094	.00020	.00076	.9996
#2	-.00029	-.00042	.00073	.9990
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5872.8**	**4364.0**	**35406.**	**4148.7**
Stddev	2.6	1.9	158.	5.3
%RSD	.04400	.04246	.44746	.12830
#1	5871.0	4365.3	35518.	4152.5
#2	5874.7	4362.7	35294.	4144.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.22%	100.51%	101.63%	102.05%
Range				

Sample Name: 480-178291-H-2-A Acquired: 11/24/2020 17:52:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00063**	**4.0016**	**.01065**	**.12363**	**.13294**
Stddev	.00004	.0273	.00100	.00004	.00005
%RSD	6.9279	.68338	9.4229	.03521	.03875
#1	.00066	4.0210	.01136	.12366	.13297
#2	.00060	3.9823	.00994	.12360	.13290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**54.644**	**.00033**	**-.0178**	**.00213**
Stddev	.00006	.175	.00005	.0089	.00006
%RSD	26.728	.31948	15.439	50.07	2.7063
#1	.00018	54.767	.00037	-.0115	.00209
#2	.00026	54.520	.00030	-.0241	.00217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03119**	**.00741**	**5.1976**	**4.2537**	**.04122**
Stddev	.00046	.00026	.0097	.1017	.00260
%RSD	1.4793	3.5293	.18607	2.3919	6.2964
#1	.03086	.00760	5.2045	4.3256	.04306
#2	.03151	.00723	5.1908	4.1817	.03939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-2-A Acquired: 11/24/2020 17:52:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**41.067**	**.18761**	**.00770**	**28.498**	**.01841**
Stddev	.065	.00017	.00013	.076	.00027
%RSD	.15765	.09160	1.6982	.26591	1.4439
#1	41.021	.18773	.00761	28.551	.01822
#2	41.113	.18748	.00779	28.444	.01860
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.04**	**.00292**	**8.5500**	**-.00188**	**-.00043**
Stddev	.00	.00039	.0197	.00015	.00057
%RSD	.0011	13.316	.23068	8.1798	132.93
#1	25.04	.00265	8.5639	-.00199	-.00003
#2	25.04	.00320	8.5360	-.00177	-.00083
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.382**	**.00011**	**1.5782**	**1.003**	**.04070**
Stddev	.038	.00007	.0056	.001	.00125
%RSD	.30734	66.922	.35202	.0972	3.0651
#1	12.409	.00006	1.5821	1.002	.03981
#2	12.355	.00016	1.5742	1.004	.04158
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-2-A Acquired: 11/24/2020 17:52:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.00596**	**.01383**	**1.000**
Stddev	.00019	.00000	.00001	.001
%RSD	486.36	.01820	.05884	.0757
#1	.00010	.00596	.01383	.9997
#2	-.00017	.00596	.01384	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5161.8**	**4179.3**	**33473.**	**4085.0**
Stddev	11.5	6.0	169.	30.9
%RSD	.22182	.14458	.50442	.75726
#1	5153.7	4175.0	33593.	4063.1
#2	5169.9	4183.5	33354.	4106.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.963%	96.259%	96.082%	100.48%
Range				

Sample Name: 480-178291-H-3-A Acquired: 11/24/2020 17:56:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**.09351**	**.00119**	**.20279**	**.05331**
Stddev	.00008	.03070	.00056	.00001	.00003
%RSD	17.927	32.829	47.042	.00718	.06502
#1	-.00038	.11522	.00079	.20278	.05333
#2	-.00049	.07180	.00158	.20280	.05329
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**13.744**	**-.00012**	**-.0268**	**-.00011**
Stddev	.00012	.032	.00009	.0237	.00002
%RSD	310.91	.23231	71.841	88.35	15.055
#1	-.00004	13.722	-.00006	-.0436	-.00012
#2	.00012	13.767	-.00018	-.0101	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00644**	**.00090**	**.07662**	**3.7763**	**.01192**
Stddev	.00016	.00011	.00258	.0238	.00117
%RSD	2.5118	12.012	3.3636	.62909	9.8490
#1	.00632	.00082	.07480	3.7595	.01275
#2	.00655	.00098	.07844	3.7931	.01109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-A Acquired: 11/24/2020 17:56:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.3552**	**.00854**	**.02681**	**68.928**	**.00545**
Stddev	.0109	.00003	.00011	.070	.00010
%RSD	.32452	.33652	.39907	.10107	1.8186
#1	3.3629	.00852	.02689	68.878	.00538
#2	3.3475	.00856	.02674	68.977	.00552
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.03**	**.00005**	**34.771**	**-.00100**	**-.00112**
Stddev	.00	.00038	.013	.00103	.00140
%RSD	.0004	730.83	.03739	102.44	124.52
#1	25.03	.00032	34.780	-.00028	-.00013
#2	25.03	-.00021	34.762	-.00173	-.00211
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.7800**	**-.00005**	**1.0717**	**.9998**	**.00066**
Stddev	.0159	.00014	.0001	.0068	.00017
%RSD	.33288	260.77	.01004	.6821	26.221
#1	4.7688	.00005	1.0716	1.005	.00078
#2	4.7913	-.00015	1.0718	.9950	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-A Acquired: 11/24/2020 17:56:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.00111**	**.00137**	**.9999**
Stddev	.00086	.00023	.00017	.0007
%RSD	490.01	20.263	12.313	.0685
#1	.00043	.00095	.00125	1.000
#2	-.00078	.00127	.00149	.9994
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5286.2**	**4188.8**	**33500.**	**4102.3**
Stddev	2.4	.8	60.	7.6
%RSD	.04534	.01885	.17936	.18435
#1	5284.5	4188.2	33457.	4107.7
#2	5287.9	4189.3	33542.	4097.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.106%	96.478%	96.158%	100.91%
Range				

Sample Name: 480-178291-H-3-ASD@5 Acquired: 11/24/2020 17:59:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.02047**	**.00033**	**.03944**	**.01101**
Stddev	.00068	.01127	.00043	.00002	.00002
%RSD	2107.9	55.057	130.59	.03960	.19472
#1	-.00051	.02844	.00064	.03943	.01102
#2	.00045	.01250	.00003	.03945	.01099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**2.7866**	**-.00005**	**-.0305**	**.00002**
Stddev	.00009	.0070	.00006	.0199	.00008
%RSD	397.63	.25058	138.24	65.27	384.33
#1	.00004	2.7915	-.00009	-.0164	.00008
#2	-.00009	2.7817	-.00000	-.0445	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00109**	**.00094**	**.01676**	**.73705**	**.00358**
Stddev	.00005	.00012	.00140	.03822	.00121
%RSD	4.6844	12.675	8.3397	5.1854	33.775
#1	.00113	.00086	.01577	.71003	.00444
#2	.00105	.00103	.01775	.76408	.00273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-ASD@5 Acquired: 11/24/2020 17:59:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.68563**	**.00167**	**.00477**	**13.725**	**.00096**
Stddev	.00145	.00002	.00009	.009	.00009
%RSD	.21210	1.4410	1.8164	.06873	9.3004
#1	.68666	.00166	.00471	13.718	.00102
#2	.68460	.00169	.00483	13.731	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00027**	**6.8800**	**-.00002**	**.00021**
Stddev	.00	.00043	.0074	.00054	.00185
%RSD	.0030	158.48	.10769	2928.6	893.09
#1	25.02	-.00003	6.8748	.00037	.00152
#2	25.02	.00058	6.8852	-.00040	-.00110
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.93674**	**.00006**	**.21667**	**.9955**	**.00019**
Stddev	.01543	.00023	.00039	.0019	.00047
%RSD	1.6470	392.44	.18217	.1925	239.36
#1	.92583	-.00011	.21639	.9942	-.00013
#2	.94765	.00023	.21695	.9969	.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-ASD@5 Acquired: 11/24/2020 17:59:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00048**	**-.00002**	**.00060**	**.9997**
Stddev	.00035	.00010	.00036	.0007
%RSD	72.708	573.04	60.233	.0720
#1	-.00073	-.00009	.00085	1.000
#2	-.00024	.00005	.00034	.9992
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5628.6**	**4287.1**	**34444.**	**4128.8**
Stddev	12.5	9.3	92.	13.3
%RSD	.22127	.21729	.26842	.32192
#1	5619.7	4280.5	34378.	4119.4
#2	5637.4	4293.7	34509.	4138.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.007%	98.743%	98.868%	101.56%
Range				

Sample Name: 480-178291-H-3-APDS Acquired: 11/24/2020 18:03:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05019**	**10.396**	**.21122**	**.40655**	**.25628**
Stddev	.00002	.008	.00115	.00010	.00008
%RSD	.03687	.07885	.54269	.02409	.02959
#1	.05018	10.390	.21041	.40648	.25634
#2	.05020	10.402	.21203	.40662	.25623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21663**	**23.657**	**.20575**	**-.0130**	**.19658**
Stddev	.00047	.012	.00001	.0081	.00000
%RSD	.21540	.05077	.00250	61.77	.00033
#1	.21630	23.665	.20575	-.0073	.19658
#2	.21696	23.648	.20575	-.0187	.19658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21053**	**.20316**	**9.9407**	**13.909**	**.21375**
Stddev	.00045	.00056	.0438	.017	.00052
%RSD	.21399	.27605	.44043	.12494	.24460
#1	.21085	.20355	9.9097	13.921	.21412
#2	.21021	.20276	9.9716	13.897	.21338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-APDS Acquired: 11/24/2020 18:03:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**13.024**	**.21281**	**.24058**	**76.395**	**.20171**
Stddev	.028	.00052	.00064	.022	.00033
%RSD	.21317	.24498	.26452	.02943	.16135
#1	13.044	.21317	.24103	76.411	.20148
#2	13.005	.21244	.24013	76.379	.20194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.70**	**.19982**	**44.261**	**.20662**	**.21010**
Stddev	.00	.00181	.048	.00210	.00139
%RSD	.0003	.90341	.10766	1.0174	.66273
#1	24.70	.19855	44.228	.20514	.20911
#2	24.70	.20110	44.295	.20811	.21108
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.699**	**.20398**	**1.2463**	**1.011**	**.20675**
Stddev	.030	.00093	.0036	.004	.00034
%RSD	.20234	.45753	.28646	.3424	.16512
#1	14.720	.20332	1.2438	1.013	.20651
#2	14.678	.20464	1.2489	1.008	.20699
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-APDS Acquired: 11/24/2020 18:03:41 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20266**	**.20746**	**.20631**	**1.002**
Stddev	.00081	.00056	.00101	.000
%RSD	.39968	.26940	.48986	.0260
#1	.20324	.20785	.20702	1.002
#2	.20209	.20706	.20560	1.002
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5170.1**	**4186.2**	**33521.**	**4094.3**
Stddev	.9	2.3	16.	29.3
%RSD	.01837	.05508	.04660	.71481
#1	5170.8	4187.8	33532.	4073.6
#2	5169.4	4184.6	33510.	4115.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.106%	96.419%	96.219%	100.71%
Range				

Sample Name: 480-178291-H-3-B MS Acquired: 11/24/2020 18:07:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04862**	**9.9899**	**.20354**	**.39864**	**.25724**
Stddev	.00056	.0610	.00125	.00017	.00008
%RSD	1.1617	.61088	.61325	.04184	.03226
#1	.04902	9.9468	.20266	.39876	.25718
#2	.04822	10.033	.20442	.39853	.25730
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20823**	**23.319**	**.19759**	**.0208**	**.18932**
Stddev	.00033	.058	.00072	.0206	.00011
%RSD	.15800	.24755	.36465	99.13	.06022
#1	.20846	23.278	.19810	.0353	.18940
#2	.20800	23.360	.19708	.0062	.18924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20242**	**.19767**	**9.6071**	**13.582**	**.21045**
Stddev	.00142	.00045	.0191	.002	.00005
%RSD	.70161	.22623	.19865	.01497	.02397
#1	.20142	.19798	9.5936	13.584	.21042
#2	.20342	.19735	9.6206	13.581	.21049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-B MS Acquired: 11/24/2020 18:07:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.773**	**.20656**	**.23317**	**76.678**	**.19489**
Stddev	.041	.00020	.00019	.090	.00004
%RSD	.32167	.09612	.08085	.11760	.02232
#1	12.744	.20642	.23331	76.614	.19492
#2	12.802	.20670	.23304	76.741	.19486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.71**	**.19231**	**43.948**	**.20001**	**.20175**
Stddev	.00	.00274	.063	.00006	.00063
%RSD	.0026	1.4260	.14433	.03184	.30986
#1	24.71	.19037	43.993	.19996	.20131
#2	24.71	.19425	43.903	.20005	.20219
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.342**	**.19207**	**1.2453**	**1.007**	**.19880**
Stddev	.048	.00044	.0002	.005	.00027
%RSD	.33540	.23091	.01746	.4737	.13783
#1	14.308	.19239	1.2455	1.003	.19900
#2	14.376	.19176	1.2451	1.010	.19861
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-B MS Acquired: 11/24/2020 18:07:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.19456**	**.19919**	**.19983**	**1.000**
Stddev	.00128	.00095	.00088	.001
%RSD	.65751	.47652	.44281	.1072
#1	.19547	.19852	.19920	.9994
#2	.19366	.19986	.20045	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5151.0**	**4173.5**	**33375.**	**4094.0**
Stddev	2.5	.3	9.	29.6
%RSD	.04818	.00646	.02618	.72199
#1	5149.3	4173.7	33368.	4114.9
#2	5152.8	4173.3	33381.	4073.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.777%	96.127%	95.799%	100.71%
Range				

Sample Name: 480-178291-H-3-C MSD Acquired: 11/24/2020 18:10:49 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04984**	**10.021**	**.20692**	**.40570**	**.26208**
Stddev	.00029	.083	.00035	.00074	.00031
%RSD	.59077	.82814	.16910	.18161	.11962
#1	.05004	10.080	.20668	.40518	.26231
#2	.04963	9.9628	.20717	.40622	.26186
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21055**	**23.533**	**.20111**	**.0119**	**.19326**
Stddev	.00115	.214	.00005	.0034	.00053
%RSD	.54590	.90808	.02491	28.26	.27430
#1	.21136	23.685	.20107	.0143	.19363
#2	.20974	23.382	.20114	.0096	.19288
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20626**	**.20017**	**9.7711**	**13.725**	**.21393**
Stddev	.00004	.00030	.0550	.102	.00128
%RSD	.02125	.14815	.56278	.74283	.59785
#1	.20629	.19996	9.8100	13.797	.21483
#2	.20623	.20038	9.7322	13.652	.21302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-C MSD Acquired: 11/24/2020 18:10:49 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.934**	**.20977**	**.23745**	**77.643**	**.19921**
Stddev	.029	.00047	.00059	.298	.00021
%RSD	.22453	.22582	.24773	.38365	.10596
#1	12.913	.20944	.23786	77.854	.19936
#2	12.954	.21011	.23703	77.432	.19906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.71**	**.19564**	**44.579**	**.20288**	**.20259**
Stddev	.00	.00193	.076	.00157	.00113
%RSD	.0002	.98879	.16999	.77359	.55580
#1	24.71	.19701	44.632	.20399	.20179
#2	24.71	.19427	44.525	.20177	.20338
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.471**	**.19578**	**1.2604**	**1.005**	**.20277**
Stddev	.086	.00070	.0065	.006	.00009
%RSD	.59092	.35863	.51317	.6102	.04252
#1	14.531	.19627	1.2650	1.001	.20271
#2	14.410	.19528	1.2558	1.010	.20283
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178291-H-3-C MSD Acquired: 11/24/2020 18:10:49 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.19978**	**.20282**	**.20114**	**1.001**
Stddev	.00023	.00036	.00038	.001
%RSD	.11388	.17680	.19131	.0535
#1	.19962	.20256	.20087	1.000
#2	.19994	.20307	.20141	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5142.9**	**4182.5**	**33535.**	**4106.5**
Stddev	5.0	2.7	192.	38.3
%RSD	.09650	.06530	.57399	.93176
#1	5139.4	4180.5	33671.	4079.4
#2	5146.4	4184.4	33399.	4133.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.637%	96.333%	96.258%	101.01%
Range				

Sample Name: 480-178299-J-1-A Acquired: 11/24/2020 18:14:23 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**1.1759**	**.00045**	**.86311**	**.11511**
Stddev	.00031	.0006	.00123	.00119	.00018
%RSD	1117.6	.04687	275.26	.13838	.15484
#1	.00019	1.1763	-.00042	.86395	.11499
#2	-.00025	1.1755	.00132	.86226	.11524
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**139.42**	**.00047**	**.0267**	**.00136**
Stddev	.00001	.10	.00006	.0409	.00007
%RSD	13.441	.07414	12.917	153.3	5.2009
#1	.00007	139.49	.00051	.0556	.00141
#2	.00009	139.35	.00043	-.0023	.00131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00354**	**.01282**	**1.7250**	**23.302**	**.00798**
Stddev	.00001	.00017	.0016	.014	.00031
%RSD	.34769	1.3000	.09447	.06027	3.8331
#1	.00353	.01270	1.7238	23.311	.00776
#2	.00355	.01294	1.7261	23.292	.00819
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178299-J-1-A Acquired: 11/24/2020 18:14:23 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**35.224**	**.09487**	**.00150**	**83.416**	**.01149**
Stddev	.006	.00010	.00035	.017	.00037
%RSD	.01780	.10297	23.370	.02009	3.2501
#1	35.220	.09480	.00125	83.427	.01176
#2	35.229	.09494	.00175	83.404	.01123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.03**	**.00022**	**36.094**	**-.00055**	**-.00313**
Stddev	.00	.00072	.133	.00041	.00126
%RSD	.0049	323.20	.36741	74.806	40.148
#1	25.03	.00073	36.188	-.00026	-.00224
#2	25.03	-.00029	36.001	-.00085	-.00402
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.0767**	**.00042**	**.75977**	**.9963**	**.01193**
Stddev	.0002	.00022	.00043	.0009	.00096
%RSD	.00341	53.233	.05595	.0888	8.0566
#1	7.0769	.00057	.75947	.9969	.01125
#2	7.0765	.00026	.76007	.9957	.01261
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178299-J-1-A Acquired: 11/24/2020 18:14:23 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00142**	**.00191**	**.01073**	**.9998**
Stddev	.00008	.00002	.00014	.0011
%RSD	5.6821	.97892	1.2690	.1089
#1	-.00136	.00189	.01083	.9990
#2	-.00148	.00192	.01064	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4897.0**	**4039.2**	**32520.**	**4089.7**
Stddev	3.1	5.9	115.	13.0
%RSD	.06423	.14549	.35452	.31682
#1	4899.2	4043.3	32602.	4080.6
#2	4894.8	4035.0	32439.	4098.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.399%	93.033%	93.347%	100.60%
Range				

Sample Name: 480-178299-J-2-A Acquired: 11/24/2020 18:18:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.02765**	**.00063**	**.91788**	**.04469**
Stddev	.00003	.01670	.00130	.00097	.00006
%RSD	205.33	60.389	205.80	.10574	.13283
#1	-.00001	.01584	-.00029	.91719	.04474
#2	.00003	.03946	.00155	.91856	.04465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**216.38**	**.00025**	**.0028**	**.00101**
Stddev	.00005	1.11	.00001	.0315	.00003
%RSD	168.97	.51381	3.1942	1137.	3.4346
#1	.00006	215.60	.00025	-.0195	.00098
#2	-.00001	217.17	.00026	.0250	.00103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.00241**	**.01916**	**1.1950**	**.01555**
Stddev	.00019	.00021	.00035	.0050	.00252
%RSD	22.749	8.6895	1.8022	.41620	16.209
#1	.00095	.00226	.01892	1.1985	.01734
#2	.00069	.00256	.01940	1.1915	.01377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178299-J-2-A Acquired: 11/24/2020 18:18:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**32.695**	**1.0409**	**.00055**	**70.766**	**.02130**
Stddev	.004	.0015	.00013	.417	.00029
%RSD	.01163	.14054	23.982	.58907	1.3830
#1	32.693	1.0419	.00045	71.060	.02109
#2	32.698	1.0398	.00064	70.471	.02150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00022**	**57.380**	**-.00105**	**-.00155**
Stddev	.00	.00007	.063	.00105	.00018
%RSD	.0023	33.381	.10917	100.12	11.758
#1	25.02	-.00017	57.335	-.00179	-.00142
#2	25.02	-.00027	57.424	-.00031	-.00168
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.4122**	**.00000**	**.98325**	**1.001**	**.00147**
Stddev	.0076	.00006	.00023	.006	.00037
%RSD	.09074	16319.	.02314	.5871	25.300
#1	8.4068	.00004	.98341	.9970	.00173
#2	8.4176	-.00004	.98309	1.005	.00121
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178299-J-2-A Acquired: 11/24/2020 18:18:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00064**	**-.00078**	**.00600**	**.9989**
Stddev	.00055	.00072	.00021	.0004
%RSD	86.504	91.983	3.5162	.0381
#1	-.00025	-.00027	.00615	.9986
#2	-.00103	-.00129	.00585	.9992
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4896.9**	**4017.7**	**32248.**	**4105.1**
Stddev	3.0	1.1	64.	8.3
%RSD	.06197	.02779	.20001	.20340
#1	4894.8	4017.0	32293.	4111.0
#2	4899.0	4018.5	32202.	4099.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.397%	92.539%	92.564%	100.98%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 18:21:54 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.98770**	**51.224**	**1.0093**	**1.0458**	**1.0108**
Stddev	.00195	.142	.0021	.0007	.0006
%RSD	.19734	.27693	.20270	.07115	.06052
#1	.98908	51.324	1.0108	1.0463	1.0112
#2	.98632	51.124	1.0079	1.0452	1.0104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0362**	**50.880**	**1.0144**	**1.025**	**.99422**
Stddev	.0034	.065	.0015	.049	.00104
%RSD	.32398	.12780	.14935	4.738	.10449
#1	1.0385	50.926	1.0155	.9905	.99496
#2	1.0338	50.834	1.0133	1.059	.99349
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0375**	**1.0014**	**50.243**	**50.518**	**1.0143**
Stddev	.0004	.0005	.185	.031	.0041
%RSD	.03401	.04997	.36871	.06062	.39983
#1	1.0373	1.0011	50.112	50.496	1.0172
#2	1.0378	1.0018	50.374	50.539	1.0114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 18:21:54 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.750**	**1.0133**	**1.0489**	**50.930**	**1.0034**
Stddev	.078	.0004	.0075	.053	.0006
%RSD	.15594	.03586	.71001	.10340	.06490
#1	49.805	1.0135	1.0541	50.968	1.0030
#2	49.695	1.0130	1.0436	50.893	1.0039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.69**	**.99968**	**25.261**	**1.0164**	**1.0205**
Stddev	.03	.00186	.088	.0036	.0008
%RSD	.0688	.18589	.34761	.35567	.07339
#1	37.70	1.0010	25.323	1.0189	1.0210
#2	37.67	.99836	25.199	1.0138	1.0199
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.146**	**1.0000**	**1.0109**	**1.498**	**1.0152**
Stddev	.007	.0017	.0014	.004	.0007
%RSD	.06676	.17141	.13619	.2857	.06988
#1	10.141	1.0013	1.0119	1.501	1.0157
#2	10.151	.99884	1.0100	1.495	1.0147
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 18:21:54 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0187**	**1.0294**	**1.0198**	**1.522**
Stddev	.0004	.0016	.0004	.002
%RSD	.03650	.15930	.04165	.1510
#1	1.0185	1.0305	1.0195	1.524
#2	1.0190	1.0282	1.0201	1.520
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4921.3**	**4139.7**	**32640.**	**4033.8**
Stddev	3.6	7.6	102.	8.8
%RSD	.07376	.18265	.31131	.21845
#1	4918.7	4134.4	32712.	4027.6
#2	4923.9	4145.1	32568.	4040.0

Sample Name: CCB-6254294 Acquired: 11/24/2020 18:25:26 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.02049**	**-.00062**	**.00087**	**.00010**
Stddev	.00074	.04295	.00148	.00004	.00002
%RSD	4561.6	209.58	238.59	4.3066	23.958
#1	.00054	.05087	.00043	.00084	.00008
#2	-.00051	-.00988	-.00167	.00089	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**.00713**	**.00002**	**.0013**	**-.00003**
Stddev	.00008	.00027	.00020	.0140	.00008
%RSD	2245.2	3.7362	856.27	1068.	225.24
#1	-.00005	.00695	-.00012	-.0086	.00002
#2	.00006	.00732	.00017	.0112	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.00136**	**.00305**	**.02802**	**-.00035**
Stddev	.00006	.00028	.00324	.02460	.00275
%RSD	65.850	20.479	106.29	87.787	784.17
#1	.00005	.00155	.00076	.04541	-.00229
#2	.00014	.00116	.00535	.01063	.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 18:25:26 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00234**	**.00002**	**.00343**	**.03785**	**.00004**
Stddev	.00198	.00001	.00090	.00638	.00007
%RSD	84.913	50.318	26.344	16.862	180.35
#1	.00374	.00003	.00279	.03333	.00009
#2	.00093	.00002	.00407	.04236	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00030**	**.00339**	**.00014**	**-.00198**
Stddev	.00	.00029	.00086	.00009	.00246
%RSD	.0052	95.797	25.467	63.090	124.49
#1	25.02	.00050	.00400	.00008	-.00372
#2	25.02	.00010	.00278	.00020	-.00024
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00101**	**.00023**	**.00005**	**1.010**	**.00028**
Stddev	.00492	.00014	.00006	.002	.00012
%RSD	488.12	58.876	131.66	.1616	43.646
#1	.00448	.00013	.00000	1.011	.00036
#2	-.00247	.00032	.00009	1.009	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 18:25:26 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00039**	**-.00011**	**.00021**	**.9996**
Stddev	.00010	.00030	.00003	.0004
%RSD	26.104	280.85	12.663	.0353
#1	-.00032	-.00032	.00019	.9993
#2	-.00046	.00010	.00023	.9998
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5760.4**	**4281.1**	**34861.**	**4070.4**
Stddev	2.7	5.3	188.	5.6
%RSD	.04707	.12346	.53938	.13767
#1	5762.3	4277.4	34994.	4066.5
#2	5758.5	4284.8	34728.	4074.4

Sample Name: CCVL-6256824 Acquired: 11/24/2020 18:29:16 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00518**	**.20872**	**.01504**	**.02012**	**.00211**
Stddev	.00037	.03830	.00041	.00025	.00000
%RSD	7.0965	18.350	2.7517	1.2506	.23282
#1	.00544	.23581	.01533	.01994	.00211
#2	.00492	.18164	.01475	.02029	.00212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00210**	**.51891**	**.00206**	**-.0155**	**.00356**
Stddev	.00008	.00437	.00002	.0330	.00006
%RSD	3.6489	.84267	1.0017	213.0	1.7690
#1	.00205	.52200	.00208	.0078	.00351
#2	.00216	.51582	.00205	-.0388	.00360
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00411**	**.01054**	**.05168**	**.50842**	**.03057**
Stddev	.00026	.00037	.00056	.04793	.00067
%RSD	6.2527	3.5343	1.0925	9.4268	2.1801
#1	.00393	.01027	.05128	.54231	.03010
#2	.00429	.01080	.05208	.47453	.03104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 18:29:16 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20604**	**.00317**	**.01041**	**1.0248**	**.00948**
Stddev	.00034	.00003	.00013	.0063	.00011
%RSD	.16586	1.0053	1.2570	.61849	1.1320
#1	.20628	.00319	.01032	1.0293	.00955
#2	.20580	.00315	.01050	1.0204	.00940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00974**	**.18493**	**.01658**	**.02252**
Stddev	.00	.00109	.00003	.00091	.00048
%RSD	.0004	11.174	.01589	5.4774	2.1523
#1	25.00	.00897	.18491	.01594	.02218
#2	25.00	.01051	.18495	.01722	.02286
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46667**	**.00924**	**.00489**	F **1.006**	**.00488**
Stddev	.01097	.00019	.00006	.002	.00026
%RSD	2.3505	2.0957	1.2229	.1765	5.3622
#1	.47442	.00938	.00494	1.007	.00507
#2	.45891	.00911	.00485	1.004	.00470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 18:29:16 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01915**	**.00454**	**.00998**	F **1.001**
Stddev	.00037	.00043	.00020	.001
%RSD	1.9498	9.4004	2.0391	.0804
#1	.01888	.00484	.01012	1.000
#2	.01941	.00424	.00983	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5672.2**	**4257.9**	**34603.**	**4026.3**
Stddev	8.2	4.0	98.	.2
%RSD	.14503	.09486	.28267	.00551
#1	5666.3	4255.1	34534.	4026.4
#2	5678.0	4260.8	34672.	4026.1

Sample Name: 480-178299-J-3-A Acquired: 11/24/2020 18:33:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00072**	**.03979**	**-.00008**	**-.00014**	**.00001**
Stddev	.00039	.01637	.00073	.00001	.00002
%RSD	55.017	41.138	946.58	3.6018	300.33
#1	.00100	.02821	.00044	-.00015	-.00001
#2	.00044	.05136	-.00059	-.00014	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00676**	**-.00004**	**.0194**	**.00003**
Stddev	.00004	.00099	.00003	.0066	.00007
%RSD	55.474	14.584	62.315	34.14	244.23
#1	.00009	.00746	-.00002	.0241	.00008
#2	.00004	.00606	-.00006	.0147	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00029**	**.00139**	**.00081**	**-.01526**	**.00119**
Stddev	.00027	.00034	.00156	.00367	.00038
%RSD	93.974	24.184	192.35	24.068	31.615
#1	.00010	.00163	.00192	-.01267	.00093
#2	.00048	.00115	-.00029	-.01786	.00146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178299-J-3-A Acquired: 11/24/2020 18:33:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00086**	**.00023**	**-.00023**	**.04103**	**.00001**
Stddev	.00062	.00000	.00009	.00065	.00001
%RSD	72.002	2.1283	40.967	1.5944	97.495
#1	.00042	.00023	-.00016	.04057	.00000
#2	.00130	.00023	-.00030	.04149	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00045**	**-.00238**	**.00024**	**.00112**
Stddev	.00	.00057	.00109	.00085	.00096
%RSD	.0007	125.19	45.564	357.52	85.151
#1	25.02	-.00005	-.00315	-.00037	.00180
#2	25.02	-.00086	-.00162	.00084	.00045
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00601**	**.00012**	**-.00006**	**.9988**	**.00038**
Stddev	.00048	.00044	.00003	.0043	.00032
%RSD	7.9743	372.40	55.333	.4277	83.870
#1	.00567	-.00019	-.00008	.9958	.00061
#2	.00635	.00043	-.00003	1.002	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178299-J-3-A Acquired: 11/24/2020 18:33:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00030**	**-.00010**	**.00111**	**.9987**
Stddev	.00004	.00042	.00020	.0020
%RSD	13.495	424.57	18.371	.2038
#1	-.00027	-.00039	.00125	1.000
#2	-.00033	.00020	.00096	.9972
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5880.0**	**4392.5**	**35365.**	**4173.9**
Stddev	7.2	7.4	163.	19.2
%RSD	.12270	.16878	.46183	.45891
#1	5874.9	4387.2	35481.	4160.3
#2	5885.1	4397.7	35250.	4187.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.34%	101.17%	101.51%	102.67%
Range				

Sample Name: 480-178300-J-1-A Acquired: 11/24/2020 18:36:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.09209**	**.02910**	**6.2103**	**.63370**
Stddev	.00041	.00540	.00001	.0037	.00117
%RSD	276.86	5.8666	.03836	.05984	.18520
#1	-.00044	.09591	.02911	6.2129	.63453
#2	.00014	.08827	.02909	6.2077	.63287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**158.46**	**.00010**	**.0005**	**.03484**
Stddev	.00002	.02	.00003	.0196	.00027
%RSD	40.202	.01174	24.804	3875.	.76596
#1	-.00004	158.48	.00012	-.0134	.03503
#2	-.00007	158.45	.00008	.0144	.03465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00486**	**.00375**	**24.706**	**144.30**	**.00603**
Stddev	.00026	.00108	.001	.38	.00009
%RSD	5.2875	28.730	.00464	.26292	1.5482
#1	.00468	.00451	24.706	144.03	.00597
#2	.00504	.00299	24.707	144.57	.00610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178300-J-1-A Acquired: 11/24/2020 18:36:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**137.97**	**7.5819**	**.00436**	**817.86**	**.22343**
Stddev	.39	.0764	.00016	3.14	.00022
%RSD	.28209	1.0081	3.5982	.38412	.09844
#1	138.25	7.6360	.00425	815.63	.22359
#2	137.70	7.5279	.00447	820.08	.22328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.35**	**.00485**	**7.3812**	**-.00323**	**.00374**
Stddev	.00	.00141	.0097	.00024	.00172
%RSD	.0008	29.070	.13110	7.2876	45.958
#1	25.35	.00386	7.3880	-.00340	.00495
#2	25.35	.00585	7.3743	-.00307	.00252
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.3029**	**.00150**	**1.6316**	**1.011**	**.00370**
Stddev	.0096	.00024	.0020	.006	.00042
%RSD	.15290	16.171	.12268	.5851	11.315
#1	6.2961	.00167	1.6302	1.015	.00340
#2	6.3097	.00133	1.6331	1.007	.00399
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178300-J-1-A Acquired: 11/24/2020 18:36:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00095**	**.00319**	**.00367**	**.9994**
Stddev	.00053	.00007	.00038	.0006
%RSD	55.884	2.1421	10.381	.0570
#1	.00058	.00323	.00340	.9998
#2	.00133	.00314	.00394	.9990
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4268.2**	**3764.9**	**29864.**	**4029.6**
Stddev	7.7	8.3	117.	15.2
%RSD	.18062	.21929	.39121	.37604
#1	4273.7	3770.8	29782.	4040.3
#2	4262.8	3759.1	29947.	4018.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	73.562%	86.716%	85.722%	99.122%
Range				

Sample Name: 480-178300-J-2-A Acquired: 11/24/2020 18:40:42 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00126**	**.09299**	**.02819**	**6.0228**	**.61187**
Stddev	.00031	.01482	.00013	.0021	.00064
%RSD	24.801	15.940	.45975	.03468	.10395
#1	.00148	.08251	.02810	6.0213	.61232
#2	.00104	.10347	.02828	6.0242	.61142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**159.64**	**.00029**	**-.0330**	**.03440**
Stddev	.00011	.44	.00006	.0054	.00017
%RSD	202.76	.27690	20.344	16.35	.49185
#1	.00013	159.95	.00025	-.0292	.03428
#2	-.00002	159.33	.00033	-.0368	.03451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00543**	**.00328**	**24.447**	**140.27**	**.00619**
Stddev	.00011	.00025	.055	.80	.00079
%RSD	1.9851	7.6341	.22624	.56688	12.797
#1	.00551	.00310	24.486	140.83	.00563
#2	.00536	.00345	24.408	139.71	.00675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178300-J-2-A Acquired: 11/24/2020 18:40:42 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**135.18**	**7.5375**	**.00397**	**802.91**	**.22178**
Stddev	.13	.0189	.00017	2.98	.00017
%RSD	.09340	.25063	4.2026	.37074	.07786
#1	135.09	7.5241	.00385	805.01	.22190
#2	135.27	7.5509	.00409	800.81	.22166
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.34**	**.00655**	**7.2341**	**-.00349**	**.00276**
Stddev	.00	.00020	.0122	.00092	.00151
%RSD	.0021	3.0628	.16841	26.473	54.947
#1	25.34	.00670	7.2427	-.00284	.00169
#2	25.34	.00641	7.2255	-.00414	.00383
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.2479**	**.00124**	**1.6157**	**1.006**	**.00389**
Stddev	.0034	.00043	.0077	.008	.00026
%RSD	.05499	34.408	.47730	.8050	6.7458
#1	6.2504	.00154	1.6211	.9998	.00371
#2	6.2455	.00094	1.6102	1.011	.00408
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178300-J-2-A Acquired: 11/24/2020 18:40:42 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00045**	**.00253**	**.00501**	**.9993**
Stddev	.00046	.00029	.00023	.0006
%RSD	102.17	11.616	4.5790	.0556
#1	.00012	.00232	.00517	.9997
#2	.00077	.00274	.00485	.9989
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4268.8**	**3760.7**	**29804.**	**3990.0**
Stddev	.5	2.2	116.	7.6
%RSD	.01146	.05963	.38943	.19140
#1	4268.4	3762.3	29887.	3984.6
#2	4269.1	3759.1	29722.	3995.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	73.572%	86.619%	85.551%	98.149%
Range				

Sample Name: 480-178303-C-1-A Acquired: 11/24/2020 18:44:37 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**4.3968**	**.01418**	**.02984**	**.16345**
Stddev	.00121	.0134	.00007	.00078	.00024
%RSD	19681.	.30417	.47871	2.6166	.14392
#1	-.00086	4.4062	.01422	.03040	.16328
#2	.00085	4.3873	.01413	.02929	.16361
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00029**	**114.02**	**-.00009**	**.0204**	**.00993**
Stddev	.00009	.06	.00000	.0600	.00016
%RSD	30.505	.05056	2.7059	294.6	1.6040
#1	.00035	113.98	-.00009	.0628	.00982
#2	.00023	114.06	-.00009	-.0221	.01004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.5289**	**.03374**	**46.577**	**3.4058**	**.02374**
Stddev	.0050	.00025	.154	.0178	.00116
%RSD	.32894	.75517	.33118	.52288	4.8956
#1	1.5254	.03356	46.468	3.4184	.02456
#2	1.5325	.03393	46.686	3.3932	.02292
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-C-1-A Acquired: 11/24/2020 18:44:37 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**87.779**	**.53281**	**.13222**	**63.270**	**.06822**
Stddev	.182	.00121	.00093	.188	.00014
%RSD	.20727	.22646	.70249	.29754	.20909
#1	87.650	.53195	.13288	63.137	.06812
#2	87.907	.53366	.13157	63.403	.06832
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.07**	**.00885**	**11.706**	**-.00582**	**.00331**
Stddev	.00	.00013	.028	.00002	.00240
%RSD	.0032	1.4390	.24246	.30796	72.490
#1	25.07	.00894	11.726	-.00580	.00161
#2	25.07	.00876	11.686	-.00583	.00500
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**15.054**	**.00055**	**.29775**	**1.020**	**.07809**
Stddev	.036	.00010	.00023	.009	.00585
%RSD	.23623	18.384	.07671	.8822	7.4864
#1	15.080	.00062	.29791	1.027	.08222
#2	15.029	.00048	.29759	1.014	.07395
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-C-1-A Acquired: 11/24/2020 18:44:37 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00065**	**.01896**	**.02674**	**1.002**
Stddev	.00061	.00027	.00020	.001
%RSD	94.193	1.4223	.73085	.0968
#1	-.00022	.01877	.02688	1.001
#2	-.00109	.01915	.02660	1.003
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4854.5**	**4085.0**	**32845.**	**4101.1**
Stddev	.9	2.1	7.	.5
%RSD	.01924	.05124	.02114	.01206
#1	4853.8	4083.5	32850.	4101.4
#2	4855.2	4086.5	32840.	4100.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.667%	94.088%	94.277%	100.88%
Range				

Sample Name: 480-178303-A-2-A Acquired: 11/24/2020 18:48:15 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00866**	**20.056**	**2.6378**	**.42952**	**3.3400**
Stddev	.00012	.030	.0025	.00035	.0040
%RSD	1.3542	.14975	.09632	.08228	.11927
#1	.00858	20.035	2.6395	.42927	3.3372
#2	.00874	20.077	2.6360	.42977	3.3428
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00121**	**444.40**	F **-.01067**	**.2012**	**.00904**
Stddev	.00004	2.90	.00019	.0095	.00010
%RSD	3.1076	.65226	1.8106	4.719	1.1519
#1	.00124	446.45	-.01081	.1945	.00896
#2	.00118	442.35	-.01054	.2080	.00911
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			4.5000		
Low Limit			-.00200		

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02402**	**.31412**	F **925.00**	**7.8694**	**.03337**
Stddev	.00023	.00018	.11	.0163	.00156
%RSD	.94017	.05808	.01231	.20733	4.6657
#1	.02418	.31399	925.08	7.8579	.03227
#2	.02386	.31424	924.91	7.8809	.03447
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			540.00		
Low Limit			-.05000		

Sample Name: 480-178303-A-2-A Acquired: 11/24/2020 18:48:15 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576-2	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}2	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**89.044**	**17.587**	**-.00343**	**188.27**	**.04651**
Stddev	.038	.055	.00022	.52	.00040
%RSD	.04273	.31496	6.5351	.27764	.86095
#1	89.071	17.626	-.00359	187.90	.04680
#2	89.017	17.547	-.00327	188.64	.04623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**30.57**	**.71666**	**23.273**	F **-.08947**	**.09488**
Stddev	.02	.00167	.125	.00006	.00179
%RSD	.0547	.23275	.53742	.06205	1.8819
#1	30.58	.71548	23.361	-.08951	.09614
#2	30.56	.71784	23.184	-.08943	.09361
Check ?	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				9.0000	
Low Limit				-.02000	

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **52.016**	**.03439**	**1.2552**	**1.441**	**.26814**
Stddev	.062	.00067	.0014	.000	.00288
%RSD	.11992	1.9376	.10958	.0295	1.0733
#1	52.060	.03486	1.2542	1.441	.26610
#2	51.972	.03392	1.2562	1.441	.27017
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	50.000				
Low Limit	-.50000				

Sample Name: 480-178303-A-2-A Acquired: 11/24/2020 18:48:15 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.01438**	**.07733**	**.48710**	**1.014**
Stddev	.00026	.00021	.00032	.001
%RSD	1.8035	.26895	.06501	.1259
#1	-.01456	.07747	.48732	1.013
#2	-.01420	.07718	.48688	1.015
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4055.7**	**4028.5**	**31917.**	**4382.6**
Stddev	12.0	13.7	114.	.5
%RSD	.29699	.34017	.35657	.01057
#1	4047.2	4018.8	31837.	4382.9
#2	4064.3	4038.2	31998.	4382.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	69.900%	92.787%	91.615%	107.81%
Range				

Sample Name: rinse Acquired: 11/24/2020 18:52:17 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00053**	**.00794**	**.00068**	**.00335**	**.00007**
Stddev	.00049	.01429	.00034	.00035	.00000
%RSD	91.962	179.95	50.670	10.458	6.3193
#1	-.00019	.01805	.00044	.00310	.00007
#2	-.00088	-.00216	.00092	.00360	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.01091**	**.00002**	**.0215**	**-.00014**
Stddev	.00003	.00117	.00013	.0018	.00016
%RSD	120.82	10.693	627.10	8.230	114.25
#1	.00000	.01008	.00011	.0202	-.00003
#2	.00005	.01173	-.00007	.0227	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.00087**	**.02936**	**.04611**	**.00200**
Stddev	.00009	.00049	.00346	.00234	.00036
%RSD	325.12	57.152	11.800	5.0815	17.987
#1	.00004	.00122	.02691	.04446	.00225
#2	-.00010	.00052	.03181	.04777	.00174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: rinse Acquired: 11/24/2020 18:52:17 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00381**	**.00041**	**-.00052**	**.08402**	**.00006**
Stddev	.00072	.00000	.00000	.01042	.00009
%RSD	19.009	.85826	.55249	12.400	147.12
#1	.00432	.00041	-.00052	.09138	-.00000
#2	.00330	.00040	-.00052	.07665	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00004**	**.00826**	**-.00010**	**-.00100**
Stddev	.00	.00048	.00099	.00079	.00236
%RSD	.0020	1308.7	11.967	816.43	236.23
#1	25.02	-.00030	.00896	-.00065	.00067
#2	25.02	.00038	.00756	.00046	-.00266
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00463**	**-.00000**	**.00008**	**1.001**	**.00054**
Stddev	.02175	.00053	.00004	.005	.00023
%RSD	469.76	55385.	43.745	.4557	43.209
#1	.02001	.00037	.00011	.9973	.00070
#2	-.01075	-.00038	.00006	1.004	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: rinse Acquired: 11/24/2020 18:52:17 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00104**	**-.00003**	**-.00006**	**.9991**
Stddev	.00130	.00015	.00014	.0004
%RSD	125.22	591.56	230.32	.0370
#1	-.00195	.00008	.00004	.9989
#2	-.00012	-.00013	-.00016	.9994
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5816.0**	**4343.2**	**35063.**	**4127.3**
Stddev	3.2	4.4	59.	26.3
%RSD	.05550	.10128	.16872	.63725
#1	5818.3	4346.3	35105.	4145.9
#2	5813.7	4340.1	35021.	4108.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.24%	100.04%	100.64%	101.53%
Range				

Sample Name: rinse Acquired: 11/24/2020 18:56:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.03353**	**.00078**	**.00245**	**.00003**
Stddev	.00017	.01057	.00008	.00024	.00004
%RSD	111.18	31.522	10.356	9.9965	112.11
#1	-.00003	.02606	.00083	.00227	.00006
#2	-.00028	.04100	.00072	.00262	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.00259**	**-.00000**	**.0044**	**-.00005**
Stddev	.00006	.00422	.00005	.0361	.00007
%RSD	57.845	162.93	3678.9	812.0	121.64
#1	.00006	.00557	-.00004	-.0211	-.00010
#2	.00014	-.00039	.00004	.0300	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00078**	**.01235**	**.04148**	**-.00012**
Stddev	.00028	.00003	.00245	.06327	.00062
%RSD	639.13	4.2396	19.850	152.53	522.19
#1	-.00015	.00080	.01062	.08622	.00032
#2	.00024	.00075	.01409	-.00326	-.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: rinse Acquired: 11/24/2020 18:56:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00565**	**.00027**	**-.00066**	**.06443**	**.00009**
Stddev	.00089	.00003	.00007	.00491	.00023
%RSD	15.762	10.070	10.896	7.6229	250.76
#1	.00628	.00029	-.00071	.06791	.00025
#2	.00502	.00025	-.00061	.06096	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00061**	**-.00232**	**-.00082**	**-.00239**
Stddev	.00	.00031	.00006	.00103	.00056
%RSD	.0034	50.855	2.6704	125.65	23.382
#1	25.02	.00039	-.00227	-.00009	-.00278
#2	25.02	.00082	-.00236	-.00154	-.00199
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00073**	**-.00003**	**.00010**	**1.002**	**-.00013**
Stddev	.00911	.00050	.00007	.002	.00011
%RSD	1256.5	1496.4	71.806	.2045	81.810
#1	-.00717	-.00039	.00005	1.003	-.00005
#2	.00572	.00032	.00015	1.000	-.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: rinse Acquired: 11/24/2020 18:56:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00115**	**-.00026**	**.00007**	**.9991**
Stddev	.00024	.00017	.00005	.0003
%RSD	20.610	65.120	63.929	.0281
#1	-.00132	-.00014	.00011	.9993
#2	-.00098	-.00038	.00004	.9989
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5835.6**	**4335.1**	**35079.**	**4080.5**
Stddev	7.3	6.2	10.	30.6
%RSD	.12491	.14369	.02749	.74931
#1	5830.5	4330.7	35072.	4102.2
#2	5840.8	4339.5	35086.	4058.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.58%	99.848%	100.69%	100.38%
Range				

Sample Name: 480-178303-A-4-A Acquired: 11/24/2020 18:59:49 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**1.6022**	**.05883**	**.08100**	**.21890**
Stddev	.00042	.0245	.00044	.00037	.00024
%RSD	73.359	1.5273	.74295	.45436	.11045
#1	.00087	1.5849	.05853	.08126	.21907
#2	.00028	1.6195	.05914	.08074	.21873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**176.19**	**.00020**	**.0278**	**.00111**
Stddev	.00004	.37	.00016	.0284	.00006
%RSD	36.096	.21238	81.487	102.1	5.2545
#1	.00009	175.93	.00032	.0479	.00115
#2	.00015	176.45	.00009	.0077	.00107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00164**	**.00644**	**22.731**	**3.7661**	**.01432**
Stddev	.00070	.00069	.199	.0212	.00041
%RSD	42.459	10.708	.87334	.56364	2.8341
#1	.00115	.00595	22.871	3.7811	.01403
#2	.00213	.00693	22.591	3.7511	.01461
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-A-4-A Acquired: 11/24/2020 18:59:49 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**84.220**	**2.1644**	**-.00052**	**35.266**	**.00458**
Stddev	.177	.0014	.00012	.213	.00011
%RSD	.21000	.06297	22.902	.60519	2.4739
#1	84.095	2.1635	-.00044	35.417	.00466
#2	84.345	2.1654	-.00061	35.115	.00450
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.08**	**.00736**	**21.887**	**-.00389**	**.00027**
Stddev	.00	.00062	.071	.00037	.00095
%RSD	.0095	8.4381	.32265	9.5941	351.56
#1	25.08	.00692	21.937	-.00415	.00094
#2	25.08	.00779	21.837	-.00362	-.00040
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.660**	**.00063**	**.39193**	**1.007**	**.01896**
Stddev	.102	.00020	.00211	.001	.00024
%RSD	.87543	31.722	.53874	.1105	1.2616
#1	11.732	.00049	.39343	1.006	.01879
#2	11.588	.00078	.39044	1.007	.01913
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-A-4-A Acquired: 11/24/2020 18:59:49 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00071**	**.00227**	**.00972**	**.9992**
Stddev	.00101	.00022	.00027	.0005
%RSD	141.42	9.5929	2.7309	.0499
#1	.00000	.00211	.00953	.9989
#2	-.00142	.00242	.00991	.9996
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4871.0**	**4069.6**	**32771.**	**4109.7**
Stddev	5.5	.4	43.	27.6
%RSD	.11254	.00971	.13064	.67136
#1	4874.9	4069.3	32801.	4090.2
#2	4867.1	4069.9	32741.	4129.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.951%	93.734%	94.067%	101.09%
Range				

Sample Name: 480-178303-C-5-A Acquired: 11/24/2020 19:03:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00109**	**27.162**	**.01275**	**.21056**	**.18790**
Stddev	.00019	.095	.00241	.00059	.00024
%RSD	17.421	.35004	18.912	.28225	.12635
#1	.00122	27.229	.01446	.21014	.18774
#2	.00095	27.095	.01105	.21098	.18807
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00143**	**209.65**	**.00017**	**.1656**	**.01998**
Stddev	.00004	.79	.00016	.0010	.00019
%RSD	2.7680	.37801	93.141	.5992	.92768
#1	.00140	209.09	.00006	.1649	.02011
#2	.00146	210.21	.00028	.1663	.01985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03088**	**.08321**	**50.752**	**9.7682**	**.06738**
Stddev	.00011	.00030	.092	.0173	.00122
%RSD	.34405	.36625	.18058	.17689	1.8053
#1	.03081	.08342	50.817	9.7805	.06824
#2	.03096	.08299	50.687	9.7560	.06652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-C-5-A Acquired: 11/24/2020 19:03:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**154.87**	**1.6892**	**-.00016**	**38.128**	**.04498**
Stddev	.12	.0001	.00003	.079	.00058
%RSD	.07650	.00621	15.484	.20768	1.2917
#1	154.79	1.6891	-.00014	38.184	.04457
#2	154.95	1.6892	-.00018	38.072	.04539
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.69**	**.02135**	**19.154**	**-.00451**	**.00158**
Stddev	.00	.00010	.049	.00040	.00007
%RSD	.0096	.45774	.25686	8.7881	4.3597
#1	25.69	.02128	19.188	-.00423	.00154
#2	25.70	.02142	19.119	-.00479	.00163
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**41.624**	**.00137**	**.46033**	**1.029**	**.45867**
Stddev	.054	.00001	.00207	.003	.00049
%RSD	.12891	.64076	.44998	.3215	.10732
#1	41.662	.00136	.46180	1.032	.45902
#2	41.586	.00138	.45887	1.027	.45832
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-C-5-A Acquired: 11/24/2020 19:03:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00258**	**.05075**	**.10745**	**1.004**
Stddev	.00238	.00018	.00023	.000
%RSD	92.193	.35167	.21252	.0252
#1	-.00426	.05062	.10729	1.004
#2	-.00090	.05088	.10762	1.004
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4667.2**	**4188.6**	**33313.**	**4263.4**
Stddev	3.3	2.1	32.	7.6
%RSD	.07076	.05005	.09636	.17935
#1	4664.8	4187.1	33336.	4268.8
#2	4669.5	4190.1	33290.	4258.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	80.438%	96.475%	95.622%	104.87%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 19:07:18 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.96735**	**48.987**	**.98757**	**1.0211**	**.99154**
Stddev	.00144	.177	.00158	.0009	.00019
%RSD	.14908	.36170	.15976	.09027	.01895
#1	.96837	48.862	.98645	1.0217	.99141
#2	.96633	49.113	.98869	1.0204	.99168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99580**	**48.897**	**.98607**	**1.032**	**.97269**
Stddev	.00117	.038	.00058	.000	.00025
%RSD	.11709	.07830	.05910	.0263	.02547
#1	.99498	48.870	.98566	1.032	.97251
#2	.99663	48.924	.98648	1.033	.97286
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0069**	**.97523**	**48.881**	**49.449**	**.98374**
Stddev	.0027	.00458	.005	.009	.00240
%RSD	.26569	.46915	.01026	.01767	.24375
#1	1.0050	.97200	48.877	49.456	.98205
#2	1.0087	.97847	48.884	49.443	.98544
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 19:07:18 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.850**	**.99498**	**1.0226**	**49.379**	**.98230**
Stddev	.034	.00057	.0056	.036	.00076
%RSD	.06950	.05688	.55258	.07272	.07764
#1	48.826	.99458	1.0266	49.354	.98284
#2	48.874	.99538	1.0186	49.405	.98176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.30**	**.97743**	**24.626**	**.99131**	**.99996**
Stddev	.00	.00073	.012	.00017	.00216
%RSD	.0084	.07421	.04895	.01697	.21594
#1	37.30	.97795	24.618	.99143	.99844
#2	37.30	.97692	24.635	.99119	1.0015
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7276**	**.97151**	**.98576**	**1.489**	**.97977**
Stddev	.0005	.00053	.00033	.000	.00131
%RSD	.00482	.05432	.03300	.0133	.13327
#1	9.7273	.97114	.98599	1.488	.97884
#2	9.7280	.97189	.98553	1.489	.98069
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 19:07:18 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0003**	**1.0042**	**.98795**	**1.506**
Stddev	.0011	.0011	.00097	.001
%RSD	.11042	.10853	.09792	.0802
#1	1.0011	1.0034	.98727	1.505
#2	.99951	1.0050	.98863	1.507
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4944.4**	**4176.2**	**32897.**	**4083.9**
Stddev	.6	1.5	28.	18.1
%RSD	.01266	.03580	.08423	.44430
#1	4944.8	4177.2	32917.	4096.7
#2	4944.0	4175.1	32877.	4071.1

Sample Name: CCB-6254294 Acquired: 11/24/2020 19:10:50 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.00261**	**-.00009**	**.00136**	**.00009**
Stddev	.00019	.01564	.00052	.00037	.00003
%RSD	75.623	598.16	579.56	27.439	32.993
#1	-.00012	.01367	-.00046	.00163	.00007
#2	-.00039	-.00844	.00028	.00110	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.00850**	**-.00001**	**.0137**	**-.00007**
Stddev	.00004	.00124	.00007	.0217	.00007
%RSD	112.56	14.588	541.45	158.8	93.580
#1	.00006	.00762	-.00006	.0290	-.00003
#2	.00001	.00937	.00004	-.0017	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.00141**	**.00522**	**.05827**	**-.00068**
Stddev	.00004	.00028	.00115	.00245	.00156
%RSD	47.996	19.853	22.008	4.1972	229.36
#1	.00010	.00161	.00604	.05654	.00042
#2	.00005	.00121	.00441	.06000	-.00178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 19:10:50 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00759**	**.00018**	**.00309**	**.03570**	**.00011**
Stddev	.00019	.00005	.00115	.00190	.00009
%RSD	2.4822	27.070	37.144	5.3255	83.398
#1	.00773	.00021	.00228	.03436	.00004
#2	.00746	.00014	.00390	.03705	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00048**	**-.00241**	**-.00150**	**-.00118**
Stddev	.00	.00056	.00246	.00006	.00023
%RSD	.0002	116.10	102.23	3.7354	19.843
#1	25.02	.00088	-.00067	-.00146	-.00102
#2	25.02	.00009	-.00414	-.00154	-.00135
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00222**	**.00028**	**.00004**	**1.002**	**.00048**
Stddev	.00302	.00028	.00007	.003	.00051
%RSD	136.03	98.651	155.69	.3130	107.04
#1	-.00008	.00048	.00009	.9998	.00012
#2	-.00435	.00008	-.00000	1.004	.00084
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 19:10:50 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00028**	**-.00039**	**.00032**	**.9992**
Stddev	.00042	.00022	.00017	.0014
%RSD	153.15	56.345	51.967	.1397
#1	.00002	-.00055	.00020	.9982
#2	-.00057	-.00024	.00044	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5791.2**	**4310.9**	**34906.**	**4096.6**
Stddev	1.8	.8	163.	26.3
%RSD	.03169	.01952	.46640	.64143
#1	5789.9	4311.5	34791.	4115.2
#2	5792.5	4310.3	35021.	4078.0

Sample Name: CCVL-6256824 Acquired: 11/24/2020 19:14:39 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00562**	**.19496**	**.01324**	**.02067**	**.00208**
Stddev	.00095	.00565	.00078	.00022	.00001
%RSD	16.915	2.8993	5.8928	1.0558	.49415
#1	.00495	.19896	.01269	.02051	.00209
#2	.00630	.19096	.01379	.02082	.00207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00213**	**.52476**	**.00197**	**.0022**	**.00352**
Stddev	.00003	.00078	.00010	.0079	.00006
%RSD	1.1840	.14808	4.9591	363.8	1.7770
#1	.00212	.52531	.00204	.0077	.00356
#2	.00215	.52421	.00190	-.0034	.00347
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00417**	**.00994**	**.05298**	**.50332**	**.02929**
Stddev	.00008	.00000	.00523	.01598	.00040
%RSD	1.9114	.02899	9.8639	3.1756	1.3701
#1	.00411	.00994	.04928	.51462	.02957
#2	.00422	.00995	.05667	.49202	.02901
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 19:14:39 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20785**	**.00324**	**.01020**	**1.0386**	**.00957**
Stddev	.00220	.00007	.00006	.0046	.00013
%RSD	1.0577	2.0784	.63075	.44540	1.3260
#1	.20940	.00329	.01015	1.0419	.00948
#2	.20630	.00319	.01024	1.0353	.00966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00936**	**.18236**	**.01784**	**.02256**
Stddev	.00	.00052	.00038	.00062	.00026
%RSD	.0002	5.5518	.20751	3.4969	1.1434
#1	25.00	.00972	.18262	.01828	.02274
#2	25.00	.00899	.18209	.01740	.02238
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.48380**	**.00945**	**.00494**	F **.9972**	**.00494**
Stddev	.00275	.00041	.00002	.0035	.00004
%RSD	.56818	4.3559	.34256	.3473	.79120
#1	.48186	.00916	.00496	.9948	.00496
#2	.48575	.00974	.00493	.9997	.00491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 19:14:39 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01932**	**.00461**	**.01024**	F **1.001**
Stddev	.00089	.00003	.00043	.001
%RSD	4.6072	.66984	4.2439	.0450
#1	.01995	.00459	.00994	1.001
#2	.01869	.00463	.01055	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5703.6**	**4283.7**	**34614.**	**4037.0**
Stddev	6.5	4.9	107.	50.9
%RSD	.11435	.11425	.30862	1.2599
#1	5708.2	4287.1	34539.	4073.0
#2	5699.0	4280.2	34690.	4001.0

Sample Name: 480-178303-A-7-A Acquired: 11/24/2020 19:18:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.44487**	**.01330**	**.04103**	**.13365**
Stddev	.00099	.02339	.00042	.00008	.00001
%RSD	148.81	5.2575	3.1630	.20149	.00526
#1	.00137	.42833	.01300	.04098	.13365
#2	-.00003	.46141	.01359	.04109	.13364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**129.78**	**.00020**	**-.0191**	**.00070**
Stddev	.00003	.01	.00002	.0037	.00014
%RSD	43.459	.00528	9.7874	19.22	19.937
#1	.00005	129.78	.00021	-.0217	.00079
#2	.00009	129.79	.00018	-.0165	.00060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00272**	**.00263**	**11.821**	**3.7141**	**.00183**
Stddev	.00027	.00103	.017	.0077	.00102
%RSD	9.8295	39.344	.14198	.20878	55.423
#1	.00291	.00190	11.809	3.7086	.00112
#2	.00253	.00336	11.833	3.7196	.00255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-A-7-A Acquired: 11/24/2020 19:18:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**34.032**	**.83113**	**-.00020**	**20.196**	**.00487**
Stddev	.025	.00054	.00009	.003	.00040
%RSD	.07397	.06442	43.835	.01278	8.1243
#1	34.014	.83075	-.00014	20.195	.00515
#2	34.049	.83151	-.00027	20.198	.00459
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.08**	**.00354**	**2.7634**	**-.00361**	**-.00070**
Stddev	.00	.00035	.0027	.00095	.00294
%RSD	.0019	9.8366	.09578	26.337	422.35
#1	25.08	.00329	2.7653	-.00429	-.00277
#2	25.08	.00378	2.7616	-.00294	.00138
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.9229**	**.00048**	**.27903**	**.9990**	**.00697**
Stddev	.0001	.00012	.00072	.0037	.00013
%RSD	.00233	25.744	.25749	.3750	1.8320
#1	4.9230	.00039	.27853	1.002	.00688
#2	4.9228	.00056	.27954	.9963	.00706
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-A-7-A Acquired: 11/24/2020 19:18:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.00044**	**.00621**	**.9995**
Stddev	.00020	.00036	.00011	.0011
%RSD	104.57	81.532	1.7982	.1145
#1	-.00005	.00069	.00629	.9987
#2	-.00034	.00019	.00613	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5058.4**	**4125.1**	**32960.**	**4086.4**
Stddev	2.5	5.2	28.	5.6
%RSD	.04954	.12514	.08446	.13670
#1	5060.2	4128.7	32980.	4082.4
#2	5056.7	4121.4	32940.	4090.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.181%	95.011%	94.609%	100.52%
Range				

Sample Name: 480-178303-A-9-A Acquired: 11/24/2020 19:22:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.60899**	**.06412**	**.13336**	**.27837**
Stddev	.00031	.02004	.00090	.00031	.00008
%RSD	157.11	3.2907	1.4110	.23192	.02708
#1	-.00002	.62316	.06348	.13314	.27842
#2	.00042	.59482	.06476	.13358	.27832
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**154.60**	**.00029**	**.0022**	**.00064**
Stddev	.00008	.42	.00002	.0061	.00003
%RSD	101.25	.27330	7.7110	276.3	3.9898
#1	.00002	154.90	.00031	.0065	.00066
#2	.00013	154.30	.00028	-.0021	.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00086**	**.00275**	**21.727**	**4.8060**	**.01074**
Stddev	.00009	.00057	.116	.0644	.00015
%RSD	10.608	20.884	.53343	1.3407	1.3949
#1	.00079	.00235	21.809	4.8516	.01085
#2	.00092	.00316	21.645	4.7605	.01063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-A-9-A Acquired: 11/24/2020 19:22:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**73.158**	**1.7087**	**-.00065**	**48.061**	**.00393**
Stddev	.198	.0022	.00008	.225	.00029
%RSD	.27093	.12666	12.842	.46814	7.3297
#1	73.018	1.7072	-.00059	48.220	.00373
#2	73.298	1.7102	-.00071	47.902	.00413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.09**	**.00468**	**5.4882**	**-.00345**	**-.00243**
Stddev	.00	.00046	.0035	.00068	.00053
%RSD	.0030	9.8040	.06367	19.834	21.802
#1	25.09	.00436	5.4907	-.00393	-.00206
#2	25.09	.00501	5.4857	-.00296	-.00281
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.9914**	**.00010**	**.43677**	**1.013**	**.01011**
Stddev	.0149	.00030	.00222	.002	.00005
%RSD	.14869	292.59	.50911	.2370	.48587
#1	9.9809	-.00011	.43834	1.011	.01015
#2	10.002	.00032	.43520	1.015	.01008
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-A-9-A Acquired: 11/24/2020 19:22:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00071**	**.00068**	**.00423**	**.9998**
Stddev	.00022	.00009	.00028	.0015
%RSD	30.587	13.526	6.6515	.1496
#1	-.00086	.00075	.00443	.9988
#2	-.00056	.00062	.00403	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4915.3**	**4094.8**	**32776.**	**4153.8**
Stddev	.3	3.7	74.	31.9
%RSD	.00518	.09031	.22470	.76875
#1	4915.2	4097.5	32829.	4131.2
#2	4915.5	4092.2	32724.	4176.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.715%	94.315%	94.082%	102.18%
Range				

Sample Name: 480-178303-C-11-A Acquired: 11/24/2020 19:25:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**-.02786**	**.09962**	**.16778**	**.31552**
Stddev	.00010	.02923	.00073	.00011	.00041
%RSD	16.606	104.95	.73100	.06676	.13143
#1	.00052	-.00718	.09911	.16786	.31581
#2	.00066	-.04853	.10014	.16770	.31523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**125.62**	**.00054**	**-.0052**	**.00125**
Stddev	.00006	.11	.00013	.0051	.00009
%RSD	108.54	.08813	23.861	97.44	7.3663
#1	-.00001	125.70	.00063	-.0088	.00131
#2	-.00010	125.54	.00045	-.0016	.00118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**-.00005**	**10.755**	**7.2056**	**.01529**
Stddev	.00003	.00048	.002	.0309	.00104
%RSD	3.1644	1018.7	.01798	.42847	6.8253
#1	.00080	-.00038	10.756	7.1838	.01603
#2	.00084	.00029	10.753	7.2274	.01455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-C-11-A Acquired: 11/24/2020 19:25:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**109.88**	**.42794**	**-.00061**	**51.708**	**.01069**
Stddev	.18	.00075	.00014	.052	.00005
%RSD	.16287	.17609	22.091	.10074	.50297
#1	109.75	.42741	-.00071	51.745	.01073
#2	110.00	.42847	-.00052	51.672	.01065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**.00145**	**4.2788**	**-.00142**	**.00078**
Stddev	.00	.00020	.0130	.00088	.00176
%RSD	.0071	14.113	.30382	62.315	225.42
#1	25.01	.00160	4.2696	-.00204	-.00046
#2	25.01	.00131	4.2880	-.00079	.00202
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.4333**	**-.00014**	**.39915**	**1.009**	**.00103**
Stddev	.0337	.00025	.00016	.001	.00046
%RSD	.35700	180.01	.03946	.0638	44.059
#1	9.4571	-.00031	.39926	1.008	.00136
#2	9.4095	.00004	.39904	1.009	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-C-11-A Acquired: 11/24/2020 19:25:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00094**	**-.00069**	**.00202**	**1.000**
Stddev	.00044	.00009	.00040	.000
%RSD	46.237	13.074	20.024	.0103
#1	-.00125	-.00076	.00230	1.000
#2	-.00063	-.00063	.00173	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4890.4**	**4028.2**	**32426.**	**4098.2**
Stddev	1.8	.9	99.	16.6
%RSD	.03687	.02328	.30382	.40391
#1	4889.1	4028.8	32496.	4109.9
#2	4891.7	4027.5	32357.	4086.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.286%	92.779%	93.077%	100.81%
Range				

Sample Name: 480-178303-C-13-A Acquired: 11/24/2020 19:29:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**.02274**	**.02039**	**.05347**	**.14947**
Stddev	.00059	.00003	.00072	.00027	.00020
%RSD	476.77	.14657	3.5378	.49983	.13383
#1	.00055	.02272	.01988	.05366	.14961
#2	-.00030	.02276	.02090	.05328	.14933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**134.95**	**.00041**	**-.0265**	**.00202**
Stddev	.00008	.20	.00001	.0570	.00017
%RSD	535.79	.15039	3.0779	215.1	8.6652
#1	.00004	134.80	.00040	.0138	.00214
#2	-.00007	135.09	.00042	-.0669	.00189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**.00015**	**9.9144**	**2.0337**	**.00634**
Stddev	.00016	.00019	.0277	.0061	.00013
%RSD	65.368	130.11	.27951	.29969	2.0816
#1	.00013	.00001	9.8948	2.0380	.00624
#2	.00035	.00029	9.9340	2.0294	.00643
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-C-13-A Acquired: 11/24/2020 19:29:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**53.961**	**2.4474**	**-.00074**	**86.023**	**.00114**
Stddev	.216	.0082	.00005	.252	.00010
%RSD	.39937	.33678	6.3358	.29339	8.3915
#1	54.113	2.4532	-.00078	85.844	.00120
#2	53.808	2.4416	-.00071	86.201	.00107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.06**	**.00091**	**8.9350**	**-.00292**	**-.00059**
Stddev	.00	.00006	.0337	.00010	.00171
%RSD	.0014	6.7317	.37672	3.3577	289.01
#1	25.06	.00095	8.9588	-.00299	-.00180
#2	25.06	.00086	8.9112	-.00285	.00062
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.5640**	**.00017**	**.31513**	**1.005**	**.00133**
Stddev	.0173	.00034	.00095	.001	.00010
%RSD	.22830	202.63	.30206	.0457	7.7269
#1	7.5518	.00041	.31446	1.005	.00141
#2	7.5762	-.00007	.31580	1.005	.00126
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178303-C-13-A Acquired: 11/24/2020 19:29:26 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00188**	**-.00053**	**.00112**	**.9984**
Stddev	.00019	.00009	.00023	.0018
%RSD	10.325	17.402	20.630	.1841
#1	-.00202	-.00059	.00096	.9997
#2	-.00174	-.00046	.00128	.9971
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4915.3**	**4046.9**	**32490.**	**4088.5**
Stddev	1.2	3.1	48.	1.7
%RSD	.02379	.07621	.14891	.04202
#1	4916.1	4049.1	32456.	4089.7
#2	4914.4	4044.7	32524.	4087.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.714%	93.211%	93.259%	100.57%
Range				

Sample Name: 480-178317-E-1-A Acquired: 11/24/2020 19:33:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.13776**	**-.00080**	**.04269**	**.02737**
Stddev	.00072	.03137	.00017	.00009	.00001
%RSD	2319.8	22.772	21.256	.21217	.02079
#1	-.00048	.15995	-.00068	.04262	.02736
#2	.00054	.11558	-.00092	.04275	.02737
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**16.984**	**-.00007**	**.0276**	**.00003**
Stddev	.00010	.008	.00009	.0103	.00006
%RSD	119.17	.04668	136.67	37.40	218.12
#1	.00015	16.978	-.00000	.0349	-.00002
#2	.00001	16.989	-.00013	.0203	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.00162**	**.19090**	**6.0948**	**.00222**
Stddev	.00017	.00005	.00526	.0146	.00108
%RSD	41.818	3.2617	2.7534	.23897	48.509
#1	.00029	.00166	.18718	6.0845	.00298
#2	.00054	.00158	.19461	6.1051	.00146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178317-E-1-A Acquired: 11/24/2020 19:33:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.8153**	**.01067**	**-.00042**	**8.4710**	**.00016**
Stddev	.0023	.00002	.00018	.0106	.00016
%RSD	.08311	.14716	43.012	.12555	104.47
#1	2.8136	.01066	-.00029	8.4635	.00027
#2	2.8170	.01068	-.00055	8.4785	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**.00066**	**4.1629**	**-.00146**	**.00018**
Stddev	.00	.00034	.0031	.00179	.00016
%RSD	.0028	50.672	.07363	122.29	84.924
#1	25.01	.00043	4.1651	-.00272	.00007
#2	25.02	.00090	4.1607	-.00020	.00030
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.6499**	**-.00014**	**.11693**	**1.003**	**.00257**
Stddev	.0076	.00013	.00032	.004	.00018
%RSD	.20703	89.169	.27701	.4035	6.9666
#1	3.6446	-.00005	.11670	.9997	.00269
#2	3.6552	-.00023	.11716	1.005	.00244
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178317-E-1-A Acquired: 11/24/2020 19:33:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00026**	**-.00001**	**.00203**	**.9993**
Stddev	.00022	.00025	.00001	.0005
%RSD	83.120	1691.9	.71649	.0488
#1	-.00011	.00016	.00204	.9997
#2	-.00041	-.00019	.00202	.9990
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5554.0**	**4267.9**	**34422.**	**4130.2**
Stddev	2.0	5.2	143.	1.6
%RSD	.03581	.12098	.41671	.03803
#1	5555.4	4271.6	34523.	4131.3
#2	5552.6	4264.3	34320.	4129.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.722%	98.301%	98.805%	101.60%
Range				

Sample Name: 480-178317-E-2-A Acquired: 11/24/2020 19:36:51 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**-.00411**	**.01330**	**.44419**	**.12458**
Stddev	.00012	.01776	.00041	.00006	.00009
%RSD	28.142	431.68	3.1081	.01424	.07127
#1	-.00052	-.01667	.01300	.44414	.12452
#2	-.00035	.00844	.01359	.44423	.12465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**157.02**	**.00039**	**-.0106**	**-.00004**
Stddev	.00013	.02	.00004	.0332	.00008
%RSD	528.51	.01092	11.313	314.1	216.94
#1	.00007	157.00	.00036	-.0341	-.00009
#2	-.00012	157.03	.00042	.0129	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.00063**	**7.3395**	**34.507**	**.01289**
Stddev	.00028	.00039	.0245	.043	.00166
%RSD	176.16	61.664	.33419	.12339	12.884
#1	-.00035	.00035	7.3222	34.477	.01172
#2	.00004	.00090	7.3569	34.537	.01407
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178317-E-2-A Acquired: 11/24/2020 19:36:51 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**107.11**	**1.2805**	**-.00083**	F **1095.0**	**.00023**
Stddev	.06	.0007	.00016	.2	.00007
%RSD	.05960	.05740	18.939	.01525	30.829
#1	107.16	1.2810	-.00072	1095.2	.00018
#2	107.07	1.2800	-.00095	1094.9	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.23**	**.00172**	F **119.89**	**-.00306**	**-.00030**
Stddev	.00	.00102	.14	.00072	.00013
%RSD	.0017	58.927	.11578	23.671	44.677
#1	25.22	.00244	119.99	-.00255	-.00020
#2	25.23	.00101	119.79	-.00357	-.00039
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.9133**	**-.00006**	**1.3178**	**.9984**	**.00103**
Stddev	.0324	.00011	.0000	.0085	.00010
%RSD	.32715	199.25	.00313	.8548	10.121
#1	9.8904	-.00013	1.3177	1.004	.00096
#2	9.9363	.00002	1.3178	.9924	.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178317-E-2-A Acquired: 11/24/2020 19:36:51 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00105**	**-.00092**	**.00032**	**.9975**
Stddev	.00013	.00014	.00011	.0007
%RSD	12.697	15.615	34.550	.0740
#1	-.00115	-.00082	.00039	.9980
#2	-.00096	-.00103	.00024	.9970
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4258.0**	**3751.5**	**29284.**	**3974.0**
Stddev	.8	2.9	87.	10.1
%RSD	.01768	.07814	.29757	.25385
#1	4257.5	3749.4	29222.	3966.9
#2	4258.6	3753.5	29345.	3981.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	73.387%	86.406%	84.056%	97.755%
Range				

Sample Name: 480-178317-E-3-A Acquired: 11/24/2020 19:40:35 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.09446**	**-.00101**	**.44500**	**.08933**
Stddev	.00051	.00379	.00102	.00045	.00014
%RSD	1120.1	4.0158	100.86	.10083	.15224
#1	-.00040	.09178	-.00029	.44532	.08923
#2	.00031	.09714	-.00173	.44469	.08942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**101.00**	**.00029**	**.0009**	**.00013**
Stddev	.00000	.15	.00003	.0009	.00019
%RSD	8.5209	.14930	9.0717	91.98	147.50
#1	-.00002	100.90	.00031	.0016	-.00001
#2	-.00002	101.11	.00027	.0003	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00148**	**.00236**	**3.4350**	**25.645**	**.00479**
Stddev	.00047	.00002	.0042	.014	.00308
%RSD	31.913	.96079	.12298	.05557	64.331
#1	.00181	.00237	3.4320	25.635	.00697
#2	.00114	.00234	3.4379	25.655	.00261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178317-E-3-A Acquired: 11/24/2020 19:40:35 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**35.741**	**.11888**	**.00189**	**258.55**	**.00014**
Stddev	.038	.00008	.00008	.06	.00003
%RSD	.10673	.06980	4.4031	.02408	17.555
#1	35.714	.11883	.00183	258.59	.00013
#2	35.768	.11894	.00194	258.50	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.68**	**.00176**	**1.5137**	**-.00075**	**-.00074**
Stddev	.00	.00084	.0007	.00135	.00118
%RSD	.0013	47.510	.04876	181.59	160.03
#1	26.68	.00235	1.5131	-.00170	.00010
#2	26.68	.00117	1.5142	.00021	-.00158
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.256**	**-.00002**	**.71257**	**.9974**	**.00441**
Stddev	.004	.00005	.00092	.0048	.00059
%RSD	.02479	251.38	.12862	.4836	13.333
#1	17.253	-.00005	.71192	.9940	.00483
#2	17.259	.00001	.71322	1.001	.00399
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178317-E-3-A Acquired: 11/24/2020 19:40:35 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00127**	**.00083**	**.00233**	**.9995**
Stddev	.00031	.00002	.00001	.0006
%RSD	24.367	2.5806	.51521	.0603
#1	-.00105	.00082	.00234	.9990
#2	-.00149	.00085	.00232	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4756.6**	**4009.1**	**31704.**	**4043.3**
Stddev	14.1	11.8	85.	29.4
%RSD	.29623	.29352	.26943	.72798
#1	4746.6	4000.7	31644.	4022.4
#2	4766.5	4017.4	31765.	4064.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.979%	92.339%	91.004%	99.459%
Range				

Sample Name: 480-178317-E-4-A Acquired: 11/24/2020 19:44:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.74109**	**.00075**	**.21193**	**.02760**
Stddev	.00091	.00187	.00121	.00057	.00009
%RSD	1590.4	.25181	162.49	.26925	.31093
#1	.00070	.74241	-.00011	.21153	.02766
#2	-.00059	.73977	.00161	.21233	.02754
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**64.349**	**.00041**	**.0244**	**.00215**
Stddev	.00001	.318	.00007	.0017	.00002
%RSD	9.3231	.49477	16.373	7.043	.91160
#1	.00013	64.574	.00036	.0232	.00216
#2	.00014	64.124	.00046	.0256	.00213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00160**	**.00315**	**1.6985**	**14.190**	**.01743**
Stddev	.00003	.00074	.0079	.070	.00211
%RSD	1.8427	23.620	.46594	.49536	12.093
#1	.00162	.00368	1.7041	14.240	.01892
#2	.00158	.00263	1.6929	14.140	.01594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178317-E-4-A Acquired: 11/24/2020 19:44:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**21.737**	**.10914**	**-.00039**	**165.62**	**.00266**
Stddev	.025	.00031	.00007	.50	.00010
%RSD	.11492	.28642	17.716	.30218	3.6457
#1	21.719	.10936	-.00034	165.97	.00259
#2	21.754	.10892	-.00044	165.26	.00273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.17**	**.00240**	**17.186**	**-.00095**	**-.00138**
Stddev	.00	.00035	.014	.00058	.00022
%RSD	.0028	14.630	.08174	60.725	16.261
#1	25.17	.00265	17.196	-.00136	-.00122
#2	25.17	.00215	17.176	-.00054	-.00154
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**13.040**	**.00016**	**.39542**	**.9989**	**.00750**
Stddev	.139	.00018	.00179	.0028	.00038
%RSD	1.0675	110.58	.45176	.2841	5.0255
#1	13.139	.00004	.39669	.9969	.00723
#2	12.942	.00029	.39416	1.001	.00777
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178317-E-4-A Acquired: 11/24/2020 19:44:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00085**	**.00327**	**.03019**	**.9999**
Stddev	.00063	.00020	.00037	.0007
%RSD	73.695	6.0444	1.2288	.0680
#1	-.00041	.00313	.03045	1.000
#2	-.00129	.00341	.02993	.9994
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4945.6**	**4106.5**	**32736.**	**4098.5**
Stddev	2.4	.9	22.	20.9
%RSD	.04882	.02081	.06741	.51103
#1	4947.3	4105.9	32752.	4083.7
#2	4943.9	4107.1	32721.	4113.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.236%	94.583%	93.967%	100.82%
Range				

Sample Name: MB 480-560496/1-A Acquired: 11/24/2020 19:48:02 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**.01299**	**-.00161**	**-.00016**	**.00017**
Stddev	.00079	.00623	.00082	.00029	.00005
%RSD	1172.3	47.950	50.745	186.26	32.305
#1	.00049	.00859	-.00104	-.00036	.00020
#2	-.00063	.01740	-.00219	.00005	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.02136**	**-.00008**	**.0325**	**-.00009**
Stddev	.00003	.00030	.00001	.0207	.00004
%RSD	31.691	1.4259	6.8948	63.64	41.638
#1	.00007	.02114	-.00008	.0471	-.00006
#2	.00012	.02157	-.00008	.0179	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.00136**	**.00186**	**.02612**	**.00152**
Stddev	.00038	.00044	.00009	.03615	.00159
%RSD	968.75	32.286	4.6351	138.36	104.16
#1	.00023	.00105	.00192	.00056	.00265
#2	-.00031	.00167	.00180	.05168	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560496/1-A Acquired: 11/24/2020 19:48:02 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00423**	**.00038**	**-.00076**	**.10545**	**.00026**
Stddev	.00132	.00001	.00002	.00392	.00005
%RSD	31.225	2.2190	2.3651	3.7179	17.644
#1	.00330	.00037	-.00075	.10822	.00023
#2	.00517	.00039	-.00077	.10267	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00030**	**.00374**	**-.00072**	**-.00084**
Stddev	.00	.00003	.00230	.00052	.00202
%RSD	.0062	9.7222	61.444	72.269	238.82
#1	25.02	.00028	.00211	-.00109	-.00227
#2	25.01	.00032	.00536	-.00035	.00058
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00773**	**.00016**	**.00005**	**.9971**	**.00001**
Stddev	.00259	.00038	.00001	.0037	.00032
%RSD	33.454	230.83	9.7629	.3683	2920.9
#1	.00590	.00043	.00005	.9997	-.00022
#2	.00956	-.00010	.00006	.9945	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560496/1-A Acquired: 11/24/2020 19:48:02 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00067**	**-.00047**	**.00075**	**.9996**
Stddev	.00045	.00003	.00006	.0000
%RSD	65.955	7.1315	8.2262	.0034
#1	-.00099	-.00049	.00079	.9995
#2	-.00036	-.00045	.00070	.9996
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5856.8**	**4363.3**	**35347.**	**4193.3**
Stddev	9.9	4.5	133.	60.6
%RSD	.16868	.10323	.37540	1.4451
#1	5863.8	4366.5	35253.	4150.5
#2	5849.8	4360.1	35441.	4236.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.94%	100.50%	101.46%	103.15%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 19:51:52 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.97065**	**49.120**	**.98537**	**1.0193**	**.99242**
Stddev	.00147	.074	.00082	.0003	.00266
%RSD	.15121	.15151	.08325	.02846	.26772
#1	.97168	49.172	.98479	1.0195	.99430
#2	.96961	49.067	.98595	1.0191	.99054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0004**	**49.100**	**.98579**	**.9954**	**.97300**
Stddev	.0031	.078	.00027	.0075	.00064
%RSD	.31329	.15795	.02789	.7510	.06626
#1	1.0027	49.155	.98559	.9902	.97254
#2	.99823	49.045	.98598	1.001	.97345
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0103**	**.97986**	**49.050**	**49.507**	**.98266**
Stddev	.0001	.00145	.102	.073	.00075
%RSD	.00741	.14762	.20699	.14835	.07680
#1	1.0102	.98088	49.121	49.559	.98213
#2	1.0103	.97883	48.978	49.455	.98319
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 19:51:52 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.892**	**.99670**	**1.0214**	**49.528**	**.98283**
Stddev	.092	.00081	.0038	.071	.00092
%RSD	.18734	.08097	.37165	.14366	.09335
#1	48.957	.99727	1.0241	49.579	.98218
#2	48.828	.99613	1.0187	49.478	.98348
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.29**	**.97708**	**24.590**	**.98678**	**.99812**
Stddev	.00	.00048	.003	.00198	.00021
%RSD	.0056	.04902	.01115	.20034	.02133
#1	37.29	.97674	24.591	.98538	.99827
#2	37.29	.97742	24.588	.98818	.99797
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6865**	**.97168**	**.98849**	**1.493**	**.98198**
Stddev	.0387	.00010	.00255	.000	.00080
%RSD	.39913	.01057	.25775	.0137	.08183
#1	9.6592	.97175	.99030	1.493	.98254
#2	9.7138	.97161	.98669	1.493	.98141
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 19:51:52 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0023**	**1.0054**	**.98699**	**1.508**
Stddev	.0006	.0004	.00177	.001
%RSD	.05603	.04361	.17967	.0771
#1	1.0019	1.0051	.98824	1.509
#2	1.0027	1.0057	.98573	1.508
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4946.7**	**4179.6**	**32745.**	**4074.9**
Stddev	5.5	3.7	21.	5.8
%RSD	.11173	.08782	.06275	.14320
#1	4950.6	4182.2	32759.	4079.1
#2	4942.7	4177.0	32730.	4070.8

Sample Name: CCB-6254294 Acquired: 11/24/2020 19:55:24 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.00717**	**.00043**	**-.00000**	**.00008**
Stddev	.00036	.02209	.00039	.00005	.00005
%RSD	96.578	308.31	91.561	10463.	64.808
#1	-.00063	.02279	.00071	-.00003	.00004
#2	-.00012	-.00846	.00015	.00003	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00160**	**.00001**	**.0117**	**-.00008**
Stddev	.00003	.00497	.00011	.0319	.00012
%RSD	54.981	310.10	1023.6	274.2	150.03
#1	.00008	.00512	.00009	-.0109	-.00016
#2	.00004	-.00191	-.00007	.0342	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.00029**	**.00017**	**.03178**	**.00156**
Stddev	.00001	.00006	.00262	.00825	.00149
%RSD	14.399	19.828	1558.6	25.969	95.675
#1	.00006	.00033	.00202	.02594	.00050
#2	.00005	.00025	-.00168	.03761	.00261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 19:55:24 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00184**	**.00006**	**.00333**	**.06805**	**.00008**
Stddev	.00316	.00001	.00074	.00571	.00016
%RSD	171.87	15.530	22.268	8.3966	195.34
#1	-.00040	.00005	.00280	.06401	-.00003
#2	.00408	.00006	.00385	.07209	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00047**	**-.00550**	**-.00065**	**.00077**
Stddev	.00	.00104	.00091	.00235	.00383
%RSD	.0007	223.57	16.617	360.49	500.27
#1	25.02	-.00027	-.00485	-.00231	.00347
#2	25.02	.00120	-.00615	.00101	-.00194
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.02203**	**.00059**	**.00006**	**1.002**	**.00041**
Stddev	.00477	.00032	.00005	.003	.00041
%RSD	21.637	54.297	87.268	.2823	98.971
#1	-.01866	.00081	.00002	1.004	.00012
#2	-.02540	.00036	.00010	1.000	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 19:55:24 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00081**	**-.00016**	**.00041**	**1.000**
Stddev	.00093	.00007	.00009	.001
%RSD	114.94	43.904	21.059	.0540
#1	-.00015	-.00011	.00047	1.001
#2	-.00146	-.00020	.00035	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5799.1**	**4313.4**	**34862.**	**4095.7**
Stddev	3.7	1.1	23.	5.3
%RSD	.06452	.02517	.06681	.12882
#1	5801.7	4312.7	34846.	4099.4
#2	5796.4	4314.2	34879.	4091.9

Sample Name: CCVL-6256824 Acquired: 11/24/2020 19:59:13 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00534**	**.22745**	**.01369**	**.01956**	**.00207**
Stddev	.00084	.03560	.00072	.00003	.00002
%RSD	15.670	15.652	5.2284	.15392	1.1794
#1	.00475	.25263	.01318	.01954	.00209
#2	.00593	.20228	.01419	.01958	.00205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00213**	**.51623**	**.00211**	**-.0009**	**.00356**
Stddev	.00003	.00066	.00000	.0284	.00004
%RSD	1.3655	.12715	.22116	3035.	1.2366
#1	.00211	.51577	.00211	-.0210	.00359
#2	.00215	.51670	.00210	.0191	.00352
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00394**	**.01033**	**.05210**	**.48509**	**.03091**
Stddev	.00026	.00052	.00003	.01837	.00018
%RSD	6.6945	5.0736	.05146	3.7867	.58059
#1	.00376	.00996	.05208	.49808	.03104
#2	.00413	.01070	.05212	.47210	.03078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 19:59:13 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20516**	**.00311**	**.01027**	**1.0570**	**.00956**
Stddev	.00279	.00003	.00017	.0042	.00018
%RSD	1.3586	.84893	1.6796	.39766	1.9183
#1	.20713	.00312	.01015	1.0540	.00969
#2	.20318	.00309	.01039	1.0599	.00943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00960**	**.18311**	**.01735**	**.02184**
Stddev	.00	.00006	.00138	.00033	.00091
%RSD	.0032	.63334	.75402	1.8774	4.1532
#1	25.00	.00956	.18213	.01758	.02248
#2	25.00	.00965	.18408	.01712	.02119
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.45830**	**.00904**	**.00487**	F **1.007**	**.00492**
Stddev	.00485	.00033	.00008	.000	.00016
%RSD	1.0582	3.6434	1.5896	.0064	3.2392
#1	.45487	.00927	.00481	1.007	.00480
#2	.46172	.00881	.00492	1.007	.00503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 19:59:13 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01911**	**.00473**	**.00976**	F **1.001**
Stddev	.00030	.00018	.00021	.001
%RSD	1.5554	3.7453	2.1780	.0515
#1	.01890	.00461	.00961	1.000
#2	.01932	.00486	.00991	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5695.7**	**4271.6**	**34616.**	**4058.6**
Stddev	10.8	9.6	2.	29.4
%RSD	.19012	.22567	.00595	.72437
#1	5688.0	4264.8	34618.	4079.4
#2	5703.3	4278.4	34615.	4037.8

Sample Name: LCS 480-560496/2-A Acquired: 11/24/2020 20:02:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04894**	**9.9377**	**.20010**	**.20299**	**.21294**
Stddev	.00064	.0387	.00015	.00002	.00016
%RSD	1.3133	.38903	.07348	.00763	.07497
#1	.04940	9.9650	.20020	.20298	.21282
#2	.04849	9.9104	.20000	.20300	.21305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20818**	**9.9543**	**.19942**	**.0103**	**.18859**
Stddev	.00140	.0537	.00012	.0037	.00027
%RSD	.67105	.53960	.06142	35.72	.14546
#1	.20916	9.9923	.19950	.0129	.18879
#2	.20719	9.9163	.19933	.0077	.18840
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20078**	**.20144**	**9.6877**	**9.9873**	**.20292**
Stddev	.00085	.00028	.0334	.0257	.00033
%RSD	.42307	.13869	.34523	.25784	.16275
#1	.20138	.20163	9.7113	10.006	.20315
#2	.20018	.20124	9.6640	9.9691	.20268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560496/2-A Acquired: 11/24/2020 20:02:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8737**	**.20404**	**.20925**	**9.9626**	**.18894**
Stddev	.0043	.00058	.00030	.0507	.00014
%RSD	.04316	.28217	.14199	.50837	.07495
#1	9.8768	.20445	.20946	9.9984	.18884
#2	9.8707	.20364	.20904	9.9268	.18904
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.70**	**.19379**	**9.7418**	**.20092**	**.20209**
Stddev	.00	.00078	.0253	.00111	.00127
%RSD	.0008	.40246	.25943	.55281	.63076
#1	24.70	.19324	9.7597	.20171	.20300
#2	24.70	.19434	9.7240	.20014	.20119
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.5369**	**.18886**	**.19999**	**1.013**	**.19993**
Stddev	.0593	.00027	.00051	.005	.00023
%RSD	.62149	.14154	.25565	.4638	.11700
#1	9.5788	.18905	.20035	1.016	.19977
#2	9.4950	.18867	.19963	1.009	.20010
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560496/2-A Acquired: 11/24/2020 20:02:58 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20040**	**.20100**	**.19720**	**1.001**
Stddev	.00101	.00048	.00070	.001
%RSD	.50343	.24000	.35648	.0750
#1	.19969	.20065	.19770	1.002
#2	.20111	.20134	.19670	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5443.4**	**4279.5**	**34104.**	**4124.4**
Stddev	4.1	3.0	61.	45.7
%RSD	.07470	.06938	.17868	1.1084
#1	5446.3	4281.6	34147.	4092.1
#2	5440.5	4277.4	34061.	4156.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.816%	98.567%	97.892%	101.45%
Range				

Sample Name: 480-178318-D-1-A Acquired: 11/24/2020 20:06:32 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**9.5997**	**.00437**	**.01568**	**.11205**
Stddev	.00060	.0151	.00123	.00012	.00006
%RSD	101.09	.15733	28.150	.79462	.05713
#1	.00102	9.6103	.00524	.01559	.11200
#2	.00017	9.5890	.00350	.01577	.11210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00100**	**44.494**	**.00019**	**.0594**	**.00425**
Stddev	.00003	.131	.00000	.0312	.00002
%RSD	3.2105	.29488	.61663	52.48	.40028
#1	.00098	44.401	.00019	.0815	.00424
#2	.00102	44.586	.00019	.0374	.00426
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01512**	**.01204**	**8.2990**	**10.148**	**.01140**
Stddev	.00016	.00006	.0344	.087	.00059
%RSD	1.0312	.46720	.41478	.85634	5.1571
#1	.01523	.01208	8.2746	10.087	.01181
#2	.01501	.01200	8.3233	10.210	.01098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-1-A Acquired: 11/24/2020 20:06:32 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.363**	**1.6824**	**.00291**	**11.172**	**.00724**
Stddev	.033	.0042	.00013	.039	.00008
%RSD	.26749	.24829	4.4417	.35150	1.1175
#1	12.340	1.6794	.00282	11.144	.00730
#2	12.386	1.6853	.00300	11.199	.00718
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.12**	**.00844**	**15.101**	**-.00137**	**-.00012**
Stddev	.00	.00013	.035	.00155	.00170
%RSD	.0018	1.5439	.23425	113.51	1409.1
#1	25.12	.00835	15.076	-.00027	.00108
#2	25.12	.00854	15.126	-.00246	-.00132
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.274**	**.00126**	**.22293**	**1.005**	**.31046**
Stddev	.147	.00064	.00086	.004	.00056
%RSD	.56098	50.471	.38598	.3840	.18075
#1	26.170	.00171	.22232	1.002	.31006
#2	26.378	.00081	.22354	1.007	.31085
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-1-A Acquired: 11/24/2020 20:06:32 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00005**	**.00978**	**.03278**	**1.000**
Stddev	.00117	.00011	.00011	.001
%RSD	2256.4	1.0804	.32285	.0559
#1	.00088	.00971	.03271	1.001
#2	-.00078	.00986	.03286	.9998
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5347.2**	**4300.6**	**34228.**	**4189.3**
Stddev	7.6	7.8	140.	12.6
%RSD	.14139	.18225	.40785	.29986
#1	5341.8	4295.0	34327.	4198.2
#2	5352.5	4306.1	34129.	4180.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.158%	99.053%	98.249%	103.05%
Range				

Sample Name: 480-178318-D-3-A Acquired: 11/24/2020 20:10:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.22802**	**.00018**	**.00650**	**.02245**
Stddev	.00066	.02880	.00026	.00013	.00010
%RSD	2393.2	12.632	150.70	2.0262	.43490
#1	-.00049	.24839	.00036	.00640	.02252
#2	.00044	.20765	-.00001	.00659	.02238
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00052**	**8.9653**	**.00044**	**.0143**	**.03728**
Stddev	.00005	.0388	.00005	.0186	.00006
%RSD	9.2836	.43294	11.167	129.9	.16643
#1	.00049	8.9928	.00048	.0012	.03733
#2	.00056	8.9379	.00041	.0275	.03724
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**.19753**	**.03320**	**2.4546**	**.00464**
Stddev	.00032	.00052	.00071	.0214	.00229
%RSD	136.53	.26101	2.1511	.87058	49.438
#1	.00046	.19716	.03371	2.4395	.00302
#2	.00001	.19789	.03270	2.4697	.00626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-A Acquired: 11/24/2020 20:10:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.4093**	**.75873**	**.01625**	**8.3304**	**.17361**
Stddev	.0129	.00070	.00023	.0071	.00003
%RSD	.53565	.09274	1.3888	.08540	.01532
#1	2.4184	.75922	.01609	8.3354	.17363
#2	2.4002	.75823	.01641	8.3253	.17359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.71**	**.00028**	**7.6748**	**.00037**	**-.00137**
Stddev	.00	.00002	.0041	.00074	.00115
%RSD	.0002	8.4153	.05290	203.03	83.900
#1	24.71	.00030	7.6720	-.00016	-.00056
#2	24.71	.00026	7.6777	.00089	-.00218
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.6946**	**.00013**	**.10639**	**.9993**	**.00113**
Stddev	.0243	.00017	.00019	.0007	.00012
%RSD	.31539	131.86	.17446	.0686	10.299
#1	7.6774	.00001	.10652	.9988	.00122
#2	7.7118	.00025	.10626	.9998	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-A Acquired: 11/24/2020 20:10:13 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.00001**	**.01387**	**.9996**
Stddev	.00017	.00004	.00010	.0009
%RSD	66.456	372.04	.68517	.0862
#1	-.00037	-.00002	.01394	.9990
#2	-.00013	.00004	.01381	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5666.3**	**4340.1**	**34897.**	**4244.3**
Stddev	1.3	5.8	44.	36.3
%RSD	.02350	.13424	.12489	.85638
#1	5667.3	4344.2	34866.	4218.6
#2	5665.4	4335.9	34928.	4270.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.658%	99.963%	100.17%	104.40%
Range				

Sample Name: 480-178318-D-3-ASD@5 Acquired: 11/24/2020 20:13:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.04488**	**-.00194**	**.00072**	**.00459**
Stddev	.00036	.00207	.00129	.00009	.00002
%RSD	1064.3	4.6081	66.274	12.484	.44071
#1	-.00029	.04634	-.00103	.00079	.00458
#2	.00022	.04342	-.00285	.00066	.00461
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**1.8517**	**.00007**	**-.0049**	**.00737**
Stddev	.00000	.0095	.00019	.0076	.00006
%RSD	.07721	.51325	261.19	154.2	.84975
#1	.00020	1.8584	-.00006	-.0103	.00733
#2	.00020	1.8450	.00021	.0004	.00741
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00019**	**.04127**	**.00713**	**.52577**	**.00139**
Stddev	.00007	.00029	.00026	.02024	.00069
%RSD	37.949	.71319	3.6567	3.8491	49.771
#1	-.00014	.04106	.00731	.51146	.00090
#2	-.00024	.04147	.00694	.54008	.00188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-ASD@5 Acquired: 11/24/2020 20:13:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.49014**	**.15398**	**.00287**	**1.7122**	**.03433**
Stddev	.00203	.00020	.00003	.0038	.00013
%RSD	.41352	.13117	1.1345	.22138	.37551
#1	.48871	.15413	.00284	1.7096	.03423
#2	.49157	.15384	.00289	1.7149	.03442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.95**	**-.00019**	**1.5199**	**-.00126**	**-.00032**
Stddev	.00	.00014	.0044	.00027	.00059
%RSD	.0000	77.229	.29048	21.391	181.85
#1	24.95	-.00029	1.5167	-.00107	-.00074
#2	24.95	-.00009	1.5230	-.00145	.00009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.5601**	**.00006**	**.02153**	**.9966**	**-.00003**
Stddev	.0233	.00012	.00012	.0037	.00002
%RSD	1.4933	204.10	.55446	.3697	78.411
#1	1.5436	-.00003	.02145	.9940	-.00005
#2	1.5765	.00015	.02162	.9992	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-ASD@5 Acquired: 11/24/2020 20:13:52 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00039**	**-.00014**	**.00324**	**.9998**
Stddev	.00010	.00001	.00033	.0005
%RSD	24.408	9.8502	10.138	.0526
#1	-.00032	-.00013	.00301	1.000
#2	-.00046	-.00015	.00348	.9994
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5795.1**	**4334.3**	**34894.**	**4113.4**
Stddev	2.5	2.7	21.	3.5
%RSD	.04231	.06288	.06097	.08587
#1	5796.8	4332.4	34909.	4115.9
#2	5793.4	4336.3	34879.	4110.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.878%	99.831%	100.16%	101.18%
Range				

Sample Name: 480-178318-D-3-APDS Acquired: 11/24/2020 20:17:35 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05202**	**10.619**	**.20960**	**.21823**	**.23245**
Stddev	.00082	.011	.00010	.00049	.00038
%RSD	1.5763	.09891	.04817	.22367	.16194
#1	.05144	10.612	.20952	.21858	.23218
#2	.05260	10.627	.20967	.21789	.23271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21782**	**18.966**	**.20717**	**.0032**	**.23319**
Stddev	.00090	.082	.00007	.0657	.00036
%RSD	.41435	.43248	.03616	2042.	.15332
#1	.21718	18.908	.20722	-.0433	.23344
#2	.21846	19.024	.20711	.0497	.23294
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20761**	**.39508**	**10.056**	**12.609**	**.21157**
Stddev	.00006	.00045	.050	.064	.00123
%RSD	.02889	.11355	.50041	.51067	.58148
#1	.20757	.39477	10.020	12.564	.21244
#2	.20766	.39540	10.091	12.655	.21070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-APDS Acquired: 11/24/2020 20:17:35 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.437**	**.93343**	**.23286**	**18.225**	**.36704**
Stddev	.003	.00035	.00114	.095	.00040
%RSD	.02025	.03706	.48764	.51882	.10989
#1	12.435	.93319	.23366	18.158	.36675
#2	12.438	.93368	.23205	18.292	.36732
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.40**	**.20099**	**17.658**	**.20880**	**.20980**
Stddev	.00	.00068	.021	.00257	.00142
%RSD	.0046	.33669	.11885	1.2319	.67589
#1	24.40	.20146	17.673	.21062	.21080
#2	24.40	.20051	17.644	.20698	.20880
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.633**	**.20342**	**.30761**	**1.007**	**.20846**
Stddev	.019	.00047	.00123	.004	.00060
%RSD	.10612	.23233	.39924	.4282	.28601
#1	17.620	.20376	.30674	1.004	.20888
#2	17.646	.20309	.30848	1.010	.20804
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-APDS Acquired: 11/24/2020 20:17:35 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20878**	**.20823**	**.21788**	**.9999**
Stddev	.00180	.00019	.00051	.0009
%RSD	.86128	.09233	.23628	.0910
#1	.20751	.20837	.21825	.9992
#2	.21005	.20809	.21752	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5351.5**	**4269.4**	**33987.**	**4144.2**
Stddev	3.2	4.6	54.	7.3
%RSD	.06020	.10739	.16008	.17534
#1	5353.8	4272.6	33949.	4139.1
#2	5349.2	4266.1	34026.	4149.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.232%	98.335%	97.557%	101.94%
Range				

Sample Name: 480-178318-D-3-B MS Acquired: 11/24/2020 20:21:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04904**	**9.9461**	**.19978**	**.20762**	**.23156**
Stddev	.00007	.0246	.00061	.00020	.00036
%RSD	.13844	.24759	.30330	.09550	.15729
#1	.04900	9.9287	.20021	.20748	.23182
#2	.04909	9.9635	.19935	.20776	.23131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20600**	**18.500**	**.19673**	**.0106**	**.22459**
Stddev	.00006	.000	.00024	.0117	.00025
%RSD	.02862	.00194	.12258	110.8	.11075
#1	.20604	18.501	.19690	.0023	.22476
#2	.20596	18.500	.19656	.0189	.22441
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19785**	**.39021**	**9.5136**	**12.229**	**.20458**
Stddev	.00011	.00009	.0045	.005	.00118
%RSD	.05429	.02234	.04700	.03880	.57864
#1	.19778	.39027	9.5104	12.225	.20542
#2	.19793	.39015	9.5168	12.232	.20374
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-B MS Acquired: 11/24/2020 20:21:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.002**	**.94794**	**.22370**	**17.914**	**.36218**
Stddev	.015	.00016	.00079	.023	.00019
%RSD	.12390	.01736	.35347	.12714	.05369
#1	11.991	.94782	.22426	17.931	.36231
#2	12.012	.94805	.22315	17.898	.36204
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.42**	**.19154**	**17.151**	**.19748**	**.19921**
Stddev	.00	.00126	.004	.00081	.00130
%RSD	.0002	.65665	.02195	.41055	.65331
#1	24.42	.19243	17.148	.19691	.19829
#2	24.42	.19065	17.154	.19805	.20013
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.008**	**.18743**	**.30119**	**1.004**	**.19748**
Stddev	.014	.00071	.00088	.001	.00077
%RSD	.08270	.37832	.29053	.0696	.39032
#1	16.998	.18793	.30181	1.003	.19803
#2	17.018	.18693	.30057	1.004	.19694
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-B MS Acquired: 11/24/2020 20:21:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.19900**	**.19894**	**.20638**	**.9996**
Stddev	.00085	.00011	.00101	.0008
%RSD	.42867	.05600	.48923	.0809
#1	.19960	.19901	.20566	1.000
#2	.19840	.19886	.20709	.9990
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5339.2**	**4261.5**	**34132.**	**4159.2**
Stddev	9.5	9.3	42.	17.7
%RSD	.17804	.21745	.12195	.42650
#1	5332.5	4254.9	34161.	4171.7
#2	5346.0	4268.0	34102.	4146.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.021%	98.153%	97.971%	102.31%
Range				

Sample Name: 480-178318-D-3-C MSD Acquired: 11/24/2020 20:24:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04943**	**10.122**	**.20175**	**.21240**	**.23629**
Stddev	.00036	.050	.00067	.00032	.00029
%RSD	.72910	.49366	.33415	.15295	.12400
#1	.04917	10.087	.20127	.21217	.23650
#2	.04968	10.158	.20222	.21263	.23608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20936**	**18.748**	**.20003**	**.0276**	**.22910**
Stddev	.00018	.057	.00027	.0070	.00003
%RSD	.08654	.30362	.13273	25.35	.01466
#1	.20923	18.707	.20022	.0227	.22913
#2	.20949	18.788	.19984	.0326	.22908
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20103**	**.39514**	**9.6561**	**12.580**	**.20570**
Stddev	.00085	.00062	.0223	.018	.00030
%RSD	.42225	.15669	.23088	.14655	.14641
#1	.20163	.39558	9.6403	12.594	.20591
#2	.20043	.39471	9.6718	12.567	.20549
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-C MSD Acquired: 11/24/2020 20:24:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.238**	**.96867**	**.22880**	**18.310**	**.37122**
Stddev	.013	.00256	.00117	.034	.00011
%RSD	.10706	.26379	.51308	.18296	.03036
#1	12.247	.97048	.22963	18.286	.37130
#2	12.229	.96686	.22797	18.334	.37114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.40**	**.19463**	**17.680**	**.20085**	**.20282**
Stddev	.00	.00038	.006	.00002	.00045
%RSD	.0072	.19381	.03538	.01157	.22022
#1	24.40	.19437	17.684	.20086	.20251
#2	24.41	.19490	17.675	.20083	.20314
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.173**	**.19107**	**.30742**	**1.003**	**.19973**
Stddev	.036	.00002	.00009	.000	.00055
%RSD	.20763	.01227	.02855	.0254	.27575
#1	17.148	.19105	.30748	1.003	.19934
#2	17.198	.19108	.30736	1.003	.20011
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178318-D-3-C MSD Acquired: 11/24/2020 20:24:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20280**	**.20242**	**.20981**	**.9993**
Stddev	.00172	.00056	.00101	.0006
%RSD	.84994	.27591	.48260	.0553
#1	.20158	.20282	.20910	.9997
#2	.20402	.20203	.21053	.9989
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5371.2**	**4299.6**	**34234.**	**4201.9**
Stddev	6.2	1.7	144.	20.8
%RSD	.11483	.03961	.42110	.49411
#1	5366.8	4298.4	34132.	4216.5
#2	5375.5	4300.8	34336.	4187.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.571%	99.030%	98.266%	103.36%
Range				

Sample Name: 480-178335-A-1-A Acquired: 11/24/2020 20:28:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00858**	**6.4076**	**.00238**	**1.2963**	**.15135**
Stddev	.00014	.0297	.00169	.0003	.00014
%RSD	1.6509	.46333	71.087	.02527	.09545
#1	.00848	6.4286	.00118	1.2965	.15146
#2	.00868	6.3866	.00357	1.2960	.15125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**644.67**	**.00003**	**-.0130**	**.00331**
Stddev	.00004	6.26	.00009	.0064	.00013
%RSD	1046.8	.97154	275.34	49.12	3.8980
#1	.00003	640.24	-.00003	-.0085	.00340
#2	-.00002	649.10	.00010	-.0175	.00322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01837**	**.08673**	**7.2228**	**2.8212**	**.01045**
Stddev	.00016	.00140	.0086	.0014	.00220
%RSD	.86422	1.6124	.11837	.04993	21.016
#1	.01848	.08772	7.2288	2.8202	.01201
#2	.01826	.08574	7.2167	2.8222	.00890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178335-A-1-A Acquired: 11/24/2020 20:28:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.909**	**.18438**	**.01812**	**112.78**	**.01532**
Stddev	.007	.00047	.00009	.08	.00053
%RSD	.06013	.25390	.48055	.06835	3.4508
#1	10.905	.18405	.01819	112.73	.01569
#2	10.914	.18471	.01806	112.84	.01494
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.89**	**.01014**	F **99.360**	**.00250**	**.00056**
Stddev	.00	.00036	.051	.00090	.00137
%RSD	.0079	3.5513	.05166	35.926	244.60
#1	25.89	.00988	99.324	.00314	.00153
#2	25.89	.01039	99.397	.00187	-.00041
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.2563**	**.00820**	**.68336**	**1.005**	**.13682**
Stddev	.0026	.00026	.00118	.002	.00004
%RSD	.03644	3.1273	.17289	.2075	.02839
#1	7.2544	.00802	.68419	1.004	.13679
#2	7.2581	.00838	.68252	1.006	.13685
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178335-A-1-A Acquired: 11/24/2020 20:28:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00216**	**.01757**	**.72821**	**1.013**
Stddev	.00010	.00018	.00130	.002
%RSD	4.5782	1.0416	.17857	.1458
#1	-.00209	.01744	.72729	1.014
#2	-.00223	.01770	.72913	1.012
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4549.6**	**3831.4**	**30839.**	**3998.3**
Stddev	2.1	2.2	67.	5.1
%RSD	.04691	.05825	.21664	.12693
#1	4548.1	3829.8	30886.	4001.9
#2	4551.1	3833.0	30792.	3994.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.412%	88.247%	88.520%	98.352%
Range				

Sample Name: 480-178367-D-1-A Acquired: 11/24/2020 20:32:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**.01609**	**.00066**	**.01161**	**.01648**
Stddev	.00004	.00622	.00196	.00041	.00003
%RSD	27.474	38.684	296.39	3.5662	.15538
#1	.00016	.02049	-.00072	.01190	.01649
#2	.00011	.01169	.00204	.01132	.01646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**16.253**	**-.00008**	**.0332**	**.00053**
Stddev	.00005	.018	.00003	.0074	.00002
%RSD	134.56	.11145	41.225	22.20	4.6189
#1	-.00007	16.241	-.00006	.0280	.00052
#2	-.00000	16.266	-.00010	.0384	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00047**	**.00336**	**.23760**	**1.2861**	**.00100**
Stddev	.00017	.00012	.00256	.0175	.00050
%RSD	36.226	3.6696	1.0779	1.3584	50.160
#1	.00035	.00327	.23941	1.2985	.00065
#2	.00059	.00344	.23579	1.2737	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178367-D-1-A Acquired: 11/24/2020 20:32:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.67283**	**.01378**	**.02489**	**.86063**	**.00956**
Stddev	.00005	.00003	.00012	.00349	.00017
%RSD	.00772	.23942	.48578	.40552	1.7258
#1	.67280	.01380	.02498	.86309	.00968
#2	.67287	.01376	.02481	.85816	.00945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00026**	**.85675**	**-.00076**	**-.00142**
Stddev	.00	.00110	.00205	.00139	.00235
%RSD	.0031	430.01	.23937	183.02	166.13
#1	25.02	.00104	.85820	-.00174	-.00308
#2	25.02	-.00052	.85530	.00022	.00025
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.5035**	**.00018**	**.02751**	**.9985**	**.00047**
Stddev	.0101	.00017	.00002	.0011	.00005
%RSD	.67414	93.636	.09086	.1151	10.172
#1	1.5107	.00029	.02753	.9994	.00044
#2	1.4963	.00006	.02749	.9977	.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178367-D-1-A Acquired: 11/24/2020 20:32:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00062**	**.00048**	**.00388**	**.9996**
Stddev	.00156	.00021	.00012	.0002
%RSD	250.79	43.239	3.0192	.0226
#1	.00048	.00063	.00380	.9994
#2	-.00172	.00033	.00397	.9997
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5714.0**	**4313.3**	**34953.**	**4168.5**
Stddev	7.5	3.1	8.	3.8
%RSD	.13180	.07297	.02165	.09153
#1	5719.4	4315.6	34958.	4171.2
#2	5708.7	4311.1	34948.	4165.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.481%	99.347%	100.33%	102.54%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 20:35:48 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.96239**	**49.524**	**.98110**	**1.0225**	**.99294**
Stddev	.00188	.102	.00067	.0018	.00215
%RSD	.19579	.20635	.06781	.17219	.21604
#1	.96105	49.597	.98157	1.0213	.99445
#2	.96372	49.452	.98063	1.0238	.99142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0040**	**49.214**	**.98482**	**1.020**	**.96584**
Stddev	.0016	.052	.00120	.002	.00025
%RSD	.15600	.10654	.12197	.2379	.02566
#1	1.0051	49.251	.98567	1.018	.96602
#2	1.0029	49.176	.98397	1.021	.96567
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0097**	**.97494**	**48.860**	**49.384**	**.98871**
Stddev	.0009	.00022	.005	.106	.00175
%RSD	.08572	.02219	.00923	.21444	.17697
#1	1.0091	.97509	48.857	49.459	.98995
#2	1.0103	.97479	48.864	49.310	.98748
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 20:35:48 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.467**	**.99144**	**1.0240**	**49.594**	**.97473**
Stddev	.180	.00195	.0046	.072	.00037
%RSD	.37220	.19676	.44808	.14558	.03823
#1	48.339	.99006	1.0273	49.645	.97500
#2	48.595	.99282	1.0208	49.543	.97447
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.17**	**.96634**	**24.338**	**.98361**	**.99108**
Stddev	.02	.00191	.061	.00404	.00243
%RSD	.0620	.19735	.25121	.41054	.24510
#1	37.19	.96768	24.381	.98647	.99280
#2	37.15	.96499	24.295	.98076	.98936
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8021**	**.96290**	**.98897**	**1.491**	**.97983**
Stddev	.0040	.00046	.00129	.002	.00235
%RSD	.04129	.04780	.13092	.1629	.23975
#1	9.7993	.96322	.98989	1.493	.97816
#2	9.8050	.96257	.98806	1.489	.98149
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 20:35:48 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.99901**	**1.0043**	**.98362**	**1.509**
Stddev	.00134	.0018	.00234	.001
%RSD	.13441	.18198	.23800	.0929
#1	.99806	1.0030	.98196	1.510
#2	.99996	1.0056	.98528	1.508
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4903.6**	**4127.7**	**32517.**	**4013.1**
Stddev	1.0	2.2	120.	16.5
%RSD	.02004	.05341	.36965	.41223
#1	4904.3	4126.2	32602.	4001.4
#2	4902.9	4129.3	32432.	4024.8

Sample Name: CCB-6254294 Acquired: 11/24/2020 20:39:20 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.00761**	**-.00051**	**.00005**	**.00012**
Stddev	.00017	.00976	.00015	.00021	.00001
%RSD	84.692	128.24	28.741	423.07	11.680
#1	-.00031	.01452	-.00040	.00020	.00012
#2	-.00008	.00071	-.00061	-.00010	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.01431**	**.00000**	**.0247**	**-.00002**
Stddev	.00007	.00067	.00000	.0629	.00009
%RSD	152.18	4.7049	517.54	254.2	488.51
#1	.00009	.01478	-.00000	-.0197	-.00008
#2	-.00000	.01383	.00000	.0692	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00167**	**.00313**	**.03757**	**.00074**
Stddev	.00003	.00018	.00076	.01533	.00008
%RSD	55.254	10.588	24.401	40.814	10.716
#1	.00004	.00179	.00367	.04841	.00069
#2	.00008	.00154	.00259	.02673	.00080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 20:39:20 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00409**	**.00009**	**.00366**	**.02591**	**.00005**
Stddev	.00077	.00004	.00094	.00170	.00002
%RSD	18.852	40.747	25.818	6.5571	46.387
#1	.00355	.00011	.00299	.02711	.00006
#2	.00464	.00006	.00432	.02471	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00013**	**-.00197**	**-.00055**	**.00054**
Stddev	.00	.00022	.00061	.00059	.00053
%RSD	.0007	163.44	31.014	106.28	98.371
#1	25.02	.00002	-.00240	-.00014	.00092
#2	25.02	-.00028	-.00154	-.00096	.00016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00962**	**.00076**	**.00002**	**1.002**	**.00033**
Stddev	.00580	.00020	.00001	.002	.00024
%RSD	60.291	26.195	49.135	.1967	74.094
#1	.00552	.00062	.00003	1.001	.00050
#2	.01372	.00090	.00001	1.004	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 20:39:20 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00006**	**-.00003**	**.00046**	**.9994**
Stddev	.00006	.00036	.00036	.0007
%RSD	113.18	1077.2	77.709	.0688
#1	-.00001	-.00029	.00021	.9999
#2	-.00010	.00022	.00071	.9989
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5789.7**	**4321.9**	**34843.**	**4133.9**
Stddev	2.2	.8	165.	40.5
%RSD	.03728	.01776	.47363	.98087
#1	5791.2	4322.5	34727.	4105.2
#2	5788.2	4321.4	34960.	4162.5

Sample Name: CCVL-6256824 Acquired: 11/24/2020 20:43:08 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00531**	**.19333**	**.01468**	**.01957**	**.00211**
Stddev	.00041	.00553	.00077	.00029	.00000
%RSD	7.6486	2.8611	5.2771	1.4986	.22127
#1	.00560	.18942	.01523	.01936	.00210
#2	.00502	.19725	.01414	.01978	.00211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00210**	**.51793**	**.00200**	**.0029**	**.00359**
Stddev	.00003	.00288	.00018	.0197	.00017
%RSD	1.3722	.55577	9.1031	676.0	4.7105
#1	.00208	.51589	.00187	.0168	.00371
#2	.00212	.51996	.00212	-.0110	.00347
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00402**	**.01064**	**.05131**	**.49733**	**.02996**
Stddev	.00000	.00055	.00019	.05993	.00006
%RSD	.10226	5.1937	.36490	12.050	.19109
#1	.00402	.01103	.05117	.45495	.02992
#2	.00402	.01025	.05144	.53970	.03000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 20:43:08 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20296**	**.00315**	**.01046**	**1.0134**	**.00932**
Stddev	.00200	.00001	.00013	.0188	.00010
%RSD	.98436	.25041	1.2814	1.8557	1.1244
#1	.20437	.00316	.01037	1.0001	.00924
#2	.20155	.00315	.01056	1.0267	.00939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00938**	**.18018**	**.01876**	**.02158**
Stddev	.00	.00017	.00043	.00181	.00321
%RSD	.0003	1.8643	.24088	9.6426	14.855
#1	25.00	.00926	.18048	.01748	.01931
#2	25.00	.00951	.17987	.02004	.02385
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.45690**	**.00934**	**.00483**	F **1.002**	**.00488**
Stddev	.01622	.00015	.00006	.003	.00001
%RSD	3.5489	1.5707	1.1782	.2531	.12746
#1	.46837	.00923	.00479	1.001	.00488
#2	.44544	.00944	.00487	1.004	.00488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 20:43:08 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.02028**	**.00446**	**.01008**	F **1.001**
Stddev	.00121	.00019	.00024	.000
%RSD	5.9589	4.2409	2.4059	.0414
#1	.01943	.00459	.00991	1.000
#2	.02114	.00432	.01025	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5707.2**	**4288.1**	**34704.**	**4081.8**
Stddev	2.4	.1	109.	.5
%RSD	.04258	.00287	.31523	.01232
#1	5705.5	4288.2	34626.	4082.1
#2	5708.9	4288.0	34781.	4081.4

Sample Name: 480-178376-A-2-A Acquired: 11/24/2020 20:46:54 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.04937**	**.00094**	**.13610**	**.06458**
Stddev	.00053	.00347	.00005	.00005	.00000
%RSD	1766.6	7.0196	5.8356	.03654	.00714
#1	.00041	.05182	.00098	.13614	.06457
#2	-.00035	.04692	.00090	.13607	.06458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**116.34**	**.00032**	**.0137**	**.00003**
Stddev	.00002	.40	.00000	.0206	.00009
%RSD	192.18	.34354	.59303	150.8	337.42
#1	-.00000	116.63	.00032	.0282	.00009
#2	.00002	116.06	.00032	-.0009	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00063**	**.00364**	**.59389**	**4.0863**	**.00566**
Stddev	.00030	.00001	.00090	.0456	.00018
%RSD	48.047	.17031	.15119	1.1170	3.1345
#1	.00042	.00365	.59325	4.1186	.00579
#2	.00085	.00364	.59452	4.0540	.00554
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178376-A-2-A Acquired: 11/24/2020 20:46:54 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.737**	**.23304**	**.00103**	**103.54**	**.00086**
Stddev	.062	.00067	.00001	.23	.00001
%RSD	.16478	.28951	.68908	.22522	1.1004
#1	37.693	.23257	.00104	103.37	.00087
#2	37.781	.23352	.00103	103.70	.00086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00067**	**34.054**	**-.00232**	**.00104**
Stddev	.00	.00138	.095	.00015	.00046
%RSD	.0000	206.97	.27956	6.3253	44.672
#1	25.02	-.00031	34.121	-.00222	.00071
#2	25.02	.00164	33.986	-.00243	.00136
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.6229**	**-.00026**	**.52269**	**.9947**	**.00190**
Stddev	.0227	.00021	.00200	.0007	.00012
%RSD	.29814	83.263	.38348	.0738	6.1995
#1	7.6390	-.00041	.52411	.9952	.00182
#2	7.6069	-.00011	.52127	.9942	.00198
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178376-A-2-A Acquired: 11/24/2020 20:46:54 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00116**	**-.00037**	**.01211**	**.9985**
Stddev	.00080	.00055	.00013	.0013
%RSD	68.864	150.76	1.0556	.1346
#1	.00060	-.00076	.01220	.9994
#2	.00173	.00002	.01202	.9975
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4937.0**	**4035.1**	**32340.**	**4034.2**
Stddev	6.4	2.6	22.	8.6
%RSD	.13030	.06436	.06719	.21378
#1	4941.5	4036.9	32324.	4028.1
#2	4932.4	4033.3	32355.	4040.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.088%	92.939%	92.829%	99.236%
Range				

Sample Name: 480-178376-A-2-B MS Acquired: 11/24/2020 20:50:36 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04930**	**9.9524**	**.20774**	**.34087**	**.26999**
Stddev	.00001	.0258	.00094	.00018	.00005
%RSD	.01679	.25966	.45431	.05375	.01748
#1	.04930	9.9341	.20840	.34100	.27002
#2	.04931	9.9707	.20707	.34074	.26996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20932**	**125.42**	**.20123**	**.0128**	**.19135**
Stddev	.00068	.21	.00010	.0051	.00017
%RSD	.32346	.17070	.05212	39.97	.08927
#1	.20885	125.27	.20130	.0092	.19147
#2	.20980	125.57	.20115	.0164	.19123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19852**	**.20172**	**10.018**	**14.084**	**.20666**
Stddev	.00046	.00051	.018	.012	.00034
%RSD	.23074	.25256	.18147	.08468	.16477
#1	.19885	.20136	10.005	14.076	.20642
#2	.19820	.20208	10.031	14.093	.20690
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178376-A-2-B MS Acquired: 11/24/2020 20:50:36 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**47.548**	**.43109**	**.21087**	**113.60**	**.19204**
Stddev	.063	.00030	.00101	.34	.00063
%RSD	.13332	.07004	.47949	.30019	.32863
#1	47.503	.43088	.21158	113.84	.19248
#2	47.593	.43131	.21015	113.36	.19159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.72**	**.19504**	**43.944**	**.20005**	**.20457**
Stddev	.00	.00005	.049	.00242	.00260
%RSD	.0067	.02536	.11070	1.2084	1.2725
#1	24.72	.19507	43.978	.20176	.20273
#2	24.72	.19500	43.910	.19834	.20641
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.114**	**.19323**	**.72048**	**1.007**	**.19989**
Stddev	.026	.00018	.00053	.000	.00011
%RSD	.15332	.09392	.07360	.0429	.05518
#1	17.096	.19310	.72011	1.007	.19981
#2	17.133	.19336	.72086	1.008	.19996
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178376-A-2-B MS Acquired: 11/24/2020 20:50:36 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.19922**	**.20171**	**.20402**	**1.001**
Stddev	.00101	.00059	.00018	.001
%RSD	.50709	.29075	.08644	.0720
#1	.19994	.20130	.20414	1.001
#2	.19851	.20213	.20389	1.002
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4822.8**	**4028.5**	**32112.**	**4025.0**
Stddev	8.5	4.5	11.	16.3
%RSD	.17597	.11234	.03576	.40596
#1	4816.8	4025.3	32104.	4036.6
#2	4828.8	4031.7	32120.	4013.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.121%	92.786%	92.175%	99.011%
Range				

Sample Name: 480-178376-A-2-C MSD Acquired: 11/24/2020 20:54:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05091**	**9.9799**	**.21516**	**.35062**	**.27619**
Stddev	.00050	.0130	.00057	.00000	.00022
%RSD	.98537	.12996	.26650	.00119	.07933
#1	.05055	9.9891	.21476	.35062	.27604
#2	.05126	9.9708	.21557	.35062	.27635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21329**	**128.22**	**.20579**	**.0050**	**.19670**
Stddev	.00011	.31	.00054	.0209	.00001
%RSD	.05381	.24071	.26413	414.9	.00651
#1	.21337	128.44	.20540	-.0098	.19669
#2	.21320	128.01	.20617	.0199	.19671
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20321**	**.20530**	**10.215**	**14.478**	**.20828**
Stddev	.00005	.00021	.041	.005	.00063
%RSD	.02664	.10399	.39804	.03707	.30460
#1	.20325	.20545	10.244	14.482	.20873
#2	.20317	.20515	10.186	14.475	.20783
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178376-A-2-C MSD Acquired: 11/24/2020 20:54:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.107**	**.44380**	**.21672**	**117.51**	**.19726**
Stddev	.130	.00015	.00047	.14	.00086
%RSD	.26459	.03491	.21520	.12212	.43578
#1	49.016	.44369	.21705	117.62	.19787
#2	49.199	.44391	.21639	117.41	.19665
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.72**	**.20014**	**45.554**	**.20631**	**.21403**
Stddev	.00	.00122	.004	.00014	.00043
%RSD	.0026	.60972	.00860	.06795	.20137
#1	24.72	.19927	45.551	.20621	.21433
#2	24.72	.20100	45.557	.20641	.21372
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.462**	**.19840**	**.74083**	**1.004**	**.20384**
Stddev	.046	.00074	.00253	.006	.00063
%RSD	.26220	.37055	.34170	.6267	.30904
#1	17.494	.19892	.74262	.9995	.20428
#2	17.429	.19788	.73904	1.008	.20339
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178376-A-2-C MSD Acquired: 11/24/2020 20:54:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20362**	**.20655**	**.20751**	**1.0000**
Stddev	.00006	.00009	.00010	.0001
%RSD	.03153	.04304	.04866	.0144
#1	.20358	.20661	.20758	.9999
#2	.20367	.20649	.20744	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4858.7**	**4074.8**	**32471.**	**4136.8**
Stddev	3.2	5.2	17.	9.0
%RSD	.06506	.12691	.05320	.21652
#1	4860.9	4078.4	32459.	4143.2
#2	4856.4	4071.1	32483.	4130.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.738%	93.853%	93.206%	101.76%
Range				

Sample Name: 480-178377-C-1-A Acquired: 11/24/2020 20:57:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00040**	**.01006**	**.00894**	**.55149**	**.32400**
Stddev	.00068	.01730	.00125	.00019	.00082
%RSD	170.51	171.89	14.008	.03467	.25263
#1	.00008	-.00217	.00983	.55135	.32458
#2	-.00088	.02230	.00806	.55162	.32342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**87.679**	**.00020**	**-.0150**	**.00054**
Stddev	.00008	.127	.00004	.0505	.00005
%RSD	167.50	.14498	20.431	337.3	9.2007
#1	.00010	87.769	.00017	.0208	.00051
#2	-.00001	87.590	.00023	-.0507	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00049**	**.00889**	**2.1556**	**6.3779**	**.00794**
Stddev	.00018	.00058	.0104	.0078	.00069
%RSD	35.525	6.5231	.48016	.12167	8.6633
#1	.00037	.00930	2.1629	6.3724	.00843
#2	.00062	.00848	2.1483	6.3834	.00746
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178377-C-1-A Acquired: 11/24/2020 20:57:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.119**	**1.3983**	**.03166**	**40.520**	**.01446**
Stddev	.038	.0027	.00000	.051	.00015
%RSD	.23555	.19430	.01468	.12470	1.0601
#1	16.146	1.4002	.03166	40.555	.01435
#2	16.092	1.3963	.03167	40.484	.01456
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.01**	**.00639**	**5.1933**	**-.00170**	**-.00237**
Stddev	.00	.00044	.0136	.00021	.00170
%RSD	.0025	6.8532	.26240	12.268	71.721
#1	25.01	.00608	5.2029	-.00185	-.00358
#2	25.01	.00670	5.1837	-.00155	-.00117
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.0536**	**.00104**	**.18505**	**1.002**	**.00100**
Stddev	.0268	.00009	.00059	.002	.00045
%RSD	.44275	8.7265	.32064	.1814	45.059
#1	6.0726	.00098	.18547	1.004	.00068
#2	6.0347	.00111	.18463	1.001	.00132
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178377-C-1-A Acquired: 11/24/2020 20:57:43 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00056**	**-.00017**	**.31776**	**.9994**
Stddev	.00076	.00009	.00026	.0004
%RSD	136.10	54.910	.08133	.0417
#1	.00109	-.00023	.31794	.9991
#2	.00002	-.00010	.31758	.9997
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5161.2**	**4143.5**	**33360.**	**4136.2**
Stddev	1.9	9.4	42.	13.4
%RSD	.03602	.22806	.12495	.32430
#1	5162.5	4150.2	33331.	4145.7
#2	5159.8	4136.9	33390.	4126.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.952%	95.437%	95.758%	101.75%
Range				

Sample Name: 480-178390-D-1-B Acquired: 11/24/2020 21:01:22 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.15770**	**.00226**	**.05429**	**.05516**
Stddev	.00004	.01286	.00127	.00006	.00011
%RSD	24.470	8.1564	56.376	.11141	.20003
#1	.00012	.14860	.00136	.05424	.05509
#2	.00017	.16679	.00316	.05433	.05524
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**105.72**	**.00002**	**.0245**	**.00111**
Stddev	.00001	.39	.00015	.0325	.00001
%RSD	153.80	.36814	658.18	132.6	1.2867
#1	.00000	105.99	-.00008	.0474	.00110
#2	-.00002	105.44	.00013	.0015	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00146**	**.00475**	**2.5769**	**4.9386**	**.00320**
Stddev	.00021	.00024	.0059	.0024	.00097
%RSD	14.185	5.1413	.23021	.04825	30.385
#1	.00161	.00458	2.5811	4.9369	.00251
#2	.00132	.00493	2.5727	4.9403	.00389
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178390-D-1-B Acquired: 11/24/2020 21:01:22 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.3602**	**.34499**	**.00370**	**14.611**	**.00394**
Stddev	.0181	.00049	.00002	.027	.00002
%RSD	.19281	.14161	.60540	.18742	.57055
#1	9.3475	.34464	.00371	14.631	.00393
#2	9.3730	.34533	.00368	14.592	.00396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.21**	**.00277**	**10.130**	**-.00194**	**-.00040**
Stddev	.00	.00046	.032	.00011	.00170
%RSD	.0009	16.795	.31447	5.7505	426.64
#1	25.21	.00309	10.152	-.00202	-.00160
#2	25.21	.00244	10.107	-.00186	.00080
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.9911**	**.00051**	**.53602**	**1.006**	**.00557**
Stddev	.0198	.00018	.00042	.007	.00032
%RSD	.66129	36.348	.07923	.6678	5.6572
#1	3.0051	.00038	.53632	1.001	.00579
#2	2.9771	.00064	.53572	1.011	.00535
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178390-D-1-B Acquired: 11/24/2020 21:01:22 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00067**	**.00072**	**.43192**	**.9999**
Stddev	.00072	.00016	.00253	.0002
%RSD	106.55	22.027	.58650	.0232
#1	-.00017	.00061	.43013	.9997
#2	-.00118	.00083	.43372	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5213.7**	**4141.0**	**33330.**	**4102.7**
Stddev	11.0	4.4	48.	18.0
%RSD	.21021	.10620	.14381	.43905
#1	5221.4	4144.1	33364.	4090.0
#2	5205.9	4137.9	33297.	4115.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.857%	95.379%	95.672%	100.92%
Range				

Sample Name: 480-178395-A-3-A Acquired: 11/24/2020 21:05:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00049**	**.93204**	**.00710**	**.21624**	**.02032**
Stddev	.00028	.00660	.00145	.00005	.00011
%RSD	58.199	.70767	20.355	.02257	.52997
#1	.00069	.92737	.00608	.21621	.02024
#2	.00029	.93670	.00812	.21628	.02039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**45.615**	**.00074**	**.0172**	**.00039**
Stddev	.00001	.027	.00003	.0090	.00017
%RSD	16.429	.05940	4.4876	52.58	44.167
#1	.00007	45.596	.00076	.0108	.00051
#2	.00005	45.635	.00071	.0236	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00970**	**.00126**	**70.830**	**10.977**	**.00200**
Stddev	.00002	.00002	.068	.091	.00117
%RSD	.16355	1.9144	.09631	.82553	58.186
#1	.00969	.00125	70.878	11.042	.00283
#2	.00971	.00128	70.781	10.913	.00118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178395-A-3-A Acquired: 11/24/2020 21:05:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.8466**	**.08377**	**.00214**	**85.107**	**.00329**
Stddev	.0003	.00015	.00010	.034	.00006
%RSD	.00377	.18142	4.8958	.03962	1.7764
#1	7.8468	.08367	.00207	85.131	.00333
#2	7.8464	.08388	.00222	85.084	.00325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.96**	**.01156**	**20.928**	**-.00973**	**.00759**
Stddev	.00	.00006	.025	.00052	.00063
%RSD	.0011	.49718	.12137	5.3116	8.2699
#1	24.96	.01160	20.910	-.00936	.00803
#2	24.96	.01152	20.946	-.01009	.00715
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.0255**	**.00027**	**.29388**	**1.032**	**.02051**
Stddev	.0158	.00008	.00081	.001	.00416
%RSD	.52360	30.066	.27490	.1024	20.282
#1	3.0142	.00033	.29445	1.033	.02345
#2	3.0367	.00021	.29331	1.031	.01757
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178395-A-3-A Acquired: 11/24/2020 21:05:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00129**	**.00439**	**.03096**	**1.008**
Stddev	.00094	.00049	.00019	.000
%RSD	72.532	11.237	.60177	.0374
#1	-.00195	.00474	.03109	1.009
#2	-.00063	.00404	.03083	1.008
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5065.3**	**4135.1**	**33094.**	**4129.1**
Stddev	6.0	7.3	13.	7.1
%RSD	.11753	.17619	.03860	.17265
#1	5061.1	4129.9	33103.	4134.1
#2	5069.5	4140.2	33085.	4124.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.299%	95.241%	94.993%	101.57%
Range				

Sample Name: 480-178395-A-4-A Acquired: 11/24/2020 21:08:44 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**1.2555**	**.00030**	**.27157**	**.02245**
Stddev	.00028	.0131	.00074	.00042	.00008
%RSD	46.810	1.0413	245.90	.15554	.34434
#1	.00080	1.2648	-.00022	.27187	.02251
#2	.00040	1.2463	.00082	.27127	.02240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**52.349**	**.00004**	**-.0162**	**-.00000**
Stddev	.00013	.027	.00004	.0202	.00011
%RSD	1804.7	.05177	84.427	124.4	4351.1
#1	.00008	52.330	.00007	-.0020	.00008
#2	-.00010	52.369	.00002	-.0305	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00604**	**.00407**	**3.3858**	**3.8459**	**.00027**
Stddev	.00018	.00066	.0017	.0008	.00063
%RSD	2.9195	16.182	.04910	.01950	230.19
#1	.00591	.00454	3.3869	3.8464	.00071
#2	.00616	.00361	3.3846	3.8453	-.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178395-A-4-A Acquired: 11/24/2020 21:08:44 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.9431**	**.25288**	**.00062**	**47.154**	**.00084**
Stddev	.0089	.00002	.00010	.031	.00009
%RSD	.09949	.00935	16.810	.06646	10.730
#1	8.9368	.25286	.00055	47.132	.00078
#2	8.9494	.25289	.00070	47.177	.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.06**	**.00069**	**4.6865**	**-.00056**	**-.00265**
Stddev	.00	.00064	.0009	.00130	.00127
%RSD	.0008	92.156	.01956	231.87	48.076
#1	25.06	.00024	4.6859	-.00148	-.00355
#2	25.06	.00114	4.6872	.00036	-.00175
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.3468**	**.00002**	**.27790**	**.9947**	**.03235**
Stddev	.0154	.00009	.00026	.0078	.00170
%RSD	.18468	375.05	.09231	.7808	5.2664
#1	8.3359	-.00004	.27772	.9892	.03114
#2	8.3577	.00009	.27808	1.000	.03355
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178395-A-4-A Acquired: 11/24/2020 21:08:44 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00093**	**.00234**	**.01351**	**1.002**
Stddev	.00027	.00001	.00018	.000
%RSD	29.002	.56594	1.3543	.0206
#1	-.00074	.00234	.01364	1.002
#2	-.00112	.00235	.01338	1.003
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5239.3**	**4212.7**	**33595.**	**4147.9**
Stddev	4.9	4.8	43.	9.9
%RSD	.09384	.11326	.12884	.23802
#1	5242.8	4216.1	33564.	4154.9
#2	5235.8	4209.4	33626.	4140.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.298%	97.030%	96.432%	102.03%
Range				

Sample Name: 480-178434-D-1-A Acquired: 11/24/2020 21:12:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**.33522**	**-.00014**	**.02152**	**.03555**
Stddev	.00055	.00003	.00083	.00031	.00003
%RSD	47716.	.00938	610.54	1.4424	.08794
#1	.00039	.33524	.00045	.02174	.03553
#2	-.00039	.33520	-.00072	.02130	.03557
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**67.021**	**.00003**	**.0137**	**-.00001**
Stddev	.00005	.188	.00014	.0226	.00006
%RSD	216.41	.28000	536.85	164.1	1013.9
#1	-.00001	67.154	.00013	-.0022	-.00005
#2	.00006	66.889	-.00007	.0297	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00072**	**.04503**	**.82706**	**19.527**	**.00612**
Stddev	.00009	.00097	.00182	.085	.00012
%RSD	13.062	2.1550	.21997	.43274	1.9316
#1	.00079	.04435	.82577	19.586	.00620
#2	.00066	.04572	.82834	19.467	.00603
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178434-D-1-A Acquired: 11/24/2020 21:12:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.1302**	**.03079**	**-.00028**	**59.954**	**.00394**
Stddev	.0042	.00012	.00017	.061	.00016
%RSD	.08149	.38734	60.072	.10230	4.1577
#1	5.1273	.03071	-.00040	59.911	.00405
#2	5.1332	.03088	-.00016	59.998	.00382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.95**	**.00043**	**3.8974**	**-.00220**	**-.00117**
Stddev	.00	.00022	.0140	.00173	.00183
%RSD	.0058	50.726	.35870	78.348	155.40
#1	24.95	.00058	3.9073	-.00343	-.00247
#2	24.95	.00027	3.8876	-.00098	.00012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.5543**	**.00021**	**.20855**	**.9944**	**.01020**
Stddev	.0222	.00020	.00052	.0164	.00490
%RSD	.29394	92.290	.25135	1.648	48.021
#1	7.5700	.00007	.20892	.9828	.00674
#2	7.5386	.00035	.20818	1.006	.01367
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178434-D-1-A Acquired: 11/24/2020 21:12:25 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00031**	**-.00027**	**.02147**	**.9998**
Stddev	.00080	.00039	.00002	.0012
%RSD	254.03	143.77	.07682	.1250
#1	-.00025	-.00055	.02146	.9990
#2	.00088	.00000	.02149	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5137.4**	**4130.3**	**33115.**	**4105.8**
Stddev	5.4	1.1	11.	17.0
%RSD	.10589	.02753	.03196	.41309
#1	5141.2	4131.1	33122.	4093.8
#2	5133.5	4129.5	33107.	4117.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.542%	95.132%	95.052%	101.00%
Range				

Sample Name: 480-178436-B-1-A Acquired: 11/24/2020 21:16:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00333**	**.39519**	**-.00011**	**.16600**	**.09425**
Stddev	.00005	.02095	.00078	.00019	.00011
%RSD	1.6485	5.3012	735.69	.11228	.11777
#1	.00337	.38038	.00045	.16614	.09433
#2	.00329	.41001	-.00066	.16587	.09417
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**27.757**	**.00421**	**-.0009**	**.00038**
Stddev	.00007	.053	.00016	.0211	.00004
%RSD	239.43	.19007	3.7065	2276.	10.544
#1	.00008	27.794	.00410	-.0158	.00036
#2	-.00002	27.720	.00432	.0140	.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04440**	**.09358**	**.95080**	**10.949**	**.00510**
Stddev	.00024	.00116	.00155	.005	.00151
%RSD	.54041	1.2378	.16318	.04515	29.704
#1	.04423	.09440	.94970	10.945	.00403
#2	.04457	.09276	.95190	10.952	.00617
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178436-B-1-A Acquired: 11/24/2020 21:16:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.1926**	**.08276**	**.00339**	**84.725**	**.04679**
Stddev	.0008	.00008	.00002	.102	.00032
%RSD	.01921	.09597	.53847	.11989	.67856
#1	4.1920	.08282	.00341	84.653	.04657
#2	4.1932	.08271	.00338	84.797	.04702
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**28.52**	**.00222**	**13.537**	**-.00114**	**.00079**
Stddev	.00	.00118	.002	.00049	.00188
%RSD	.0159	53.082	.01720	42.842	238.47
#1	28.52	.00305	13.536	-.00079	.00212
#2	28.51	.00138	13.539	-.00149	-.00054
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.6413**	**.00440**	**.11750**	**.9961**	**.01973**
Stddev	.0008	.00008	.00007	.0008	.00156
%RSD	.01464	1.7125	.05565	.0823	7.9089
#1	5.6419	.00445	.11746	.9955	.02083
#2	5.6407	.00434	.11755	.9967	.01862
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178436-B-1-A Acquired: 11/24/2020 21:16:09 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00049**	**.00036**	**.28116**	**1.002**
Stddev	.00094	.00009	.00013	.001
%RSD	192.01	24.115	.04733	.0601
#1	.00017	.00043	.28107	1.002
#2	-.00115	.00030	.28126	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5183.7**	**4166.9**	**33644.**	**4161.4**
Stddev	2.0	2.8	22.	11.1
%RSD	.03843	.06624	.06558	.26622
#1	5185.1	4168.9	33628.	4153.6
#2	5182.2	4165.0	33659.	4169.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.340%	95.975%	96.571%	102.36%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 21:19:50 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.95664**	**49.107**	**.97859**	**1.0263**	**.99132**
Stddev	.00074	.114	.00115	.0016	.00016
%RSD	.07695	.23276	.11712	.15463	.01591
#1	.95716	49.188	.97778	1.0252	.99120
#2	.95612	49.026	.97940	1.0274	.99143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0030**	**48.750**	**.98434**	**1.009**	**.96221**
Stddev	.0003	.064	.00033	.021	.00123
%RSD	.03139	.13058	.03392	2.067	.12811
#1	1.0033	48.795	.98410	1.024	.96308
#2	1.0028	48.705	.98457	.9944	.96134
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0145**	**.97500**	**48.193**	**49.318**	**.98778**
Stddev	.0006	.00117	.025	.053	.00091
%RSD	.05638	.12001	.05193	.10676	.09224
#1	1.0149	.97583	48.176	49.281	.98713
#2	1.0141	.97417	48.211	49.355	.98842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 21:19:50 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.249**	**.99151**	**1.0274**	**49.440**	**.97181**
Stddev	.003	.00065	.0058	.005	.00134
%RSD	.00590	.06597	.56152	.00981	.13795
#1	48.251	.99104	1.0315	49.443	.97276
#2	48.247	.99197	1.0233	49.436	.97086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.12**	**.96246**	**24.286**	**.98310**	**.99260**
Stddev	.02	.00373	.029	.00001	.00106
%RSD	.0510	.38760	.11758	.00098	.10701
#1	37.13	.96510	24.307	.98311	.99335
#2	37.11	.95982	24.266	.98309	.99185
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6580**	**.95640**	**.98535**	**1.476**	**.97755**
Stddev	.0252	.00342	.00027	.000	.00169
%RSD	.26121	.35736	.02781	.0256	.17314
#1	9.6401	.95882	.98554	1.476	.97875
#2	9.6758	.95398	.98516	1.476	.97635
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 21:19:50 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.99990**	**1.0094**	**.97475**	**1.509**
Stddev	.00111	.0008	.00118	.003
%RSD	.11132	.08109	.12079	.2005
#1	.99911	1.0100	.97558	1.507
#2	1.0007	1.0088	.97392	1.511
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4905.3**	**4119.7**	**32492.**	**4033.1**
Stddev	.1	3.5	55.	7.0
%RSD	.00279	.08475	.16898	.17380
#1	4905.4	4122.2	32531.	4028.2
#2	4905.2	4117.3	32453.	4038.1

Sample Name: CCB-6254294 Acquired: 11/24/2020 21:23:21 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**.02882**	**-.00089**	**-.00038**	**.00009**
Stddev	.00032	.01049	.00011	.00025	.00002
%RSD	89.976	36.402	12.682	66.923	22.373
#1	.00059	.03624	-.00081	-.00020	.00010
#2	.00013	.02140	-.00097	-.00056	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**.00257**	**.00003**	**.0336**	**-.00002**
Stddev	.00014	.00208	.00013	.0041	.00015
%RSD	8624.9	81.168	422.76	12.19	627.60
#1	.00010	.00404	.00013	.0307	.00008
#2	-.00010	.00109	-.00006	.0365	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.00191**	**.00254**	**.00699**	**.00104**
Stddev	.00015	.00042	.00181	.00713	.00033
%RSD	98.118	21.767	71.255	102.06	31.268
#1	-.00005	.00221	.00126	.01203	.00081
#2	-.00027	.00162	.00381	.00195	.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 21:23:21 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00375**	**.00003**	**.00357**	**.02725**	**.00008**
Stddev	.00208	.00003	.00088	.00234	.00003
%RSD	55.463	122.34	24.673	8.5697	41.025
#1	.00228	.00000	.00295	.02560	.00006
#2	.00522	.00005	.00419	.02890	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00069**	**-.00678**	**-.00008**	**.00045**
Stddev	.00	.00016	.00038	.00156	.00009
%RSD	.0011	23.089	5.5346	1846.9	20.014
#1	25.02	.00080	-.00651	-.00118	.00039
#2	25.02	.00058	-.00704	.00102	.00052
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00908**	**.00030**	**.00005**	**1.000**	**.00061**
Stddev	.02023	.00029	.00000	.001	.00008
%RSD	222.73	99.086	1.6523	.0959	13.655
#1	-.02339	.00009	.00005	1.001	.00055
#2	.00522	.00051	.00005	.9997	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 21:23:21 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00069**	**.00006**	**.00042**	**1.000**
Stddev	.00044	.00061	.00038	.001
%RSD	63.554	983.76	91.552	.1409
#1	-.00100	.00049	.00015	1.001
#2	-.00038	-.00037	.00069	.9990
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5788.0**	**4316.7**	**34694.**	**4082.3**
Stddev	8.5	13.6	160.	4.0
%RSD	.14712	.31511	.46008	.09763
#1	5782.0	4307.1	34581.	4079.5
#2	5794.1	4326.3	34807.	4085.1

Sample Name: CCVL-6256824 Acquired: 11/24/2020 21:27:08 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00584**	**.20313**	**.01465**	**.01990**	**.00214**
Stddev	.00007	.02608	.00203	.00018	.00002
%RSD	1.1798	12.837	13.850	.90291	.91187
#1	.00580	.22156	.01609	.02002	.00215
#2	.00589	.18469	.01322	.01977	.00212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00201**	**.50902**	**.00193**	**-.0034**	**.00349**
Stddev	.00001	.00322	.00006	.0032	.00015
%RSD	.34490	.63242	2.8862	94.70	4.2879
#1	.00202	.51130	.00197	-.0057	.00360
#2	.00201	.50675	.00189	-.0011	.00338
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00408**	**.01081**	**.05262**	**.47850**	**.02999**
Stddev	.00002	.00027	.00148	.04063	.00087
%RSD	.57915	2.5052	2.8182	8.4913	2.8983
#1	.00406	.01100	.05367	.44977	.03061
#2	.00410	.01062	.05157	.50723	.02938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 21:27:08 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20085**	**.00317**	**.01060**	**1.0171**	**.00938**
Stddev	.00065	.00000	.00008	.0024	.00007
%RSD	.32115	.08845	.79163	.23823	.78380
#1	.20131	.00316	.01054	1.0154	.00933
#2	.20039	.00317	.01066	1.0188	.00943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00958**	**.17796**	**.01811**	**.02499**
Stddev	.00	.00078	.00151	.00033	.00047
%RSD	.0050	8.1858	.84879	1.8216	1.8772
#1	25.00	.01014	.17903	.01788	.02465
#2	25.00	.00903	.17689	.01834	.02532
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.45522**	**.00916**	**.00496**	F **.9922**	**.00487**
Stddev	.00825	.00013	.00004	.0066	.00007
%RSD	1.8132	1.4566	.85607	.6632	1.4473
#1	.44939	.00925	.00499	.9969	.00482
#2	.46106	.00906	.00493	.9875	.00492
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 21:27:08 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	.01944	.00467	.00996	F .9999
Stddev	.00026	.00013	.00028	.0008
%RSD	1.3532	2.6971	2.8586	.0800
#1	.01963	.00458	.01017	1.000
#2	.01925	.00476	.00976	.9993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5701.6	4282.9	34814.	4100.5
Stddev	12.9	5.7	59.	3.0
%RSD	.22709	.13290	.17081	.07435
#1	5692.4	4278.8	34772.	4102.7
#2	5710.7	4286.9	34856.	4098.3

Sample Name: 480-178436-B-2-A Acquired: 11/24/2020 21:30:53 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**.11623**	**.00019**	**.15723**	**.01434**
Stddev	.00118	.02514	.00050	.00020	.00011
%RSD	383.39	21.631	255.15	.12452	.78771
#1	-.00053	.09845	-.00016	.15709	.01442
#2	.00114	.13401	.00054	.15737	.01426
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**26.814**	**.00043**	**-.0150**	**.00019**
Stddev	.00005	.047	.00009	.0127	.00004
%RSD	84.786	.17504	21.475	85.08	22.671
#1	.00002	26.847	.00049	-.0060	.00016
#2	.00009	26.781	.00036	-.0240	.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00469**	**.00542**	**.10312**	**10.776**	**.00400**
Stddev	.00021	.00044	.00060	.065	.00150
%RSD	4.4096	8.1812	.58034	.60508	37.404
#1	.00483	.00574	.10269	10.822	.00506
#2	.00454	.00511	.10354	10.730	.00294
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178436-B-2-A Acquired: 11/24/2020 21:30:53 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.9114**	**.05933**	**.00442**	**99.633**	**.03592**
Stddev	.0130	.00009	.00007	.156	.00018
%RSD	.33142	.15356	1.5554	.15651	.49772
#1	3.9206	.05940	.00437	99.523	.03579
#2	3.9022	.05927	.00447	99.743	.03604
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.50**	**.00056**	**10.603**	**-.00051**	**-.00158**
Stddev	.00	.00033	.008	.00081	.00061
%RSD	.0115	59.609	.07370	157.89	38.766
#1	25.50	.00032	10.608	.00006	-.00201
#2	25.49	.00079	10.597	-.00109	-.00115
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.1241**	**.00056**	**.09607**	**1.005**	**.00191**
Stddev	.0146	.00048	.00017	.004	.00000
%RSD	.28438	85.835	.18046	.3653	.06422
#1	5.1344	.00022	.09619	1.003	.00191
#2	5.1138	.00090	.09595	1.008	.00191
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178436-B-2-A Acquired: 11/24/2020 21:30:53 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00084**	**.00014**	**.05816**	**.9992**
Stddev	.00022	.00019	.00049	.0007
%RSD	26.596	138.24	.84113	.0703
#1	-.00099	.00028	.05850	.9987
#2	-.00068	.00000	.05781	.9997
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5143.4**	**4145.3**	**33153.**	**4094.4**
Stddev	3.2	4.4	84.	23.8
%RSD	.06160	.10618	.25347	.58028
#1	5141.1	4142.2	33093.	4077.6
#2	5145.6	4148.4	33212.	4111.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.645%	95.477%	95.161%	100.72%
Range				

Sample Name: 480-178457-J-1-A Acquired: 11/24/2020 21:34:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.55895**	**.00208**	**.07556**	**.05587**
Stddev	.00010	.02037	.00062	.00002	.00011
%RSD	69.762	3.6440	29.704	.03112	.20570
#1	.00022	.57335	.00252	.07555	.05579
#2	.00007	.54455	.00164	.07558	.05595
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**60.048**	**.00011**	**-.0292**	**.00117**
Stddev	.00004	.084	.00017	.0348	.00019
%RSD	86.716	.14021	150.96	119.4	16.378
#1	-.00002	60.108	.00023	-.0046	.00103
#2	-.00008	59.989	-.00001	-.0538	.00130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00281**	**.00489**	**.77065**	**11.047**	**.00379**
Stddev	.00042	.00031	.00314	.025	.00172
%RSD	14.947	6.2556	.40692	.22527	45.394
#1	.00251	.00511	.77287	11.029	.00501
#2	.00311	.00467	.76843	11.064	.00257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178457-J-1-A Acquired: 11/24/2020 21:34:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.702**	**.48651**	**.00310**	**24.839**	**.00261**
Stddev	.020	.00090	.00023	.004	.00002
%RSD	.16879	.18531	7.4709	.01780	.61592
#1	11.688	.48588	.00326	24.842	.00260
#2	11.716	.48715	.00293	24.836	.00263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00353**	**23.960**	**-.00158**	**-.00046**
Stddev	.00	.00025	.022	.00112	.00326
%RSD	.0025	6.9717	.09076	70.741	713.85
#1	25.02	.00336	23.944	-.00236	.00185
#2	25.02	.00371	23.975	-.00079	-.00276
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.4053**	**.00015**	**.31791**	**1.003**	**.01398**
Stddev	.0336	.00019	.00007	.003	.00023
%RSD	.76185	133.17	.02239	.2860	1.6625
#1	4.4291	.00028	.31796	1.005	.01382
#2	4.3816	.00001	.31786	1.001	.01415
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178457-J-1-A Acquired: 11/24/2020 21:34:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00083**	**.00145**	**.00921**	**.9996**
Stddev	.00012	.00020	.00001	.0006
%RSD	14.559	13.824	.09821	.0596
#1	-.00074	.00131	.00920	1.000
#2	-.00091	.00159	.00922	.9992
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5230.3**	**4136.9**	**33421.**	**4094.2**
Stddev	1.3	.9	63.	37.3
%RSD	.02548	.02124	.18737	.91214
#1	5229.3	4137.5	33465.	4067.8
#2	5231.2	4136.2	33377.	4120.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.143%	95.282%	95.932%	100.71%
Range				

Sample Name: 480-178466-K-1-A Acquired: 11/24/2020 21:38:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**-.02659**	**-.00103**	**.00071**	**.00017**
Stddev	.00052	.00805	.00056	.00036	.00004
%RSD	258.51	30.258	54.383	49.779	20.892
#1	.00057	-.02090	-.00143	.00046	.00015
#2	-.00017	-.03228	-.00063	.00097	.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.08589**	**.00001**	**.0219**	**.00011**
Stddev	.00012	.00242	.00000	.0167	.00008
%RSD	182.97	2.8216	16.311	76.31	75.171
#1	-.00002	.08760	.00001	.0337	.00016
#2	.00015	.08417	.00001	.0101	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00192**	**-.00037**	**.00794**	**-.00018**
Stddev	.00012	.00061	.00038	.00531	.00070
%RSD	279.46	31.864	101.86	66.881	389.05
#1	-.00004	.00148	-.00010	.01170	.00031
#2	.00013	.00235	-.00064	.00419	-.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178466-K-1-A Acquired: 11/24/2020 21:38:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00748**	**.00033**	**-.00064**	**.50678**	**.00026**
Stddev	.00058	.00005	.00009	.01394	.00015
%RSD	7.6924	15.894	13.621	2.7506	58.836
#1	.00789	.00037	-.00071	.49692	.00015
#2	.00707	.00030	-.00058	.51663	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00004**	**-.00352**	**-.00054**	**-.00047**
Stddev	.00	.00002	.00084	.00014	.00018
%RSD	.0048	54.518	23.738	26.266	38.798
#1	25.02	.00002	-.00412	-.00064	-.00059
#2	25.02	.00005	-.00293	-.00044	-.00034
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03894**	**.00017**	**.00025**	**1.002**	**.00010**
Stddev	.01549	.00002	.00002	.005	.00023
%RSD	39.769	11.489	9.0520	.4979	239.84
#1	.04989	.00015	.00027	.9985	-.00007
#2	.02799	.00018	.00024	1.006	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178466-K-1-A Acquired: 11/24/2020 21:38:16 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.00027**	**-.00034**	**.00040**	**.9992**
Stddev	.00012	.00014	.00013	.0014
%RSD	43.573	42.035	33.760	.1372
#1	.00018	-.00044	.00049	1.000
#2	.00035	-.00024	.00030	.9983
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5853.0**	**4366.2**	**35264.**	**4169.7**
Stddev	8.5	7.5	86.	29.8
%RSD	.14547	.17124	.24465	.71525
#1	5846.9	4361.0	35203.	4148.6
#2	5859.0	4371.5	35325.	4190.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.87%	100.57%	101.22%	102.57%
Range				

Sample Name: 480-178500-E-1-A@10 Acquired: 11/24/2020 21:42:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00037**	**.02331**	**.00097**	**.01084**	**.01200**
Stddev	.00016	.00723	.00064	.00012	.00000
%RSD	43.101	31.027	66.053	1.0650	.03308
#1	-.00026	.01820	.00052	.01075	.01200
#2	-.00048	.02842	.00143	.01092	.01200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**62.488**	**.00003**	**.0052**	**-.00003**
Stddev	.00000	.061	.00008	.0112	.00009
%RSD	63.964	.09694	241.99	214.8	291.57
#1	.00001	62.531	.00009	-.0027	.00003
#2	.00000	62.445	-.00002	.0131	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.00171**	**.36457**	**6.5060**	**.03461**
Stddev	.00016	.00085	.00482	.0001	.00003
%RSD	39.194	49.828	1.3222	.00085	.08477
#1	.00030	.00111	.36798	6.5061	.03459
#2	.00053	.00231	.36117	6.5060	.03463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178500-E-1-A@10 Acquired: 11/24/2020 21:42:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.4494**	**.02136**	**-.00045**	F **3049.8**	**.00002**
Stddev	.0118	.00008	.00002	1.3	.00008
%RSD	.13929	.38990	4.3625	.04120	374.37
#1	8.4411	.02142	-.00047	3050.7	-.00004
#2	8.4577	.02130	-.00044	3048.9	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00147**	**39.949**	**-.00107**	**-.00036**
Stddev	.00	.00117	.047	.00082	.00247
%RSD	.0013	79.857	.11808	76.395	685.84
#1	25.02	.00064	39.982	-.00049	-.00211
#2	25.02	.00230	39.915	-.00166	.00139
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20507**	**-.00006**	**.92494**	**.9975**	**.00019**
Stddev	.01215	.00100	.00053	.0060	.00013
%RSD	5.9270	1802.1	.05688	.6026	64.916
#1	.21367	-.00076	.92531	.9933	.00011
#2	.19648	.00065	.92457	1.002	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178500-E-1-A@10 Acquired: 11/24/2020 21:42:03 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00148**	**-.00057**	**.00122**	**1.0000**
Stddev	.00106	.00038	.00008	.0017
%RSD	71.534	67.348	6.6812	.1654
#1	-.00223	-.00030	.00128	1.001
#2	-.00073	-.00084	.00117	.9988
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3917.1**	**3548.0**	**26967.**	**3838.5**
Stddev	3.2	2.0	1.	43.7
%RSD	.08087	.05668	.00392	1.1395
#1	3919.3	3549.4	26968.	3807.6
#2	3914.8	3546.6	26966.	3869.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	67.510%	81.720%	77.406%	94.423%
Range				

Sample Name: 480-178392-D-1-A Acquired: 11/24/2020 21:45:53 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.22414**	**.38184**	**4.1099**	**.44661**
Stddev	.00007	.00629	.00092	.0055	.00073
%RSD	20.874	2.8046	.24143	.13482	.16387
#1	.00027	.22858	.38249	4.1138	.44712
#2	.00036	.21969	.38119	4.1060	.44609
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**123.79**	**.00066**	**.0238**	**.01100**
Stddev	.00010	.13	.00021	.0198	.00006
%RSD	1971.3	.10641	31.621	83.13	.57397
#1	-.00008	123.89	.00051	.0098	.01104
#2	.00007	123.70	.00081	.0378	.01095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02753**	**.01617**	**13.443**	**358.68**	**.06855**
Stddev	.00013	.00056	.041	.52	.00142
%RSD	.46279	3.4416	.30801	.14563	2.0673
#1	.02762	.01578	13.472	359.05	.06755
#2	.02744	.01657	13.413	358.31	.06955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178392-D-1-A Acquired: 11/24/2020 21:45:53 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**182.09**	**.12780**	**.00210**	F **1054.8**	**.08432**
Stddev	.05	.00010	.00018	3.1	.00044
%RSD	.02667	.08150	8.5827	.29603	.51667
#1	182.05	.12772	.00223	1057.0	.08463
#2	182.12	.12787	.00198	1052.6	.08401
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.86**	**.00501**	**49.641**	**.04810**	**.00094**
Stddev	.00	.00045	.115	.00094	.00101
%RSD	.0031	8.9379	.23247	1.9571	107.50
#1	25.86	.00533	49.722	.04877	.00165
#2	25.86	.00469	49.559	.04744	.00022
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.699**	**.00412**	**.70714**	**1.000**	**.04076**
Stddev	.028	.00065	.00179	.004	.00013
%RSD	.18999	15.694	.25256	.3637	.31133
#1	14.718	.00366	.70841	1.003	.04067
#2	14.679	.00458	.70588	.9976	.04085
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178392-D-1-A Acquired: 11/24/2020 21:45:53 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00238**	**.01337**	**.03500**	**1.018**
Stddev	.00027	.00082	.00013	.001
%RSD	11.190	6.1646	.36005	.0556
#1	-.00220	.01395	.03491	1.018
#2	-.00257	.01279	.03509	1.017
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4130.5**	**3654.2**	**28763.**	**3910.7**
Stddev	1.1	6.3	68.	9.4
%RSD	.02542	.17224	.23531	.24058
#1	4129.7	3649.8	28715.	3904.0
#2	4131.2	3658.7	28811.	3917.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	71.188%	84.166%	82.561%	96.198%
Range				

Sample Name: 480-178319-B-1-A Acquired: 11/24/2020 21:49:37 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00084**	**.37385**	**1.3360**	**14.849**	**.03338**
Stddev	.00044	.00110	.0011	.018	.00002
%RSD	51.974	.29445	.08002	.11867	.06249
#1	-.00115	.37307	1.3353	14.837	.03340
#2	-.00053	.37462	1.3368	14.862	.03337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**72.964**	**-.00062**	**-.0408**	**.03090**
Stddev	.00000	.246	.00006	.0038	.00016
%RSD	1.2875	.33685	10.186	9.306	.53284
#1	.00010	73.138	-.00066	-.0381	.03078
#2	.00010	72.790	-.00057	-.0435	.03101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05073**	**.84571**	**3.6954**	**520.26**	**.01152**
Stddev	.00011	.00137	.0106	.75	.00208
%RSD	.22300	.16194	.28721	.14435	18.090
#1	.05065	.84474	3.7029	520.79	.01299
#2	.05081	.84667	3.6879	519.72	.01005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178319-B-1-A Acquired: 11/24/2020 21:49:37 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**58.043**	**.34911**	**.00375**	F **2485.0**	**.29902**
Stddev	.186	.00104	.00033	3.6	.00033
%RSD	.32058	.29896	8.6795	.14327	.11079
#1	57.911	.34837	.00352	2487.5	.29879
#2	58.174	.34985	.00398	2482.5	.29926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**27.52**	**.01062**	F **170.79**	**.00324**	**.00290**
Stddev	.00	.00029	.10	.00214	.00039
%RSD	.0037	2.6967	.05568	66.001	13.361
#1	27.52	.01082	170.85	.00173	.00263
#2	27.52	.01041	170.72	.00475	.00318
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.434**	**.00456**	**.22374**	**.9992**	**.08280**
Stddev	.054	.00012	.00051	.0011	.00041
%RSD	.37342	2.6370	.22756	.1121	.49718
#1	14.472	.00465	.22410	1.000	.08251
#2	14.396	.00448	.22338	.9984	.08309
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178319-B-1-A Acquired: 11/24/2020 21:49:37 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00265**	**.04513**	**.18474**	**1.090**
Stddev	.00191	.00031	.00106	.001
%RSD	71.975	.67927	.57477	.0691
#1	-.00400	.04535	.18399	1.091
#2	-.00130	.04491	.18549	1.090
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3875.5**	**3546.1**	**27272.**	**3858.7**
Stddev	5.1	1.0	68.	4.4
%RSD	.13092	.02727	.24888	.11469
#1	3879.1	3546.8	27320.	3861.9
#2	3871.9	3545.4	27224.	3855.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	66.794%	81.675%	78.282%	94.920%
Range				

Sample Name: 480-178319-B-2-A Acquired: 11/24/2020 21:53:18 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.27406**	**.43291**	**4.1761**	**.02212**
Stddev	.00026	.01227	.00171	.0057	.00002
%RSD	39.576	4.4764	.39589	.13713	.09299
#1	.00048	.28273	.43412	4.1802	.02211
#2	.00086	.26538	.43169	4.1721	.02214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00091**	**52.951**	**.00036**	**-.0018**	**.01367**
Stddev	.00009	.093	.00016	.0345	.00002
%RSD	9.8175	.17527	45.289	1901.	.13598
#1	.00084	53.017	.00024	-.0262	.01368
#2	.00097	52.885	.00047	.0226	.01366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02205**	**3.8473**	**13.610**	**152.60**	**.01461**
Stddev	.00046	.0040	.030	.30	.00097
%RSD	2.0917	.10487	.21872	.19671	6.6407
#1	.02173	3.8445	13.631	152.81	.01529
#2	.02238	3.8502	13.589	152.38	.01392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178319-B-2-A Acquired: 11/24/2020 21:53:18 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.963**	**1.9424**	**.00231**	**866.35**	**.07159**
Stddev	.004	.0006	.00021	3.30	.00009
%RSD	.01601	.03244	8.9812	.38044	.12071
#1	25.960	1.9419	.00217	868.68	.07165
#2	25.966	1.9428	.00246	864.02	.07153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	**.07274**	F **170.77**	**.00022**	**.00266**
Stddev	-----	.00115	.42	.00148	.00036
%RSD	-----	1.5868	.24886	664.78	13.513
#1	^ -----	.07193	171.08	-.00083	.00241
#2	^ -----	.07356	170.47	.00127	.00291
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7378**	**.00680**	**.14507**	**1.006**	**.02758**
Stddev	.0418	.00026	.00054	.003	.00022
%RSD	.42943	3.8346	.37413	.2445	.79285
#1	9.7673	.00662	.14545	1.004	.02773
#2	9.7082	.00699	.14468	1.008	.02742
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178319-B-2-A Acquired: 11/24/2020 21:53:18 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00087**	**.01290**	**.70796**	**1.014**
Stddev	.00082	.00032	.00190	.001
%RSD	94.588	2.4745	.26821	.0897
#1	-.00029	.01313	.70931	1.014
#2	-.00144	.01267	.70662	1.013
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4406.6**	**3894.5**	**30487.**	**4107.4**
Stddev	1.6	5.7	107.	2.4
%RSD	.03604	.14653	.35202	.05926
#1	4405.5	3890.5	30411.	4105.7
#2	4407.8	3898.5	30563.	4109.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.948%	89.700%	87.511%	101.04%
Range				

Sample Name: MB 480-560632/1-A Acquired: 11/24/2020 21:57:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.02165**	**-.00022**	**.01153**	**.00014**
Stddev	.00106	.02074	.00014	.00050	.00003
%RSD	541.36	95.767	62.291	4.3244	20.226
#1	-.00094	.03632	-.00032	.01188	.00012
#2	.00055	.00699	-.00012	.01118	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.06700**	**-.00014**	**.0158**	**-.00000**
Stddev	.00000	.00136	.00022	.0533	.00010
%RSD	13.047	2.0306	161.88	338.0	7377.2
#1	-.00002	.06604	.00002	-.0219	-.00007
#2	-.00003	.06797	-.00030	.0534	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.00157**	**.00519**	**.35074**	**.00001**
Stddev	.00035	.00014	.00021	.00016	.00152
%RSD	541.03	8.8727	3.9807	.04611	10949.
#1	-.00019	.00167	.00504	.35062	-.00106
#2	.00032	.00147	.00533	.35085	.00109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560632/1-A Acquired: 11/24/2020 21:57:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00624**	**.00054**	**-.00073**	**.26400**	**.00023**
Stddev	.00138	.00004	.00005	.00864	.00013
%RSD	22.120	7.0345	7.3716	3.2746	58.822
#1	.00722	.00051	-.00076	.25788	.00013
#2	.00526	.00056	-.00069	.27011	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00004**	**.02892**	**-.00013**	**-.00039**
Stddev	.00	.00004	.00188	.00091	.00304
%RSD	.0039	89.571	6.5075	695.10	775.36
#1	25.02	-.00002	.02759	-.00077	.00176
#2	25.02	-.00007	.03025	.00051	-.00254
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.06205**	**-.00006**	**.00027**	**1.004**	**.00038**
Stddev	.01284	.00034	.00006	.006	.00005
%RSD	20.691	604.29	22.729	.5859	13.620
#1	.05297	-.00030	.00031	1.008	.00042
#2	.07113	.00019	.00022	.9998	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560632/1-A Acquired: 11/24/2020 21:57:00 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00016**	**-.00014**	**.00123**	**.9994**
Stddev	.00003	.00035	.00028	.0010
%RSD	20.404	252.70	22.762	.0976
#1	-.00018	.00011	.00103	1.000
#2	-.00014	-.00039	.00142	.9987
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5887.6**	**4360.3**	**35299.**	**4161.1**
Stddev	11.6	6.8	112.	5.0
%RSD	.19746	.15665	.31742	.11930
#1	5895.8	4365.1	35378.	4164.6
#2	5879.3	4355.4	35220.	4157.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.47%	100.43%	101.32%	102.36%
Range				

Sample Name: LCS 480-560632/2-A Acquired: 11/24/2020 22:00:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04939**	**10.080**	**.20312**	**.21501**	**.21481**
Stddev	.00021	.031	.00046	.00078	.00017
%RSD	.42633	.30379	.22528	.36063	.08021
#1	.04924	10.102	.20344	.21555	.21469
#2	.04954	10.058	.20279	.21446	.21493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21187**	**9.9729**	**.20058**	**.0251**	**.18787**
Stddev	.00034	.0208	.00023	.0071	.00026
%RSD	.15913	.20882	.11682	28.22	.13742
#1	.21211	9.9876	.20075	.0201	.18769
#2	.21163	9.9581	.20042	.0301	.18806
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20347**	**.20075**	**9.6516**	**10.418**	**.20632**
Stddev	.00002	.00003	.0421	.017	.00186
%RSD	.00819	.01337	.43620	.16644	.90234
#1	.20349	.20073	9.6814	10.431	.20764
#2	.20346	.20077	9.6219	10.406	.20501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560632/2-A Acquired: 11/24/2020 22:00:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.9020**	**.20609**	**.21151**	**10.344**	**.18912**
Stddev	.0032	.00015	.00153	.026	.00020
%RSD	.03227	.07190	.72475	.24793	.10663
#1	9.8997	.20598	.21260	10.362	.18898
#2	9.9043	.20619	.21043	10.326	.18926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.70**	**.19192**	**9.8174**	**.20063**	**.20314**
Stddev	.00	.00194	.0026	.00089	.00158
%RSD	.0022	1.0088	.02651	.44166	.77916
#1	24.70	.19055	9.8193	.20126	.20426
#2	24.70	.19329	9.8156	.20001	.20202
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.3328**	**.18835**	**.20324**	**1.004**	**.19912**
Stddev	.0282	.00045	.00095	.006	.00031
%RSD	.30159	.23838	.46592	.6379	.15815
#1	9.3527	.18867	.20391	.9993	.19934
#2	9.3129	.18804	.20257	1.008	.19889
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560632/2-A Acquired: 11/24/2020 22:00:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20329**	**.20406**	**.19584**	**1.001**
Stddev	.00167	.00029	.00063	.000
%RSD	.82233	.14355	.32366	.0284
#1	.20447	.20386	.19540	1.001
#2	.20211	.20427	.19629	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5458.4**	**4277.1**	**34316.**	**4132.6**
Stddev	1.6	.9	73.	7.7
%RSD	.02952	.02088	.21255	.18681
#1	5459.5	4277.8	34264.	4127.2
#2	5457.2	4276.5	34367.	4138.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.074%	98.514%	98.500%	101.66%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 22:04:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.95771**	**48.697**	**.98115**	**1.0349**	**.99341**
Stddev	.00097	.036	.00043	.0017	.00204
%RSD	.10172	.07321	.04411	.16404	.20585
#1	.95840	48.672	.98146	1.0337	.99196
#2	.95702	48.722	.98085	1.0361	.99485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99900**	**48.431**	**.98316**	**1.032**	**.96311**
Stddev	.00174	.037	.00016	.014	.00112
%RSD	.17370	.07572	.01646	1.376	.11655
#1	.99778	48.457	.98328	1.022	.96232
#2	1.0002	48.405	.98305	1.042	.96390
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0149**	**.97139**	**48.134**	**49.611**	**.98586**
Stddev	.0012	.00119	.049	.048	.00183
%RSD	.11552	.12285	.10111	.09672	.18598
#1	1.0157	.97223	48.168	49.645	.98457
#2	1.0141	.97054	48.099	49.577	.98716
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 22:04:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.359**	**.99514**	**1.0337**	**49.407**	**.97295**
Stddev	.030	.00048	.0041	.050	.00042
%RSD	.06172	.04816	.40041	.10030	.04298
#1	48.338	.99548	1.0367	49.372	.97265
#2	48.381	.99481	1.0308	49.442	.97324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.06**	**.95834**	**24.206**	**.98237**	**1.0005**
Stddev	.02	.00126	.051	.00248	.0016
%RSD	.0524	.13178	.20908	.25258	.16258
#1	37.07	.95745	24.242	.98413	.99931
#2	37.04	.95923	24.171	.98062	1.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7203**	**.95292**	**.98367**	**1.486**	**.97171**
Stddev	.0098	.00098	.00096	.010	.00034
%RSD	.10121	.10319	.09746	.6591	.03512
#1	9.7272	.95223	.98299	1.479	.97195
#2	9.7133	.95362	.98435	1.493	.97146
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 22:04:25 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0070**	**1.0126**	**.96737**	**1.510**
Stddev	.0010	.0014	.00206	.002
%RSD	.09910	.13494	.21309	.1488
#1	1.0063	1.0135	.96591	1.509
#2	1.0077	1.0116	.96882	1.512
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4890.6**	**4111.5**	**32430.**	**4042.8**
Stddev	8.4	6.9	8.	17.8
%RSD	.17166	.16893	.02531	.44100
#1	4896.5	4116.4	32436.	4030.2
#2	4884.6	4106.6	32425.	4055.4

Sample Name: CCB-6254294 Acquired: 11/24/2020 22:07:57 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00047**	**.01741**	**.00051**	**.00510**	**.00015**
Stddev	.00023	.01286	.00104	.00053	.00003
%RSD	50.317	73.864	204.93	10.320	19.555
#1	.00030	.02651	-.00023	.00548	.00013
#2	.00063	.00832	.00124	.00473	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.00299**	**.00001**	**.0186**	**-.00007**
Stddev	.00002	.00010	.00008	.0053	.00012
%RSD	25.438	3.4163	1670.3	28.45	161.77
#1	.00006	.00306	-.00005	.0149	-.00016
#2	.00009	.00292	.00006	.0224	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.00185**	**.00133**	**.14723**	**.00046**
Stddev	.00017	.00060	.00130	.02925	.00159
%RSD	329.66	32.289	98.296	19.867	344.25
#1	.00017	.00143	.00040	.12654	-.00066
#2	-.00007	.00227	.00225	.16791	.00158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 22:07:57 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00551**	**.00008**	**.00382**	**.17855**	**.00018**
Stddev	.00197	.00001	.00086	.00260	.00017
%RSD	35.723	5.9913	22.450	1.4537	96.023
#1	.00690	.00008	.00322	.17672	.00030
#2	.00411	.00009	.00443	.18039	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00005**	**-.00008**	**-.00014**	**-.00084**
Stddev	.00	.00042	.00034	.00080	.00017
%RSD	.0002	765.77	439.66	566.99	20.380
#1	25.02	.00024	-.00032	-.00071	-.00072
#2	25.02	-.00035	.00016	.00043	-.00096
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02545**	**.00037**	**.00005**	**1.006**	**.00013**
Stddev	.01198	.00026	.00005	.001	.00037
%RSD	47.071	70.434	102.61	.1261	288.04
#1	.01698	.00056	.00001	1.005	-.00013
#2	.03392	.00019	.00009	1.007	.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 22:07:57 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.00035**	**-.00002**	**.00054**	**1.0000**
Stddev	.00001	.00020	.00017	.0002
%RSD	2.6326	1205.3	31.629	.0185
#1	.00036	-.00016	.00067	1.000
#2	.00034	.00013	.00042	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5789.7**	**4319.9**	**34741.**	**4128.0**
Stddev	3.1	1.5	28.	16.4
%RSD	.05409	.03528	.07918	.39659
#1	5787.5	4320.9	34722.	4116.4
#2	5792.0	4318.8	34761.	4139.6

Sample Name: CCVL-6256824 Acquired: 11/24/2020 22:11:48 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00565**	**.20752**	**.01479**	**.02405**	**.00210**
Stddev	.00023	.01825	.00123	.00011	.00006
%RSD	3.9859	8.7921	8.2918	.47504	2.8794
#1	.00581	.19462	.01565	.02397	.00206
#2	.00549	.22042	.01392	.02413	.00214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00213**	**.50780**	**.00201**	**.0154**	**.00352**
Stddev	.00003	.00580	.00002	.0130	.00001
%RSD	1.5681	1.1422	1.0484	84.62	.24621
#1	.00211	.51190	.00199	.0062	.00352
#2	.00216	.50370	.00202	.0246	.00353
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00422**	**.01060**	**.05208**	**.56412**	**.03151**
Stddev	.00016	.00057	.00156	.00404	.00279
%RSD	3.7988	5.3857	3.0010	.71625	8.8468
#1	.00411	.01101	.05098	.56698	.03348
#2	.00433	.01020	.05319	.56126	.02954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 22:11:48 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20555**	**.00319**	**.01045**	**1.1677**	**.00945**
Stddev	.00502	.00004	.00001	.0080	.00023
%RSD	2.4433	1.4021	.05205	.68523	2.3951
#1	.20200	.00316	.01044	1.1733	.00961
#2	.20910	.00322	.01045	1.1620	.00929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00982**	**.18222**	**.01759**	**.02350**
Stddev	.00	.00026	.00152	.00130	.00030
%RSD	.0022	2.6233	.83661	7.3699	1.2855
#1	25.00	.00964	.18330	.01667	.02372
#2	25.00	.01000	.18114	.01851	.02329
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.47405**	**.00880**	**.00499**	F **1.001**	**.00473**
Stddev	.00397	.00035	.00010	.003	.00029
%RSD	.83772	4.0200	1.9823	.2728	6.1027
#1	.47686	.00855	.00492	1.003	.00453
#2	.47125	.00905	.00506	.9992	.00494
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 22:11:48 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.02008**	**.00473**	**.00968**	F **1.000**
Stddev	.00021	.00003	.00014	.000
%RSD	1.0443	.66867	1.4954	.0363
#1	.02023	.00471	.00978	.9999
#2	.01993	.00476	.00957	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5692.2**	**4271.8**	**34677.**	**4072.4**
Stddev	6.3	1.2	73.	.9
%RSD	.10982	.02813	.21057	.02091
#1	5696.6	4272.7	34728.	4073.1
#2	5687.8	4271.0	34625.	4071.8

Sample Name: 480-178415-H-1-A Acquired: 11/24/2020 22:15:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00039**	**.12729**	**.13290**	**3.0956**	**.49379**
Stddev	.00014	.00063	.00039	.0008	.00114
%RSD	35.545	.49444	.29706	.02722	.23018
#1	.00048	.12685	.13318	3.0950	.49299
#2	.00029	.12774	.13262	3.0962	.49460
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**81.842**	**.00037**	**-.0041**	**.01182**
Stddev	.00001	.518	.00005	.0035	.00009
%RSD	19.266	.63250	12.099	86.12	.74579
#1	-.00002	81.476	.00034	-.0016	.01188
#2	-.00003	82.208	.00041	-.0066	.01176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01098**	**.00208**	**1.2046**	**127.22**	**.04015**
Stddev	.00063	.00002	.0043	.69	.00074
%RSD	5.7491	1.0748	.35748	.53978	1.8372
#1	.01142	.00206	1.2015	126.73	.03962
#2	.01053	.00210	1.2076	127.70	.04067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-A Acquired: 11/24/2020 22:15:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**93.798**	**.05041**	**.00038**	**705.34**	**.07535**
Stddev	.009	.00020	.00009	2.78	.00014
%RSD	.00963	.39662	22.864	.39404	.18287
#1	93.792	.05027	.00044	703.37	.07526
#2	93.804	.05055	.00032	707.30	.07545
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.54**	**.00117**	**13.650**	**.03856**	**-.00051**
Stddev	.00	.00086	.014	.00047	.00130
%RSD	.0026	73.938	.10547	1.2271	252.28
#1	25.54	.00056	13.660	.03822	-.00143
#2	25.54	.00178	13.640	.03889	.00040
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.565**	**.00146**	**.85280**	**1.001**	**.01309**
Stddev	.040	.00064	.00355	.001	.00033
%RSD	.31693	43.905	.41639	.1322	2.5129
#1	12.537	.00191	.85029	1.002	.01333
#2	12.593	.00101	.85532	1.000	.01286
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-A Acquired: 11/24/2020 22:15:34 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00168**	**.01118**	**.00743**	**1.011**
Stddev	.00115	.00004	.00023	.002
%RSD	68.644	.35163	3.0858	.1520
#1	-.00086	.01115	.00759	1.012
#2	-.00249	.01121	.00727	1.010
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4419.0**	**3846.9**	**30444.**	**4050.7**
Stddev	2.4	3.0	52.	40.7
%RSD	.05417	.07754	.16922	1.0059
#1	4417.3	3849.0	30407.	4079.5
#2	4420.7	3844.8	30480.	4021.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	76.161%	88.604%	87.386%	99.642%
Range				

Sample Name: 480-178415-H-1-ASD@5 Acquired: 11/24/2020 22:19:19 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**.00904**	**.02512**	**.63148**	**.10200**
Stddev	.00026	.00574	.00011	.00107	.00015
%RSD	83.863	63.453	.45606	.16888	.14268
#1	.00050	.00498	.02504	.63073	.10190
#2	.00013	.01309	.02520	.63224	.10210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**16.472**	**.00011**	**.0269**	**.00228**
Stddev	.00002	.027	.00005	.0093	.00014
%RSD	61.480	.16435	47.695	34.57	5.9562
#1	-.00002	16.452	.00014	.0203	.00238
#2	-.00005	16.491	.00007	.0334	.00219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00245**	**.00096**	**.24743**	**25.117**	**.00782**
Stddev	.00007	.00024	.00138	.076	.00208
%RSD	2.6789	25.312	.55580	.30192	26.532
#1	.00249	.00113	.24840	25.064	.00635
#2	.00240	.00079	.24646	25.171	.00929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-ASD@5 Acquired: 11/24/2020 22:19:19 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.420**	**.01015**	**-.00043**	**140.77**	**.01451**
Stddev	.005	.00001	.00024	.27	.00010
%RSD	.02700	.07005	54.502	.19274	.72188
#1	18.416	.01014	-.00060	140.58	.01458
#2	18.423	.01015	-.00027	140.97	.01444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.11**	**-.00012**	**2.5699**	**.00702**	**-.00213**
Stddev	.00	.00114	.0080	.00007	.00110
%RSD	.0016	940.00	.30942	.92854	51.775
#1	25.11	-.00092	2.5643	.00707	-.00135
#2	25.11	.00068	2.5755	.00698	-.00291
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.4779**	**.00025**	**.17238**	**1.004**	**.00256**
Stddev	.0251	.00004	.00024	.006	.00089
%RSD	1.0140	17.876	.13929	.6177	34.909
#1	2.4601	.00028	.17255	1.008	.00319
#2	2.4956	.00022	.17222	.9991	.00193
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-ASD@5 Acquired: 11/24/2020 22:19:19 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00060**	**.00160**	**.00247**	**1.001**
Stddev	.00029	.00012	.00007	.000
%RSD	49.417	7.5178	2.9971	.0415
#1	-.00080	.00168	.00252	1.001
#2	-.00039	.00151	.00242	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4986.0**	**4092.3**	**32529.**	**4051.7**
Stddev	2.5	2.2	17.	14.2
%RSD	.04984	.05396	.05323	.35153
#1	4984.2	4090.7	32517.	4061.8
#2	4987.7	4093.9	32541.	4041.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.932%	94.256%	93.371%	99.667%
Range				

Sample Name: 480-178415-H-1-APDS Acquired: 11/24/2020 22:23:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05203**	**9.9769**	**.34861**	**3.1800**	**.66690**
Stddev	.00015	.0132	.00177	.0001	.00163
%RSD	.29340	.13228	.50835	.00433	.24496
#1	.05192	9.9676	.34986	3.1799	.66805
#2	.05214	9.9863	.34736	3.1801	.66574
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21250**	**88.139**	**.20896**	**.0013**	**.21429**
Stddev	.00036	.134	.00002	.0440	.00046
%RSD	.17058	.15246	.01000	3425.	.21581
#1	.21276	88.234	.20895	.0324	.21462
#2	.21225	88.044	.20898	-.0298	.21396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21694**	**.20519**	**10.631**	**133.80**	**.23994**
Stddev	.00015	.00062	.025	.04	.00050
%RSD	.06884	.30065	.23500	.02894	.20923
#1	.21683	.20475	10.649	133.77	.24029
#2	.21704	.20562	10.614	133.83	.23958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-APDS Acquired: 11/24/2020 22:23:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**101.23**	**.25302**	**.21335**	**696.24**	**.27706**
Stddev	.07	.00035	.00167	1.06	.00029
%RSD	.07292	.13680	.78336	.15281	.10306
#1	101.28	.25327	.21453	696.99	.27686
#2	101.17	.25278	.21217	695.49	.27726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.21**	**.20111**	**24.010**	**.24866**	**.22148**
Stddev	.00	.00196	.024	.00027	.00306
%RSD	.0031	.97315	.09803	.10774	1.3830
#1	25.21	.19972	24.027	.24885	.21932
#2	25.21	.20249	23.994	.24847	.22365
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**28.229**	**.20776**	**1.0245**	**1.001**	**.21465**
Stddev	.110	.00075	.0009	.002	.00007
%RSD	.38944	.35894	.09197	.2064	.03359
#1	28.306	.20829	1.0252	1.003	.21470
#2	28.151	.20724	1.0239	.9998	.21459
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-APDS Acquired: 11/24/2020 22:23:01 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20054**	**.22159**	**.20802**	**1.014**
Stddev	.00084	.00050	.00075	.000
%RSD	.42057	.22533	.35891	.0114
#1	.19994	.22124	.20749	1.014
#2	.20114	.22195	.20855	1.014
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4426.6**	**3896.2**	**30613.**	**4107.5**
Stddev	3.2	6.9	32.	3.7
%RSD	.07306	.17786	.10330	.08899
#1	4428.9	3901.1	30591.	4105.0
#2	4424.3	3891.3	30635.	4110.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	76.291%	89.740%	87.871%	101.04%
Range				

Sample Name: 480-178415-H-1-B MS Acquired: 11/24/2020 22:26:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05103**	**10.103**	**.35310**	**3.2952**	**.71066**
Stddev	.00002	.003	.00080	.0003	.00137
%RSD	.04539	.02770	.22563	.00943	.19279
#1	.05101	10.101	.35254	3.2955	.70969
#2	.05104	10.105	.35366	3.2950	.71163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Ba4554-2	Be3130	Ca3179	Cd2288	**Ce4040
Line	455.403 { 74}2	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}
IS Ref	(Y_3600)	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.68966**	**.21274**	**92.508**	**.20849**	**-.0125**
Stddev	.00104	.00059	.115	.00017	.0139
%RSD	.15094	.27939	.12451	.08195	111.3
#1	.69040	.21232	92.427	.20837	-.0027
#2	.68893	.21316	92.589	.20861	-.0223
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Line	228.616 {447}	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21365**	**.21529**	**.20394**	**10.698**	**139.19**
Stddev	.00009	.00055	.00124	.016	.13
%RSD	.03997	.25668	.60645	.14908	.09475
#1	.21371	.21568	.20307	10.686	139.10
#2	.21359	.21490	.20482	10.709	139.29
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-B MS Acquired: 11/24/2020 22:26:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na8183
Line	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}
IS Ref	(Y_3774)	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.24503**	**104.89**	**.25289**	**.21267**	**724.02**
Stddev	.00043	.17	.00037	.00147	.90
%RSD	.17683	.15990	.14508	.69301	.12482
#1	.24534	105.01	.25315	.21371	723.38
#2	.24473	104.77	.25263	.21162	724.66
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Line	231.604 {446}	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}
IS Ref	(In2306)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.27872**	**25.23**	**.20094**	**24.520**	**.24482**
Stddev	.00006	.00	.00181	.039	.00057
%RSD	.02043	.0047	.89981	.15755	.23365
#1	.27868	25.23	.20222	24.547	.24523
#2	.27876	25.23	.19967	24.493	.24442
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837
Line	196.090 {472}	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}
IS Ref	(Y_2243)	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21757**	**16.951**	**.20271**	**1.0635**	**.9996**
Stddev	.00299	.108	.00054	.0015	.0013
%RSD	1.3754	.63710	.26797	.13976	.1303
#1	.21545	17.028	.20309	1.0625	1.001
#2	.21968	16.875	.20232	1.0646	.9987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-B MS Acquired: 11/24/2020 22:26:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	TI1908	V_2924	Zn2062	Zr3438
Line	334.904 {101}	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(Y_3600)	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21511**	**.19729**	**.21950**	**.20793**	**1.014**
Stddev	.00053	.00007	.00111	.00063	.000
%RSD	.24785	.03494	.50754	.30067	.0149
#1	.21549	.19734	.22029	.20837	1.014
#2	.21473	.19724	.21871	.20749	1.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4381.6**	**3858.0**	**30306.**	**4034.7**
Stddev	3.7	9.4	83.	11.7
%RSD	.08506	.24237	.27346	.28954
#1	4384.2	3864.6	30247.	4043.0
#2	4378.9	3851.4	30364.	4026.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.516%	88.859%	86.990%	99.249%
Range				

Sample Name: 480-178415-H-1-C MSD Acquired: 11/24/2020 22:30:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05134**	**10.330**	**.35974**	**3.3809**	**.72727**
Stddev	.00016	.058	.00077	.0003	.00171
%RSD	.31204	.56303	.21290	.00787	.23502
#1	.05122	10.371	.36028	3.3811	.72848
#2	.05145	10.289	.35919	3.3807	.72606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21590**	**94.321**	**.21140**	**-.0040**	**.21653**
Stddev	.00061	.259	.00039	.0118	.00008
%RSD	.28117	.27492	.18290	291.8	.03592
#1	.21633	94.504	.21167	.0043	.21659
#2	.21547	94.138	.21112	-.0124	.21648
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21748**	**.20623**	**10.804**	**142.51**	**.25103**
Stddev	.00045	.00014	.041	.54	.00165
%RSD	.20744	.06934	.38189	.38111	.65745
#1	.21716	.20633	10.834	142.89	.25219
#2	.21780	.20613	10.775	142.12	.24986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-C MSD Acquired: 11/24/2020 22:30:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**106.33**	**.25617**	**.21595**	**741.39**	**.28246**
Stddev	.06	.00014	.00129	2.57	.00042
%RSD	.06069	.05533	.59955	.34630	.14815
#1	106.38	.25607	.21686	743.21	.28216
#2	106.29	.25627	.21503	739.58	.28276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.24**	**.20271**	**25.007**	**.24992**	**.22202**
Stddev	.00	.00057	.058	.00062	.00110
%RSD	.0075	.28301	.23117	.24860	.49661
#1	25.24	.20231	25.048	.24948	.22280
#2	25.24	.20312	24.966	.25036	.22124
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.555**	**.20474**	**1.0886**	**1.009**	**.21787**
Stddev	.155	.00125	.0017	.004	.00113
%RSD	.88322	.61027	.15441	.3840	.51707
#1	17.665	.20562	1.0898	1.007	.21866
#2	17.445	.20386	1.0874	1.012	.21707
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-178415-H-1-C MSD Acquired: 11/24/2020 22:30:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20035**	**.22321**	**.20833**	**1.013**
Stddev	.00019	.00047	.00089	.002
%RSD	.09307	.21207	.42538	.1658
#1	.20022	.22355	.20771	1.012
#2	.20048	.22288	.20896	1.014
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4372.3**	**3849.6**	**30428.**	**4042.2**
Stddev	5.3	.1	28.	36.7
%RSD	.12007	.00164	.09132	.90897
#1	4376.0	3849.6	30408.	4016.2
#2	4368.6	3849.5	30448.	4068.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.356%	88.665%	87.340%	99.431%
Range				

Sample Name: 480-177811-D-1-A Acquired: 11/24/2020 22:34:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**1.0907**	**.08664**	F **20.336**	**.46966**
Stddev	.00064	.0203	.00053	.027	.00211
%RSD	557.21	1.8627	.61271	.13038	.44993
#1	.00057	1.0764	.08627	20.317	.47115
#2	-.00034	1.1051	.08702	20.355	.46816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				18.000	
Low Limit				-.02000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00015**	**122.55**	**.00064**	**-.0049**	**.06405**
Stddev	.00003	.01	.00006	.0003	.00018
%RSD	17.361	.00927	9.7865	5.712	.28162
#1	.00017	122.54	.00060	-.0047	.06393
#2	.00014	122.56	.00068	-.0051	.06418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.51629**	**.01477**	**3.7723**	F **719.12**	**.17458**
Stddev	.00121	.00001	.0048	1.00	.00071
%RSD	.23349	.04996	.12710	.13924	.40724
#1	.51714	.01478	3.7757	718.41	.17408
#2	.51544	.01477	3.7689	719.83	.17509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-177811-D-1-A Acquired: 11/24/2020 22:34:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**123.57**	**1.4836**	**.01534**	F **2590.5**	**.28111**
Stddev	.03	.0048	.00002	3.4	.00035
%RSD	.02681	.32093	.10501	.13051	.12334
#1	123.59	1.4870	.01535	2592.9	.28136
#2	123.55	1.4802	.01533	2588.1	.28087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**36.05**	**.00457**	**79.959**	**.02067**	**.00788**
Stddev	.00	.00067	.004	.00019	.00089
%RSD	.0119	14.586	.00496	.89885	11.314
#1	36.05	.00410	79.961	.02054	.00725
#2	36.05	.00504	79.956	.02080	.00851
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**21.240**	**.07470**	**.84525**	**1.003**	**.74010**
Stddev	.055	.00089	.00051	.002	.00015
%RSD	.26068	1.1889	.06058	.1645	.02086
#1	21.201	.07407	.84561	1.002	.74021
#2	21.279	.07533	.84489	1.004	.73999
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177811-D-1-A Acquired: 11/24/2020 22:34:14 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00280**	**.12328**	**.15489**	**1.063**
Stddev	.00065	.00016	.00049	.000
%RSD	23.080	.12830	.31415	.0369
#1	-.00326	.12339	.15455	1.063
#2	-.00234	.12317	.15523	1.063
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3766.5**	**3493.2**	**26793.**	**3822.6**
Stddev	.5	.3	19.	15.7
%RSD	.01275	.00743	.07242	.41145
#1	3766.9	3493.4	26806.	3811.4
#2	3766.2	3493.1	26779.	3833.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	64.915%	80.458%	76.906%	94.029%
Range				

Sample Name: MB 480-560498/1-A Acquired: 11/24/2020 22:38:02 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.01977**	**-.00032**	F **.02246**	**.00010**
Stddev	.00074	.01471	.00084	.00153	.00000
%RSD	299.42	74.433	263.37	6.8296	2.2682
#1	.00028	.03017	-.00092	.02354	.00010
#2	-.00077	.00936	.00028	.02138	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.02000	
Low Limit				-.00800	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.03723**	**-.00005**	**.0292**	**-.00001**
Stddev	.00001	.00184	.00010	.0428	.00005
%RSD	41.554	4.9313	184.77	146.6	573.27
#1	.00001	.03853	-.00012	.0595	-.00004
#2	.00002	.03593	.00002	-.0011	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.00221**	**.00355**	F **.57801**	**.00070**
Stddev	.00023	.00024	.00305	.02500	.00066
%RSD	449.03	10.907	85.915	4.3247	93.248
#1	.00011	.00238	.00139	.56033	.00024
#2	-.00021	.00204	.00571	.59568	.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.50000	
Low Limit				-.50000	

Sample Name: MB 480-560498/1-A Acquired: 11/24/2020 22:38:02 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02764**	**.00054**	**-.00054**	**.41367**	**.00029**
Stddev	.00171	.00002	.00011	.00079	.00027
%RSD	6.1752	2.9464	21.311	.19113	94.063
#1	.02644	.00052	-.00062	.41311	.00010
#2	.02885	.00055	-.00046	.41423	.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00012**	**.02919**	**-.00125**	**-.00004**
Stddev	.00	.00012	.00098	.00026	.00245
%RSD	.0041	100.99	3.3726	21.085	6968.2
#1	25.02	.00004	.02849	-.00106	.00170
#2	25.02	.00021	.02988	-.00144	-.00177
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08888**	**.00029**	**.00024**	**1.002**	**.00062**
Stddev	.00261	.00005	.00018	.007	.00017
%RSD	2.9421	17.328	75.306	.6575	27.930
#1	.08703	.00025	.00037	1.007	.00074
#2	.09073	.00032	.00011	.9972	.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-560498/1-A Acquired: 11/24/2020 22:38:02 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00025**	**-.00005**	**.00088**	**1.000**
Stddev	.00037	.00016	.00009	.001
%RSD	150.21	331.54	10.205	.0641
#1	.00002	-.00016	.00081	1.001
#2	-.00051	.00007	.00094	.9998
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5909.4**	**4394.6**	**35508.**	**4253.2**
Stddev	3.7	6.6	150.	3.6
%RSD	.06186	.15036	.42179	.08388
#1	5912.0	4399.2	35402.	4250.7
#2	5906.8	4389.9	35614.	4255.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.85%	101.22%	101.92%	104.62%
Range				

Sample Name: LCS 480-560498/2-A Acquired: 11/24/2020 22:41:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04784**	**9.9929**	**.20176**	**.21941**	**.21331**
Stddev	.00051	.0069	.00051	.00032	.00044
%RSD	1.0559	.06874	.25324	.14700	.20834
#1	.04820	9.9880	.20212	.21964	.21362
#2	.04748	9.9978	.20140	.21918	.21300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21098**	**9.9099**	**.20028**	**-.0125**	**.18684**
Stddev	.00016	.0236	.00016	.0181	.00024
%RSD	.07706	.23838	.07901	144.8	.13025
#1	.21109	9.9266	.20039	-.0252	.18666
#2	.21086	9.8932	.20017	.0003	.18701
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20382**	**.19990**	**9.5623**	**10.480**	**.20528**
Stddev	.00009	.00038	.0463	.046	.00062
%RSD	.04276	.19002	.48439	.43433	.30257
#1	.20388	.20016	9.5950	10.512	.20572
#2	.20376	.19963	9.5295	10.448	.20484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560498/2-A Acquired: 11/24/2020 22:41:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8756**	**.20570**	**.21068**	**10.350**	**.18848**
Stddev	.0323	.00082	.00054	.003	.00012
%RSD	.32717	.39788	.25654	.03327	.06190
#1	9.8984	.20628	.21107	10.353	.18856
#2	9.8527	.20512	.21030	10.348	.18840
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.71**	**.19139**	**9.7877**	**.19884**	**.20325**
Stddev	.00	.00053	.0025	.00176	.00183
%RSD	.0013	.27628	.02525	.88742	.89819
#1	24.71	.19101	9.7859	.20009	.20454
#2	24.71	.19176	9.7894	.19760	.20196
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.0609**	**.18635**	**.20191**	**1.004**	**.19799**
Stddev	.0232	.00013	.00064	.003	.00026
%RSD	.25629	.07011	.31791	.3348	.12946
#1	9.0773	.18625	.20236	1.001	.19817
#2	9.0445	.18644	.20145	1.006	.19781
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-560498/2-A Acquired: 11/24/2020 22:41:47 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20278**	**.20400**	**.19816**	**1.001**
Stddev	.00015	.00013	.00149	.000
%RSD	.07619	.06331	.75063	.0304
#1	.20289	.20391	.19921	1.000
#2	.20268	.20409	.19711	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5491.0**	**4294.3**	**34390.**	**4139.6**
Stddev	9.3	3.2	124.	3.7
%RSD	.16897	.07545	.36170	.08985
#1	5497.5	4296.6	34302.	4142.3
#2	5484.4	4292.1	34478.	4137.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.636%	98.910%	98.714%	101.83%
Range				

Sample Name: 480-177733-M-1-B Acquired: 11/24/2020 22:45:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.05352**	**.00918**	**1.3659**	**.11720**
Stddev	.00006	.00969	.00019	.0012	.00007
%RSD	122.35	18.099	2.0745	.08691	.06170
#1	-.00001	.04667	.00932	1.3650	.11715
#2	-.00009	.06037	.00905	1.3667	.11725
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**309.27**	**.00038**	**-.0275**	**.00597**
Stddev	.00005	5.25	.00007	.0177	.00016
%RSD	63.853	1.6988	17.282	64.52	2.7185
#1	-.00004	312.98	.00043	-.0400	.00608
#2	-.00011	305.55	.00034	-.0149	.00585
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00289**	**.00498**	**2.6378**	**116.56**	**.03337**
Stddev	.00030	.00021	.0098	.28	.00174
%RSD	10.355	4.2120	.37090	.23953	5.2121
#1	.00268	.00483	2.6448	116.75	.03214
#2	.00310	.00512	2.6309	116.36	.03460
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177733-M-1-B Acquired: 11/24/2020 22:45:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**178.88**	**.74864**	**.00240**	**464.29**	**.08355**
Stddev	.04	.00004	.00011	.77	.00025
%RSD	.02368	.00585	4.6314	.16610	.30427
#1	178.91	.74861	.00232	464.84	.08373
#2	178.85	.74867	.00248	463.75	.08337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.09**	**.00124**	F **292.71**	**.00043**	**-.00421**
Stddev	.00	.00206	.16	.00004	.00309
%RSD	.0044	165.23	.05596	10.342	73.504
#1	25.09	-.00021	292.82	.00040	-.00639
#2	25.09	.00270	292.59	.00046	-.00202
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.6979**	**.00045**	**.61585**	**.9945**	**.00288**
Stddev	.0095	.00049	.00153	.0016	.00058
%RSD	.14259	110.91	.24786	.1650	20.169
#1	6.6911	.00080	.61693	.9956	.00329
#2	6.7046	.00010	.61477	.9933	.00247
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177733-M-1-B Acquired: 11/24/2020 22:45:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00097**	**.00468**	**.02117**	**1.0000**
Stddev	.00089	.00011	.00005	.0009
%RSD	91.253	2.4127	.23424	.0905
#1	-.00035	.00460	.02121	.9993
#2	-.00160	.00476	.02114	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4344.7**	**3723.4**	**29845.**	**3943.5**
Stddev	1.8	1.5	92.	36.9
%RSD	.04055	.04044	.30696	.93542
#1	4343.5	3722.3	29910.	3917.4
#2	4346.0	3724.4	29780.	3969.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.880%	85.759%	85.668%	97.004%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 22:49:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.95561**	**48.427**	**.98333**	**1.0424**	**.99790**
Stddev	.00242	.194	.00410	.0012	.00212
%RSD	.25334	.40070	.41717	.11533	.21283
#1	.95732	48.290	.98043	1.0416	.99640
#2	.95390	48.565	.98623	1.0433	.99941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99854**	**48.122**	**.98268**	**1.006**	**.96461**
Stddev	.00357	.208	.00053	.014	.00031
%RSD	.35716	.43204	.05370	1.369	.03180
#1	.99602	47.975	.98305	.9959	.96483
#2	1.0011	48.269	.98231	1.015	.96439
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0177**	**.96810**	**47.900**	**49.868**	**.98492**
Stddev	.0029	.00199	.058	.144	.00293
%RSD	.28440	.20541	.12100	.28811	.29700
#1	1.0197	.96670	47.859	49.766	.98286
#2	1.0156	.96951	47.941	49.969	.98699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 22:49:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.536**	**.99923**	**1.0360**	**49.327**	**.97756**
Stddev	.198	.00129	.0062	.166	.00073
%RSD	.40846	.12934	.59795	.33665	.07456
#1	48.676	1.0001	1.0404	49.209	.97705
#2	48.396	.99832	1.0316	49.444	.97808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.05**	**.95807**	**24.137**	**.98215**	**1.0034**
Stddev	.01	.00152	.047	.00245	.0022
%RSD	.0235	.15896	.19526	.24994	.21383
#1	37.05	.95700	24.104	.98388	1.0019
#2	37.06	.95915	24.171	.98041	1.0050
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.5710**	**.95231**	**.98411**	**1.481**	**.96492**
Stddev	.0641	.00013	.00269	.002	.00137
%RSD	.67001	.01409	.27354	.1022	.14172
#1	9.5257	.95221	.98220	1.480	.96588
#2	9.6164	.95240	.98601	1.482	.96395
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 22:49:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0101**	**1.0189**	**.95915**	**1.510**
Stddev	.0026	.0021	.00430	.001
%RSD	.25987	.21036	.44784	.0821
#1	1.0120	1.0204	.96219	1.509
#2	1.0083	1.0174	.95612	1.511
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4888.9**	**4118.2**	**32420.**	**4032.4**
Stddev	4.3	3.2	130.	13.1
%RSD	.08860	.07874	.40001	.32432
#1	4885.9	4115.9	32328.	4041.7
#2	4892.0	4120.5	32512.	4023.2

Sample Name: CCB-6254294 Acquired: 11/24/2020 22:52:47 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00062**	**-.01221**	**-.00090**	**.00786**	**.00014**
Stddev	.00034	.00394	.00051	.00010	.00001
%RSD	55.874	32.247	56.637	1.2571	6.3487
#1	.00037	-.00943	-.00127	.00779	.00013
#2	.00086	-.01499	-.00054	.00793	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.00038**	**-.00009**	**.0100**	**-.00007**
Stddev	.00005	.00144	.00002	.0003	.00001
%RSD	55.700	382.27	23.016	3.079	11.136
#1	.00013	-.00064	-.00008	.0102	-.00007
#2	.00006	.00139	-.00011	.0098	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.00190**	**.00512**	**.17416**	**.00133**
Stddev	.00014	.00045	.00248	.04512	.00196
%RSD	968.68	23.742	48.423	25.907	148.25
#1	.00008	.00221	.00687	.20607	.00271
#2	-.00011	.00158	.00337	.14226	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 22:52:47 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00716**	**.00004**	**.00345**	**.16395**	**.00021**
Stddev	.00234	.00001	.00081	.00822	.00003
%RSD	32.667	34.296	23.363	5.0143	15.933
#1	.00551	.00003	.00288	.15813	.00023
#2	.00881	.00004	.00401	.16976	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00003**	**.01105**	**-.00049**	**-.00038**
Stddev	.00	.00005	.00061	.00092	.00156
%RSD	.0000	176.40	5.4820	187.35	404.91
#1	25.02	.00001	.01148	.00016	.00072
#2	25.02	-.00006	.01063	-.00114	-.00148
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00751**	**.00051**	**.00010**	**.9955**	**.00063**
Stddev	.01791	.00020	.00010	.0071	.00052
%RSD	238.63	39.524	100.96	.7094	82.759
#1	-.00516	.00065	.00003	1.001	.00026
#2	.02017	.00037	.00017	.9905	.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 22:52:47 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00045**	**-.00021**	**.00042**	**.9992**
Stddev	.00096	.00034	.00007	.0010
%RSD	215.42	165.05	16.945	.0981
#1	.00023	-.00045	.00037	.9985
#2	-.00113	.00003	.00047	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5734.3**	**4283.1**	**34571.**	**4131.4**
Stddev	.1	1.0	64.	10.6
%RSD	.00132	.02366	.18578	.25627
#1	5734.3	4283.9	34617.	4123.9
#2	5734.4	4282.4	34526.	4138.8

Sample Name: CCVL-6256824 Acquired: 11/24/2020 22:56:35 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00547**	**.21655**	**.01509**	W **.02625**	**.00212**
Stddev	.00031	.01522	.00103	.00012	.00004
%RSD	5.7252	7.0305	6.8389	.45714	1.6832
#1	.00569	.20578	.01581	.02634	.00214
#2	.00525	.22731	.01436	.02617	.00209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value				.02000	
Range				30.000%	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00209**	**.50641**	**.00199**	**.0248**	**.00352**
Stddev	.00005	.00046	.00016	.0006	.00000
%RSD	2.3694	.09090	7.8671	2.254	.10853
#1	.00212	.50609	.00188	.0244	.00351
#2	.00205	.50674	.00210	.0252	.00352
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00390**	**.01080**	**.05096**	**.64886**	**.03025**
Stddev	.00002	.00073	.00126	.02142	.00124
%RSD	.52841	6.7560	2.4671	3.3006	4.0902
#1	.00391	.01029	.05007	.63372	.02937
#2	.00388	.01132	.05185	.66401	.03112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 22:56:35 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20754**	**.00320**	**.01048**	**1.1359**	**.00942**
Stddev	.00062	.00010	.00003	.0051	.00015
%RSD	.30027	3.0707	.25983	.44548	1.6241
#1	.20710	.00313	.01050	1.1324	.00952
#2	.20799	.00327	.01046	1.1395	.00931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00948**	**.18594**	**.01679**	**.02237**
Stddev	.00	.00017	.00204	.00084	.00105
%RSD	.0024	1.7998	1.0995	4.9780	4.6932
#1	25.00	.00936	.18738	.01620	.02311
#2	25.00	.00960	.18449	.01738	.02163
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46570**	**.00913**	**.00494**	F **1.002**	**.00488**
Stddev	.00414	.00003	.00006	.003	.00026
%RSD	.88846	.30075	1.1781	.3056	5.3399
#1	.46278	.00915	.00499	1.004	.00506
#2	.46863	.00911	.00490	.9996	.00469
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 22:56:35 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01877**	**.00505**	**.00969**	F **1.001**
Stddev	.00057	.00006	.00010	.000
%RSD	3.0381	1.1320	1.0602	.0033
#1	.01918	.00509	.00976	1.001
#2	.01837	.00501	.00961	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5643.2**	**4229.4**	**34417.**	**4025.0**
Stddev	7.8	6.7	58.	16.9
%RSD	.13746	.15797	.16757	.41944
#1	5648.7	4234.1	34376.	4036.9
#2	5637.7	4224.7	34457.	4013.0

Sample Name: 480-177739-D-1-B Acquired: 11/24/2020 23:00:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00019**	**.01629**	**.06584**	**17.532**	**.28180**
Stddev	.00121	.01752	.00025	.011	.00053
%RSD	622.81	107.53	.37268	.06353	.18707
#1	-.00105	.00390	.06602	17.524	.28143
#2	.00066	.02868	.06567	17.540	.28218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**80.010**	**.00041**	**.0018**	**.03304**
Stddev	.00004	.165	.00012	.0359	.00003
%RSD	51.495	.20665	28.640	1959.	.09621
#1	.00005	79.893	.00050	-.0235	.03307
#2	.00010	80.127	.00033	.0272	.03302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.06374**	**.00607**	**1.9518**	**363.86**	**.98084**
Stddev	.00016	.00055	.0011	.83	.00082
%RSD	.25285	9.0724	.05608	.22856	.08405
#1	.06385	.00646	1.9526	363.27	.98143
#2	.06362	.00568	1.9511	364.45	.98026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-1-B Acquired: 11/24/2020 23:00:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**158.20**	**.05040**	**.00434**	F **1888.7**	**.14959**
Stddev	.22	.00007	.00001	2.9	.00048
%RSD	.13971	.13533	.26143	.15129	.31927
#1	158.04	.05035	.00435	1886.7	.14992
#2	158.35	.05045	.00433	1890.7	.14925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**27.24**	**-.00152**	F **162.19**	**.00009**	**.00007**
Stddev	.01	.00024	.06	.00038	.00105
%RSD	.0331	15.936	.03592	444.74	1495.1
#1	27.25	-.00169	162.23	-.00018	-.00067
#2	27.23	-.00135	162.14	.00036	.00081
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.311**	**.00440**	**.99866**	**.9975**	**.07077**
Stddev	.071	.00002	.00098	.0023	.00009
%RSD	.43462	.36783	.09814	.2272	.12045
#1	16.261	.00439	.99797	.9991	.07071
#2	16.361	.00441	.99936	.9959	.07083
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-1-B Acquired: 11/24/2020 23:00:21 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00200**	**.19171**	**.00998**	**1.052**
Stddev	.00128	.00036	.00003	.001
%RSD	63.755	.18921	.28765	.0796
#1	-.00291	.19145	.00996	1.052
#2	-.00110	.19197	.01000	1.051
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4000.6**	**3611.7**	**28037.**	**3910.6**
Stddev	1.8	2.1	69.	24.5
%RSD	.04443	.05898	.24455	.62753
#1	4001.8	3610.2	28086.	3928.0
#2	3999.3	3613.2	27989.	3893.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	68.949%	83.186%	80.478%	96.196%
Range				

Sample Name: 480-177739-D-2-B Acquired: 11/24/2020 23:04:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.07080**	**.30370**	F **21.610**	**.26044**
Stddev	.00040	.02426	.00105	.018	.00036
%RSD	244.31	34.260	.34520	.08262	.13871
#1	-.00012	.05365	.30444	21.598	.26018
#2	.00045	.08795	.30296	21.623	.26070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				18.000	
Low Limit				-.02000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**53.826**	**.00025**	**-.0303**	**.04035**
Stddev	.00002	.072	.00008	.0129	.00013
%RSD	87.867	.13356	32.537	42.46	.32457
#1	.00004	53.877	.00020	-.0394	.04026
#2	.00001	53.775	.00031	-.0212	.04044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18699**	**.00658**	**1.4541**	**524.17**	**.65805**
Stddev	.00113	.00022	.0026	.08	.00013
%RSD	.60303	3.3016	.17993	.01468	.01965
#1	.18619	.00643	1.4522	524.23	.65796
#2	.18778	.00673	1.4559	524.12	.65814
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-2-B Acquired: 11/24/2020 23:04:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**184.74**	**.09978**	**.01512**	F **2449.4**	**.18773**
Stddev	.20	.00031	.00024	.6	.00060
%RSD	.10878	.31156	1.5806	.02428	.31741
#1	184.60	.09956	.01529	2449.8	.18730
#2	184.89	.10000	.01495	2449.0	.18815
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**28.76**	**-.00119**	F **320.43**	**.05046**	**.00333**
Stddev	.01	.00060	.76	.00081	.00032
%RSD	.0248	50.454	.23606	1.6109	9.5836
#1	28.75	-.00076	319.89	.04989	.00310
#2	28.76	-.00161	320.96	.05104	.00355
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**15.636**	**.00605**	**1.0969**	**.9948**	**.25930**
Stddev	.010	.00009	.0010	.0017	.00077
%RSD	.06671	1.4561	.08749	.1660	.29646
#1	15.629	.00611	1.0962	.9959	.25876
#2	15.644	.00599	1.0975	.9936	.25984
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-2-B Acquired: 11/24/2020 23:04:04 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00285**	**.54553**	**.00395**	**1.055**
Stddev	.00169	.00068	.00001	.000
%RSD	59.448	.12405	.27318	.0417
#1	-.00404	.54505	.00395	1.055
#2	-.00165	.54601	.00394	1.055
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3875.4**	**3549.5**	**27399.**	**3922.8**
Stddev	.8	3.9	8.	29.6
%RSD	.02016	.10898	.03049	.75478
#1	3874.8	3546.8	27405.	3901.9
#2	3875.9	3552.3	27393.	3943.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	66.792%	81.755%	78.646%	96.495%
Range				

Sample Name: 480-177739-D-3-B Acquired: 11/24/2020 23:07:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.57647	.00289	4.9902	1.8494
Stddev	.00018	.00423	.00028	.0051	.0056
%RSD	25.922	.73316	9.8473	.10190	.30493
#1	.00058	.57945	.00309	4.9938	1.8534
#2	.00084	.57348	.00269	4.9866	1.8454
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00001	160.98	-.00108	.0291	.01613
Stddev	.00008	.98	.00012	.0080	.00004
%RSD	963.41	.61084	11.402	27.64	.25535
#1	-.00005	161.68	-.00117	.0234	.01616
#2	.00006	160.29	-.00099	.0348	.01610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.05550	.01424	169.55	283.21	.76737
Stddev	.00053	.00004	.39	.92	.00196
%RSD	.96287	.26991	.23147	.32549	.25561
#1	.05588	.01427	169.83	283.86	.76598
#2	.05512	.01421	169.27	282.56	.76875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-3-B Acquired: 11/24/2020 23:07:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**198.24**	**.31966**	**.00172**	**610.57**	**.09606**
Stddev	3.59	.00110	.00016	1.75	.00002
%RSD	1.8124	.34308	9.3986	.28581	.01756
#1	200.78	.32043	.00184	611.81	.09607
#2	195.70	.31888	.00161	609.34	.09605
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**33.12**	**.06127**	**10.767**	**-.01543**	**.01893**
Stddev	.01	.00079	.024	.00031	.00247
%RSD	.0419	1.2828	.21821	2.0350	13.060
#1	33.13	.06183	10.784	-.01565	.02068
#2	33.11	.06072	10.751	-.01521	.01719
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.567**	**.05078**	**.77348**	**1.076**	**.12471**
Stddev	.527	.00021	.00266	.004	.00076
%RSD	3.1810	.41299	.34384	.3332	.61240
#1	16.940	.05063	.77536	1.079	.12417
#2	16.195	.05093	.77160	1.074	.12525
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-3-B Acquired: 11/24/2020 23:07:46 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00453**	**.04610**	**.15134**	**1.009**
Stddev	.00146	.00014	.00030	.000
%RSD	32.181	.31347	.19727	.0106
#1	-.00350	.04600	.15113	1.009
#2	-.00556	.04621	.15155	1.009
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4225.3**	**3768.2**	**29658.**	**4041.6**
Stddev	9.0	5.7	108.	19.9
%RSD	.21392	.15258	.36443	.49143
#1	4219.0	3764.1	29581.	4027.6
#2	4231.7	3772.2	29734.	4055.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	72.823%	86.791%	85.130%	99.418%
Range				

Sample Name: 480-177739-D-4-B Acquired: 11/24/2020 23:11:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**.92978**	**.02074**	**5.6142**	**.25496**
Stddev	.00025	.00539	.00015	.0015	.00031
%RSD	57.934	.57977	.73101	.02622	.12030
#1	.00026	.93360	.02085	5.6132	.25518
#2	.00061	.92597	.02064	5.6152	.25474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**101.83**	**.00046**	**-.0059**	**.01231**
Stddev	.00001	.36	.00007	.0088	.00011
%RSD	5.1180	.35121	14.595	149.0	.90804
#1	.00016	101.58	.00042	.0003	.01239
#2	.00018	102.09	.00051	-.0121	.01223
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02011**	**.00637**	**10.619**	**215.22**	**.52641**
Stddev	.00013	.00067	.045	.86	.00214
%RSD	.62252	10.508	.42233	.39808	.40602
#1	.02020	.00684	10.587	214.62	.52490
#2	.02002	.00590	10.651	215.83	.52792
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-4-B Acquired: 11/24/2020 23:11:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**139.20**	**.13458**	**.03982**	**702.96**	**.14725**
Stddev	.53	.00062	.00017	1.80	.00025
%RSD	.38155	.46055	.42398	.25594	.16728
#1	139.58	.13502	.03994	701.69	.14708
#2	138.82	.13414	.03970	704.23	.14743
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.70**	**.00300**	F **107.06**	**.00462**	**.00124**
Stddev	.00	.00050	.22	.00021	.00334
%RSD	.0096	16.772	.20243	4.4614	268.47
#1	25.71	.00264	106.90	.00447	.00360
#2	25.70	.00335	107.21	.00476	-.00112
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.000		
Low Limit			-.20000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.140**	**.00534**	**.69634**	**.9972**	**.04680**
Stddev	.110	.00024	.00184	.0083	.00064
%RSD	1.0888	4.5335	.26435	.8301	1.3670
#1	10.218	.00551	.69503	.9913	.04635
#2	10.062	.00517	.69764	1.003	.04726
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-4-B Acquired: 11/24/2020 23:11:45 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00142**	**.33440**	**.02330**	**1.011**
Stddev	.00073	.00218	.00047	.001
%RSD	51.061	.65064	2.0168	.1088
#1	-.00091	.33594	.02297	1.012
#2	-.00194	.33286	.02363	1.010
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4370.3**	**3809.9**	**30100.**	**4023.6**
Stddev	5.4	4.4	54.	24.5
%RSD	.12443	.11639	.18022	.60875
#1	4366.5	3806.8	30062.	4040.9
#2	4374.2	3813.0	30138.	4006.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.322%	87.752%	86.399%	98.974%
Range				

Sample Name: 480-177739-D-5-B Acquired: 11/24/2020 23:15:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00107**	**.28070**	**.04435**	**17.973**	**.17343**
Stddev	.00031	.02503	.00290	.034	.00025
%RSD	28.958	8.9164	6.5491	.18919	.14463
#1	-.00129	.26301	.04230	17.949	.17361
#2	-.00085	.29840	.04641	17.997	.17325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**133.22**	**.00046**	**-.0121**	**.03029**
Stddev	.00008	.31	.00003	.0014	.00010
%RSD	202.54	.23407	6.0649	11.68	.32421
#1	.00010	133.44	.00047	-.0130	.03036
#2	-.00002	132.99	.00044	-.0111	.03022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20359**	**.00594**	**1.8751**	F **546.79**	**.33546**
Stddev	.00040	.00023	.0097	.56	.00144
%RSD	.19761	3.8395	.51469	.10265	.42879
#1	.20331	.00578	1.8682	546.40	.33647
#2	.20388	.00610	1.8819	547.19	.33444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-177739-D-5-B Acquired: 11/24/2020 23:15:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**207.18**	**.29550**	**.01181**	F **1651.9**	**.25030**
Stddev	.88	.00091	.00007	1.5	.00026
%RSD	.42270	.30666	.55704	.09206	.10375
#1	207.80	.29614	.01186	1650.9	.25011
#2	206.56	.29486	.01177	1653.0	.25048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**29.13**	**.00147**	**62.571**	**.00599**	**.00286**
Stddev	.01	.00066	.063	.00091	.00042
%RSD	.0247	44.878	.10051	15.214	14.739
#1	29.14	.00194	62.615	.00663	.00256
#2	29.13	.00100	62.526	.00535	.00315
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.8280**	**.01649**	**.97279**	**.9940**	**.11528**
Stddev	.0155	.00039	.00048	.0028	.00016
%RSD	.22732	2.3534	.04888	.2809	.13697
#1	6.8390	.01676	.97245	.9960	.11539
#2	6.8170	.01621	.97313	.9920	.11517
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177739-D-5-B Acquired: 11/24/2020 23:15:29 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00279**	**.06723**	**.21462**	**1.019**
Stddev	.00057	.00020	.00025	.001
%RSD	20.570	.29906	.11566	.0744
#1	-.00320	.06737	.21480	1.020
#2	-.00238	.06709	.21445	1.019
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3961.3**	**3588.7**	**28143.**	**3913.2**
Stddev	4.0	3.2	24.	.0
%RSD	.09993	.09049	.08547	.00053
#1	3964.1	3591.0	28160.	3913.2
#2	3958.5	3586.4	28126.	3913.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	68.272%	82.657%	80.781%	96.259%
Range				

Sample Name: 480-177765-A-1-A Acquired: 11/24/2020 23:19:17 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.03049**	**.01004**	**.20946**	**.22556**
Stddev	.00101	.02159	.00015	.00176	.00001
%RSD	318.51	70.813	1.5012	.83906	.00604
#1	-.00103	.01522	.00993	.21070	.22557
#2	.00040	.04576	.01015	.20821	.22555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**100.07**	**.00016**	**-.0100**	**.00102**
Stddev	.00001	.08	.00011	.0440	.00017
%RSD	31.531	.07970	66.361	440.7	16.380
#1	-.00002	100.01	.00009	-.0411	.00090
#2	-.00001	100.12	.00024	.0211	.00114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**.00685**	**2.2348**	**7.4910**	**.01217**
Stddev	.00020	.00016	.0049	.0020	.00025
%RSD	39.058	2.2744	.21872	.02723	2.0139
#1	.00064	.00674	2.2383	7.4896	.01200
#2	.00036	.00696	2.2314	7.4925	.01235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-1-A Acquired: 11/24/2020 23:19:17 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**60.597**	**.09758**	**.00071**	**72.844**	**.01003**
Stddev	.012	.00007	.00017	.075	.00014
%RSD	.02023	.07613	23.514	.10261	1.4217
#1	60.606	.09753	.00083	72.897	.01013
#2	60.588	.09764	.00059	72.791	.00993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00012**	**19.982**	**-.00235**	**-.00195**
Stddev	.00	.00047	.057	.00097	.00131
%RSD	.0026	389.51	.28526	41.338	66.842
#1	25.02	.00045	20.022	-.00166	-.00103
#2	25.02	-.00021	19.942	-.00304	-.00288
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6172**	**-.00028**	**3.2931**	**.9974**	**.00096**
Stddev	.1032	.00018	.0067	.0015	.00007
%RSD	1.0733	63.837	.20309	.1501	7.0488
#1	9.6902	-.00015	3.2978	.9964	.00101
#2	9.5443	-.00041	3.2884	.9985	.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-1-A Acquired: 11/24/2020 23:19:17 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00094**	**-.00006**	**.02897**	**.9999**
Stddev	.00055	.00042	.00018	.0001
%RSD	58.069	687.24	.62778	.0139
#1	-.00133	.00024	.02910	1.000
#2	-.00056	-.00036	.02884	.9998
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4978.9**	**4082.6**	**32588.**	**4116.4**
Stddev	8.7	4.2	12.	1.4
%RSD	.17569	.10329	.03653	.03491
#1	4985.1	4085.6	32580.	4115.4
#2	4972.7	4079.7	32596.	4117.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.810%	94.034%	93.541%	101.26%
Range				

Sample Name: 480-177765-A-2-A Acquired: 11/24/2020 23:22:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**-.02696**	**.01113**	**.20128**	**.22278**
Stddev	.00001	.00194	.00058	.00001	.00004
%RSD	3.1859	7.1781	5.2513	.00534	.01908
#1	-.00035	-.02559	.01155	.20127	.22281
#2	-.00033	-.02833	.01072	.20129	.22275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**102.39**	**.00042**	**-.0319**	**.00101**
Stddev	.00003	.06	.00001	.0328	.00027
%RSD	335.26	.05573	2.9268	102.8	26.395
#1	.00001	102.43	.00043	-.0087	.00082
#2	-.00003	102.35	.00041	-.0551	.00120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00052**	**.00174**	**1.9669**	**7.2150**	**.01158**
Stddev	.00013	.00005	.0076	.0389	.00032
%RSD	24.634	2.9691	.38364	.53929	2.8035
#1	.00061	.00170	1.9616	7.1875	.01135
#2	.00043	.00177	1.9722	7.2425	.01181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-A Acquired: 11/24/2020 23:22:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**60.774**	**.08538**	**.00071**	**72.549**	**.00922**
Stddev	.153	.00008	.00034	.014	.00009
%RSD	.25187	.08887	47.681	.01935	.95098
#1	60.882	.08533	.00094	72.539	.00928
#2	60.665	.08544	.00047	72.558	.00916
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**-.00024**	**20.170**	**-.00222**	**-.00118**
Stddev	.00	.00024	.011	.00064	.00226
%RSD	.0024	102.34	.05411	28.754	191.58
#1	25.02	-.00007	20.177	-.00268	-.00278
#2	25.02	-.00041	20.162	-.00177	.00042
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7692**	**-.00016**	**3.3754**	**.9986**	**.00082**
Stddev	.1574	.00065	.0036	.0015	.00030
%RSD	1.6108	406.79	.10698	.1505	36.682
#1	9.8805	-.00062	3.3780	.9997	.00060
#2	9.6579	.00030	3.3728	.9976	.00103
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-A Acquired: 11/24/2020 23:22:57 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00126**	**-.00007**	**.00365**	**1.000**
Stddev	.00079	.00049	.00003	.000
%RSD	62.984	708.97	.87254	.0040
#1	-.00070	.00027	.00367	1.000
#2	-.00182	-.00041	.00362	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4960.6**	**4053.3**	**32543.**	**4060.6**
Stddev	4.8	3.0	43.	5.2
%RSD	.09679	.07478	.13292	.12762
#1	4964.0	4055.4	32513.	4064.2
#2	4957.2	4051.2	32574.	4056.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.495%	93.358%	93.413%	99.884%
Range				

Sample Name: 480-177765-A-2-ASD@5 Acquired: 11/24/2020 23:26:38 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00035**	**-.01780**	**.00156**	**.05235**	**.04542**
Stddev	.00005	.03199	.00044	.00042	.00001
%RSD	14.397	179.71	28.114	.79945	.01829
#1	-.00032	-.04043	.00188	.05265	.04542
#2	-.00039	.00482	.00125	.05206	.04543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**20.441**	**.00013**	**.0013**	**.00016**
Stddev	.00002	.109	.00001	.0230	.00004
%RSD	42.093	.53322	7.6510	1773.	23.384
#1	.00003	20.364	.00012	.0175	.00013
#2	.00006	20.518	.00014	-.0149	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00040**	**.00174**	**.39953**	**1.6263**	**.00209**
Stddev	.00033	.00023	.00527	.0427	.00052
%RSD	82.978	13.137	1.3194	2.6228	24.589
#1	.00063	.00190	.39580	1.5962	.00173
#2	.00016	.00158	.40325	1.6565	.00246
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-ASD@5 Acquired: 11/24/2020 23:26:38 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.042**	**.01739**	**-.00051**	**14.491**	**.00199**
Stddev	.014	.00007	.00002	.068	.00030
%RSD	.11277	.42136	4.6453	.46663	14.998
#1	12.052	.01734	-.00053	14.443	.00178
#2	12.032	.01744	-.00050	14.539	.00221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00009**	**3.8658**	**-.00072**	**-.00006**
Stddev	.00	.00023	.0010	.00148	.00363
%RSD	.0027	251.64	.02471	206.92	6318.0
#1	25.02	.00026	3.8651	.00033	-.00262
#2	25.02	-.00007	3.8665	-.00176	.00251
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.9202**	**.00001**	**.67579**	**.9966**	**.00035**
Stddev	.0241	.00042	.00259	.0052	.00007
%RSD	1.2567	3057.8	.38303	.5222	20.875
#1	1.9373	-.00029	.67396	.9929	.00040
#2	1.9032	.00031	.67762	1.000	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-ASD@5 Acquired: 11/24/2020 23:26:38 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**-.00007**	**-.00023**	**.00099**	**.9993**
Stddev	.00010	.00016	.00002	.0018
%RSD	150.28	70.276	2.1029	.1761
#1	.00000	-.00012	.00098	1.001
#2	-.00014	-.00035	.00101	.9980
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5371.5**	**4170.8**	**33606.**	**4040.5**
Stddev	7.1	2.0	121.	29.3
%RSD	.13160	.04741	.36137	.72430
#1	5376.5	4172.2	33521.	4061.2
#2	5366.5	4169.4	33692.	4019.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.577%	96.065%	96.464%	99.392%
Range				

Sample Name: 480-177765-A-2-APDS Acquired: 11/24/2020 23:30:23 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04953**	**9.8999**	**.22252**	**.40150**	**.41991**
Stddev	.00030	.0853	.00005	.00020	.00006
%RSD	.61258	.86158	.02238	.04965	.01400
#1	.04974	9.9602	.22255	.40165	.41986
#2	.04931	9.8396	.22248	.40136	.41995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21460**	**106.66**	**.20666**	**-.0304**	**.19569**
Stddev	.00073	.16	.00009	.0135	.00000
%RSD	.33948	.15164	.04117	44.36	.00065
#1	.21512	106.78	.20672	-.0209	.19569
#2	.21409	106.55	.20660	-.0400	.19569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20732**	**.20178**	**11.369**	**17.208**	**.21327**
Stddev	.00072	.00061	.015	.005	.00073
%RSD	.34869	.30466	.12789	.02811	.34198
#1	.20681	.20134	11.358	17.211	.21275
#2	.20784	.20221	11.379	17.205	.21378
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-APDS Acquired: 11/24/2020 23:30:23 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**68.573**	**.28789**	**.21726**	**79.861**	**.20488**
Stddev	.021	.00048	.00163	.335	.00021
%RSD	.03031	.16641	.75226	.42003	.10099
#1	68.587	.28823	.21842	80.098	.20503
#2	68.558	.28755	.21610	79.624	.20473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.72**	**.19869**	**29.320**	**.20457**	**.21235**
Stddev	.00	.00033	.008	.00039	.00350
%RSD	.0019	.16417	.02652	.18905	1.6480
#1	24.72	.19846	29.325	.20484	.21483
#2	24.73	.19892	29.314	.20429	.20988
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.879**	**.20133**	**3.4318**	**1.006**	**.20194**
Stddev	.002	.00086	.0078	.013	.00025
%RSD	.01143	.42762	.22806	1.238	.12532
#1	20.880	.20072	3.4374	.9972	.20176
#2	20.877	.20194	3.4263	1.015	.20212
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-APDS Acquired: 11/24/2020 23:30:23 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20731**	**.21124**	**.19752**	**1.001**
Stddev	.00001	.00009	.00057	.001
%RSD	.00314	.04315	.28745	.0594
#1	.20730	.21118	.19712	1.001
#2	.20731	.21131	.19793	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4862.0**	**4052.2**	**32332.**	**4053.3**
Stddev	.9	.9	30.	4.9
%RSD	.01854	.02310	.09135	.12005
#1	4862.7	4051.5	32353.	4049.8
#2	4861.4	4052.9	32311.	4056.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.796%	93.333%	92.806%	99.705%
Range				

Sample Name: CCV-6249977 Acquired: 11/24/2020 23:33:58 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.95171**	**48.246**	**.99238**	**1.0534**	**1.0076**
Stddev	.00234	.079	.00045	.0006	.0029
%RSD	.24563	.16295	.04515	.05933	.28758
#1	.95336	48.302	.99207	1.0530	1.0097
#2	.95006	48.191	.99270	1.0539	1.0056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0053**	**48.021**	**.98381**	**1.020**	**.96657**
Stddev	.0042	.157	.00025	.000	.00003
%RSD	.41873	.32638	.02508	.0390	.00332
#1	1.0083	48.132	.98364	1.020	.96655
#2	1.0024	47.911	.98399	1.020	.96659
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0266**	**.97032**	**47.755**	**50.241**	**.98688**
Stddev	.0017	.00122	.025	.255	.00288
%RSD	.16755	.12546	.05166	.50762	.29221
#1	1.0279	.97118	47.772	50.421	.98892
#2	1.0254	.96946	47.737	50.061	.98484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 23:33:58 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.777**	**1.0061**	**1.0473**	**49.517**	**.98133**
Stddev	.215	.0038	.0041	.164	.00023
%RSD	.44108	.37468	.39337	.33035	.02386
#1	48.929	1.0088	1.0502	49.632	.98150
#2	48.625	1.0034	1.0443	49.401	.98116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.08**	**.96049**	**24.277**	**.98557**	**1.0149**
Stddev	.00	.00122	.022	.00108	.0021
%RSD	.0115	.12661	.09206	.10981	.20668
#1	37.08	.96135	24.261	.98634	1.0164
#2	37.08	.95963	24.292	.98481	1.0134
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7803**	**.95169**	**.98901**	**1.480**	**.96448**
Stddev	.0430	.00233	.00386	.000	.00173
%RSD	.44006	.24531	.39023	.0108	.17917
#1	9.7498	.95334	.99174	1.480	.96570
#2	9.8107	.95004	.98628	1.480	.96326
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/24/2020 23:33:58 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0218**	**1.0299**	**.95829**	**1.515**
Stddev	.0014	.0015	.00263	.002
%RSD	.13254	.14232	.27415	.1130
#1	1.0227	1.0309	.96014	1.516
#2	1.0208	1.0288	.95643	1.513
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4900.1**	**4133.4**	**32489.**	**4099.3**
Stddev	2.4	1.9	240.	21.5
%RSD	.04814	.04599	.73836	.52519
#1	4898.4	4134.8	32320.	4084.1
#2	4901.7	4132.1	32659.	4114.5

Sample Name: CCB-6254294 Acquired: 11/24/2020 23:37:31 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.01782**	**-.00026**	**.00969**	**.00011**
Stddev	.00035	.01108	.00109	.00021	.00001
%RSD	1058.8	62.178	426.42	2.1694	4.8835
#1	-.00028	.02565	-.00102	.00954	.00011
#2	.00021	.00998	.00051	.00984	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.00155**	**-.00013**	**.0208**	**.00007**
Stddev	.00001	.00118	.00005	.0281	.00009
%RSD	63.753	76.176	35.975	135.3	122.15
#1	.00001	.00071	-.00017	.0407	.00001
#2	.00003	.00238	-.00010	.0009	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00216**	**.00184**	**.15901**	**.00052**
Stddev	.00010	.00076	.00034	.01791	.00039
%RSD	164.41	35.017	18.294	11.266	75.403
#1	-.00001	.00269	.00208	.17167	.00080
#2	.00013	.00163	.00160	.14634	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 23:37:31 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00537**	**.00005**	**.00357**	**.14441**	**.00014**
Stddev	.00046	.00007	.00112	.00607	.00008
%RSD	8.4701	139.59	31.435	4.2014	57.473
#1	.00569	.00010	.00278	.14870	.00020
#2	.00505	.00000	.00437	.14012	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00018**	**.00138**	**-.00033**	**-.00075**
Stddev	.00	.00040	.00080	.00012	.00094
%RSD	.0029	221.70	57.496	37.433	125.62
#1	25.02	.00046	.00195	-.00024	-.00008
#2	25.02	-.00010	.00082	-.00042	-.00141
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02729**	**.00029**	**.00011**	**.9934**	**-.00007**
Stddev	.00507	.00028	.00001	.0055	.00036
%RSD	18.588	94.943	7.6641	.5570	545.51
#1	.03088	.00010	.00011	.9973	-.00032
#2	.02371	.00049	.00010	.9895	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/24/2020 23:37:31 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00036**	**-.00026**	**.00041**	**.9992**
Stddev	.00000	.00004	.00007	.0002
%RSD	.21456	14.325	18.104	.0182
#1	-.00036	-.00024	.00036	.9993
#2	-.00036	-.00029	.00046	.9991
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5752.3**	**4264.6**	**34548.**	**4082.3**
Stddev	2.6	4.2	44.	3.6
%RSD	.04456	.09863	.12754	.08736
#1	5754.1	4267.6	34517.	4084.8
#2	5750.5	4261.7	34579.	4079.7

Sample Name: CCVL-6256824 Acquired: 11/24/2020 23:41:20 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00592**	**.19203**	**.01418**	W **.02880**	**.00214**
Stddev	.00022	.03902	.00028	.00038	.00004
%RSD	3.7109	20.320	1.9719	1.3248	1.9254
#1	.00608	.21962	.01398	.02853	.00217
#2	.00577	.16444	.01437	.02907	.00211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value				.02000	
Range				30.000%	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00214**	**.50547**	**.00191**	**.0008**	**.00355**
Stddev	.00003	.00064	.00009	.0137	.00009
%RSD	1.4651	.12670	4.7468	1703.	2.6050
#1	.00212	.50501	.00198	-.0089	.00349
#2	.00216	.50592	.00185	.0105	.00362
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00438**	**.01071**	**.05063**	W **.67068**	**.03232**
Stddev	.00007	.00026	.00152	.02557	.00007
%RSD	1.5143	2.4373	3.0093	3.8129	.21812
#1	.00443	.01089	.04955	.65259	.03237
#2	.00433	.01053	.05170	.68876	.03227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value				.50000	
Range				30.000%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 23:41:20 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20751**	**.00322**	**.01078**	**1.1526**	**.00954**
Stddev	.00320	.00005	.00013	.0024	.00003
%RSD	1.5434	1.6380	1.1634	.20599	.34448
#1	.20524	.00318	.01069	1.1543	.00957
#2	.20977	.00325	.01087	1.1509	.00952
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00954**	**.18170**	**.01840**	**.02364**
Stddev	.00	.00005	.00082	.00172	.00132
%RSD	.0016	.54176	.44945	9.3739	5.5922
#1	25.00	.00958	.18112	.01962	.02457
#2	25.00	.00951	.18228	.01718	.02270
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46867**	**.00918**	**.00509**	F **.9973**	**.00463**
Stddev	.00421	.00008	.00011	.0011	.00002
%RSD	.89895	.86302	2.2403	.1112	.44803
#1	.46569	.00923	.00517	.9965	.00461
#2	.47165	.00912	.00500	.9980	.00464
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 23:41:20 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	.01977	.00518	.00958	F .9993
Stddev	.00181	.00019	.00061	.0002
%RSD	9.1386	3.6835	6.3205	.0208
#1	.01849	.00531	.01001	.9991
#2	.02105	.00504	.00915	.9994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5654.3	4239.8	34420.	4018.0
Stddev	3.2	2.9	16.	10.0
%RSD	.05691	.06853	.04693	.24874
#1	5652.0	4241.9	34431.	4010.9
#2	5656.5	4237.8	34409.	4025.1

Sample Name: 480-177765-A-2-B MS Acquired: 11/24/2020 23:45:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05015**	**9.8892**	**.22295**	**.39988**	**.43627**
Stddev	.00027	.0095	.00099	.00021	.00024
%RSD	.54732	.09625	.44291	.05244	.05580
#1	.05035	9.8825	.22365	.40003	.43644
#2	.04996	9.8960	.22225	.39974	.43610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21351**	**109.66**	**.20522**	**-.0257**	**.19571**
Stddev	.00043	.33	.00039	.0267	.00007
%RSD	.20018	.30435	.18806	103.7	.03678
#1	.21381	109.89	.20495	-.0068	.19566
#2	.21321	109.42	.20549	-.0446	.19576
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20534**	**.20050**	**11.371**	**17.297**	**.21743**
Stddev	.00033	.00225	.048	.042	.00124
%RSD	.16303	1.1202	.42176	.24056	.56832
#1	.20510	.20209	11.405	17.326	.21831
#2	.20558	.19891	11.338	17.267	.21656
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-B MS Acquired: 11/24/2020 23:45:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**70.662**	**.29004**	**.21816**	**82.787**	**.20535**
Stddev	.033	.00004	.00032	.045	.00083
%RSD	.04714	.01264	.14512	.05377	.40279
#1	70.685	.29006	.21839	82.756	.20594
#2	70.638	.29001	.21794	82.818	.20477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.73**	**.19670**	**30.014**	**.20292**	**.21288**
Stddev	.00	.00218	.039	.00094	.00094
%RSD	.0113	1.1060	.12838	.46476	.44066
#1	24.73	.19516	29.987	.20359	.21222
#2	24.73	.19824	30.042	.20225	.21354
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.547**	**.19409**	**3.5568**	**1.004**	**.20057**
Stddev	.143	.00087	.0098	.005	.00125
%RSD	.76904	.44751	.27587	.5359	.62550
#1	18.647	.19470	3.5638	1.001	.20146
#2	18.446	.19348	3.5499	1.008	.19968
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-B MS Acquired: 11/24/2020 23:45:06 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20798**	**.21063**	**.19525**	**1.001**
Stddev	.00028	.00034	.00099	.000
%RSD	.13359	.16077	.50451	.0164
#1	.20818	.21087	.19594	1.000
#2	.20779	.21039	.19455	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4857.8**	**4068.0**	**32360.**	**4093.5**
Stddev	6.9	6.0	19.	5.0
%RSD	.14115	.14704	.05906	.12218
#1	4852.9	4063.8	32346.	4090.0
#2	4862.6	4072.2	32374.	4097.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.723%	93.697%	92.886%	100.70%
Range				

Sample Name: 480-177765-A-2-C MSD Acquired: 11/24/2020 23:48:39 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04851**	**9.7545**	**.21983**	**.39603**	**.43034**
Stddev	.00002	.0468	.00153	.00031	.00050
%RSD	.03840	.47934	.69518	.07811	.11520
#1	.04852	9.7214	.22091	.39581	.43069
#2	.04850	9.7876	.21875	.39625	.42999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21014**	**108.56**	**.20175**	**-.0451**	**.19244**
Stddev	.00044	.20	.00006	.0029	.00001
%RSD	.20965	.18721	.02925	6.441	.00538
#1	.21045	108.71	.20179	-.0471	.19243
#2	.20983	108.42	.20171	-.0430	.19245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20316**	**.19744**	**11.197**	**17.141**	**.21591**
Stddev	.00094	.00074	.009	.058	.00167
%RSD	.46381	.37251	.08395	.33605	.77398
#1	.20249	.19796	11.204	17.182	.21709
#2	.20382	.19692	11.190	17.100	.21473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-C MSD Acquired: 11/24/2020 23:48:39 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**70.119**	**.28626**	**.21589**	**82.018**	**.20196**
Stddev	.020	.00006	.00073	.423	.00010
%RSD	.02826	.02118	.33803	.51571	.04781
#1	70.105	.28630	.21640	82.317	.20189
#2	70.133	.28622	.21537	81.719	.20203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.73**	**.19393**	**29.645**	**.20327**	**.20881**
Stddev	.00	.00092	.014	.00124	.00262
%RSD	.0003	.47227	.04735	.61194	1.2565
#1	24.73	.19458	29.635	.20239	.21066
#2	24.73	.19328	29.655	.20415	.20695
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3774)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.088**	**.19252**	**3.5229**	**1.003**	**.19698**
Stddev	.143	.00089	.0107	.009	.00004
%RSD	.74842	.46334	.30308	.8452	.02006
#1	19.189	.19315	3.5304	.9968	.19695
#2	18.987	.19189	3.5153	1.009	.19701
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-177765-A-2-C MSD Acquired: 11/24/2020 23:48:39 Type: Unk
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3774)
Units	ppm	ppm	ppm	ppm
Avg	**.20329**	**.20666**	**.19347**	**1.002**
Stddev	.00015	.00100	.00015	.001
%RSD	.07164	.48448	.07504	.1213
#1	.20339	.20736	.19337	1.001
#2	.20318	.20595	.19358	1.003
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4856.9**	**4064.9**	**32455.**	**4117.3**
Stddev	.7	4.1	95.	12.1
%RSD	.01434	.09965	.29302	.29292
#1	4857.4	4067.8	32387.	4108.8
#2	4856.5	4062.1	32522.	4125.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.709%	93.626%	93.158%	101.28%
Range				

Sample Name: CCVL-6256824 Acquired: 11/24/2020 23:52:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00595**	**.18140**	**.01482**	W **.02655**	**.00214**
Stddev	.00027	.00004	.00157	.00002	.00005
%RSD	4.5212	.02237	10.565	.09278	2.3057
#1	.00576	.18142	.01371	.02657	.00211
#2	.00614	.18137	.01593	.02653	.00218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value				.02000	
Range				30.000%	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00201**	**.50832**	**.00221**	**.0064**	**.00337**
Stddev	.00009	.00323	.00003	.0104	.00001
%RSD	4.3269	.63469	1.3703	162.5	.38751
#1	.00207	.51060	.00223	-.0010	.00336
#2	.00195	.50603	.00219	.0137	.00338
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00387**	**.01182**	**.04984**	**.62387**	**.03226**
Stddev	.00003	.00082	.00214	.00381	.00068
%RSD	.65344	6.9659	4.2860	.61011	2.0933
#1	.00389	.01124	.05135	.62656	.03178
#2	.00385	.01240	.04832	.62118	.03274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCVL-6256824 Acquired: 11/24/2020 23:52:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20745**	**.00315**	**.01079**	**1.1283**	**.00942**
Stddev	.00262	.00003	.00026	.0195	.00020
%RSD	1.2648	.93966	2.4507	1.7253	2.1233
#1	.20930	.00317	.01060	1.1421	.00956
#2	.20559	.00313	.01098	1.1146	.00928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **25.00**	**.00936**	**.18414**	**.01871**	**.02207**
Stddev	.00	.00032	.00064	.00027	.00216
%RSD	.0009	3.4121	.34867	1.4229	9.7797
#1	25.00	.00959	.18460	.01852	.02055
#2	25.00	.00913	.18369	.01890	.02360
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0060				
Range	50.00%				

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.48516**	**.00911**	**.00511**	F **1.002**	**.00493**
Stddev	.00034	.00042	.00008	.002	.00007
%RSD	.07060	4.5722	1.4888	.1674	1.3249
#1	.48540	.00940	.00517	1.001	.00497
#2	.48492	.00881	.00506	1.003	.00488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0060	
Range				50.00%	

Sample Name: CCVL-6256824 Acquired: 11/24/2020 23:52:14 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.01892**	**.00484**	**.00978**	F **1.000**
Stddev	.00013	.00005	.00016	.001
%RSD	.66377	1.0039	1.6130	.0921
#1	.01901	.00481	.00990	1.001
#2	.01883	.00487	.00967	.9996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.0060
Range				50.00%
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5647.3**	**4231.6**	**34377.**	**4033.7**
Stddev	5.0	4.4	183.	17.3
%RSD	.08780	.10440	.53284	.42849
#1	5650.9	4234.8	34248.	4021.5
#2	5643.8	4228.5	34507.	4045.9

Sample Name: ICSA-6190462 Acquired: 11/24/2020 23:56:01 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00122**	**490.40**	**.00107**	**.00383**	F **.00692**
Stddev	.00002	.67	.00080	.00023	.00002
%RSD	1.5249	.13707	74.190	6.1166	.28909
#1	.00123	490.88	.00164	.00399	.00693
#2	.00120	489.93	.00051	.00366	.00690
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					.00400
Low Limit					-.00400

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**454.06**	**-.00140**	**.0202**	**.00005**
Stddev	.00012	5.65	.00042	.0443	.00008
%RSD	78.046	1.2435	29.772	219.7	167.67
#1	-.00007	458.06	-.00110	-.0112	-.00001
#2	-.00024	450.07	-.00169	.0515	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00091**	**.00309**	**178.49**	**.14459**	**.00134**
Stddev	.00011	.00090	.23	.00519	.00082
%RSD	11.573	28.951	.12849	3.5905	61.067
#1	-.00084	.00246	178.65	.14091	.00076
#2	-.00099	.00373	178.33	.14826	.00192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICSA-6190462 Acquired: 11/24/2020 23:56:01 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**497.48**	**-.00076**	**-.00125**	**.23090**	**-.00073**
Stddev	3.44	.00004	.00014	.00901	.00008
%RSD	.69178	4.9284	11.099	3.9012	10.206
#1	495.05	-.00073	-.00135	.23727	-.00079
#2	499.91	-.00079	-.00115	.22453	-.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.84**	**.00818**	**-.06932**	**.00817**	**-.00087**
Stddev	.00	.00094	.00195	.00038	.00300
%RSD	.0041	11.456	2.8131	4.6579	344.21
#1	24.85	.00752	-.07070	.00844	.00125
#2	24.84	.00884	-.06794	.00790	-.00299
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00413**	**.00182**	**.01433**	**1.073**	**.00267**
Stddev	.00248	.00027	.00002	.005	.00035
%RSD	60.054	14.736	.17171	.4689	13.141
#1	-.00589	.00202	.01431	1.069	.00242
#2	-.00238	.00163	.01435	1.076	.00291
Check ?	None	Chk Pass	None	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICSA-6190462 Acquired: 11/24/2020 23:56:01 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00392**	**.00041**	**.00092**	**1.003**
Stddev	.00074	.00057	.00074	.000
%RSD	18.997	138.00	80.009	.0259
#1	-.00339	.00081	.00144	1.003
#2	-.00444	.00001	.00040	1.003
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4138.0**	**3710.8**	**29169.**	**3878.9**
Stddev	2.9	4.6	153.	17.1
%RSD	.06921	.12272	.52286	.44151
#1	4136.0	3714.0	29276.	3866.8
#2	4140.0	3707.6	29061.	3891.0

Sample Name: ICSAB-6213230 Acquired: 11/24/2020 23:59:49 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.51652**	**481.95**	**.50521**	**4.9875**	**.51989**
Stddev	.00363	.59	.00057	.0064	.00072
%RSD	.70283	.12317	.11332	.12863	.13821
#1	.51909	482.37	.50561	4.9829	.52039
#2	.51395	481.53	.50481	4.9920	.51938
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.24849**	**454.40**	**.50675**	**.0362**	**.48696**
Stddev	.00020	3.70	.00114	.0255	.00043
%RSD	.07855	.81470	.22420	70.46	.08796
#1	.24863	457.02	.50595	.0542	.48666
#2	.24835	451.78	.50756	.0182	.48727
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.50892**	**.49910**	**176.36**	**5.3902**	**.00075**
Stddev	.00130	.00188	.03	.0001	.00234
%RSD	.25492	.37727	.01505	.00130	311.73
#1	.50801	.49777	176.34	5.3903	-.00090
#2	.50984	.50043	176.38	5.3902	.00240
Check ?	Chk Pass	Chk Pass	Chk Pass	None	None
Value					
Range					

Sample Name: ICSAB-6213230 Acquired: 11/24/2020 23:59:49 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**493.42**	**.49921**	**.51555**	**5.4230**	**.48380**
Stddev	.16	.00074	.00126	.0017	.00119
%RSD	.03189	.14808	.24456	.03102	.24536
#1	493.31	.49973	.51644	5.4218	.48464
#2	493.53	.49869	.51466	5.4242	.48296
Check ?	Chk Pass	Chk Pass	None	None	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.94**	**.48620**	**-.07263**	**.47902**	**.51319**
Stddev	.01	.00106	.00226	.00005	.00238
%RSD	.0310	.21835	3.1093	.01019	.46291
#1	26.93	.48545	-.07423	.47898	.51487
#2	26.94	.48695	-.07104	.47905	.51151
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.5834**	**.47678**	**.50310**	**1.080**	**.48506**
Stddev	.0190	.00080	.00075	.004	.00065
%RSD	.41491	.16676	.14936	.3558	.13430
#1	4.5699	.47735	.50364	1.078	.48552
#2	4.5968	.47622	.50257	1.083	.48460
Check ?	None	None	None	None	None
Value					
Range					

Sample Name: ICSAB-6213230 Acquired: 11/24/2020 23:59:49 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**.49719**	**.51711**	**.43869**	**1.003**
Stddev	.00164	.00107	.00116	.001
%RSD	.33082	.20699	.26331	.0922
#1	.49836	.51786	.43950	1.002
#2	.49603	.51635	.43787	1.003
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4103.1**	**3696.6**	**28880.**	**3872.2**
Stddev	8.9	6.1	8.	24.8
%RSD	.21725	.16370	.02730	.63941
#1	4096.8	3692.4	28886.	3854.7
#2	4109.4	3700.9	28874.	3889.7

Sample Name: CCV-6249977 Acquired: 11/25/2020 0:03:31 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.94810**	**48.546**	**.99410**	**1.0572**	**1.0144**
Stddev	.00021	.115	.00149	.0012	.0016
%RSD	.02177	.23712	.14974	.11746	.15380
#1	.94796	48.465	.99305	1.0563	1.0155
#2	.94825	48.627	.99515	1.0580	1.0133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0138**	**48.314**	**.99034**	**1.002**	**.96750**
Stddev	.0006	.044	.00020	.009	.00188
%RSD	.06094	.09208	.02062	.8465	.19397
#1	1.0134	48.282	.99048	.9961	.96883
#2	1.0143	48.345	.99019	1.008	.96618
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0368**	**.96994**	**47.943**	**50.536**	**.99370**
Stddev	.0029	.00090	.028	.005	.00021
%RSD	.28011	.09234	.05770	.01052	.02070
#1	1.0347	.97057	47.923	50.532	.99384
#2	1.0388	.96930	47.962	50.540	.99355
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/25/2020 0:03:31 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.739**	**1.0085**	**1.0564**	**50.036**	**.98217**
Stddev	.074	.0004	.0039	.048	.00240
%RSD	.15227	.03543	.36492	.09633	.24413
#1	48.687	1.0082	1.0591	50.070	.98386
#2	48.792	1.0087	1.0537	50.002	.98047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.12**	**.96063**	**24.280**	**.99342**	**1.0218**
Stddev	.00	.00045	.002	.00299	.0061
%RSD	.0101	.04680	.00740	.30086	.59888
#1	37.11	.96095	24.279	.99131	1.0174
#2	37.12	.96031	24.282	.99554	1.0261
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6872**	**.95432**	**.99370**	**1.473**	**.96735**
Stddev	.0741	.00087	.00208	.010	.00082
%RSD	.76494	.09113	.20958	.6623	.08453
#1	9.6348	.95494	.99517	1.466	.96677
#2	9.7396	.95371	.99223	1.480	.96793
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Sample Name: CCV-6249977 Acquired: 11/25/2020 0:03:31 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**1.0257**	**1.0371**	**.95974**	**1.522**
Stddev	.0024	.0000	.00304	.003
%RSD	.23418	.00088	.31703	.1726
#1	1.0274	1.0371	.95759	1.524
#2	1.0240	1.0371	.96189	1.520
Check ?	Chk Pass	Chk Pass	Chk Pass	None
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4894.3**	**4111.5**	**32614.**	**4048.5**
Stddev	1.5	8.8	15.	3.1
%RSD	.03108	.21457	.04694	.07563
#1	4895.4	4117.7	32603.	4046.4
#2	4893.3	4105.2	32624.	4050.7

Sample Name: CCB-6254294 Acquired: 11/25/2020 0:07:04 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**.02633**	**-.00053**	**.00601**	**.00014**
Stddev	.00033	.01272	.00070	.00020	.00004
%RSD	20455.	48.296	132.15	3.3184	26.722
#1	-.00024	.01734	-.00103	.00615	.00011
#2	.00023	.03533	-.00003	.00587	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00015**	**.00433**	**-.00008**	**.0071**	**.00005**
Stddev	.00002	.00356	.00006	.0249	.00016
%RSD	16.902	82.354	79.271	352.0	316.06
#1	.00017	.00181	-.00003	-.0105	.00016
#2	.00013	.00684	-.00012	.0247	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00171**	**.00767**	**.08922**	**.00076**
Stddev	.00009	.00006	.00163	.07318	.00009
%RSD	53.052	3.2336	21.273	82.023	11.634
#1	-.00023	.00167	.00652	.03747	.00082
#2	-.00010	.00175	.00882	.14096	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/25/2020 0:07:04 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01343**	**.00006**	**.00378**	**.10448**	**.00007**
Stddev	.00435	.00008	.00128	.00353	.00008
%RSD	32.411	125.09	33.792	3.3803	114.39
#1	.01035	.00001	.00288	.10199	.00001
#2	.01651	.00012	.00469	.10698	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.02**	**.00030**	**-.00631**	**.00017**	**.00099**
Stddev	.00	.00039	.00060	.00101	.00069
%RSD	.0003	129.32	9.5607	578.39	70.151
#1	25.02	.00003	-.00674	.00089	.00148
#2	25.02	.00057	-.00589	-.00054	.00050
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00667**	**.00043**	**.00004**	**1.001**	**.00024**
Stddev	.01052	.00002	.00002	.002	.00012
%RSD	157.70	3.9108	64.394	.2330	49.796
#1	-.01411	.00042	.00005	.9996	.00015
#2	.00077	.00044	.00002	1.003	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-6254294 Acquired: 11/25/2020 0:07:04 Type: QC
Method: ICAP2 New stds DEC2019(v386) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062	Zr3438
Line	190.856 {477}	292.402 {115}	206.200 {163}	343.823 { 98}
Units	ppm	ppm	ppm	ppm
Avg	**-.00037**	**-.00015**	**.00008**	**.9998**
Stddev	.00026	.00043	.00003	.0011
%RSD	71.107	296.53	31.356	.1051
#1	-.00056	.00016	.00006	.9990
#2	-.00019	-.00045	.00010	1.001
Check ?	Chk Pass	Chk Pass	Chk Pass	None
High Limit				
Low Limit				
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5733.2**	**4243.3**	**34441.**	**4022.6**
Stddev	2.3	4.8	6.	31.2
%RSD	.03984	.11362	.01608	.77669
#1	5731.6	4239.9	34444.	4044.7
#2	5734.8	4246.7	34437.	4000.5

Report Generated By Teledyne Leeman QuickTrace

Analyst: BufHG4

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\K20201123A.wszf

Creation Date: 11/23/2020 1:48:53 PM

Comment:

Results

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank					STD	11/23/20 04:04:25 pm	0.00	33	114.38	-22.52		1.0000	N/A
	Replicates	44.7	76.0	22.2	-12.5								
Standard #1 (0.1 ug/L)					STD	11/23/20 04:05:57 pm	0.10	2090	1.46	-11.46		1.0000	N/A
	Replicates	2061.2	2129.6	2071.4	2097.6								
Standard #2 (0.5 ug/L)					STD	11/23/20 04:07:29 pm	0.50	10395	1.24	36.81		1.0000	N/A
	Replicates	10453.0	10502.9	10412.7	10209.9								
Standard #3 (2.0 ug/L)					STD	11/23/20 04:09:02 pm	2.00	40524	0.70	163.16		1.0000	N/A
	Replicates	40584.9	40778.9	40611.1	40121.6								
Standard #4 (10 ug/L)					STD	11/23/20 04:10:35 pm	10.00	192350	0.53	358.52		1.0000	N/A
	Replicates	192275.7	193365.1	192780.3	190980.1								
Standard #5 (20 ug/L)					STD	11/23/20 04:12:08 pm	20.00	362579	0.52	-452.80		1.0000	N/A
	Replicates	362644.1	364399.7	363310.9	359959.9								

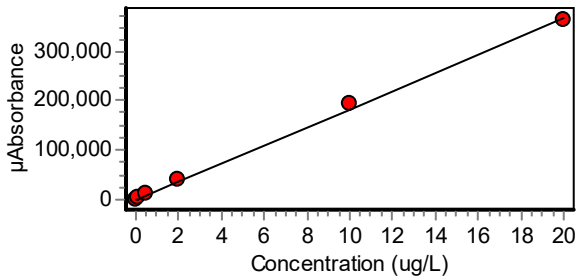
Calibration

Equation: Abs = 18525.874x + 449.715

R2: 0.99886

SEE: 5574.5500

Flags:



ICV					ICV	11/23/20 04:13:42 pm	3.14	58587	0.65			1.0000	104.61
	Replicates	58624.0	58915.5	58757.3	58051.3								
ICB					ICB	11/23/20 04:15:14 pm	-0.02	14	2.05			1.0000	N/A
	Replicates	7.1	4.7	20.0	22.5								
ICVL					CRDL	11/23/20 04:16:48 pm	0.19	3985	0.93			1.0000	95.42
	Replicates	3998.6	4023.3	3971.6	3947.6								
CCV					CCV	11/23/20 04:18:22 pm	2.09	39238	0.65			1.0000	104.69
	Replicates	39160.0	39527.6	39332.8	38931.8								
CCB					CCB	11/23/20 04:19:54 pm	-0.02	26	1.74			1.0000	N/A
	Replicates	35.2	17.5	23.7	26.5								
MB 480-560510/1-A					UNK	11/23/20 04:21:25 pm	-0.02	60	7.67			1.0000	N/A
	Replicates	76.0	90.7	50.5	22.7								
LCS 480-560510/2-A					UNK	11/23/20 04:22:56 pm	4.15	77404	0.74			1.0000	N/A
	Replicates	77623.7	77873.9	77544.2	76573.7								

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
480-178309-B-1-H				UNK	11/23/20 04:24:28 pm	5.40	100462	0.81			1.0000	N/A
Replicates	100761.0	101167.4	100629.7	99288.9								
480-178146-D-14-A				UNK	11/23/20 04:25:59 pm	-0.02	14	5.66			1.0000	N/A
Replicates	48.8	14.7	1.2	-7.1								
480-177746-F-1-B				UNK	11/23/20 04:27:31 pm	-0.02	58	3.99			1.0000	N/A
Replicates	35.2	63.9	70.9	61.6								
480-177894-C-2-C				UNK	11/23/20 04:29:03 pm	-0.02	25	6.24			1.0000	N/A
Replicates	58.9	-2.2	32.1	12.1								
480-177894-C-3-C				UNK	11/23/20 04:30:35 pm	-0.02	142	6.07			1.0000	N/A
Replicates	153.8	153.2	114.2	145.4								
480-178459-C-1-B				UNK	11/23/20 04:32:07 pm	-0.02	67	7.84			1.0000	N/A
Replicates	90.4	29.7	91.9	55.2								
480-178459-C-2-B				UNK	11/23/20 04:33:40 pm	-0.02	89	3.41			1.0000	N/A
Replicates	72.4	101.7	89.5	93.0								
480-178459-C-3-D				UNK	11/23/20 04:35:12 pm	-0.02	82	10.33			1.0000	N/A
Replicates	25.9	104.8	95.3	103.8								
CCV				CCV	11/23/20 04:36:46 pm	2.14	40103	0.71			1.0000	107.02
Replicates	40196.2	40381.8	40121.8	39713.1								
CCB				CCB	11/23/20 04:38:18 pm	-0.02	29	5.08			1.0000	N/A
Replicates	0.1	29.3	36.8	50.8								
480-178459-C-3-Dsd@5				UNK	11/23/20 04:39:51 pm	-0.01	212	13.33			1.0000	N/A
Replicates	185.6	243.1	234.9	183.1								
480-178459-C-3-E MS				UNK	11/23/20 04:41:24 pm	4.30	80068	0.94			1.0000	N/A
Replicates	80488.5	80657.3	80126.5	78999.8								
480-178459-C-3-F MSD				UNK	11/23/20 04:42:55 pm	4.31	80268	0.99			1.0000	N/A
Replicates	80722.5	80937.6	80255.1	79157.1								
480-178459-C-4-B				UNK	11/23/20 04:44:26 pm	-0.02	31	5.95			1.0000	N/A
Replicates	-0.2	23.8	57.5	42.5								
480-178434-D-1-B				UNK	11/23/20 04:45:58 pm	-0.02	59	10.40			1.0000	N/A
Replicates	53.6	54.4	113.4	14.9								
480-177858-C-1-C				UNK	11/23/20 04:47:29 pm	-0.02	82	3.83			1.0000	N/A
Replicates	84.2	65.5	99.5	78.5								
480-177858-C-3-C				UNK	11/23/20 04:49:01 pm	-0.02	37	1.22			1.0000	N/A
Replicates	37.5	42.1	36.6	29.9								
480-178134-H-1-B				UNK	11/23/20 04:50:33 pm	-0.01	258	16.98			1.0000	N/A
Replicates	241.9	232.2	252.4	305.2								
480-178254-C-10-E				UNK	11/23/20 04:52:05 pm	-0.02	47	8.60			1.0000	N/A
Replicates	97.9	24.8	37.5	26.3								

Sample Name		Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
480-178254-C-11-C		UNK	11/23/20 04:53:37 pm	-0.02	35	8.65			1.0000	N/A
Replicates	47.0	45.8	63.8	-17.7						
CCV		CCV	11/23/20 04:55:11 pm	2.12	39766	0.66			1.0000	106.11
Replicates	39841.5	40001.6	39824.9	39397.4						
CCB		CCB	11/23/20 04:56:43 pm	-0.02	57	4.03			1.0000	N/A
Replicates	53.8	37.6	63.1	75.1						
480-178254-C-12-C		UNK	11/23/20 04:58:15 pm	-0.02	25	4.37			1.0000	N/A
Replicates	34.8	32.1	36.1	-2.6						
480-178254-C-13-C		UNK	11/23/20 04:59:48 pm	-0.02	70	12.76			1.0000	N/A
Replicates	50.2	34.2	55.4	141.7						
480-178254-C-14-C		UNK	11/23/20 05:01:20 pm	-0.02	38	2.80			1.0000	N/A
Replicates	32.5	45.0	25.0	50.3						
480-178254-C-15-C		UNK	11/23/20 05:02:53 pm	-0.02	67	9.44			1.0000	N/A
Replicates	80.9	54.6	108.1	23.6						
480-178269-D-1-B		UNK	11/23/20 05:04:25 pm	0.00	422	112.22			1.0000	N/A
Replicates	423.9	377.1	439.4	446.9						
MB 480-560511/1-A		UNK	11/23/20 05:05:56 pm	-0.02	47	12.48			1.0000	N/A
Replicates	46.7	29.0	-4.5	115.0						
LCS 480-560511/2-A		UNK	11/23/20 05:07:28 pm	4.09	76222	1.03			1.0000	N/A
Replicates	76644.1	76853.3	76283.8	75108.3						
480-178254-C-17-C		UNK	11/23/20 05:08:59 pm	-0.02	54	5.12			1.0000	N/A
Replicates	41.6	57.3	35.3	80.8						
480-178254-C-18-C		UNK	11/23/20 05:10:31 pm	-0.02	30	1.50			1.0000	N/A
Replicates	33.0	21.7	36.5	30.5						
480-178254-C-19-C		UNK	11/23/20 05:12:03 pm	-0.02	32	3.84			1.0000	N/A
Replicates	42.5	46.5	11.8	25.3						
CCV		CCV	11/23/20 05:13:37 pm	2.11	39606	0.61			1.0000	105.68
Replicates	39582.4	39860.1	39688.3	39291.6						
CCB		CCB	11/23/20 05:15:09 pm	-0.02	31	8.64			1.0000	N/A
Replicates	11.2	-2.8	35.7	79.7						
480-178254-C-20-C		UNK	11/23/20 05:16:41 pm	-0.02	28	11.78			1.0000	N/A
Replicates	16.4	2.0	101.0	-7.5						
480-178254-C-20-Csd@5		UNK	11/23/20 05:18:13 pm	-0.01	178	15.59			1.0000	N/A
Replicates	226.9	189.0	124.8	172.0						
480-178254-C-20-D MS		UNK	11/23/20 05:19:45 pm	4.20	78262	0.83			1.0000	N/A
Replicates	78360.9	78845.5	78497.2	77342.7						
480-178254-C-20-E MSD		UNK	11/23/20 05:21:18 pm	4.24	78992	0.79			1.0000	N/A
Replicates	79130.9	79568.6	79159.6	78108.1						

Sample Name			Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
480-178254-C-21-C			UNK	11/23/20 05:22:51 pm	-0.02	24	2.61			1.0000	N/A
Replicates	37.6	13.4	29.4	17.4							
480-178254-C-22-E			UNK	11/23/20 05:24:24 pm	-0.02	56	6.92			1.0000	N/A
Replicates	57.3	86.5	20.5	61.5							
480-178254-C-23-C			UNK	11/23/20 05:25:55 pm	-0.02	156	1.28			1.0000	N/A
Replicates	155.8	151.8	160.8	157.5							
480-178254-C-25-C			UNK	11/23/20 05:27:27 pm	-0.02	35	11.12			1.0000	N/A
Replicates	94.0	20.5	-16.5	41.5							
480-178254-C-26-C			UNK	11/23/20 05:28:59 pm	0.18	3788	1.40			1.0000	N/A
Replicates	3778.1	3837.5	3809.2	3728.7							
480-178254-C-27-E			UNK	11/23/20 05:30:30 pm	-0.02	31	4.79			1.0000	N/A
Replicates	3.7	29.7	44.2	47.7							
CCV			CCV	11/23/20 05:32:04 pm	2.12	39672	0.80			1.0000	105.86
Replicates	39752.4	39973.5	39733.3	39227.5							
CCB			CCB	11/23/20 05:33:36 pm	-0.02	41	5.90			1.0000	N/A
Replicates	36.7	64.9	53.4	9.4							
480-178254-C-28-C			UNK	11/23/20 05:35:08 pm	-0.02	49	4.55			1.0000	N/A
Replicates	51.1	26.6	47.6	71.1							
480-178254-C-29-C			UNK	11/23/20 05:36:40 pm	-0.02	33	7.16			1.0000	N/A
Replicates	27.7	34.8	71.1	-1.4							
480-178237-B-1-B			UNK	11/23/20 05:38:12 pm	-0.02	125	12.05			1.0000	N/A
Replicates	154.8	162.5	88.0	94.5							
480-178237-B-2-B			UNK	11/23/20 05:39:44 pm	-0.02	136	5.85			1.0000	N/A
Replicates	160.5	128.1	138.9	117.6							
480-178237-B-3-B			UNK	11/23/20 05:41:16 pm	-0.02	129	6.36			1.0000	N/A
Replicates	148.6	107.6	115.9	144.4							
480-178237-B-4-B			UNK	11/23/20 05:42:49 pm	-0.02	45	9.24			1.0000	N/A
Replicates	85.4	8.2	18.7	67.7							
480-178237-B-5-B			UNK	11/23/20 05:44:22 pm	-0.01	198	9.42			1.0000	N/A
Replicates	190.9	231.4	175.4	195.1							
480-178237-B-6-B			UNK	11/23/20 05:45:54 pm	-0.01	192	2.95			1.0000	N/A
Replicates	197.1	181.7	198.5	192.5							
480-178237-B-7-B			UNK	11/23/20 05:47:26 pm	-0.02	66	4.59			1.0000	N/A
Replicates	81.4	41.6	63.6	75.6							
480-178237-B-8-B			UNK	11/23/20 05:48:58 pm	-0.02	33	4.64			1.0000	N/A
Replicates	59.3	33.2	24.2	14.2							
CCV			CCV	11/23/20 05:50:32 pm	2.13	39827	0.64			1.0000	106.28
Replicates	39823.3	40063.8	39939.8	39480.5							

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
CCB	CCB	11/23/20 05:52:04 pm	-0.02	23	4.30			1.0000	N/A
Replicates	19.9	16.5	7.0	49.5					
MB 480-560512/1-A	UNK	11/23/20 05:53:36 pm	-0.02	30	7.28			1.0000	N/A
Replicates	62.6	23.5	-9.5	41.8					
LCS 480-560512/2-A	UNK	11/23/20 05:55:08 pm	4.22	78718	0.89			1.0000	N/A
Replicates	79023.7	79320.5	78812.3	77716.5					
480-178241-C-1-B	UNK	11/23/20 05:56:40 pm	-0.01	211	20.08			1.0000	N/A
Replicates	160.7	255.1	180.6	249.3					
480-178241-C-2-B	UNK	11/23/20 05:58:12 pm	-0.02	67	12.70			1.0000	N/A
Replicates	51.7	18.6	134.1	62.1					
480-178241-C-3-B	UNK	11/23/20 05:59:44 pm	0.05	1441	2.49			1.0000	N/A
Replicates	1439.2	1463.7	1455.4	1407.7					
480-178241-C-4-B	UNK	11/23/20 06:01:16 pm	-0.02	71	8.17			1.0000	N/A
Replicates	80.4	95.3	82.3	25.6					
480-178241-C-6-B	UNK	11/23/20 06:02:49 pm	-0.02	96	11.91			1.0000	N/A
Replicates	63.7	152.0	104.0	63.0					
480-178246-C-1-B	UNK	11/23/20 06:04:21 pm	-0.02	68	10.42			1.0000	N/A
Replicates	59.8	45.5	126.5	40.8					
480-178246-C-1-Bsd@5	UNK	11/23/20 06:05:54 pm	-0.01	201	10.63			1.0000	N/A
Replicates	226.9	168.4	217.2	190.7					
480-178246-C-1-C MS	UNK	11/23/20 06:07:27 pm	4.22	78583	0.60			1.0000	N/A
Replicates	78403.6	79081.3	78828.8	78018.0					
CCV	CCV	11/23/20 06:09:01 pm	2.18	40838	1.31			1.0000	109.00
Replicates	41258.3	41194.6	40793.3	40104.3					
CCB	CCB	11/23/20 06:10:33 pm	-0.02	30	5.04			1.0000	N/A
Replicates	29.5	60.1	14.4	16.1					
480-178246-C-1-D MSD	UNK	11/23/20 06:12:05 pm	4.27	79531	1.23			1.0000	N/A
Replicates	80213.0	80242.7	79500.9	78168.4					
480-178246-C-2-B	UNK	11/23/20 06:13:37 pm	-0.02	87	9.57			1.0000	N/A
Replicates	112.7	118.1	70.8	45.3					
480-178250-D-1-C	UNK	11/23/20 06:15:09 pm	-0.02	65	3.91			1.0000	N/A
Replicates	59.0	73.9	46.9	80.4					
480-178250-D-2-C	UNK	11/23/20 06:16:42 pm	-0.02	44	8.85			1.0000	N/A
Replicates	20.2	93.9	44.9	15.4					
480-178250-D-3-C	UNK	11/23/20 06:18:14 pm	0.01	633	17.10			1.0000	N/A
Replicates	673.8	636.5	599.8	620.5					
480-178250-D-4-C	UNK	11/23/20 06:19:46 pm	-0.02	84	5.24			1.0000	N/A
Replicates	62.2	77.8	88.6	107.8					

Sample Name		Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
480-178250-D-5-E		UNK	11/23/20 06:21:18 pm	-0.02	42	7.80			1.0000	N/A
Replicates	-5.0	60.2	60.4	54.4						
480-178250-D-6-C		UNK	11/23/20 06:22:51 pm	-0.02	48	5.60			1.0000	N/A
Replicates	17.4	63.3	66.5	46.3						
480-178250-D-7-C		UNK	11/23/20 06:24:23 pm	-0.02	70	5.52			1.0000	N/A
Replicates	54.9	99.5	55.3	71.0						
480-178250-D-8-C		UNK	11/23/20 06:25:56 pm	-0.02	26	11.66			1.0000	N/A
Replicates	27.2	-42.3	75.2	41.9						
CCV		CCV	11/23/20 06:27:30 pm	2.14	40112	0.80			1.0000	107.05
Replicates	40175.5	40407.8	40204.3	39660.0						
CCB		CCB	11/23/20 06:29:01 pm	-0.02	16	6.44			1.0000	N/A
Replicates	-19.6	16.1	48.3	21.1						
480-178251-C-1-A		UNK	11/23/20 06:30:34 pm	0.04	1204	2.59			1.0000	N/A
Replicates	1192.5	1187.0	1230.8	1207.5						
480-178254-C-16-C		UNK	11/23/20 06:32:07 pm	-0.02	38	3.12			1.0000	N/A
Replicates	53.1	31.7	42.7	23.7						
480-178305-D-2-A		UNK	11/23/20 06:33:39 pm	-0.02	72	3.41			1.0000	N/A
Replicates	67.3	73.2	89.2	58.7						
480-178305-D-3-A		UNK	11/23/20 06:35:12 pm	-0.02	34	6.80			1.0000	N/A
Replicates	69.1	31.2	34.7	-0.1						
480-178305-D-4-A		UNK	11/23/20 06:36:44 pm	-0.02	32	10.43			1.0000	N/A
Replicates	31.2	-5.5	8.7	93.2						
CCV		CCV	11/23/20 06:38:18 pm	2.15	40208	0.91			1.0000	107.30
Replicates	40322.3	40536.2	40281.4	39690.9						
CCB		CCB	11/23/20 06:39:49 pm	-0.02	69	5.71			1.0000	N/A
Replicates	58.5	52.0	100.7	66.0						
CCVL		CRDL	11/23/20 06:41:23 pm	0.19	4061	1.09			1.0000	97.47
Replicates	4084.9	4091.4	4063.6	4005.1						
LB 480-560215/1-C		UNK	11/23/20 06:42:56 pm	-0.02	68	4.85			1.0000	N/A
Replicates	89.6	73.1	62.9	45.4						
MB 480-560513/2-A		UNK	11/23/20 06:44:28 pm	-0.02	29	4.14			1.0000	N/A
Replicates	4.6	27.7	44.2	38.2						
LCS 480-560513/3-A		UNK	11/23/20 06:46:00 pm	4.26	79311	0.99			1.0000	N/A
Replicates	79678.0	79984.9	79384.6	78196.1						
480-178216-C-1-C		UNK	11/23/20 06:47:33 pm	-0.02	131	9.14			1.0000	N/A
Replicates	161.1	105.5	106.3	150.5						
480-178216-C-2-C		UNK	11/23/20 06:49:05 pm	-0.02	18	6.05			1.0000	N/A
Replicates	-17.1	44.5	28.3	17.0						

Sample Name		Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
480-178216-A-3-C		UNK	11/23/20 06:50:37 pm	-0.01	190	10.88			1.0000	N/A
Replicates	183.3	164.2	181.5	230.2						
480-178216-A-4-C		UNK	11/23/20 06:52:10 pm	-0.02	79	4.92			1.0000	N/A
Replicates	65.8	72.6	71.1	105.8						
480-178216-C-5-C		UNK	11/23/20 06:53:43 pm	-0.02	100	4.79			1.0000	N/A
Replicates	111.4	116.1	79.3	95.1						
480-178216-B-6-C		UNK	11/23/20 06:55:15 pm	-0.02	88	9.18			1.0000	N/A
Replicates	121.3	50.6	71.1	110.6						
480-178216-F-7-F		UNK	11/23/20 06:56:48 pm	-0.02	6	5.56			1.0000	N/A
Replicates	35.1	-14.4	17.9	-14.6						
CCV		CCV	11/23/20 06:58:22 pm	2.19	40950	1.10			1.0000	109.31
Replicates	41178.2	41293.7	41024.9	40301.2						
CCB		CCB	11/23/20 06:59:54 pm	-0.02	68	3.11			1.0000	N/A
Replicates	56.7	67.3	84.3	62.5						
480-178216-C-8-C		UNK	11/23/20 07:01:26 pm	-0.02	79	2.03			1.0000	N/A
Replicates	89.6	77.8	76.8	71.8						
480-178216-C-9-C		UNK	11/23/20 07:02:59 pm	-0.02	67	8.61			1.0000	N/A
Replicates	83.0	42.2	36.2	104.9						
480-178216-B-10-C		UNK	11/23/20 07:04:31 pm	-0.02	170	10.48			1.0000	N/A
Replicates	140.3	169.4	210.1	160.9						
480-178216-A-11-C		UNK	11/23/20 07:06:04 pm	-0.02	80	4.76			1.0000	N/A
Replicates	62.2	70.1	101.8	86.1						
480-178216-L-12-C		UNK	11/23/20 07:07:36 pm	-0.02	56	13.62			1.0000	N/A
Replicates	110.5	89.7	-5.8	29.5						
480-178216-A-14-C		UNK	11/23/20 07:09:09 pm	-0.02	35	8.98			1.0000	N/A
Replicates	10.8	15.6	21.9	90.1						
480-178216-C-15-C		UNK	11/23/20 07:10:41 pm	-0.02	43	8.86			1.0000	N/A
Replicates	45.0	-2.2	41.5	86.0						
480-178216-A-13-F		UNK	11/23/20 07:12:14 pm	-0.01	186	10.17			1.0000	N/A
Replicates	172.8	206.3	211.0	155.3						
480-178216-A-13-Fsd@5		UNK	11/23/20 07:13:46 pm	-0.01	244	15.52			1.0000	N/A
Replicates	254.6	282.3	229.3	208.3						
480-178216-C-13-C MS		UNK	11/23/20 07:15:19 pm	4.25	79224	1.36			1.0000	N/A
Replicates	79930.0	80053.7	79194.9	77719.2						
CCV		CCV	11/23/20 07:16:53 pm	2.15	40247	0.70			1.0000	107.41
Replicates	40212.5	40519.0	40380.0	39876.8						
CCB		CCB	11/23/20 07:18:25 pm	-0.02	37	10.19			1.0000	N/A
Replicates	22.0	47.5	-10.0	89.5						

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
480-178216-B-13-D MSD				UNK	11/23/20 07:19:58 pm	4.08	76011	1.07			1.0000	N/A
Replicates	76410.4	76686.4	76094.1	74854.1								
LB 480-560211/1-C				UNK	11/23/20 07:21:30 pm	-0.02	37	8.11			1.0000	N/A
Replicates	41.6	71.7	44.5	-8.5								
MB 480-560514/2-A				UNK	11/23/20 07:23:03 pm	-0.02	7	5.57			1.0000	N/A
Replicates	-19.5	-4.6	37.9	13.1								
LCS 480-560514/3-A				UNK	11/23/20 07:24:35 pm	4.16	77487	1.07			1.0000	N/A
Replicates	77920.8	78126.6	77609.1	76293.6								
480-178149-B-1-C				UNK	11/23/20 07:26:08 pm	-0.01	268	4.72			1.0000	N/A
Replicates	269.4	279.2	262.2	260.2								
480-178149-B-2-C				UNK	11/23/20 07:27:40 pm	-0.02	115	10.58			1.0000	N/A
Replicates	123.6	142.4	63.4	131.4								
480-178149-A-3-C				UNK	11/23/20 07:29:13 pm	-0.02	53	7.01			1.0000	N/A
Replicates	57.8	14.1	60.8	79.8								
480-178149-A-4-C				UNK	11/23/20 07:30:45 pm	-0.02	89	5.05			1.0000	N/A
Replicates	62.1	97.0	92.7	103.0								
480-178149-A-5-C				UNK	11/23/20 07:32:18 pm	-0.02	23	5.15			1.0000	N/A
Replicates	34.8	1.3	8.5	48.0								
480-178149-A-6-E				UNK	11/23/20 07:33:50 pm	-0.02	26	4.28			1.0000	N/A
Replicates	52.8	13.8	19.8	17.1								
CCV				CCV	11/23/20 07:35:24 pm	2.17	40696	0.77			1.0000	108.62
Replicates	40645.8	41026.9	40816.2	40295.7								
CCB				CCB	11/23/20 07:36:56 pm	-0.02	67	3.43			1.0000	N/A
Replicates	73.8	81.4	53.1	58.4								
480-178149-A-6-Esd@5				UNK	11/23/20 07:38:29 pm	-0.01	232	15.47			1.0000	N/A
Replicates	240.7	202.4	275.9	209.2								
480-178149-A-6-F MS				UNK	11/23/20 07:40:01 pm	3.98	74201	0.82			1.0000	N/A
Replicates	74315.2	74784.1	74355.4	73349.4								
480-178149-A-6-G MSD				UNK	11/23/20 07:41:34 pm	4.03	75063	0.66			1.0000	N/A
Replicates	75053.5	75571.8	75224.8	74402.5								
480-178149-B-7-C				UNK	11/23/20 07:43:07 pm	-0.02	84	4.53			1.0000	N/A
Replicates	80.0	100.6	62.8	93.1								
480-178149-B-8-C				UNK	11/23/20 07:44:40 pm	-0.02	94	7.51			1.0000	N/A
Replicates	102.9	126.5	64.5	82.5								
480-178149-B-9-C				UNK	11/23/20 07:46:12 pm	-0.02	43	4.80			1.0000	N/A
Replicates	47.2	59.0	15.0	52.2								
480-178149-B-10-D				UNK	11/23/20 07:47:45 pm	-0.02	73	7.57			1.0000	N/A
Replicates	78.6	110.7	48.7	52.9								

Sample Name		Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
480-178149-A-11-C		UNK	11/23/20 07:49:18 pm	-0.02	39	5.13			1.0000	N/A
Replicates	57.7	56.0	27.3	15.5						
480-178149-A-12-C		UNK	11/23/20 07:50:51 pm	-0.02	69	7.03			1.0000	N/A
Replicates	30.8	92.3	80.8	71.8						
480-178149-B-13-C		UNK	11/23/20 07:52:24 pm	0.01	591	18.79			1.0000	N/A
Replicates	582.9	588.1	564.1	627.1						
CCV		CCV	11/23/20 07:53:58 pm	2.16	40545	0.81			1.0000	108.21
Replicates	40544.0	40863.3	40671.8	40100.1						
CCB		CCB	11/23/20 07:55:29 pm	-0.02	58	6.27			1.0000	N/A
Replicates	58.1	79.0	70.7	23.2						
480-178149-D-14-C		UNK	11/23/20 07:57:02 pm	-0.01	274	25.32			1.0000	N/A
Replicates	318.0	231.9	239.9	306.7						
480-178149-A-15-E		UNK	11/23/20 07:58:35 pm	-0.01	197	5.49			1.0000	N/A
Replicates	195.9	214.3	180.3	196.1						
480-178149-D-16-E		UNK	11/23/20 08:00:08 pm	0.00	537	13.98			1.0000	N/A
Replicates	554.9	529.2	528.5	537.5						
CCV		CCV	11/23/20 08:01:42 pm	2.15	40337	0.74			1.0000	107.65
Replicates	40315.5	40618.1	40478.6	39934.1						
CCB		CCB	11/23/20 08:03:13 pm	-0.02	60	6.63			1.0000	N/A
Replicates	63.8	27.8	57.6	90.8						
CCVL		CRDL	11/23/20 08:04:48 pm	0.20	4128	0.86			1.0000	99.28
Replicates	4120.4	4171.0	4125.5	4095.5						

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Batch Number: 560468 Batch Start Date: 11/23/20 11:05 Batch Analyst: Merkle, Adam D

Batch Method: 3005A Batch End Date: 11/23/20 14:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MED_01_Si 00150	MED_01_W1 00066	MED_02_W2 00064	MED_03_Ag 00163
MB 480-560468/1		3005A, 6010C		50 mL	50 mL				
LCS 480-560468/2		3005A, 6010C		50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	0.25 mL
480-178459-C-1	Influent	3005A, 6010C	T	50 mL	50 mL				
480-178459-C-2	Mid	3005A, 6010C	T	50 mL	50 mL				
480-178459-C-3	Effluent	3005A, 6010C	T	50 mL	50 mL				
480-178459-C-3 MS	Effluent	3005A, 6010C	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	0.25 mL
480-178459-C-3 MSD	Effluent	3005A, 6010C	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	0.25 mL
480-178459-C-4	DUP	3005A, 6010C	T	50 mL	50 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	MED_04_Sn 00150	MED_05_S 00110				
MB 480-560468/1		3005A, 6010C							
LCS 480-560468/2		3005A, 6010C		0.25 mL	0.25 mL				
480-178459-C-1	Influent	3005A, 6010C	T						
480-178459-C-2	Mid	3005A, 6010C	T						
480-178459-C-3	Effluent	3005A, 6010C	T						
480-178459-C-3 MS	Effluent	3005A, 6010C	T	0.25 mL	0.25 mL				
480-178459-C-3 MSD	Effluent	3005A, 6010C	T	0.25 mL	0.25 mL				
480-178459-C-4	DUP	3005A, 6010C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Batch Number: 560468 Batch Start Date: 11/23/20 11:05 Batch Analyst: Merkle, Adam D

Batch Method: 3005A Batch End Date: 11/23/20 14:40

Batch Notes	
Temperature - Corrected - End	97.8 Degrees C
Temperature - Corrected - Start	97.5 Degrees C
Digestion End Time	11/23/2020 14:40
Digestion Start Time	11/23/2020 11:05
Digestion Unit ID	C
Hydrochloric Acid ID	6238799
Nitric Acid ID	6245419
pH Indicator ID	HC911298
Pipette/Syringe/Dispenser ID	MDL-3
Analyst ID - Spike Analyst	KP
Sufficient Volume for Batch QC	YES
Thermometer Location ID	B5
Thermometer ID	200152471
Digestion Tube/Cup ID	2008043
Temperature - Uncorrected - End	97.5 Degrees C
Temperature - Uncorrected - Start	97.2 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Batch Number: 560510 Batch Start Date: 11/23/20 13:25 Batch Analyst: Booth, Bryan M

Batch Method: 7470A Batch End Date: 11/23/20 15:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MEH_HG1_WKG 02420	AnalysisComment		
MB 480-560510/1		7470A, 7470A		30 mL	50 mL		KMnO4 x2		
LCS 480-560510/2		7470A, 7470A		30 mL	50 mL	2 mL	KMnO4 x2		
480-178459-C-1	Influent	7470A, 7470A	T	30 mL	50 mL				
480-178459-C-2	Mid	7470A, 7470A	T	30 mL	50 mL				
480-178459-C-3	Effluent	7470A, 7470A	T	30 mL	50 mL				
480-178459-C-3 MS	Effluent	7470A, 7470A	T	30 mL	50 mL	2 mL			
480-178459-C-3 MSD	Effluent	7470A, 7470A	T	30 mL	50 mL	2 mL			
480-178459-C-4	DUP	7470A, 7470A	T	30 mL	50 mL				

Batch Notes	
Batch Comment	1 & 2 Prep 1245
Temperature - Corrected - End	93.6 Deg. C
Temperature - Corrected - Start	94.1 Deg. C
Digestion End Time	1525
Digestion Start Time	1325
Digestion Unit ID	HG-B
Sulfuric Acid ID	6175332
Nitric Acid ID	6224424
Hydroxylamine ID	6238265
Potassium Persulfate ID	6206676
Potassium Permanganate ID	6221798
Pipette/Syringe/Dispenser ID	Hg 8
Analyst ID - Spike Analyst	BB
Thermometer ID	170435802
Digestion Tube/Cup ID	2008043
Temperature - Uncorrected - End	93.8 Deg. C
Temperature - Uncorrected - Start	94.3 Deg. C

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-178459-1

SDG No.:

Batch Number: 560510 Batch Start Date: 11/23/20 13:25 Batch Analyst: Booth, Bryan M

Batch Method: 7470A Batch End Date: 11/23/20 15:25

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Subcontract Data

Shipping and Receiving Documents

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

Albany #224

eurofins | Environment Testing America

Client Information	Sampler: Pat Sakdawski	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-153396-34077.1
Client Contact: ~~Stephen Phelps~~ Brian Neumann	Phone: 518-885-4399	E-Mail: Judy.Stone@Eurofinset.com	State of Origin:	Page: Page 1 of 2
Company: Precision Environmental Services Inc.	PWSID:			Job #:
Address: 831 State Route 67 Ste 38	Due Date Requested:			
City: Ballston Spa	TAT Requested (days): ~~5 Days~~ ☆ 30 Day TAT			
State, Zip: NY, 12020	Compliance Project: Δ Yes Δ No			
Phone: 518-402-9813(Tel)	PO #: Callout ID: 136916			
Email: ~~sphelps@pesnyinc.com~~ bneumann@pesnyinc.com	WO #:			
Project Name: Easton PFAS Spill #1900266 PIN H7140	Project #: 48020029			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 7470A	8260C - TCL list VOAs	PFAS_DI_DW - (MCD) PFAS, UCMR List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
Influent	11-19-20	0945	Grab	Water			X	X	X	6	
Mid		0935		Water						6	
Effluent		0910		Water		Yes				18	
Dup		-		Water						6	
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

480-178459 Chain of Custody

11-19-20

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) CAT B Deliverables

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	11-19-20 1454	PES		11-19-2020 1454	EETA
Relinquished by:	11-19-2020 1700	EETA	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	11/20/20 0800	TA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.9 #1

Ver: 11/01/2020

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

Albany #224

eurofins | Environment Testing America

Client Information	Sampler: Pat Sukolowski	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-153396-34077.1
Client Contact: ~~Stephen Phelps~~ Brian Neumann	Phone: 518-885-4399	E-Mail: Judy.Stone@Eurofinset.com	State of Origin:	Page: Page 1 of 2
Company: Precision Environmental Services Inc.	PWSID:			Job #:
Address: 831 State Route 67 Ste 38	Due Date Requested:			
City: Ballston Spa	TAT Requested (days): ~~7 Day~~ ★ 30 Day TAT			
State, Zip: NY, 12020	Compliance Project: Δ Yes Δ No			
Phone: 518-402-9813(Tel)	PO #: Callout ID: 136916			
Email: ~~sphelps@pesnyinc.com~~ bneumann@pesnyinc.com	WO #:			
Project Name: Easton PFAS Spill #1900266 PIN H7140	Project #: 48020029			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 7470A	8260C - TCL list VOAs	PFAS_DI_DW - (MOD) PFAS, UCMR List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
Influent	11-19-20	0945	Grab	Water			X	X	X	6	
Mid	↓	0935	↓	Water			↓	↓	↓	6	
Effluent	↓	0910	↓	Water		Yes	↓	↓	↓	18	
Dup	↓	—	↓	Water			↓	↓	↓	6	
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

480-178459 Chain of Custody

11-19-20

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) CAT B Deliverables

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11-19-20 1454	PES		11-19-2020 1454	EETA
2		11-19-2020 1700	EETA		11/20/20 925	EETASAC
3						

Custody Seals Intact: ☒ Yes Δ No	Custody Seal No.: 1478662	Cooler Temperature(s) °C and Other Remarks: 1.5

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-178459-1

Login Number: 178459 **List Source: Eurofins TestAmerica, Buffalo**
List Number: 1
Creator: Sabuda, Brendan D

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9 #1c ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	NA: Check done at department level as required

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-178459-1

Login Number: 178459
List Number: 2
Creator: Her, David A

List Source: Eurofins TestAmerica, Sacramento
List Creation: 11/20/20 06:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	